

*(Follow Amphenol Pcd to keep up with our Connecting Solutions)*

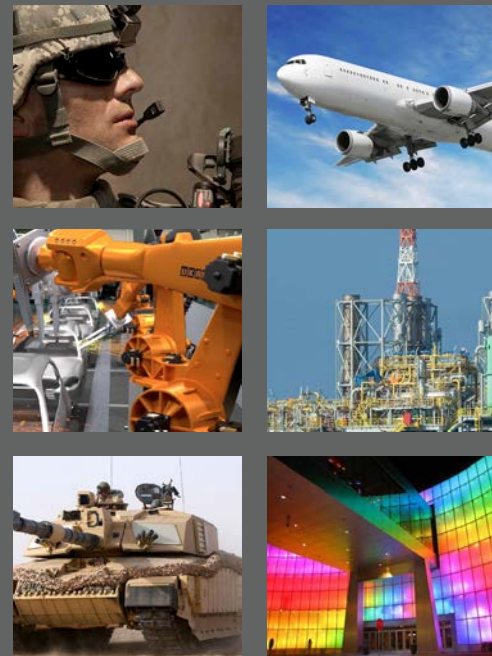


Military

Commercial Aerospace

Industrial

Amphenol Pcd, a subsidiary of Amphenol Corporation, is one of the world's leading suppliers of interconnect products for Military, Commercial Aerospace and Industrial applications. Located north of Boston in Beverly, Massachusetts, the company designs and manufactures a wide range of products - System Attachments, Junction Modules, Relay Sockets, Terminal Blocks, Rectangular & Circular connectors, and Cable Assemblies & Adapters. Each product is made and engineered with the highest quality standards in the industry. With facilities in North America and Asia, Amphenol Pcd products are chosen by hundreds of OEMs around the world, reliant on Amphenol's technical excellence, global network of distributors, and cost-effective solutions for custom systems.



## Products

- Backshells
- Cable Solutions
- Circular
- Field Bus
- Junction Modules
- Luminus Series
- Military Audio/Power
- Rectangular
- Relay Sockets
- SIM
- System Attachments
- Terminal Blocks
- Waterproof Solutions



# Markets and Applications

The primary markets served by Amphenol Pcd are Commercial Aerospace, Military Aerospace, Military Ground Vehicles, Communication/C4ISR, Rail Mass Transit, and Industrial. These markets have different interconnect and system configuration demands, but are closely linked by an absolute requirement for the very highest levels of reliability and performance under challenging conditions. Connectors must meet rigid military / aerospace and customer specifications, including electrical, mechanical, environmental, chemical shock / vibration performance, and configuration. Please contact Amphenol Pcd for requirements ranging from standard products to complete customized systems.



## Commercial Aerospace-Avionics

**Market and Applications:** Avionics controls and instrumentation, in-flight entertainment systems, aircraft power distribution, lighting, control systems, galleys and more. All designed to reduce weight and simplify installation / maintenance procedures.

**Amphenol Pcd Products:** Junction Modules, Relay Sockets, Luminus Series, In-Line Junctions, High Performance Clamps, Field Series Connectors, Rectangular Connectors, Modular Rectangular Connectors, In-Line Splices, Electronic Modules, Push-Pull Mini Connectors and Contacts.



## Commercial Aerospace-Airframe

**Market and Applications:** Airframe power distribution, wire bundle and cable management, hydraulic tubing applications, lighting applications, fuel tank applications. All designed to reduce weight and simplify installation / maintenance procedures; (LEAN Manufacturing).

**Amphenol Pcd Products:** Junction Modules, Relay Sockets, Luminus Series, In-Line Junctions, System Attachments, High Performance Clamps, Field Series Connectors, Rectangular Connectors, Modular Rectangular Connectors, In-Line Splices, Electronic Modules, and Contacts.



## Military Aerospace

**Market and Applications:** Avionics controls and instrumentation, aircraft power distribution, lighting, control systems, galleys, pipe and cable management, weapon systems, and more. All designed to reduce weight and simplify installation / maintenance procedures.

**Amphenol Pcd Products:** Junction Modules, Relay Sockets, In-Line Junctions, System Attachments, High Performance Clamps, Field Series Connectors, SIM Connectors, In-Line Splices, Electronic Modules, Backplane Connectors, and Contacts.



## Military Ground Vehicles

**Market and Applications:** Fighting vehicles, tanks, shelters, armored personnel carriers, artillery. Off-road, heavy earth-moving equipment. Extremely harsh environmental conditions. Heavy shock and vibration, and dust exposure.

**Amphenol Pcd Products:** Push-Pull Rectangular Power Connectors, Flex Power Bar Mounting Plates, MIL-DTL-38999 Series III Connectors, Power Bus Bars, Field Series Connectors, SIM Connectors, High Performance Clamps, Power Distribution Systems, and Sealed Junctions.



## Military Communication-C4ISR

**Market and Applications:** Combat vests - worn by individual soldiers containing electronic communications provisions within active webbing embedded in vest and connected to the military communication system.

**Amphenol Pcd Products:** Battlefield Interconnect Assemblies, Push-Pull Mini Connectors, Field Series Connectors, Sealed Miniature Connectors, and SIM Connectors.



## Industrial & Rail Mass Transit

**Market and Applications:** Factory Automation, Manufacturing Communications, Earth Moving Equipment Space, Offshore Oil Platforms, High speed railway, Freight and passenger railway, Subway and Metro, Railway controls and instrumentation, and Railway communications system.

**Amphenol Pcd Products:** Printed Circuit Board Terminal Blocks, Terminal Blocks, Interface Modules, Custom I/O Connectors, Field Series Connectors, Junction Modules, Relay Sockets, Luminus Series, In-Line Junctions, System Attachments and Electronic Modules.



# Manufacturing Technology and Capabilities

Amphenol Pcd is a leading manufacturer of interconnect products and accessories and has the manufacturing capability along with technical expertise to provide customers with the most innovative and reliable products on the market. Amphenol Pcd has five divisions around the world with engineering and production capability in Boston, Los Angeles, Shenzhen, Montreal, and Saigon. These facilities allow Amphenol Pcd to have round the clock engineering support, high volume manufacturing capabilities, and low cost resources. Amphenol Pcd also represents Amphenol India, the European Amphenol divisions of Amphenol Socapex, Amphenol Air LB France, Amphenol Air LB Germany, and Amphenol Limited in the North and South American market.

## Quality Assurance

Amphenol Pcd has a strong focus on quality, and to show for it, Amphenol Pcd has been awarded both the AS9100-C:2009 and ISO 9001:2008 quality assurance certificates.

The AS9100-C:2009 is a quality standard that stems from the ISO and adds additionally stringent requirements aimed at the military and commercial aerospace industry.

## Amphenol Pcd - Beverly, Massachusetts, USA

Amphenol Pcd, a subsidiary of Amphenol Corporation, is one of the world's leading suppliers of interconnect products for Military, Commercial Aerospace and Industrial applications. Located north of Boston in Beverly, Massachusetts, the company designs and manufactures a wide range of products - System Attachments, Junction Modules, Relay Sockets, Terminal Blocks, Rectangular & Circular connectors, and Cable Assemblies. Each product is made and engineered with the highest quality standards in the industry. With facilities in North America and Asia, Amphenol Pcd products are chosen by hundreds of OEMs around the world, reliant on Amphenol's technical excellence, global network of distributors, and cost-effective solutions for custom systems.



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## Amphenol Pcd China - Shenzhen, China

Amphenol Pcd China is Amphenol Pcd's sister division in Shenzhen, China. The facility has a large manufacturing and production floor and has expertise



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## Amphenol Air LB NA - Montreal, Quebec, Canada

Amphenol Air LB North America is Amphenol Pcd's sister division in Quebec, Canada. This division is the main design and engineering location for Amphenol Pcd's System Attachment product line.



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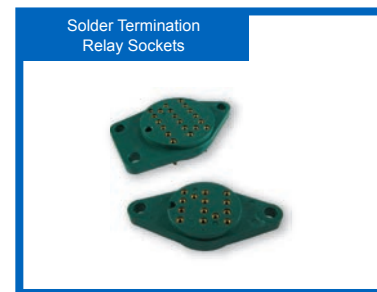
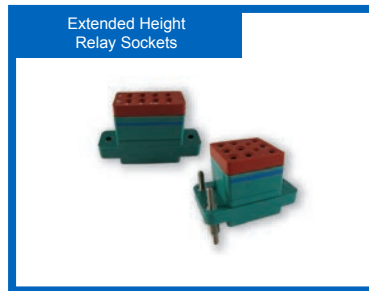
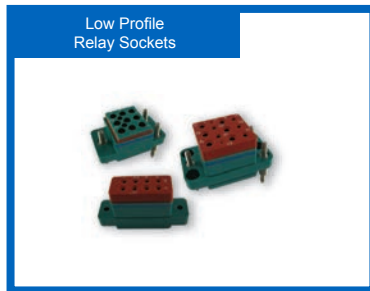
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# Relay Sockets

## MIL-PRF-12883

Amphenol Pcd offers the industry's broadest line of pluggable relay sockets for commercial and military airborne, ground and shipboard equipment. Sockets are made to MIL-PRF-12883 specifications, plus specialized requirements, and are supplied in a broad range of military standard and special configurations and styles for 2 through 25 amp operations.

Amphenol Pcd Relay Sockets feature state-of-the-art ultrasonically bonded interfaces between the dielectric components, which eliminate air paths and provide protection against moisture and degradation.



## Socket Variations

### Low Profile

Low Profile Relay Sockets are provided in all military configurations, are configured to a minimum size and weight, and accept the MIL-C-39029/92 contact family.

### Extended Height

Extended Height Sockets are configured to accept the longer MIL-C-39029/5 contact - which is standard on many cylindrical connectors and other avionics interconnect systems - and allow contact standardization.

### Mounting Hardware

Sockets are available with either fixed or loose mounting studs. Studs and hardware supplied with standard Amphenol Pcd QPL-listed sockets are cold rolled steel. Stainless steel is available as an alternate. To specify stainless steel, an "S" is added to both the QPL number and the Amphenol Pcd catalog number.

### Mounting Style

Relay sockets can be top or bottom mounted. See page 26 for mounting instructions.

### Polarization

Relay-to-socket positive polarization is provided by specific contact configurations and/or polarizing pins, in accordance with MIL-Spec requirements.

### Contacts

Closed entry socket contacts qualified to MIL-C-39029 are used and supplied with Amphenol Pcd Relay Sockets. Note: Relay Socket catalog numbers include the appropriate number of contacts as defined in the applicable military specification.

# Military Qualified, QPL Listed

## Relay Socket Part Numbers

| Military Socket P/N | Amphenol Pcd Socket P/N | Page |
|---------------------|-------------------------|------|
| M12883/40-01        | RSL116079               | 10   |
| M12883/40-02        | RSL116081               | 10   |
| M12883/40-03        | RSL116083               | 10   |
| M12883/40-04        | RSL116085               | 10   |
| M12883/40-05        | RSL116087               | 10   |
| M12883/40-06        | RSL116089               | 10   |
| M12883/40-07        | RSL116051               | 10   |
| M12883/40-08        | RSL116053               | 10   |
| M12883/40-09        | RSL116055               | 10   |
| M12883/40-10        | RSL116057               | 10   |
| M12883/40-11        | RSL116059               | 10   |
| M12883/40-12        | RSL116061               | 10   |
| M12883/40-13        | RSE116661               | 11   |
| M12883/40-14        | RSE116663               | 11   |
| M12883/40-15        | RSE116665               | 11   |
| M12883/40-16        | RSE116667               | 11   |
| M12883/40-17        | RSE116669               | 11   |
| M12883/40-18        | RSE116671               | 11   |
| M12883/40-19        | RSE116673               | 11   |
| M12883/40-20        | RSE116675               | 11   |
| M12883/40-21        | RSE116677               | 11   |
| M12883/40-22        | RSE116679               | 11   |
| M12883/40-23        | RSE116681               | 11   |
| M12883/40-24        | RSE116683               | 11   |
| M12883/41-01        | RSL116091               | 12   |
| M12883/41-02        | RSL116093               | 12   |
| M12883/41-03        | RSL116095               | 12   |
| M12883/41-04        | RSL116097               | 12   |
| M12883/41-05        | RSL116099               | 12   |
| M12883/41-06        | RSL116063               | 12   |
| M12883/41-07        | RSL116065               | 12   |
| M12883/41-08        | RSL116067               | 12   |
| M12883/41-09        | RSL116069               | 12   |
| M12883/41-10        | RSL116071               | 12   |
| M12883/41-11        | RSE116685               | 13   |
| M12883/41-12        | RSE116687               | 13   |
| M12883/41-13        | RSE116689               | 13   |
| M12883/41-14        | RSE116691               | 13   |
| M12883/41-15        | RSE116693               | 13   |
| M12883/41-16        | RSE116695               | 13   |
| M12883/41-17        | RSE116697               | 13   |
| M12883/41-18        | RSE116699               | 13   |
| M12883/41-19        | RSE116701               | 13   |

| Military Socket P/N | Amphenol Pcd Socket P/N | Page |
|---------------------|-------------------------|------|
| M12883/41-20        | RSE116703               | 13   |
| M12883/44-01        | RSE120151               | 14   |
| M12883/44-02        | RSE120153               | 14   |
| M12883/44-03        | RSE120155               | 14   |
| M12883/44-04        | RSE120157               | 14   |
| M12883/45-01        | RSE120159               | 15   |
| M12883/45-02        | RSE120161               | 15   |
| M12883/45-03        | RSE120163               | 15   |
| M12883/45-04        | RSE120165               | 16   |
| M12883/45-05        | RSE120167               | 16   |
| M12883/45-06        | RSE120169               | 16   |
| M12883/46-01        | RSE116747               | 17   |
| M12883/46-02        | RSE116749               | 17   |
| M12883/46-03        | RSE116751               | 17   |
| M12883/46-04        | RSE116753               | 17   |
| M12883/47-01        | RSE116755               | 18   |
| M12883/47-02        | RSE116757               | 18   |
| M12883/47-04        | RSE116761               | 18   |
| M12883/47-05        | RSE116763               | 18   |
| M12883/47-07        | RSL116101               | 18   |
| M12883/47-08        | RSL116103               | 18   |
| M12883/47-10        | RSL116073               | 18   |
| M12883/47-11        | RSL116075               | 18   |
| M12883/48-01        | RSE112061               | 19   |
| M12883/48-02        | RSE112063               | 19   |
| M12883/48-03        | RSL112105               | 19   |
| M12883/48-04        | RSL112101               | 19   |
| M12883/48-05        | RSE112065               | 19   |
| M12883/48-06        | RSE112067               | 19   |
| M12883/48-07        | RSL112107               | 19   |
| M12883/48-08        | RSL112103               | 19   |
| M12883/52-001       | RSE116175               | 20   |
| M12883/52-002       | RSE116185               | 20   |
| M12883/52-003       | RSE116195               | 20   |
| M12883/53-001       | RST145005               | 20   |
| M12883/54-01        | RSE116627               | 21   |
| M12883/54-02        | RSE116631               | 21   |
| M12883/54-03        | RSE116629               | 21   |
| M12883/54-04        | RSE116635               | 21   |
| M12883/55-01        | RSE112035               | 22   |
| M12883/55-02        | RSE112036               | 22   |
| M12883/55-03        | RSE112044               | 22   |

### Stainless Steel Hardware

To specify Relay Sockets with Stainless Steel hardware, the suffix "S" is added to both the military and Amphenol Pcd part numbers. For example, M12883/40-01 becomes M12883/40-01S, and the Amphenol Pcd equivalent RSL116079 becomes RSL116079-S.

# Relay Socket Cross Reference Chart

## Relay to Relay Socket

| Military Relay P/N   | Military Socket P/N  | APCD Socket P/N  | Relay Type      | Page  |
|--|--|--|-----------------|-------|
| M83536/15-002<br>M83536/16-006, -014, -031, -034<br>M83726/1, /2, /3, /4, /28, /29, /30, /31*<br>MS27709-2 | M12883/40-01<br>M12883/40-05<br>M12883/40-07<br>M12883/40-11<br>M12883/40-13<br>M12883/40-17<br>M12883/40-19<br>M12883/40-23 | RSL116079<br>RSL116087<br>RSL116051<br>RSL116059<br>RSE116661<br>RSE116669<br>RSE116673<br>RSE116681 | 4 Pole / 10 Amp | 10-11 |
| M83536/17-002, 17-005  | M12883/40-02<br>M12883/40-08<br>M12883/40-14<br>M12883/40-20   | RSL116081<br>RSL116053<br>RSE116663<br>RSE116675   | 4 Pole / 10 Amp | 10-11 |
| M83536/18-002, -005, -008, -012<br>M83536/19-002, -005, -008, -012<br>M83536/20-002                        | M12883/40-06<br>M12883/40-12<br>M12883/40-18<br>M12883/40-24   | RSL116089<br>RSL116061<br>RSL116671<br>RSE116683   | 4 Pole / 10 Amp | 10-11 |
| M83536/21-006, -014, -022, -030<br>M83536/22-006, -014, -022, -031   | M12883/46-01   | RSE116747  | 3 Pole / 10 Amp | 17    |
| M83536/25-002<br>M83536/26-002   | M12883/47-01<br>M12883/47-04<br>M12883/47-07<br>M12883/47-10   | RSE116755<br>RSE116761<br>RSL116101<br>RSL116073   | 6 Pole / 10 Amp | 18    |
| M6106/27-002   | M12883/47-02<br>M12883/47-05<br>M12883/47-08<br>M12883/47-11   | RSE116757<br>RSE116763<br>RSL116103<br>RSL116075   | 6 Pole / 10 Amp | 18    |
| MS27742-2  | M12883/54-04   | RSE116635  | 3 Pole / 25 Amp | 21    |
| MS27743-06, -12, -18, -24  | M12883/48-01<br>M12883/48-02<br>M12883/48-03<br>M12883/48-04   | RSE112061<br>RSE112063<br>RSL112105<br>RSL112101   | 3 Pole / 25 Amp | 19    |
| MS27743-09, -15, -21, -27  | M12883/48-05<br>M12883/48-06<br>M12883/48-07<br>M12883/48-08   | RSE112065<br>RSE112067<br>RSL112107<br>RSL112103   | 3 Pole / 25 Amp | 19    |
| Leach Corp. JA-D4E & J   | M12883/41-03<br>M12883/41-08<br>M12883/41-13<br>M12883/41-18   | RSL116095<br>RSL116067<br>RSE116689<br>RSE116699   | 2 Pole / 10 Amp | 12-13 |
| Leach Corp. KA-D4E & J   | M12883/40-04<br>M12883/40-10<br>M12883/40-16<br>M12883/40-22   | RSL116085<br>RSL116057<br>RSE116667<br>RSE116679   | 4 Pole / 10 Amp | 10-11 |

Note: M12883 Relay Sockets are compatible with plug-in or socket pin relays in the specified documents



# Relay Socket Cross Reference Chart

## Relay to Relay Socket

| Military Relay P/N  | Military Socket P/N  | APCD Socket P/N  | Relay Type                    | Page  |
|---|--|--|-------------------------------|-------|
| M6106/12-002  | M12883/54-03   | RSE116629  | 3 Pole / 25 Amp               | 21    |
| M6106/13-002,-008,-011,-013,-015  | M12883/54-01   | RSE116627  | 3 Pole / 25 Amp               | 21    |
| M6106/13-004  | M12883/54-02   | RSE116631  | 3 Pole / 25 Amp               | 21    |
| M6106/19-004,-007,-012,-017,-022  | M12883/55-01, M12883/55-02   | RSE112035, RSE112036   | 1 Pole / 25 Amp               | 22    |
| M6106/20-002  | M12883/55-03   | RSE112044  | 1 Pole / 25 Amp               | 22    |
| M6106/38-002  | M12883/45-04   | RSE120165  | 2 Pole / 5 Amp                | 15-16 |
| M6106/40-002  | M12883/46-02   | RSE116749  | 3 Pole / 5 Amp                | 17    |
| M83536/1-006,-015,-024,-033<br>M83536/2-006,-015,-024,-035                | M12883/45-01   | RSE120159  | 2 Pole / 5 Amp                | 15-16 |
| M83536/2-028, M83726/24, /25  | M12883/52-001  | RSE116175  | Track Mount<br>2 Pole / 5 Amp | 20    |
| M83536/5-006,-014, -022, -030<br>M83536/6-006, -015, -022, -032           | M12883/44-01   | RSE120151  | 4 Pole / 5 Amp                | 14    |
| M83536/6-025  | M12883/52-002  | RSE116185  | Track Mount<br>4 Pole / 5 Amp | 20    |
| M83536/7-022  | M12883/44-02   | RSE120153  | 4 Pole / 5 Amp                | 14    |
| M83536/9, -006, -015, -024, -035<br>M83536/10-006,-015,-024,<br>-034,-038 | M12883/41-01<br>M12883/41-04<br>M12883/41-06<br>M12883/41-09<br>M12883/41-11<br>M12883/41-14<br>M12883/41-16<br>M12883/41-19 | RSL116091<br>RSL116097<br>RSL116063<br>RSL116069<br>RSE116685<br>RSE116691<br>RSE116695<br>RSE116701 | 2 Pole / 10 Amp               | 12-13 |
| M83536/11-002, 004, 007   | M12883/41-02<br>M12883/41-07<br>M12883/41-12<br>M12883/41-17   | RSL116093<br>RSL116065<br>RSE116687<br>RSE116697   | 2 Pole / 10 Amp               | 12-13 |
| M83536/13-002, 005, 008, 012<br>M83536/14-002                             | M12883/41-05<br>M12883/41-10<br>M12883/41-15<br>M12883/41-20   | RSL116099<br>RSL116071<br>RSE116693<br>RSE116703   | 2 Pole / 10 Amp               | 12-13 |

Note: M12883 Relay Sockets are compatible with plug-in or socket pin relays in the specified documents

# MIL-PRF-12883/40

## Extended Height RSL 4 Pole/10 Amp

### Operating Range

Temperature:  
-65°C to 125°C

Insulation Resistance:  
1000 Megohms Min.

Dielectric Withstanding Voltage:  
1500 VRMS at Sea Level  
500 VRMS at 80,000 ft.

Vibration:  
MIL-STD-202, Method 204  
Test Condition G

Shock:  
MIL-STD-202, Method 213  
Test Condition C

### Materials

Socket Body:  
Polyetherimide per ASTM-D5205

Grommet:  
Silicone Rubber per A-A-59588

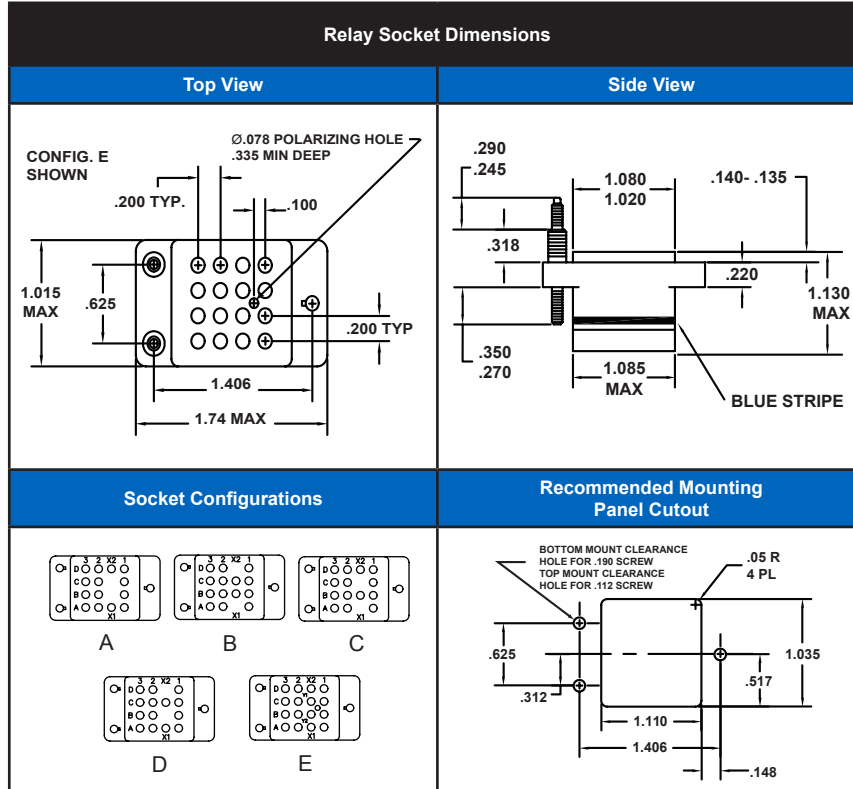
Hardware:  
Stainless Steel or Steel  
w/Cadmium Chromate Finish

Contact Retainers:  
Stainless Steel

Socket Contacts:  
Stainless Steel, Hard Gold Plated  
in Accordance with SAE-AMS-2422



Mates with M83536, M6106,  
M27709, M83726 Relays



| Extended Height Relay Sockets |             |                  |     |                   |                |         |   |        |       |
|-------------------------------|-------------|------------------|-----|-------------------|----------------|---------|---|--------|-------|
| MIL P/N<br>M12883             | APCD<br>P/N | Mounting<br>Stud | QTY | Size <sup>1</sup> | Contact<br>P/N | Config. | Mating Relay  | Weight |       |
|                               |             |                  |     |                   |                |         |   | Pounds | Grams |
| /40-01                        | RSL116079   | Loose            | 14  | 16/16             | /5-116         | A       | M83536/15-022, M83536/16-006,-014,-031,-034<br>M83726/1,2,3,4,28,29,30,31*, M27709-02 | .132   | 60    |
| /40-02                        | RSL116081   | Loose            | 14  | 16/16             | /5-116         | B       | M83536/17-002,-005  |        |       |
| /40-03                        | RSL116083   | Loose            | 14  | 16/16             | /5-116         | C       |   |        |       |
| /40-04                        | RSL116085   | Loose            | 14  | 16/16             | /5-116         | D       | Leach Corp KA-D4E & J   |        |       |
| /40-05                        | RSL116087   | Loose            | 14  | 16/20             | /5/117         | A       | M83536/15-022, M83536/16-006,-014,-031,-034<br>M83726/1,2,3,4,28,29,31,N27709-02      |        |       |
| /40-06                        | RSL116089   | Loose            | 16  | 16/16             | /5-116         | E       | M83536/18-002,005,008,012<br>M83536/19-002,008,012, M83536/20-002                     |        |       |
| /40-07                        | RSL116051   | Fixed            | 14  | 16/16             | /5-116         | A       | M83536/15-022, M83536/16-006,-014,-031,-034<br>M83726/1,2,3,4,28,29,31,N27709-02      |        |       |
| /40-08                        | RSL116053   | Fixed            | 14  | 16/16             | /5-116         | B       | M83536/17-002,-005  |        |       |
| /40-09                        | RSL116055   | Fixed            | 14  | 16/16             | /5-116         | C       |   |        |       |
| /40-10                        | RSL116057   | Fixed            | 14  | 16/16             | /5-116         | D       | Leach Corp KA-D4E & J   |        |       |
| /40-11                        | RSL116059   | Fixed            | 14  | 16/20             | /5/117         | A       | M83536/15-022, M83536/16-006,-014,-031,-034<br>M83726/1,2,3,4,28,29,31,M27709-02      |        |       |
| /40-12                        | RSL116061   | Fixed            | 16  | 16/16             | /5-116         | E       | M83536/18-002,-005,-008,-012<br>M83536/19-002,-008,-012, M83536/20-002                |        |       |

<sup>1</sup>Mating End/ Wire Barrel

Mounting instructions can be found on page 26

# MIL-PRF-12883/40

## Low Profile RSL 4 Pole/10 Amp



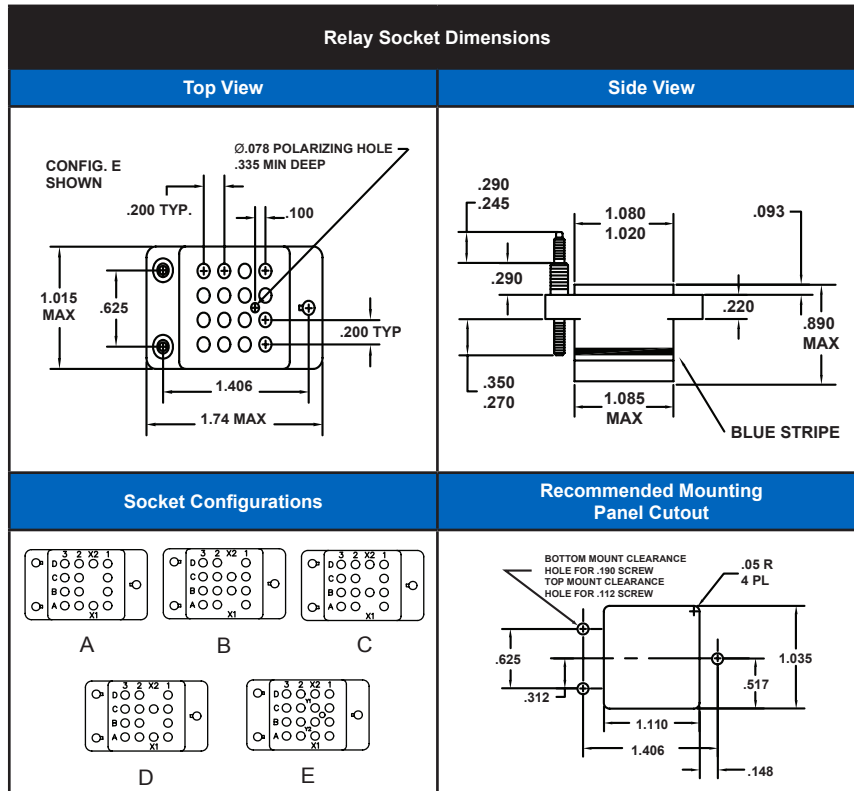
Mates with M83536, M6106,  
M27709, M83726 Relays

### Operating Range

Temperature:  
-65°C to 125°C  
Insulation Resistance:  
1000 Megohms Min.  
Dielectric Withstanding  
Voltage:  
1500 VRMS at Sea Level  
500 VRMS at 80,000 ft.  
Vibration:  
MIL-STD-202, Method 204  
Test Condition G  
Shock:  
MIL-STD-202, Method 213  
Test Condition C

### Materials

Socket Body:  
Polyetherimide per ASTM-D5205  
Grommet:  
Silicone Rubber per A-A-59588  
Hardware:  
Stainless Steel or Steel  
w/Cadmium Chromate Finish  
Contact Retainers:  
Stainless Steel  
Socket Contacts:  
Stainless Steel, Hard Gold Plated  
in Accordance with SAE-AMS-2422



| Low Profile Relay Sockets |             |                  |     |                   |                |         |   |        |       |
|---------------------------|-------------|------------------|-----|-------------------|----------------|---------|---|--------|-------|
| MIL P/N<br>M12883         | APCD<br>P/N | Mounting<br>Stud | QTY | Size <sup>1</sup> | Contact<br>P/N | Config. | Mating Relay  | Weight |       |
|                           |             |                  |     |                   |                |         |   | Pounds | Grams |
| /40-13                    | RSE116661   | Loose            | 14  | 16/16             | /92-533        | A       | M83536/15-022, M83536/16-006,-014,-031,-034<br>M83726/1,2,3,4,28,29,30,31*, M27709-02 | .100   | 45    |
| /40-14                    | RSE116663   | Loose            | 14  | 16/16             | /92-533        | B       | M83536/17-002,-005  |        |       |
| /40-15                    | RSE116665   | Loose            | 14  | 16/16             | /92-533        | C       |   |        |       |
| /40-16                    | RSE116667   | Loose            | 14  | 16/16             | /92-533        | D       | Leach Corp KA-D4E & J   |        |       |
| /40-17                    | RSE116669   | Loose            | 14  | 16/20             | /92-534        | A       | M83536/15-022, M83536/16-006,-014,-031,-034<br>M83726/1,2,3,4,28,29,31,N27709-02      |        |       |
| /40-18                    | RSE116671   | Loose            | 16  | 16/16             | /92-533        | E       | M83536/18-002,005,008,012<br>M83536/19-002,008,012, M83536/20-002                     |        |       |
| /40-19                    | RSE116673   | Fixed            | 14  | 16/16             | /92-533        | A       | M83536/15-022, M83536/16-006,-014,-031,-034<br>M83726/1,2,3,4,28,29,31,N27709-02      |        |       |
| /40-20                    | RSE116675   | Fixed            | 14  | 16/16             | /92-533        | B       | M83536/17-002,-005  |        |       |
| /40-21                    | RSE116677   | Fixed            | 14  | 16/16             | /92-533        | C       |   |        |       |
| /40-22                    | RSE116679   | Fixed            | 14  | 16/16             | /92-533        | D       | Leach Corp KA-D4E & J   |        |       |
| /40-23                    | RSE116681   | Fixed            | 14  | 16/20             | /92-534        | A       | M83536/15-022, M83536/16-006,-014,-031,-034<br>M83726/1,2,3,4,28,29,31,M27709-02      |        |       |
| /40-24                    | RSE116683   | Fixed            | 16  | 16/16             | /92-533        | E       | M83536/18-002,-005,-008,-012<br>M83536/19-002,-008,-012, M83536/20-002                |        |       |

<sup>1</sup>Mating End/Wire Barrel  
\*Applies to all plug-in type relays of these documents

Mounting instructions can be found on page 26

# MIL-PRF-12883/41

## Extended Height RSL 2 Pole/10 Amp

### Operating Range

Temperature:  
-65°C to 125°C

Insulation Resistance  
1000 Megaohms Min.

Dielectric Withstanding Voltage:  
1500 VRMS at Sea Level  
500 VRMS at 80,000 ft.

Vibration:  
MIL-STD-202, Method 204  
Test Condition G

Shock:  
MIL-STD-202, Method 213  
Test Condition C

### Materials

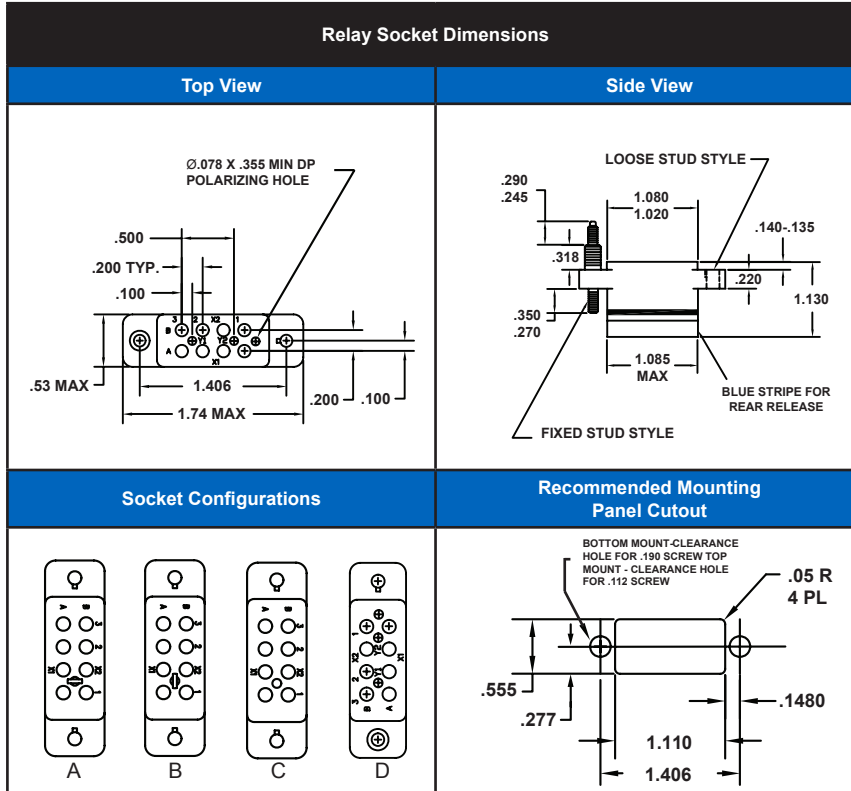
Socket Body:  
Polyetherimide per ASTM-D5205

Grommet:  
Silicone Rubber per A-A-59588

Hardware:  
Stainless Steel or Steel  
w/Cadmium Chromate Finish

Contact Retainers:  
Stainless Steel

Socket Contacts:  
Stainless Steel, Hard Gold Plated  
in Accordance with SAE-AMS-2422



| Extended Height Relay Sockets |             |                  |     |                   |                |         |  | Weight |       |
|-------------------------------|-------------|------------------|-----|-------------------|----------------|---------|--|--------|-------|
| MIL P/N<br>M12883             | APCD<br>P/N | Mounting<br>Stud | QTY | Size <sup>1</sup> | Contact<br>P/N | Config. | Mating Relay   | Pounds | Grams |
| /41-01                        | RSL116091   | Loose            | 8   | 16/16             | /5-116         | C       | M83536/9-006, 015, 024, 035<br>M83536/10-006, 015, 024, 034, 038 | .073   | 33    |
| /41-02                        | RSL116093   | Loose            | 8   | 16/16             | /5-116         | B       | M83536/11-002, 004, 007  |        |       |
| /41-03                        | RSL116095   | Loose            | 8   | 16/16             | /5-116         | A       | Leach Corp JA-D4E & J  |        |       |
| /41-04                        | RSL116097   | Loose            | 8   | 16/20             | /5-117         | C       | M83536/9-006, 015, 024, 035<br>M83536/10-006, 015, 024, 034, 038 |        |       |
| /41-05                        | RSL116099   | Loose            | 8   | 16/16             | /5-116         | D       | M83536/12-008, /14-008   |        |       |
|                               |             |                  |     | 22/22             | /5-TBD         |         |  |        |       |
| /41-06                        | RSL116063   | Fixed            | 8   | 16/16             | /5-116         | C       | M83536/9-006, 015, 024, 035<br>M83536/10-006, 015, 024, 034, 038 |        |       |
| /41-07                        | RSL116065   | Fixed            | 8   | 16/16             | /5-116         | B       | M83536/11-002, 004, 007  |        |       |
| /41-08                        | RSL116067   | Fixed            | 8   | 16/16             | /5-116         | A       | Leach Corp JA-D4E & J  |        |       |
| /41-09                        | RSL116069   | Fixed            | 8   | 16/20             | /5-117         | C       | M83536/9-006, 015, 024, 035<br>M83536/10-006, 015, 024, 034, 038 |        |       |
|                               |             |                  |     | 16/16             | /5-116         |         |  |        |       |
| /41-10                        | RSL116071   | Fixed            | 8   | 16/16             | /5-116         | D       | M83536/12-008, /14-008   |        |       |
|                               |             |                  |     | 22/22             | /5-TBD         |         |  |        |       |

<sup>1</sup>Mating End/ Wire Barrel

Mounting instructions can be found on page 26

# MIL-PRF-12883/41

## Low Profile RSE 2 Pole/10 Amp



### Operating Range

Temperature:  
-65°C to 125°C

Insulation Resistance:  
1000 Megohms Min.

Dielectric Withstanding Voltage:  
1500 VRMS at Sea Level  
500 VRMS at 80,000 ft.

Vibration:  
MIL-STD-202, Method 204  
Test Condition G

Shock:  
MIL-STD-202, Method 213  
Test Condition C

### Materials

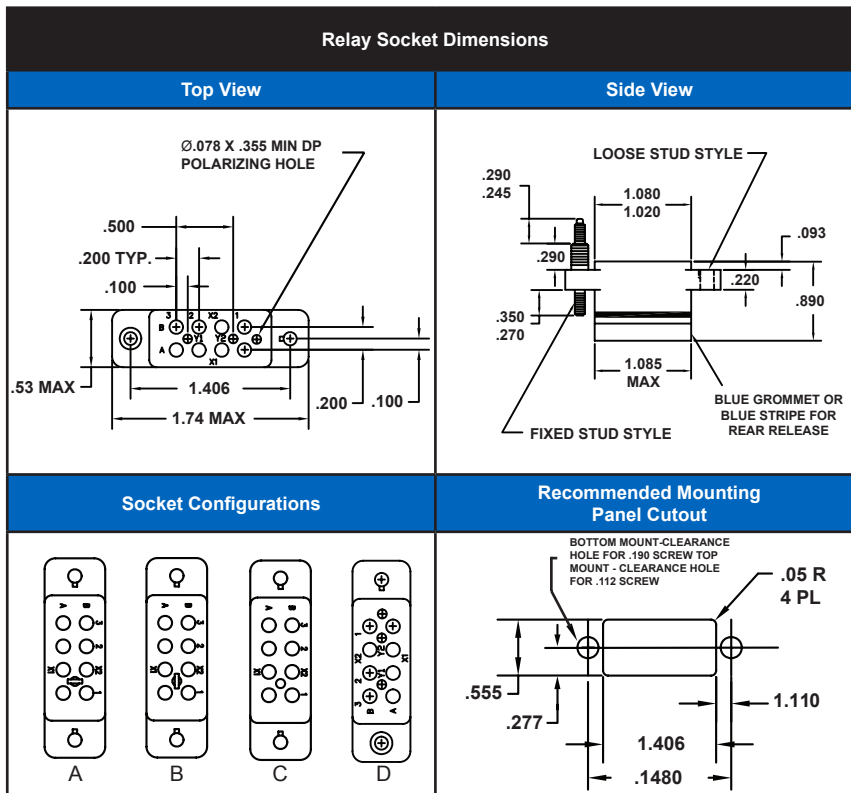
Socket Body:  
Polyetherimide per ASTM-D5205

Grommet:  
Silicone Rubber per A-A-59588

Hardware:  
Stainless Steel or Steel  
w/Cadmium Chromate Finish

Contact Retainers:  
Stainless Steel

Socket Contacts:  
Copper Alloy, Hard Gold Plated in  
Accordance with SAE-AMS-2422



| Low Profile Relay Sockets |             |                  |     |                   |                |         |  | Weight |       |
|---------------------------|-------------|------------------|-----|-------------------|----------------|---------|--|--------|-------|
| MIL P/N<br>M12883         | APCD<br>P/N | Mounting<br>Stud | QTY | Size <sup>1</sup> | Contact<br>P/N | Config. | Mating Relay   | Pounds | Grams |
| /41-11                    | RSE116685   | Loose            | 8   | 16/16             | /92-533        | C       | M83536/9-006, 015, 024, 035<br>M83536/10-006, 015, 024, 034, 038   | .055   | 25    |
| /41-12                    | RSE116687   | Loose            | 8   | 16/16             | /92-533        | B       | M83536/11-002, 004, 007  |        |       |
| /41-13                    | RSE116689   | Loose            | 8   | 16/16             | /92-533        | A       | TBD  |        |       |
| /41-14                    | RSE116691   | Loose            | 8   | 16/16             | /92-533        | C       | Leach Corp JA-D4E & J  |        |       |
| /41-15                    | RSE116693   | Loose            | 8   | 16/16             | /92-533        | D       | M83536/13-002, 005, -008, -012<br>M83536/13-002, -005, -008, -012  |        |       |
|                           |             |                  | 2   | 22/22             | /92-551        |         |  |        |       |
| /41-16                    | RSE116695   | Fixed            | 8   | 16/16             | /92-533        | C       | M83536/9-006, 015, 024, 035<br>M83536/10-006, 015, 024, 034, 038   |        |       |
| /41-17                    | RSE116697   | Fixed            | 8   | 16/16             | /92-533        | B       | M83536/11-002, 004, 007  |        |       |
| /41-18                    | RSE116699   | Fixed            | 8   | 16/16             | /92-533        | A       | Leach Corp JA-D4E & J  |        |       |
| /41-19                    | RSE116701   | Fixed            | 8   | 16/20             | /92-534        | C       | M83536/9-006, 015, 024, 035<br>M83536/10-006, 015, 024, 034, 038   |        |       |
| /41-20                    | RSE116703   | Fixed            | 8   | 16/16             | /92-553        | D       | M83536/13-002, -005, -008, -012<br>M83536/13-002, -005, -008, -012 |        |       |
|                           |             |                  | 2   | 22/22             | /92-551        |         |  |        |       |

<sup>1</sup>Mating End/ Wire Barrel

Mounting instructions can be found on page 26

# MIL-PRF-12883/44

## RSE 4 Pole/5 Amp

### Operating Range

Temperature:  
-65°C to 125°C

Insulation Resistance:  
1000 Megaohms Min.

Dielectric Withstanding Voltage:  
1000 VRMS at Sea Level  
500 VRMS at 80,000 ft.

Vibration:  
MIL-STD-202, Method 204  
Test Condition G

Shock:  
MIL-STD-202, Method 213  
Test Condition C

### Materials

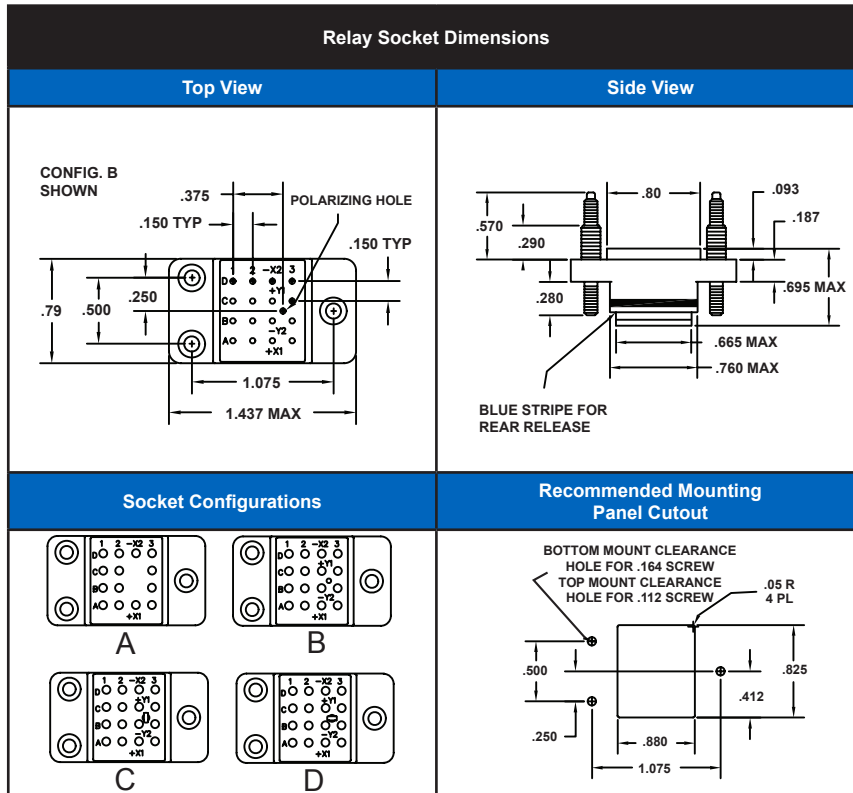
Socket Body:  
Polyetherimide per ASTM-D5205

Grommet:  
Silicone Rubber per A-A-59588

Hardware:  
Stainless Steel or Steel  
w/Cadmium Chromate Finish

Contact Retainers:  
Stainless Steel

Socket Contacts:  
Copper Alloy, Hard Gold Plated in  
Accordance with SAE-AMS-2422



| Low Profile Relay Sockets |             |                  |     |                   |                |         |   | Weight |       |
|---------------------------|-------------|------------------|-----|-------------------|----------------|---------|---|--------|-------|
| MIL P/N<br>M12883         | APCD<br>P/N | Mounting<br>Stud | QTY | Size <sup>1</sup> | Contact<br>P/N | Config. | Mating Relay  | Pounds | Grams |
| /44-01                    | RSE120151   | Fixed            | 14  | 20/20             | /101-553       | A       | M83536/5-006,-014,-022,-030<br>M83536/6,-006,-014,-022,-032 | .055   | 25    |
| /44-02                    | RSE120153   | Fixed            | 16  | 20/20             | /101-553       | B       | M83536/7-002  |        |       |
| /44-03                    | RSE120155   | Fixed            | 16  | 20/20             | /101-553       | C       |   |        |       |
| /44-04                    | RSE120157   | Fixed            | 16  | 20/20             | /101-553       | D       |   |        |       |

<sup>1</sup>Mating End/ Wire Barrel

Mounting instructions can be found on page 26

# MIL-PRF-12883/45

RSE 2 Pole/5 Amp



Mates with M83536, M6106 Relays

## Operating Range

Temperature:  
-65°C to 125°C

Insulation Resistance:  
1000 Megohms Min.

Dielectric Withstanding  
Voltage:  
1000 VRMS at Sea Level  
500 VRMS at 80,000 ft.

Vibration:  
MIL-STD-202, Method 204  
Test Condition G

Shock:  
MIL-STD-202, Method 213  
Test Condition C

## Materials

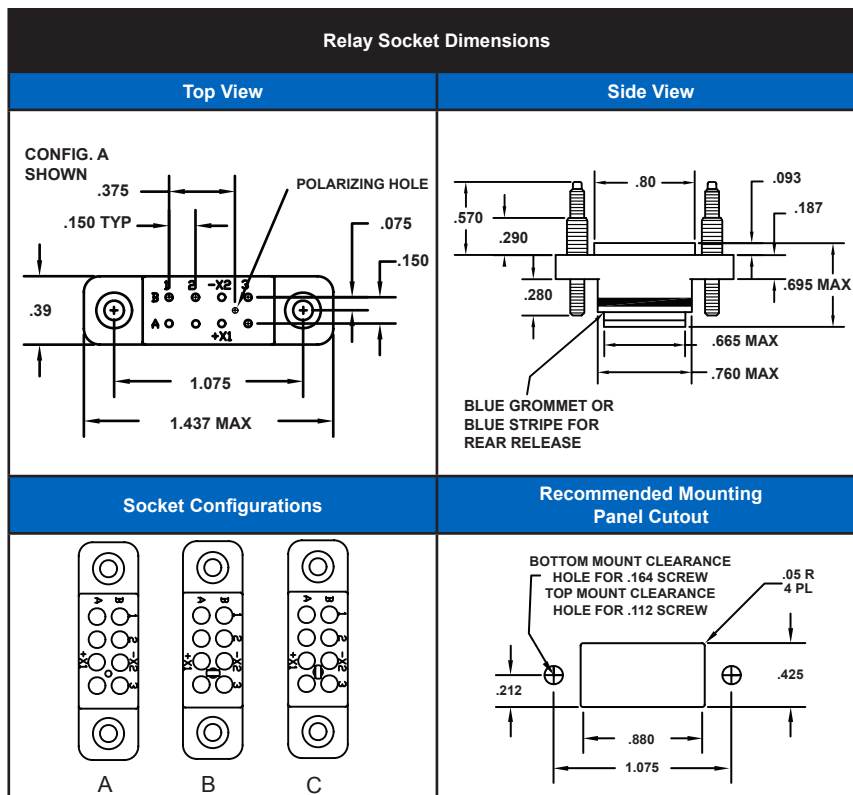
Socket Body:  
Polyetherimide per ASTM-D5205

Grommet:  
Silicone Rubber per A-A-59588

Hardware:  
Stainless Steel or Steel w/Cadmium  
Chromate Finish

Contact Retainers:  
Stainless Steel

Socket Contacts:  
Copper Alloy, Hard Gold Plated in  
Accordance with SAE AMS-2422



| Low Profile Relay Sockets |             |                  |     |                   |                |         |  | Weight |       |
|---------------------------|-------------|------------------|-----|-------------------|----------------|---------|--|--------|-------|
| MIL P/N<br>M12883         | APCD<br>P/N | Mounting<br>Stud | QTY | Size <sup>1</sup> | Contact<br>P/N | Config. | Mating Relay   | Pounds | Grams |
| /45-01                    | RSE120159   | Fixed            | 8   | 20/20             | /101-533       | A       | M83536/1-006, -015, -024, -033<br>M83536/2-006, -015, -024, -035 | .033   | 15    |
| /45-02                    | RSE120161   | Fixed            | 8   | 20/20             | /101-533       | B       |  |        |       |
| /45-03                    | RSE120163   | Fixed            | 8   | 20/20             | /101-533       | C       |  |        |       |

<sup>1</sup>Mating End/ Wire Barrel

Mounting instructions can be found on page 26

# MIL-PRF-12883/45

RSE 2 Pole/5 Amp

## Operating Range

Temperature:  
-65°C to 125°C

Insulation Resistance:  
1000 Megohms Min.

Dielectric Withstanding Voltage:  
1000 VRMS at Sea Level  
500 VRMS at 80,000 ft.

Vibration:  
MIL-STD-202, Method 204  
Test Condition G

Shock:  
MIL-STD-202, Method 213  
Test Condition C

## Materials

Socket Body:  
Polyetherimide per ASTM-D5205

Grommet:  
Silicone Rubber per A-A-59588

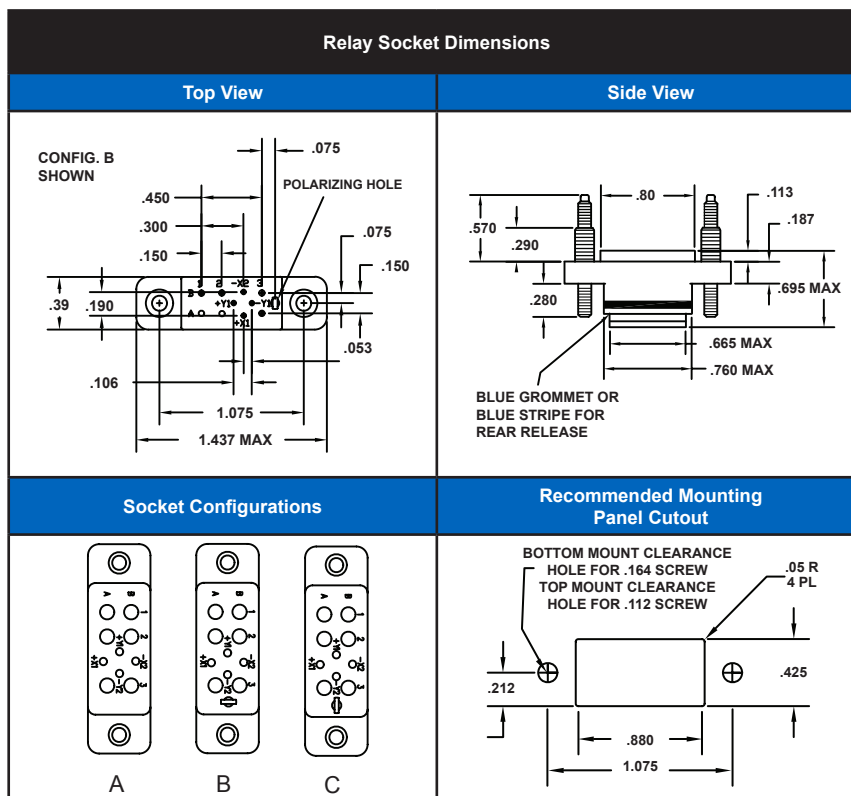
Hardware:  
Stainless Steel or Steel  
w/Cadmium Chromate Finish

Contact Retainers:  
Stainless Steel

Socket Contacts:  
Copper Alloy, Hard Gold Plated  
in Accordance with SAE-AMS-2422



Mates with M6106/38 Relays



| Low Profile Relay Sockets |             |                  |     |                   |                |         |              | Weight |       |
|---------------------------|-------------|------------------|-----|-------------------|----------------|---------|--------------|--------|-------|
| MIL P/N<br>M12883         | APCD<br>P/N | Mounting<br>Stud | QTY | Size <sup>1</sup> | Contact<br>P/N | Config. | Mating Relay | Pounds | Grams |
| /45-04                    | RSE120165   | Fixed            | 6   | 20/20             | /101-553       | A       | M6106/38-002 | .033   | 15    |
|                           |             |                  | 4   | 20/22             | /101-552       |         |              |        |       |
| /45-05                    | RSE120167   | Fixed            | 6   | 20/20             | /101-553       | B       |              |        |       |
|                           |             |                  | 4   | 20/22             | /101-552       |         |              |        |       |
| /45-06                    | RSE120169   | Fixed            | 6   | 20/20             | /101-553       | C       |              |        |       |
|                           |             |                  | 4   | 20/22             | /101-552       |         |              |        |       |

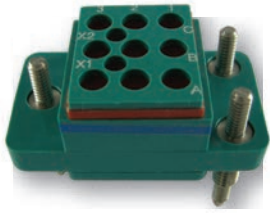
<sup>1</sup>Mating End/ Wire Barrel

Mounting instructions can be found on page 26



# MIL-PRF-12883/46

RSE 3 Pole/10 Amp



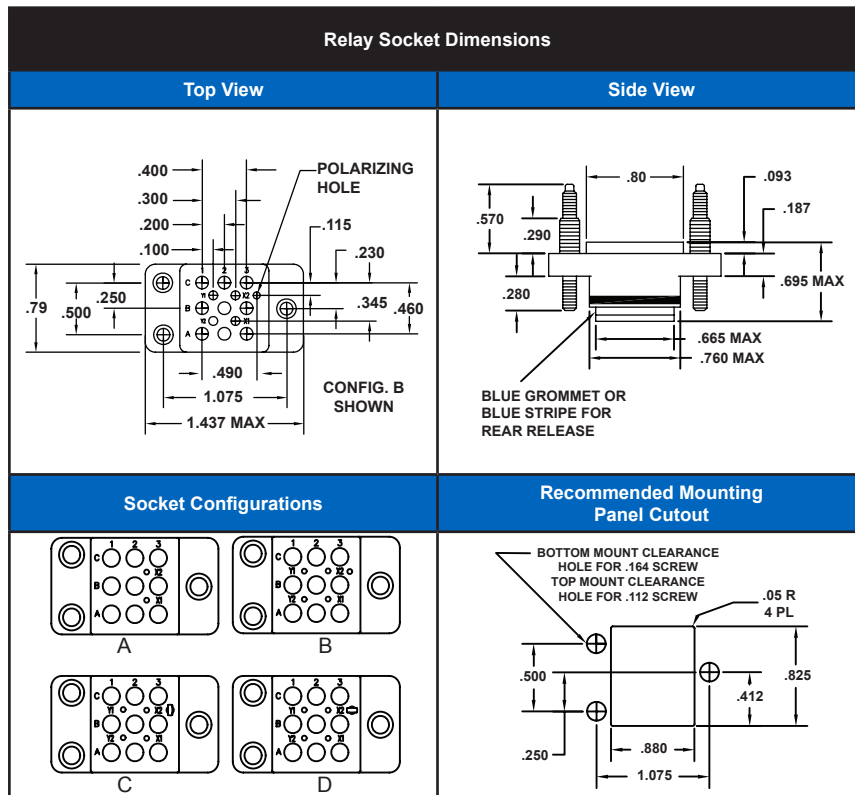
Mates with M83536, M6106 Relays

## Operating Range

Temperature:  
-65°C to 125°C  
Insulation Resistance:  
1000 Megohms Min.  
Dielectric Withstanding Voltage:  
1250 VRMS at Sea Level  
500 VRMS at 80,000 ft.  
Vibration:  
MIL-STD-202, Method 204  
Test Condition G  
Shock:  
MIL-STD-202, Method 213  
Test Condition C

## Materials

Socket Body:  
Polyetherimide per ASTM-D5205  
Grommet:  
Silicone Rubber per A-A-59588  
Hardware:  
Stainless Steel or Steel w/Cadmium Chromate Finish  
Contact Retainers:  
Stainless Steel  
Socket Contacts:  
Copper Alloy, Hard Gold Plated in Accordance with SAE-AMS-2422



| Low Profile Relay Sockets |           |               |     |                   |             |         |                              | Weight |       |
|---------------------------|-----------|---------------|-----|-------------------|-------------|---------|------------------------------|--------|-------|
| MIL P/N M12883            | APCD P/N  | Mounting Stud | QTY | Size <sup>1</sup> | Contact P/N | Config. | Mating Relay                 | Pounds | Grams |
| /46-01                    | RSE116747 | Fixed         | 9   | 16/16             | /101-554    | A       | M83536/21-006,-014,-022,-030 | .055   | 25    |
|                           |           |               | 2   | 20/20             | /101-553    |         | M83536/22-006,-014,-022,-030 |        |       |
| /46-02                    | RSE116749 | Fixed         | 9   | 16/16             | /101-554    | B       | M6106/40-002                 |        |       |
|                           |           |               | 2   | 20/20             | /101-553    |         |                              |        |       |
| /46-03                    | RSE116751 | Fixed         | 9   | 16/16             | /101-554    | C       |                              |        |       |
|                           |           |               | 2   | 20/20             | /101-553    |         |                              |        |       |
| /46-04                    | RSE116753 | Fixed         | 9   | 16/16             | /101-554    | D       |                              |        |       |
|                           |           |               | 2   | 20/20             | /101-553    |         |                              |        |       |

<sup>1</sup>Mating End/ Wire Barrel

Mounting instructions can be found on page 26

# MIL-PRF-12883/47

RSE/RSL 6 Pole/10 Amp

## Operating Range

Temperature:  
-65°C to 125°C

Insulation Resistance:  
1000 Megaohms Min.

Dielectric Withstanding Voltage:  
1500 VRMS at Sea Level  
500 VRMS at 80,000 ft.

Vibration:  
MIL-STD-202, Method 204  
Test Condition G

Shock:  
MIL-STD-202, Method 213  
Test Condition C

## Materials

Socket Body:  
Polyetherimide per ASTM-D5205

Grommet:  
Silicone Rubber per A-A-59588

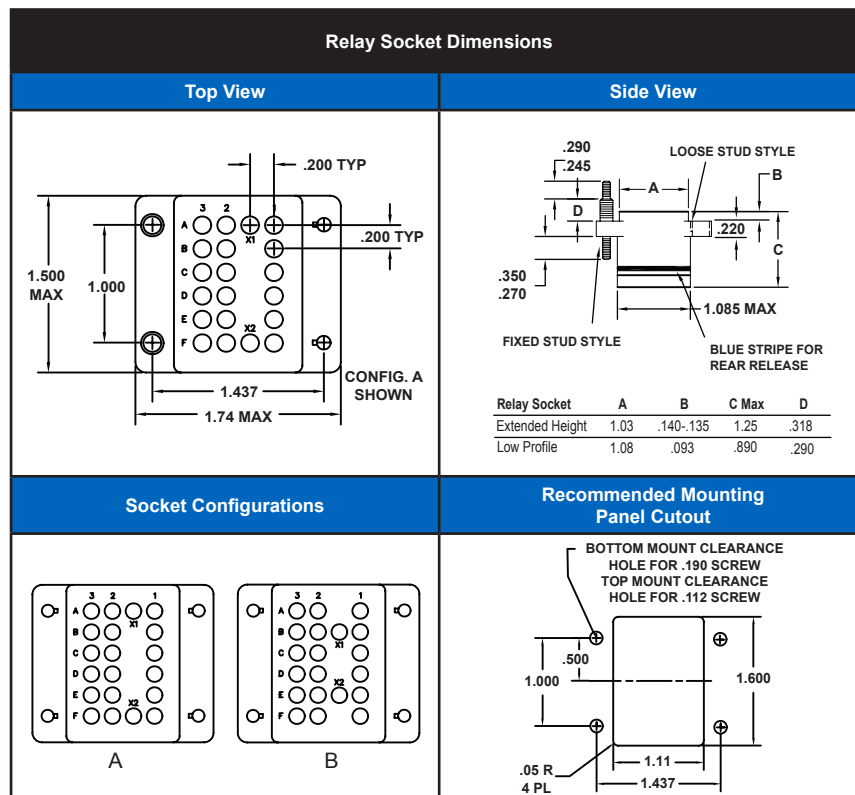
Hardware:  
Stainless Steel or Steel  
w/Cadmium Chromate Finish

Contact Retainers:  
Stainless Steel

Socket Contacts:  
Copper Alloy, Hard Gold Plated  
in Accordance with SAE-AMS-2422



Mates with M83536, M6106 Relays



| Low Profile Relay Sockets |             |                  |     |                   |                |         |                              |        |       |
|---------------------------|-------------|------------------|-----|-------------------|----------------|---------|------------------------------|--------|-------|
| MIL P/N<br>M12883         | APCD<br>P/N | Mounting<br>Stud | QTY | Size <sup>1</sup> | Contact<br>P/N | Config. | Mating Relay                 | Weight |       |
|                           |             |                  |     |                   |                |         |                              | Pounds | Grams |
| /47-01                    | RSE116755   | Loose            | 20  | 16/16             | /92-533        | A       | M83536/25-002, M83536/26-002 | .144   | 65    |
| /47-02                    | RSE116757   | Loose            | 20  | 16/16             | /92-535        | B       | M83536/27-002                |        |       |
| /47-04                    | RSE116761   | Fixed            | 20  | 16/16             | /92-533        | A       | M83536/25-002, M83536/26-002 |        |       |
| /47-05                    | RSE116763   | Fixed            | 20  | 16/16             | /92-533        | B       | M83536/27-002                |        |       |

| Extended Height Relay Sockets |             |                  |     |                   |                |         |                              |        |       |
|-------------------------------|-------------|------------------|-----|-------------------|----------------|---------|------------------------------|--------|-------|
| MIL P/N<br>M12883             | APCD<br>P/N | Mounting<br>Stud | QTY | Size <sup>1</sup> | Contact<br>P/N | Config. | Mating Relay                 | Weight |       |
|                               |             |                  |     |                   |                |         |                              | Pounds | Grams |
| /47-07                        | RSL116101   | Loose            | 20  | 16/16             | /5-116         | A       | M83536/25-002, M83536/26-002 | .176   | 80    |
| /47-08                        | RSL116103   | Loose            | 20  | 16/16             | /5-116         | B       | M83536/27-002                |        |       |
| /47-10                        | RSL116073   | Fixed            | 20  | 16/16             | /5-116         | A       | M83536/25-002, M83536/26-002 |        |       |
| /47-11                        | RSL116075   | Fixed            | 20  | 16/16             | /5-116         | B       | M83536/27-002                |        |       |

<sup>1</sup>Mating End/ Wire Barrel

Mounting instructions can be found on page 26

# MIL-PRF-12883/48

## RSE/RSL 3 Pole/25 Amp



### Operating Range

Temperature:  
-65°C to 125°C

Insulation Resistance:  
1000 Megaohms Min.

Dielectric Withstanding Voltage:  
1500 VRMS at Sea Level  
500 VRMS at 80,000 ft.

Vibration:  
MIL-STD-202, Method 204  
Test Condition G

Shock:  
MIL-STD-202, Method 213; Test Condition C

### Materials

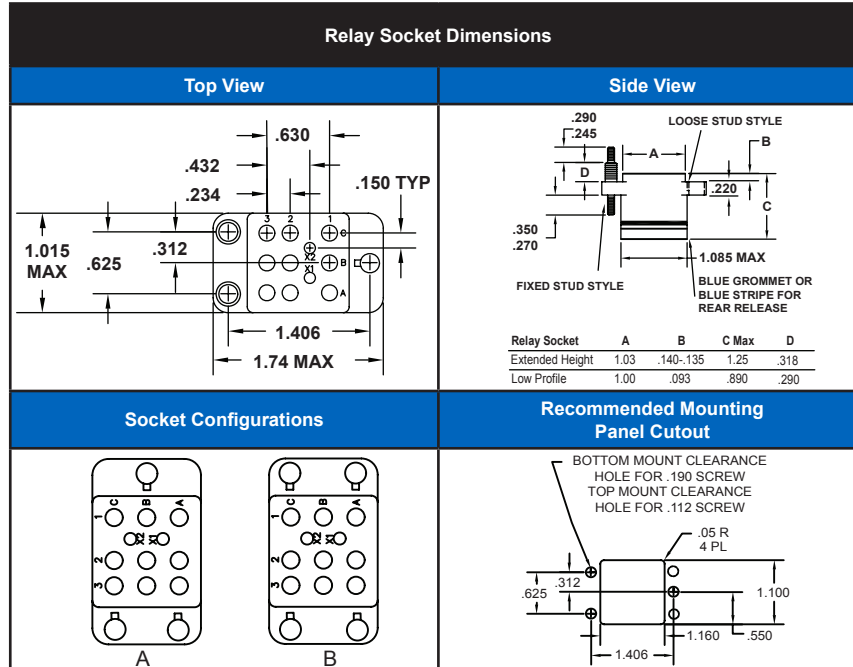
Socket Body:  
Polyetherimide per ASTM-D5205

Grommet:  
Silicone Rubber per A-A-59588

Hardware:  
Stainless Steel or Steel w/Cadmium Chromate Finish

Contact Retainers:  
Stainless Steel

Socket Contacts:  
Copper Alloy, Hard Gold Plated in Accordance with SAE-AMS-2422



| Low Profile Relay Sockets |             |                  |     |                   |                |         |                           |        |       |
|---------------------------|-------------|------------------|-----|-------------------|----------------|---------|---------------------------|--------|-------|
| MIL P/N<br>M12883         | APCD<br>P/N | Mounting<br>Stud | QTY | Size <sup>1</sup> | Contact<br>P/N | Config. | Mating Relay              | Weight |       |
|                           |             |                  |     |                   |                |         |                           | Pounds | Grams |
| /48-01                    | RSE112061   | Loose            | 2   | 16/16             | /92-533        | A       | MS27743-06, -12, -18, -24 | .109   | 49    |
|                           |             |                  | 9   | 12/12             | /92-535        | A       | MS27743-06, -12, -18, -24 |        |       |
| /48-02                    | RSE112063   | Fixed            | 2   | 16/16             | /92-533        | A       | MS27743-09, -15, -21, -27 |        |       |
|                           |             |                  | 9   | 12/12             | /92-535        | A       | MS27743-09, -15, -21, -27 |        |       |
| /48-05                    | RSE112065   | Loose            | 2   | 16/16             | /92-533        | B       | MS27743-06, -12, -18, -24 |        |       |
|                           |             |                  | 9   | 12/12             | /92-535        | B       | MS27743-06, -12, -18, -24 |        |       |
| /48-06                    | RSE112067   | Fixed            | 2   | 16/16             | /92-533        | B       | MS27743-09, -15, -21, -27 |        |       |
|                           |             |                  | 9   | 12/12             | /92-535        | B       | MS27743-09, -15, -21, -27 |        |       |

| Extended Height Relay Sockets |             |                  |     |                   |                |         |                           |        |       |
|-------------------------------|-------------|------------------|-----|-------------------|----------------|---------|---------------------------|--------|-------|
| MIL P/N<br>M12883             | APCD<br>P/N | Mounting<br>Stud | QTY | Size <sup>1</sup> | Contact<br>P/N | Config. | Mating Relay              | Weight |       |
|                               |             |                  |     |                   |                |         |                           | Pounds | Grams |
| /48-03                        | RSL112105   | Loose            | 2   | 16/16             | /5-116         | A       | MS27743-06, -12, -18, -24 | .129   | 55    |
|                               |             |                  | 9   | 12/12             | /5-118         | A       | MS27743-06, -12, -18, -24 |        |       |
| /48-04                        | RSL112101   | Fixed            | 2   | 16/16             | /5-116         | A       | MS27743-09, -15, -21, -27 |        |       |
|                               |             |                  | 9   | 12/12             | /5-118         | A       | MS27743-09, -15, -21, -27 |        |       |
| /48-07                        | RSL112107   | Loose            | 2   | 16/16             | /5-116         | B       | MS27743-06, -12, -18, -24 |        |       |
|                               |             |                  | 9   | 12/12             | /5-118         | B       | MS27743-06, -12, -18, -24 |        |       |
| /48-08                        | RSL112103   | Fixed            | 2   | 16/16             | /5-116         | B       | MS27743-09, -15, -21, -27 |        |       |
|                               |             |                  | 9   | 12/12             | /5-118         | B       | MS27743-09, -15, -21, -27 |        |       |

<sup>1</sup>Mating End/ Wire Barrel

Mounting instructions can be found on page 26

# MIL-PRF-12883/52, MIL PRF-12883/53

## RSE Track Mount 2, 3 & 4 Pole & Mounting Track

### Operating Range

Temperature:  
-65°C to 125°C

Insulation Resistance:  
1000 Megaohms Min.

Dielectric Withstanding Voltage:  
1500 VRMS at Sea Level  
700 VRMS at 80,000 ft.

Vibration:  
MIL-STD-202, Method 204  
Test Condition G

Shock:  
MIL-STD-202, Method 213  
Test Condition C

### Materials

Socket Body:  
Polyetherimide per ASTM-D5205

Grommet:  
Silicone Rubber per A-A-59588

Contact Retainers:  
Beryllium Copper

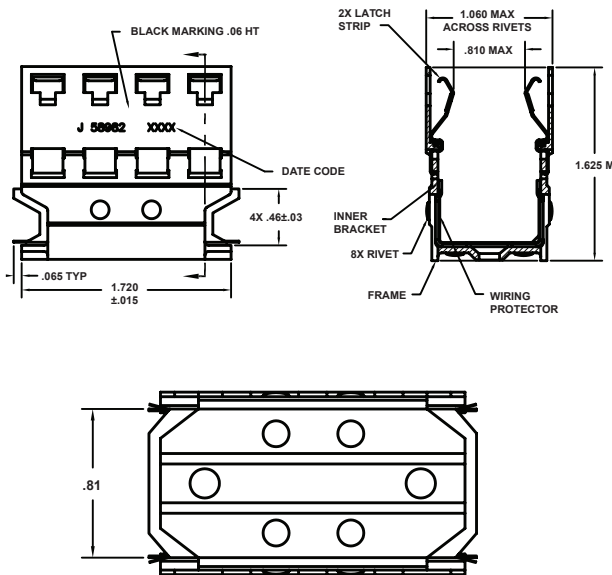
Socket Contacts:  
Copper Alloy, Hard Gold Plated in Accordance with MIL-G-45204



Mates with MS83726, M83536  
& M6106 Relays

### M12883/53-001 Mounting Track Dimensions

#### Track Dimensions



#### Track Materials

Outer Track:  
Aluminum Alloy per QQ-A-225  
Chemical Coating per MIL-C-5541, Class 3

Inner Brackets and Rivets:  
Stainless Steel per QQ-S-766, Passivated

Latch:  
Beryllium copper #172 per QQ-C-533  
Bright Finish

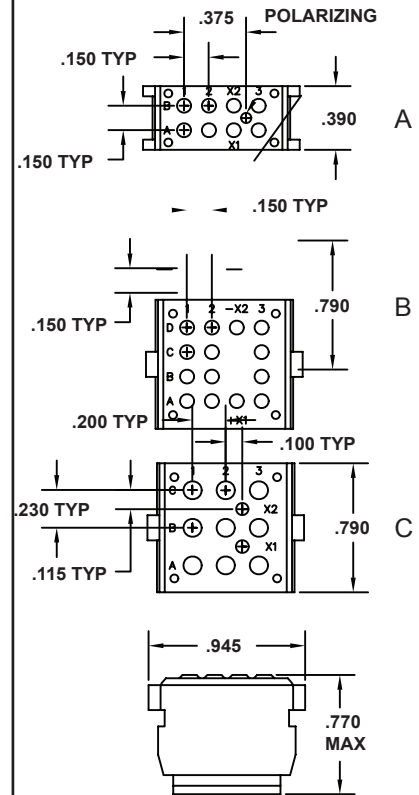
Wiring Protector:  
Aramid Paper per MIL-I-24202  
Track Operating Range:  
-65°C to 125°C

#### Track Weight

| RST145005 |       |
|-----------|-------|
| lbs.      | Grams |
| .053      | 24    |

Use tool M6106/32-001 to remove M1288/52 sockets.  
Use tool M6106/31-001 to remove relays from this mounting bracket.

### Socket Dimensions



### Low Profile Relay Sockets

| MIL P/N<br>M12883* | APCD<br>P/N | QTY | Size <sup>1</sup> | Contact<br>P/N | Config. | Mating Relay                    | Weight |       |
|--------------------|-------------|-----|-------------------|----------------|---------|---------------------------------|--------|-------|
|                    |             |     |                   |                |         |                                 | Pounds | Grams |
| /52-001            | RSE116175   | 8   | 20/20             | /101-553       | A       | M83536/2-028,<br>M83726/27, /25 | .016   | 7     |
| /52-002            | RSE116185   | 14  | 20/20             | /101-533       | B       | M83536/6-025                    | .031   | 14    |
| /52-003            | RSE116195   | 9   | 16/16             | /101-554       | C       | M83536/22-025                   |        |       |
|                    |             | 2   | 20/20             | /101-553       |         |                                 |        |       |

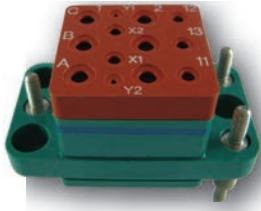
\*Mating End/ Wire Barrel

<sup>1</sup>These relay sockets are used in track mount system with track M12883/53-001, Amphenol Pcd P/N RST145005

Mounting instructions can be found on page 26

# MIL-PRF-12883/54

RSE 3 Pole/25 Amp



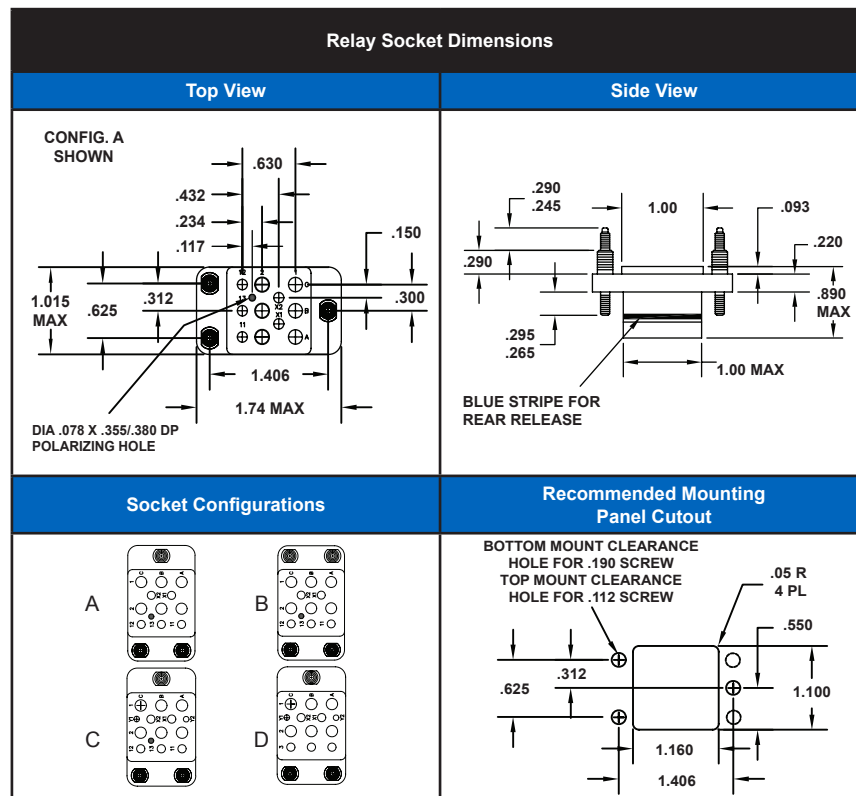
Mates with M6106/12, /13 & MS27742 Relays

## Operating Range

Temperature:  
-65°C to 125°C  
Insulation Resistance:  
1000 Megaohms Min.  
Dielectric Withstanding Voltage:  
1500 VRMS at Sea Level  
500 VRMS at 80,000 ft.  
Vibration:  
MIL-STD-202, Method 204  
Test Condition G  
Shock:  
MIL-STD-202, Method 213  
Test Condition C

## Materials

Socket Body:  
Polyetherimide per ASTM-D5205  
Grommet:  
Silicone Rubber per A-A-59588  
Hardware:  
Stainless Steel or Steel  
w/Cadmium Chromate Finish  
Contact Retainers:  
Stainless Steel  
Socket Contacts:  
Copper Alloy, Hard Gold Plated in  
Accordance with SAE-AMS-2422



| Low Profile Relay Sockets |             |                  |     |                   |                |         |                                  | Weight |       |
|---------------------------|-------------|------------------|-----|-------------------|----------------|---------|----------------------------------|--------|-------|
| MIL P/N<br>M12883         | APCD<br>P/N | Mounting<br>Stud | QTY | Size <sup>1</sup> | Contact<br>P/N | Config. | Mating Relay                     | Pounds | Grams |
| /54-01                    | RSE116627   | Fixed            | 5   | 16/16             | /92-533        | A       | M6106/13-002,-008,-011,-013,-015 | .132   | 60    |
|                           |             |                  | 6   | 12/12             | /92-535        |         |                                  |        |       |
| /54-02                    | RSE116631   | Fixed            | 5   | 16/16             | /92-533        | B       | M6106/13-004                     | .132   | 60    |
|                           |             |                  | 6   | 12/12             | /92-535        |         |                                  |        |       |
| /54-03                    | RSE116629   | Fixed            | 2   | 20/20             | /92-532        | C       | M6106/12-002                     | .154   | 70    |
|                           |             |                  | 5   | 16/16             | /92-533        |         |                                  |        |       |
| /54-04                    | RSE116635   | Fixed            | 2   | 20/20             | /92-532        | D       | MS27742-2                        | .154   | 70    |
|                           |             |                  | 2   | 16/16             | /92-535        |         |                                  |        |       |
|                           |             |                  | 9   | 12/12             | /92-535        |         |                                  |        |       |

<sup>1</sup>Mating End/ Wire Barrel

Mounting instructions can be found on page 26

# MIL-PRF-12883/55

## RSE 1 Pole/25 Amp

### Operating Range

Temperature:  
-65°C to 125°C

Insulation Resistance:  
1000 Megaohms Min.

Dielectric Withstanding Voltage:  
1500 VRMS at Sea Level  
500 VRMS at 80,000 ft.

Vibration:  
MIL-STD-202, Method 204  
Test Condition G

Shock:  
MIL-STD-202, Method 213  
Test Condition C

### Materials

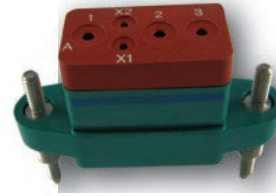
Socket Body:  
Polyetherimide per ASTM-D5205

Grommet:  
Silicone Rubber per A-A-59588

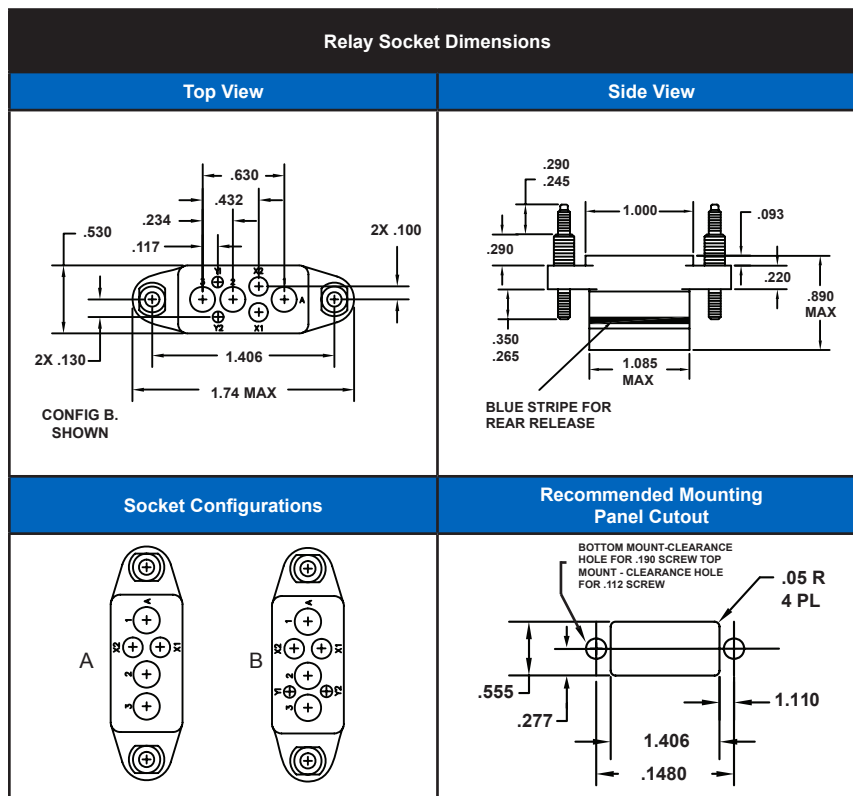
Hardware:  
Stainless Steel or Steel  
w/Cadmium Chromate Finish

Contact Retainers:  
Stainless Steel

Socket Contacts:  
Copper Alloy, Hard Gold Plated in  
Accordance with SAE-AMS-2422



Mates with M6106/19, 20 Relays



| Low Profile Relay Sockets |             |                  |     |                   |                |         |                                      | Weight |       |
|---------------------------|-------------|------------------|-----|-------------------|----------------|---------|--------------------------------------|--------|-------|
| MIL P/N<br>M12883         | APCD<br>P/N | Mounting<br>Stud | QTY | Size <sup>1</sup> | Contact<br>P/N | Config. | Mating Relay                         | Pounds | Grams |
| /55-01                    | RSE112035   | Fixed            | 2   | 16/16             | /92-533        | A       | M6106/19-004, -007, -012, -017, -022 | .073   | 33    |
|                           |             |                  | 3   | 12/12             | /92-535        |         |                                      |        |       |
| /55-02                    | RSE112036   | Fixed            | 2   | 16/16             | /92-533        | A       | M6106/19-004, -007, -012, -017, -022 |        |       |
|                           |             |                  | 3   | 12/16             | /92-536        |         |                                      |        |       |
| /55-03                    | RSE112044   | Fixed            | 2   | 22/22             | /92-531        | B       | M6106/20-002                         |        |       |
|                           |             |                  | 2   | 16/16             | /92-533        |         |                                      |        |       |
|                           |             |                  | 3   | 12/12             | /92-535        |         |                                      |        |       |

<sup>1</sup>Mating End/ Wire Barrel

Mounting instructions can be found on page 26

# Microminiature Relay Sockets

RSE 2&3 Pole, 2 Amp



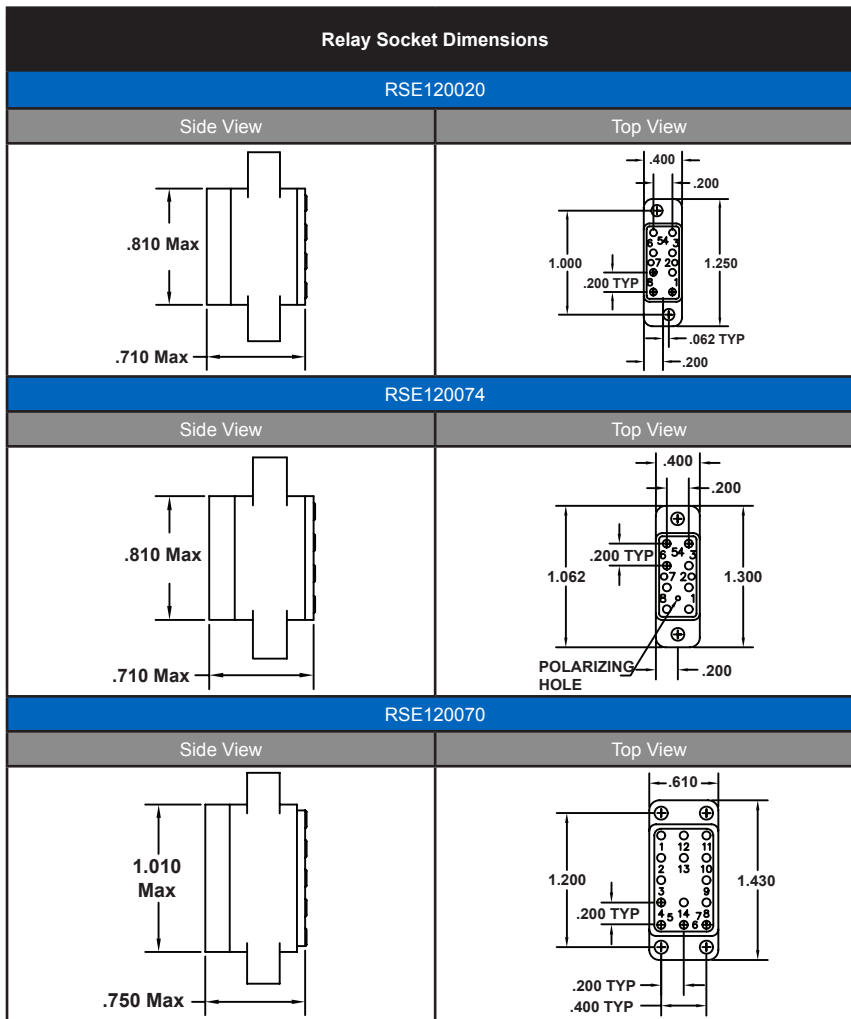
Mates with M39016 & M5757 Relays

## Operating Range

Temperature:  
-65°C to 125°C  
Insulation Resistance:  
1000 Megaohms Min.  
Dielectric Withstanding  
Voltage:  
2500 VRMS at Sea Level  
700 VRMS at 80,000 ft.  
Vibration:  
MIL-STD-202, Method 204  
Test Condition G  
Shock:  
MIL-STD-202, Method 213  
Test Condition C

## Materials

Socket Body:  
Polyetherimide per ASTM-D5205  
Grommet:  
Silicone Rubber per A-A-59588  
Hardware:  
Stainless Steel or Steel w/Cadmium  
Chromate Finish  
Contact Retainers:  
Stainless Steel  
Socket Contacts:  
Copper Alloy, Hard Gold Plated in  
Accordance with SAE-AMS-2422



| Relay Sockets for 2 Pole/2 Amp Microminiature Relays |     |                   |             |         |                                   |        |       |
|--|-----|-------------------|-------------|---------|-----------------------------------|--------|-------|
| APCD P/N   | QTY | Size <sup>1</sup> | Contact P/N | Config. | Mating Relay                      | Weight |       |
|  |     |                   |             |         |                                   | Pounds | Grams |
| RSE120020  | 8   | 22/20             | CNS109900   | A       | MIL-R-5757/10-022,-044            | .024   | 11    |
| RSE120074  | 8   | 22/20             | CNS109900   | B       | MIL-R-39016/55-001,-013,-025,-037 |        |       |
| Relay Sockets for 3 Pole/2 Amp Microminiature Relays |     |                   |             |         |                                   |        |       |
| APCD P/N   | QTY | Size <sup>1</sup> | Contact P/N | Config. | Mating Relay                      | Weight |       |
|  |     |                   |             |         |                                   | Pounds | Grams |
| RSE120070  | 14  | 22/20             | CNS109900   | C       | MIL-R-39016/39-002,-008,-014      | .044   | 20    |

<sup>1</sup>Mating End/ Wire Barrel

Mounting instructions can be found on page 26

# MIL-PRF-12883 Board Mount

RSN 2, 4 Pole/10 Amp, 3 Pole/25 Amp

## Operating Range

Temperature:  
-65°C to 125°C

Insulation Resistance:  
1000 Megaohms Min.

Dielectric Withstanding Voltage:  
1500 VRMS at Sea Level  
500 VRMS at 80,000 ft.

Vibration:  
MIL-STD-202, Method 204  
Test Condition G

Shock:  
MIL-STD-202, Method 213  
Test Condition C

## Materials

Socket Body:  
Polyetherimide per ASTM-D5205

Hardware:  
Stainless Steel or Steel  
w/Cadmium Chromate Finish

Contact Retainers:  
Stainless Steel

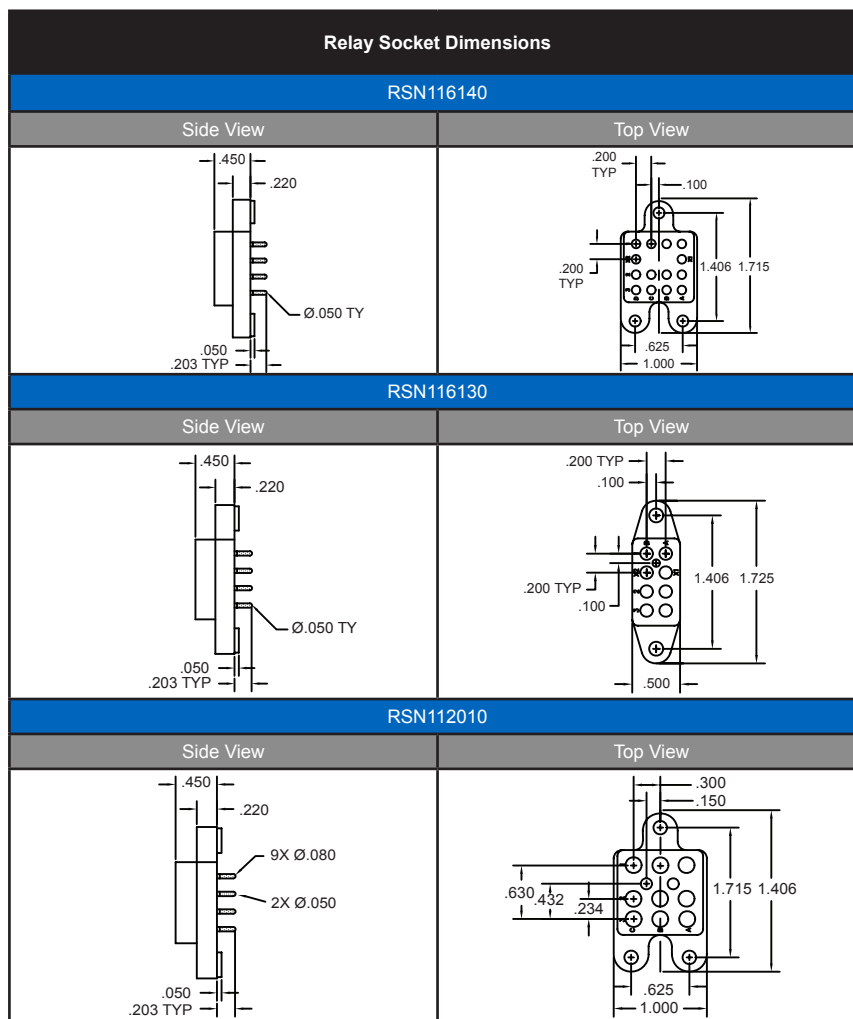
Socket Contacts:  
Copper Alloy, Hard Gold Plated  
in Accordance with SAE-AMS-2422



Mates with MIL-R-6106  
& MS27743 Relays

## Product Description

Product line of pluggable, PC Board Mount Relay Sockets allows separable mounting of relays directly to boards in airborne or ground applications. Polyetherimide body and scalloped mounting flange reduce weight and improve strength. Mounting hardware supplied with connector secures firmly to board and eliminates stress on solder contacts. Gold-plated contacts and solder-dipped contact tails are available.



| Board Mount Relay Sockets |               |     |                   |             |         |                     |        |       |
|---------------------------|---------------|-----|-------------------|-------------|---------|---------------------|--------|-------|
| APCD P/N                  | Mounting Stud | QTY | Size <sup>1</sup> | Contact P/N | Config. | Mating Relay        | Weight |       |
|                           |               |     |                   |             |         |                     | Pounds | Grams |
| RSN116140                 | HEX           | 14  | 16/16             | /92-533     | A       | MIL-R-6106, MS27400 | .055   | 25    |
| RSN116130                 | HEX           | 8   | 16/16             | /92-533     | B       | MIL-R-6106, MS27401 | .033   | 15    |
| RSN112010                 | HEX           | 9   | 12/12             | /92-535     | C       | MIL-R-6106, MS27743 | .057   | 26    |
|                           |               | 2   | 16/16             | /92-533     |         |                     |        |       |

<sup>1</sup>Mating End/ Wire Barrel

Mounting instructions can be found on page 26



# Non-Environmental Relay Sockets

## Solder Termination

6 Pole/5 Amp, 4 Pole/10 Amp, 2&4 Pole/5Amp, 2 Pole/10Amp



### Operating Range

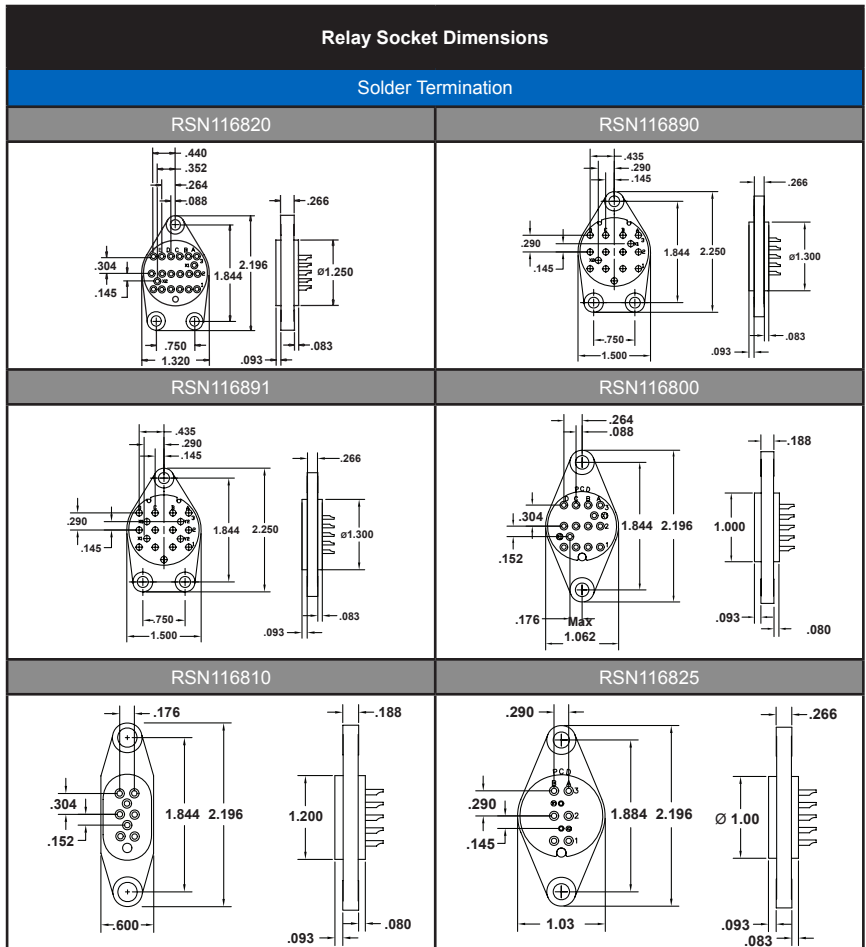
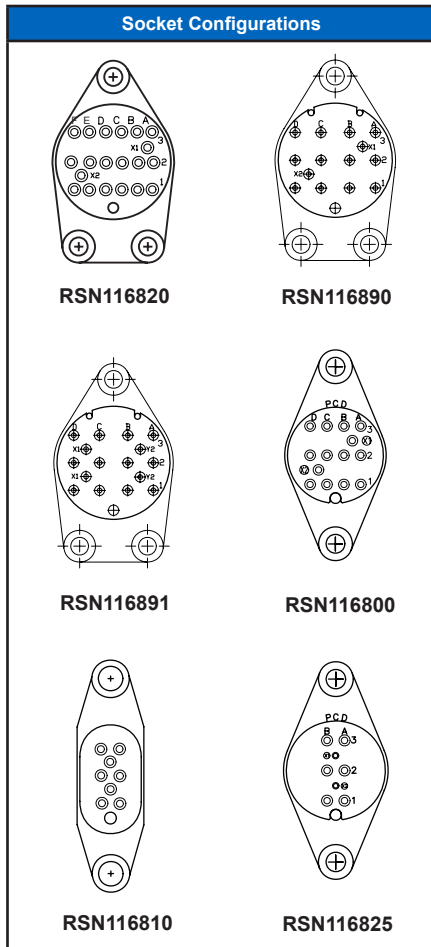
Temperature:  
-65°C to 125°C  
Insulation Resistance:  
1000 Megaohms Min.  
Dielectric Withstanding  
Voltage:  
1500 VRMS at Sea Level  
500 VRMS at 80,000 ft.  
Vibration:  
MIL-STD-202, Method 204  
Test Condition G  
Shock:  
MIL-STD-202, Method 213  
Test Condition C

### Materials

Socket Body:  
Polyetherimide per ASTM-D5205  
Grommet:  
Silicone Rubber per A-A-59588  
Hardware:  
Stainless Steel or Steel  
w/Cadmium Chromate Finish  
Contact Retainers:  
Stainless Steel  
Socket Contacts:  
Copper Alloy, Hard Gold Plated in  
Accordance with SAE-AMS-2422

### Product Description

Solder Termination Relay Sockets are made with a polyetherimide body and scalloped mounting flange to reduce weight and improve strength. Mounting hardware is supplied with the product.



| Solder Termination Relay Sockets |                    |                         |                  |
|----------------------------------|--------------------|-------------------------|------------------|
| APCD P/N                         | Ref MIL STD Socket | MIL STD Relay           | Leach Corp Relay |
| RSN116820                        | MS25330            | MS25329 (6 Pole/5 Amp)  | 9226 Series      |
| RSN116890                        | MS25328            | MS25327 (4 Pole/10 Amp) | 9224 Series      |
| RSN116891                        | MS25462            | MS25461 (4 Pole/10 Amp) | 9225 Series      |
| RSN116800                        | MS25326            | MS25325 (4 Pole/5 Amp)  | 9220 Series      |
| RSN116810                        | MS25322            | MS25321 (2 Pole/10 Amp) | 9229 Series      |
| RSN116825                        | MS25324            | MS25323 (2 Pole/10 Amp) | 9227 Series      |

Mounting instructions can be found on page 26

# Relay Socket Mounting Instructions

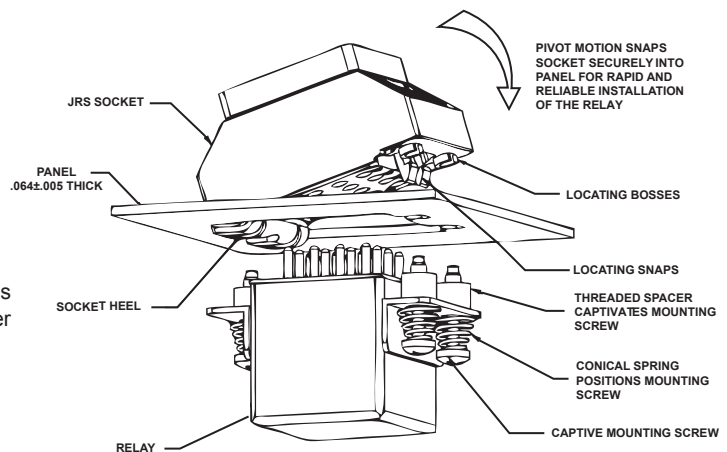
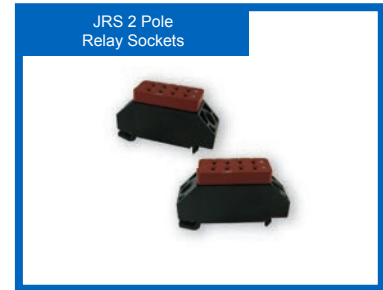
## Top Mount & Bottom Mount

| Mounting Instructions<br>MIL-PRF-12883/40, MIL-PRF-12883/41; MIL-PRF-12883/47, MIL-PRF-12883/48; MIL-PRF-12883/54, MIL-PRF-12883/55   |   |
|---|---|
| Top Mount   | Bottom Mount  |
| <p>Silicone Rubber Gasket (Supplied With Relay)<br/>Relay Mounting Bracket (Ref.)<br/>Stud<br/>4-40 Hex Lock Nut<br/>Flat Washers<br/>.125 Max. Mounting Panel<br/>4-40 Hex Lock Nut</p>            | <p>Silicone Rubber Gasket (Supplied With Relay)<br/>Relay Mounting Bracket (Ref.)<br/>Stud<br/>4-40 Hex Lock Nut<br/>Flat Washers<br/>10-32 Hex Lock Nut<br/>.093 Max. Mounting Panel<br/>4-40 Hex Lock Nut</p> |
| Mounting Instructions<br>MIL-PRF-12883/44, MIL-PRF-12883/45; MIL-PRF-12883/46   |   |
| Top Mount   | Bottom Mount  |
| <p>Silicone Rubber Gasket (Supplied With Relay)<br/>Relay Mounting Bracket (Ref.)<br/>Stud<br/>4-40 Hex Lock Nut<br/>Flat Washers<br/>.125 Max. Mounting Panel<br/>4-40 Hex Lock Nut</p>            | <p>Silicone Rubber Gasket (Supplied With Relay)<br/>Relay Mounting Bracket (Ref.)<br/>Stud<br/>4-40 Hex Lock Nut<br/>Flat Washers<br/>8-32 Hex Lock Nut<br/>.093 Max. Mounting Panel<br/>4-40 Hex Lock Nut</p>  |
| Mounting Instructions<br>Microminiature Relay Sockets   |   |
| Top Mount   | Bottom Mount  |
| <p>Relay Mounting Bracket (Ref.)<br/>2-56 Screw (4-40 Config. C)<br/>Lock Washer<br/>Stud<br/>Spacer (.050 Thick)<br/>.090 Max. Mounting Panel<br/>Lock Washer<br/>4-40 Hex Lock Nut</p>            | <p>Relay Mounting Bracket (Ref.)<br/>2-56 Screw (4-40 Config. C)<br/>Lock Washer<br/>Stud<br/>.050 Max. Mounting Panel<br/>Lock Washer<br/>4-40 Hex Lock Nut</p>  |
| Mounting Instructions<br>Non-Environmental Solder Termination Relay Sockets   |   |
| Top Mount   | Bottom Mount  |
| <p>Silicone Rubber Gasket (Supplied With Relay)<br/>4-40 Pan Head Screw<br/># 4 Lock Washer<br/># 10-32 Mounting Stud<br/># 10 Flat Washer (3)<br/>Mounting Panel<br/># 10-32 Self-Lock Hex Nut</p> | <p>Silicone Rubber Gasket (Supplied With Relay)<br/>4-40 Pan Head Screw<br/># 4 Lock Washer<br/># 10-32 Mounting Stud<br/>Mounting Panel<br/># 10-32 Self-Lock Hex Nut</p>                                      |

# Amphenol Pcd Relay Sockets

## JRS/JRE Quick-Mount Relay Sockets

Amphenol Pcd recently introduced the JRS/JRE Quick-Mount Relay Sockets. These relay sockets snap mount into standard aircraft panel cutouts and eliminate all socket-to-bulkhead mounting hardware, simplifying installation and dramatically reducing weight and installation cost. JRS/JRE Quick-Mount Relay Sockets meet the applicable performance and dimensional requirements of MIL-PRF-12883, are compatible with Mil-Spec approved relays from any manufacturer, and can be used in existing avionics systems with standard slotted panel cutouts.



### Key Features and Benefits

#### Socket Construction & Installation

JRS/JRE Relay Sockets maintain the same MIL mounting configurations and construction (molded polyetherimide bodies and silicone rubber sealing grommets) as Amphenol Pcd's traditional relay sockets. A heel and toe snap-in system allows the socket to be mounted to the panel without hardware and held securely in place. The assembled socket and relay meet all shock and vibration requirements per MIL-PRF-12883.

#### Lower Installed Cost

Elimination of loose hardware and the time required to assemble individual hardware components to the sockets results in a reduction of over 45% in socket installation time.

#### No Loose Hardware

The combination of snap-in relay-to-panel mounting and per-assembled relay hardware eliminates all loose hardware from the socket and relay mounting and installation process. The logistical and safety issues related with loose hardware/FOD are completely avoided.

#### Relay Installation

JRS/JRE Relay Sockets feature externally threaded mounting screws and spacer assemblies which are per-assembled to the relay. These mounting screws are captured and aligned by a conical spring, and used to fasten the relay to the socket. The screws engage internally threaded bushings captured in the socket and once the relay is secured, the socket snap features are no longer under stress.

#### Reduced Weight

The elimination of socket mounting hardware and a streamlined polyetherimide body combine to reduce the weight of a Quick-Mount Relay Socket. When compared to standard MIL-PRF-12883 Relay Sockets, with traditional mounting hardware, the weight is reduced by approximately 30% to 40%.

# Quick-Mount Relay Sockets

JRS 1 Pole / 25 Amp / Size 12 & 16

## Operating Range

Temperature:  
-65°C to 125°C

Insulation Resistance:  
1000 Megaohms Min.

Dielectric Withstanding Voltage:  
1500 VRMS at Sea Level  
500 VRMS at 80,000 ft.

Vibration:  
MIL-STD-202, Method 204  
Test Condition G

Shock:  
MIL-STD-213, Method 213  
Test Condition C

## Materials

Socket Body:  
Polyetherimide per ASTM-D5205

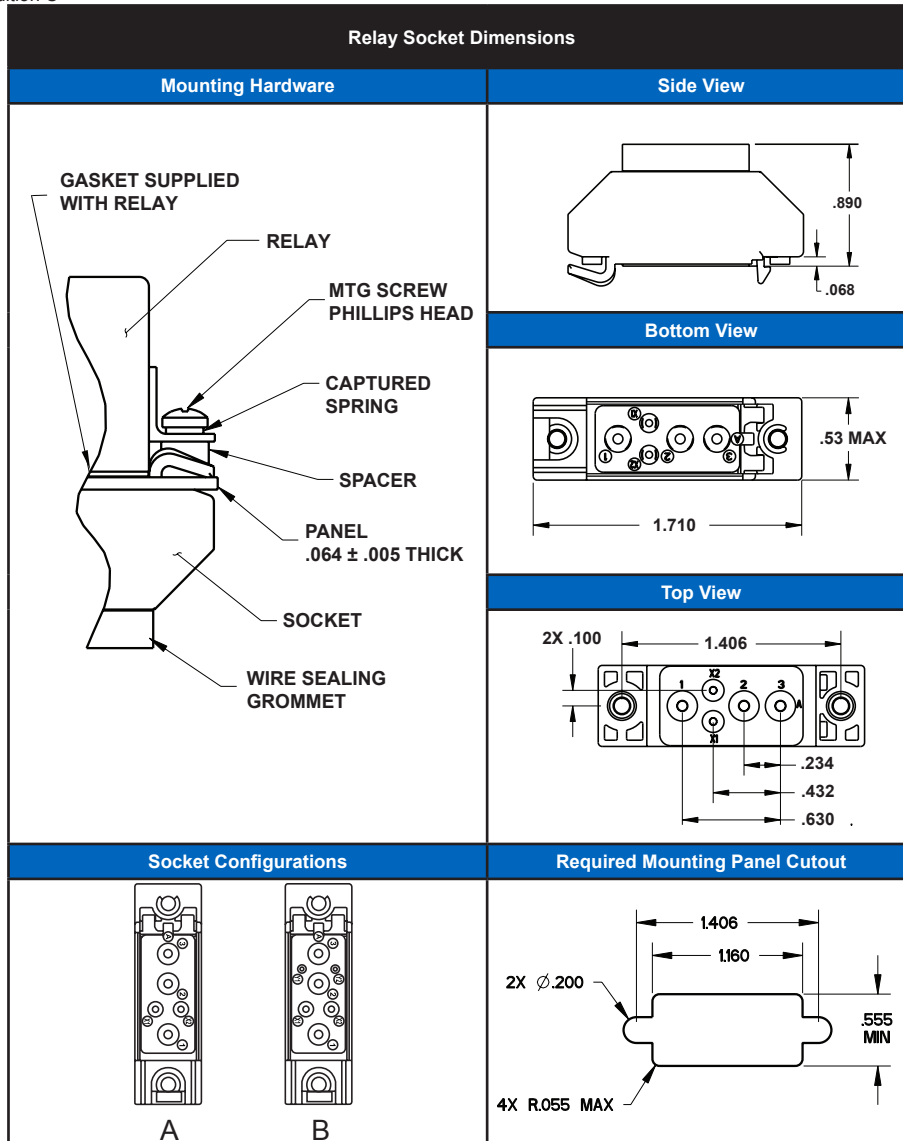
Grommet:  
Silicone Rubber per A-A-59588

Contact Retainers:  
Stainless Steel

Internal Socket Contacts:  
Copper Alloy, Hard Gold Finish  
per SAE-AMS-2422



Replaces MIL-PRF-12883/55  
Mates with M6106 Relays



## Extended Height Relay Sockets

| APCD P/N  | QTY | Size <sup>1</sup> | Contact P/N | Config. | Mating Relay       |
|-----------|-----|-------------------|-------------|---------|--------------------|
| JRS500100 | 2   | 16/16             | /92-533     | A       | M6106/19, M6106/20 |
|           | 3   | 12/12             | /92-535     |         |                    |
| JRS500200 | 2   | 16/16             | /92-533     | B       | M6106/20-002       |
|           | 3   | 12/12             | /92-535     |         |                    |
|           | 2   | 22/22             | /92-531     |         |                    |

<sup>1</sup>Mating End/ Wire Barrel

# Quick-Mount Relay Sockets

JRS 2 Pole / 10 Amp / Size 16



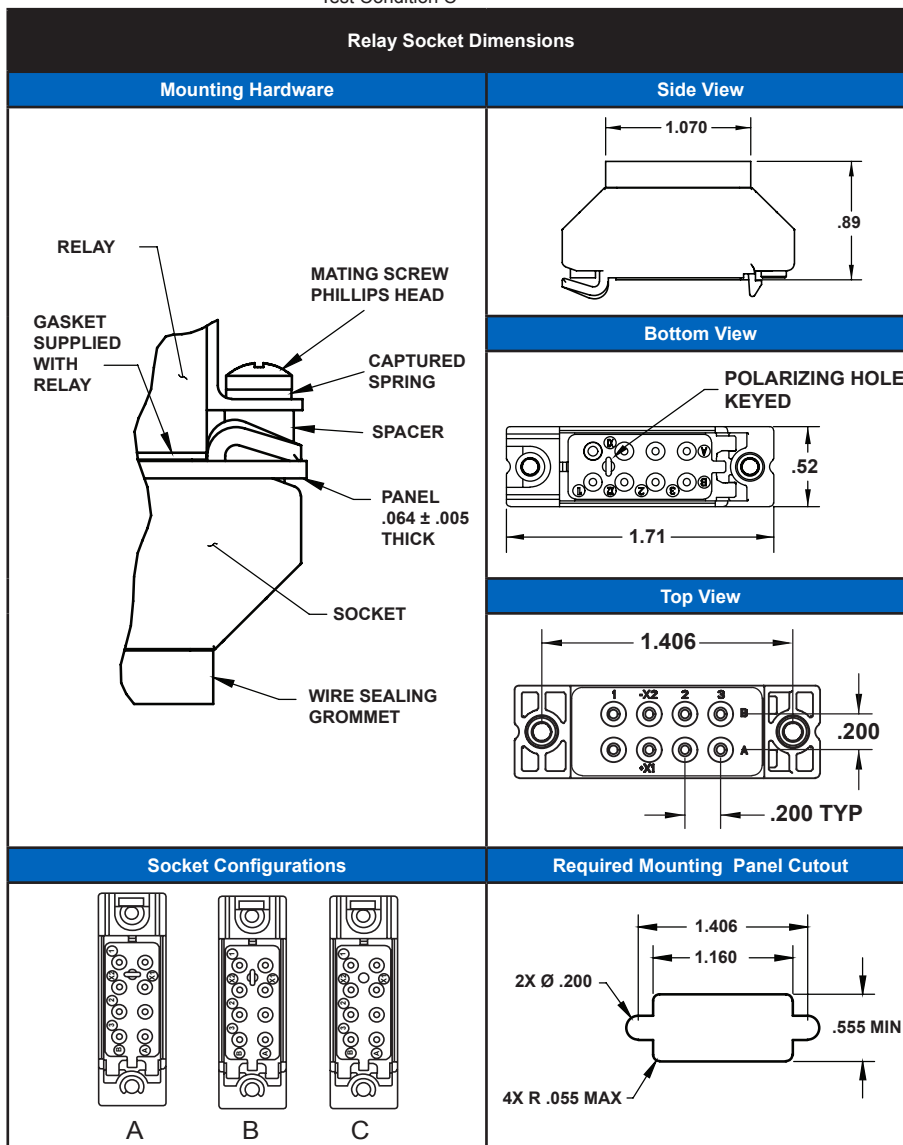
Replaces MIL-PRF-12883/41  
Mates with M83536 Relays

## Operating Range

Temperature:  
-65°C to 125°C  
Insulation Resistance:  
1000 Megaohms Min.  
Dielectric Withstanding  
Voltage:  
1500 VRMS at Sea Level  
500 VRMS at 80,000 ft.  
Vibration:  
MIL-STD-202, Method 204  
Test Condition G  
Shock:  
MIL-STD-213, Method 213  
Test Condition C

## Materials

Socket Body:  
Polyetherimide per ASTM-D5205  
Grommet:  
Silicone Rubber per A-A-59588  
Contact Retainers:  
Stainless Steel  
Internal Socket Contacts:  
Copper Alloy, Hard Gold Finish per  
SAE-AMS-2422



## Extended Height Relay Sockets

| APCD P/N  | QTY | Size <sup>1</sup> | Contact P/N | Config. | Mating Relay |
|-----------|-----|-------------------|-------------|---------|--------------|
| JRS200100 | 8   | 16/16             | /92-533     | A       | M83536       |
| JRS200200 | 8   | 16/16             | /92-533     | B       | M83536       |
| JRS200300 | 8   | 16/16             | /92-533     | C       | M83536       |

<sup>1</sup>Mating End/ Wire Barrel

# Quick-Mount Relay Sockets

JRS 3 Pole / 25 Amp / Size 12 & 16

## Operating Range

Temperature:  
-65°C to 125°C

Insulation Resistance:  
1000 Megaohms Min.

Dielectric Withstanding Voltage:  
1500 VRMS at Sea Level  
500 VRMS at 80,000 ft.

Vibration:  
MIL-STD-202, Method 204  
Test Condition G

Shock:  
MIL-STD-213, Method 213  
Test Condition C

## Materials

Socket Body:  
Polyetherimide per ASTM-D5205

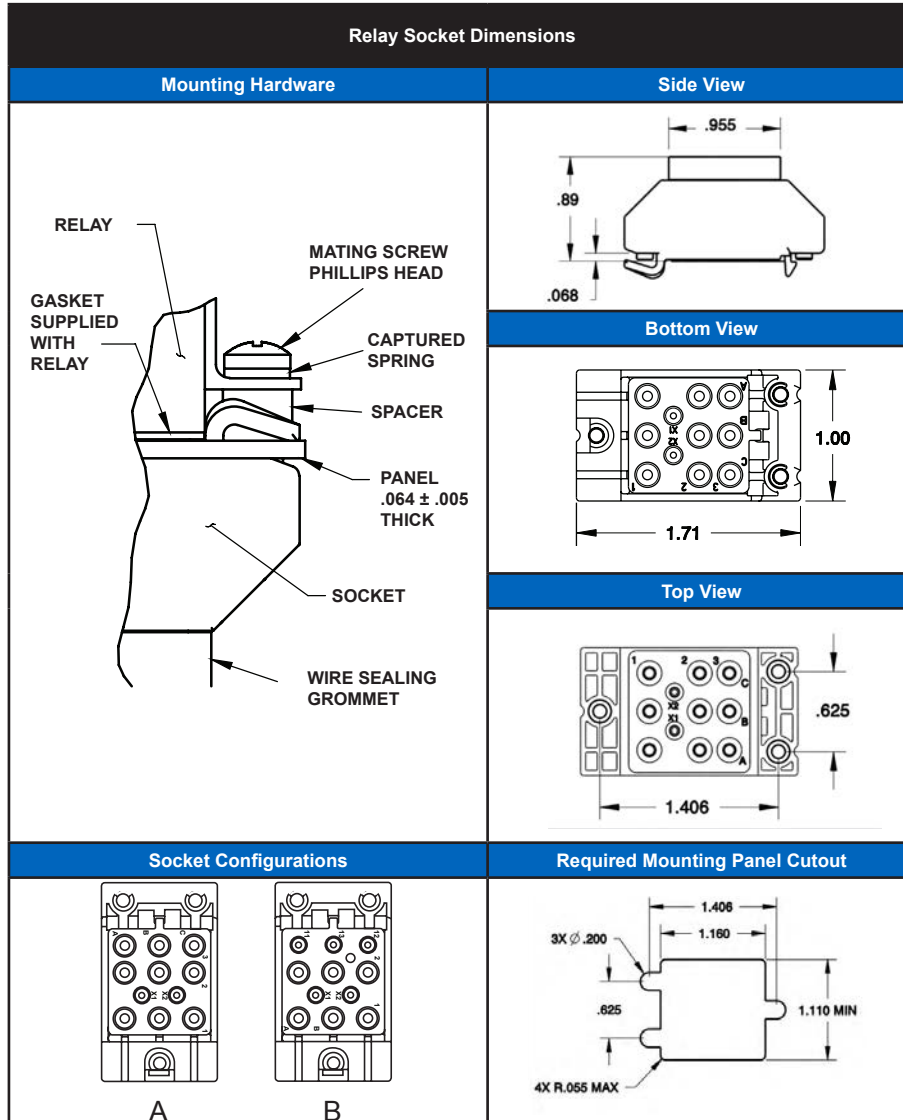
Grommet:  
Silicone Rubber per A-A-59588

Contact Retainers:  
Stainless Steel

Internal Socket Contacts:  
Copper Alloy, Hard Gold Finish  
per SAE-AMS-2422



Replaces MIL-PRF-12883/48  
Mates with M6106 &  
MS27743 Relays



| Extended Height Relay Sockets |     |                   |             |         |                   |
|-------------------------------|-----|-------------------|-------------|---------|-------------------|
| APCD P/N                      | QTY | Size <sup>1</sup> | Contact P/N | Config. | Mating Relay      |
| JRS300100                     | 2   | 16/16             | /92-533     | A       | M6106/13, MS27743 |
|                               | 9   | 12/12             | /92-535     |         |                   |
| JRS310100                     | 5   | 16/16             | /92-533     | B       | M6106/13, MS27743 |
|                               | 6   | 12/12             | /92-535     |         |                   |

<sup>1</sup>Mating End/ Wire Barrel

# Quick-Mount Relay Sockets

JRS 4 Pole / 10 Amp / Size 16



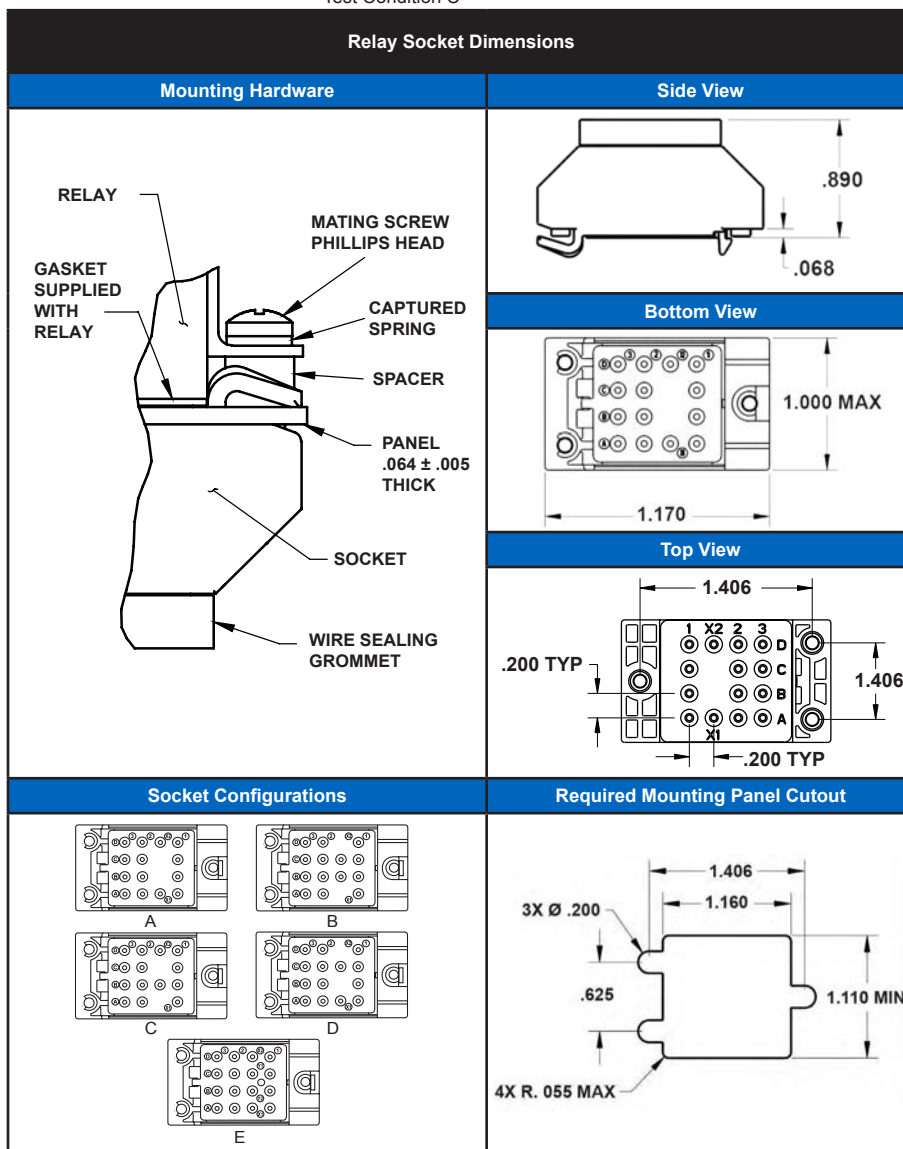
Replaces MIL-PRF-12883/40  
Mates with M83536,83726  
& MS27709 Relays

## Operating Range

Temperature:  
-65°C to 125°C  
Insulation Resistance:  
1000 Megaohms Min.  
Dielectric Withstanding  
Voltage:  
1500 VRMS at Sea Level  
500 VRMS at 80,000 ft.  
Vibration:  
MIL-STD-202, Method 204  
Test Condition G  
Shock:  
MIL-STD-213, Method 213  
Test Condition C

## Materials

Socket Body:  
Polyetherimide per ASTM-D5205  
Grommet:  
Silicone Rubber per A-A-59588  
Contact Retainers:  
Stainless Steel  
Internal Socket Contacts:  
Copper Alloy, Hard Gold Finish  
per SAE-AMS-2422



## Extended Height Relay Sockets

| APCD P/N  | QTY | Size <sup>1</sup> | Contact P/N | Config. | Mating Relay            |
|-----------|-----|-------------------|-------------|---------|-------------------------|
| JRS400100 | 14  | 16/16             | /92-533     | A       | M83536, M83726, MS27709 |
| JRS400200 | 14  | 16/16             | /92-533     | B       | M83536, M83726, MS27709 |
| JRS400300 | 14  | 16/16             | /92-533     | C       | M83536, M83726, MS27709 |
| JRS400400 | 14  | 16/16             | /92-533     | D       | M83536, M83726, MS27709 |
| JRS400500 | 16  | 16/16             | /92-533     | E       | M83536, M83726, MS27709 |

<sup>1</sup>Mating End/ Wire Barrel

# Quick-Mount Relay Sockets

JRE 2 Pole / 5 Amp / Size 20

## Operating Range

Temperature:  
-65°C to 125°C

Insulation Resistance:  
1000 Megaohms Min.

Dielectric Withstanding Voltage:  
1500 VRMS at Sea Level  
500 VRMS at 80,000 ft.

Vibration:  
MIL-STD-202, Method 204  
Test Condition G

Shock:  
MIL-STD-213, Method 213  
Test Condition C

## Materials

Socket Body:  
Polyetherimide per ASTM-D5205

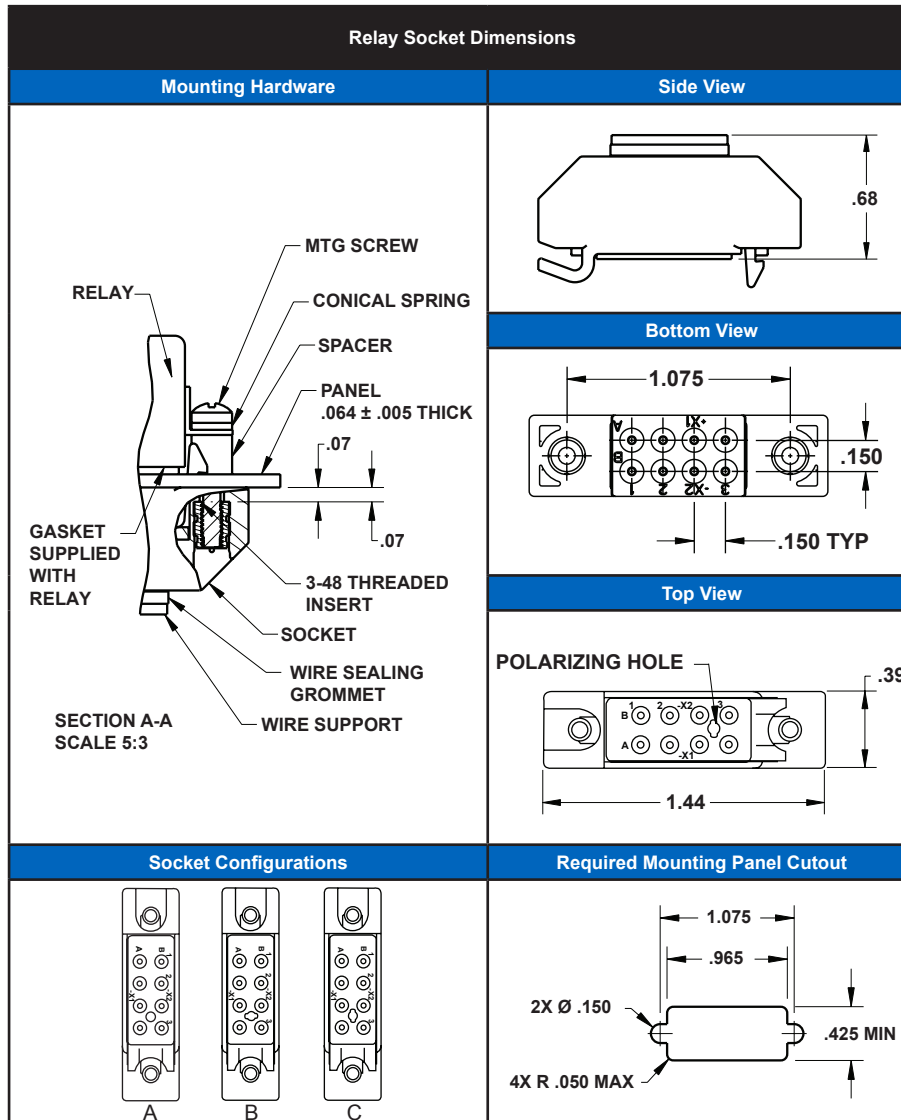
Grommet:  
Silicone Rubber per A-A-59588

Contact Retainers:  
Stainless Steel

Internal Socket Contacts:  
Copper Alloy, Hard Gold Finish  
per SAE-AMS-2422



Replaces MIL-PRF-12883/41  
Mates with M6106 & M83536 Relays



| Extended Height Relay Sockets |     |                   |             |         |               |
|-------------------------------|-----|-------------------|-------------|---------|---------------|
| APCD P/N                      | QTY | Size <sup>1</sup> | Contact P/N | Config. | Mating Relay  |
| JRE200100                     | 8   | 20/20             | /101-553    | A       | M83536, M6106 |
| JRE200200                     | 8   | 20/20             | /101-553    | B       | M83536, M6106 |
| JRE200300                     | 8   | 20/20             | /101-553    | C       | M83536, M6106 |

<sup>1</sup>Mating End/ Wire Barrel

| Part Number Information |          |          |
|-------------------------|----------|----------|
| APCD P/N                | Hardware | Contacts |
| JRE200100               | None     | None     |
| JRE200101               | None     | Yes      |
| JRE200110               | Yes      | None     |
| JRE200111               | Yes      | Yes      |
| Relay Socket Weight     |          |          |
| Relay Socket            | Ounces   | Grams    |
| Extended Height         | 0.02     | 5.81     |



# Quick-Mount Relay Sockets

JRE 4 Pole / 5 Amp / Size 20



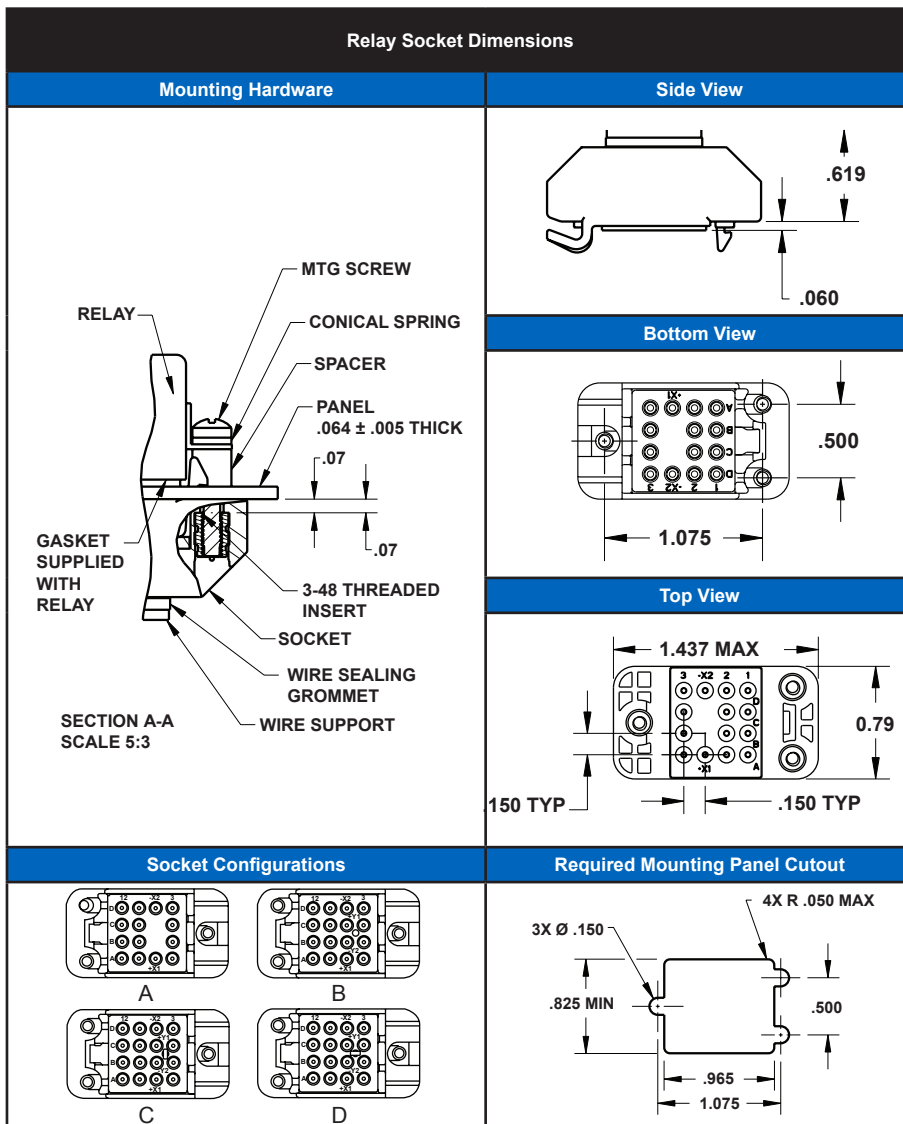
Replaces MIL-PRF-12883/44  
Mates with M83536 Relays

## Operating Range

Temperature: -65°C to 125°C  
Insulation Resistance: 1000 Megaohms Min.  
Dielectric Withstanding Voltage: 1000 VRMS at Sea Level  
500 VRMS at 80,000 ft.  
Vibration: MIL-STD-202, Method 204  
Test Condition G  
Shock: MIL-STD-213, Method 213  
Test Condition C

## Materials

Socket Body: Polyetherimide per ASTM-D5205  
Grommet: Silicone Rubber per A-A-59588  
Contact Retainers: Stainless Steel  
Internal Socket Contacts: Copper Alloy, Hard Gold Finish per SAE-AMS-2422



| Extended Height Relay Sockets |     |                   |             |         |                              |
|-------------------------------|-----|-------------------|-------------|---------|------------------------------|
| APCD P/N                      | QTY | Size <sup>1</sup> | Contact P/N | Config. | Mating Relay                 |
| JRE400100                     | 14  | 20/20             | /101-553    | A       | M83536/5, M83536/6, M83536/7 |
| JRE400200                     | 16  | 20/20             | /101-553    | B       | M83536/5, M83536/6, M83536/7 |
| JRE400300                     | 16  | 20/20             | /101-553    | C       | M83536/5, M83536/6, M83536/7 |
| JRE400400                     | 16  | 20/20             | /101-553    | D       | M83536/5, M83536/6, M83536/7 |

| Part Number Information |          |          |
|-------------------------|----------|----------|
| APCD P/N                | Hardware | Contacts |
| JRE400100               | None     | None     |
| JRE400101               | None     | Yes      |
| JRE400110               | Yes      | None     |
| JRE400111               | Yes      | Yes      |
| Relay Socket Weight     |          |          |
| Relay Socket            | Ounces   | Grams    |
| Low Profile             | 0.38     | 10.9     |

# Terminal Junction Modules

## MIL-T-81714 Series I Class D

QPL-approved MIL-T-81714 modules and AS39029 contacts (formerly MIL-C-39029) are available in four standard sizes accommodating 12-26 AWG wires in both feedback and feedthru types with a full selection of bussing arrangements. The complete MIL-T-81714 Series I Terminal Junction Modules includes the following products.



### Key Features and Benefits

#### Integral Socket/Bus Bar

The patented integral socket/bus bar assembly provides superior electrical characteristics and assures mechanical integrity over a long product life. This unique design completely eliminates all solder or welded joints which could cause variation in electrical and/or mechanical performance.

#### Integral Contacts

Integral female contacts and bus bar have no mechanical functions - only the electrical conductivity function and highly conductive alloy for optimum electrical performance.

#### Split Socket Design

Split Socket Design, conforming to the mating pin diameter, provides peripheral surface wipe and contact, while using the maximum mating surfaces of pin and socket.

#### High Density Modules

A recently introduced series of high density modules which conform to all dimensional and performance requirements of MIL-T-81714/17 is now available from Amphenol Pcd. The high density modules accept size 22 contacts in a compact 3x7 configuration, with a wide variety of bus arrangements. The construction features one-piece screw machine contacts with a split socket design for maximum performance. Contacts are securely packaged within a polyetherimide housing.

#### Class D Modules System

Amphenol Pcd was the first supplier to qualify module and track systems to high performance MIL-T-81714 Series I Class D requirements. Class D systems combine the maximum high temperature and high fluid resistance performance parameters previously divided among three module classes A, B, and C.

#### Electronic Splices

TJSE electronic modules can be supplied with a wide variety of diodes, resistors, capacitors, and fuses within the splice itself. TJSE electronic splices meet the electrical parameters of MIL-81714/24 and allow customers to incorporate system modifications into wire bundles.

# General Table of Contents

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# MIL-T-81714/1, /6 Series I

## Size 22 Class D

### Operating Range

Temperature:  
-65°C to 200°C

Insulation Resistance:  
5000 Megaohms @ 25°C

Dielectric Withstanding Voltage:  
1500 VRMS at Sea Level  
200 VRMS at 100,000 ft.

Current Rating:  
5 Amps

Vibration & Shock:  
MIL-T-81714 Paragraph  
3.5.8 and 3.5.9

### Materials

Module Body:  
Polyetherimide per ASTM-D5205

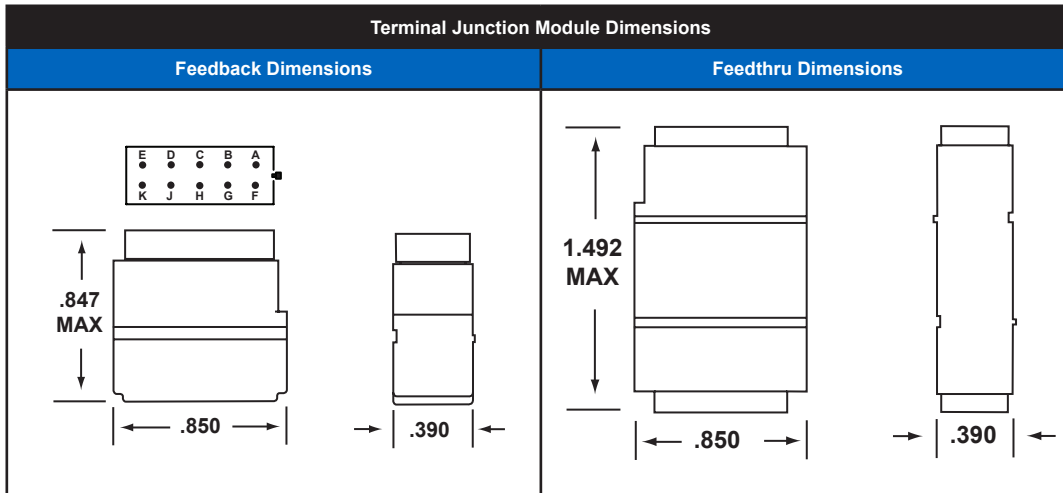
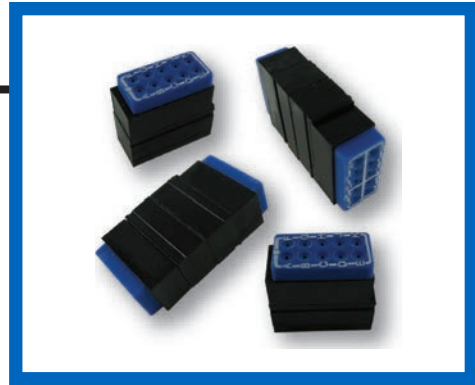
Grommet:  
Silicone Rubber per A-A-59588

Contact Retainers:  
Stainless Steel

Socket Contacts:  
Copper Alloy, Hard Gold Plated in Accordance with MIL-G-45204

Accepts Multiple Wire Sizes:  
Size 22, 24, 26 AWG

Fluid Capability:  
Method 1016 per MIL-STD-1344



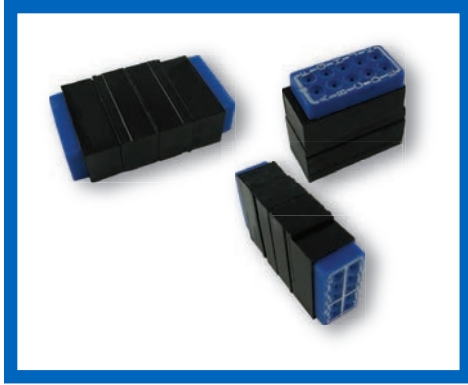
**Amphenol Pcd Terminal Junction Modules**

| Config. | Feedback     |           | Feedthru     |           | Contact |                   |            |
|---------|--------------|-----------|--------------|-----------|---------|-------------------|------------|
|         | MIL P/N      | APCD P/N  | MIL P/N      | APCD P/N  | QTY*    | Size <sup>1</sup> | P/N M39029 |
|         | M81714/1-DA1 | TJM122701 | M81714/6-DA1 | TJM222701 | 10      | 16/22             | /1-100     |
|         | M81714/1-DB1 | TJM122702 | M81714/6-DB1 | TJM222702 | 10      | 16/22             | /1-100     |
|         | M81714/1-DB2 | TJM122703 | M81714/6-DB2 | TJM222703 | 10      | 16/22             | /1-100     |
|         | M81714/1-DB3 | TJM122704 | M81714/6-DB3 | TJM222704 | 10      | 16/22             | /1-100     |
|         | M81714/1-DC1 | TJM122705 | M81714/6-DC1 | TJM222705 | 10      | 16/22             | /1-100     |
|         | M81714/1-DC2 | TJM122706 | M81714/6-DC2 | TJM222706 | 10      | 16/22             | /1-100     |
|         | M81714/1-DC3 | TJM122710 |              |           | 10      | 16/22             | /1-100     |
|         | M81714/1-DC4 | TJM122712 |              |           | 10      | 16/22             | /1-100     |
|         | M81714/1-DD1 | TJM122707 | M81714/6-DD1 | TJM222707 | 10      | 16/22             | /1-100     |
|         | M81714/1-DD2 | TJM122711 |              |           | 10      | 16/22             | /1-100     |
|         | M81714/1-DE1 | TJM122708 | M81714/6-DE1 | TJM222708 | 10      | 16/22             | /1-100     |
|         |              |           | M81714/6-DJ1 | TJM222709 | 10      | 16/22             | /1-100     |

\*Contact quantity for feedthru is double feedback. Quantity figure denotes number of contacts accommodated by module. Modules are supplied with one additional spare contact and sealing plug per MIL-T-M81714.  
<sup>1</sup>Mating Pin/Wire Barrel

# MIL-T-81714/2, /7 Series I

## Size 20 Class D

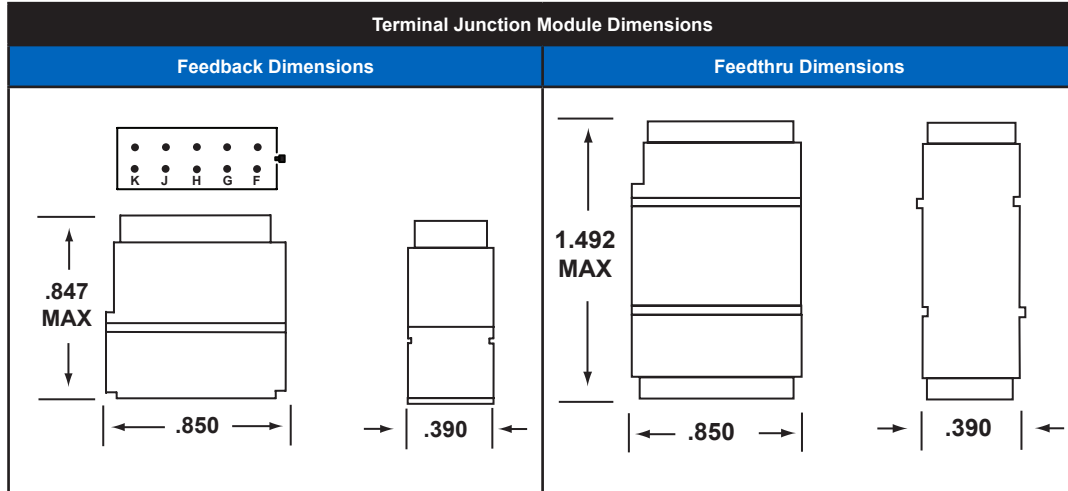


### Operating Range

Temperature:  
-65°C to 200°C  
Insulation Resistance:  
5000 Megaohms @ 25°C  
Dielectric Withstanding  
Voltage:  
1500 VRMS at Sea Level  
200 VRMS at 100,000 ft.  
Current Rating:  
7.5 Amps  
Vibration & Shock:  
MIL-T-81714 Paragraph  
3.5.8 and 3.5.9

### Materials

Module Body:  
Polyetherimide per ASTM-D5205  
Grommet:  
Silicone Rubber per A-A-59588  
Contact Retainers:  
Stainless Steel  
Socket Contacts:  
Copper Alloy, Hard Gold Plated in  
Accordance with MIL-G-45204  
Accepts Multiple Wire Sizes:  
Size 20, 22, 24 AWG



**Amphenol Pcd Terminal Junction Modules**

| Bussing Config. | Feedback     |           | Feedthru     |           | Contact |                   |            |
|-----------------|--------------|-----------|--------------|-----------|---------|-------------------|------------|
|                 | MIL P/N      | APCD P/N  | MIL P/N      | APCD P/N  | QTY*    | Size <sup>1</sup> | P/N M39029 |
|                 | M81714/2-DA1 | TJM120701 | M81714/7-DA1 | TJM220701 | 10      | 16/20             | /1-101     |
|                 | M81714/2-DB1 | TJM120702 | M81714/7-DB1 | TJM220702 | 10      | 16/20             | /1-101     |
|                 | M81714/2-DB2 | TJM120703 | M81714/7-DB2 | TJM220703 | 10      | 16/20             | /1-101     |
|                 | M81714/2-DB3 | TJM120704 | M81714/7-DB3 | TJM220704 | 10      | 16/20             | /1-101     |
|                 | M81714/2-DC1 | TJM120705 | M81714/7-DC1 | TJM220705 | 10      | 16/20             | /1-101     |
|                 | M81714/2-DC2 | TJM120706 | M81714/7-DC2 | TJM220706 | 10      | 16/20             | /1-101     |
|                 | M81714/2-DC3 | TJM120710 |              |           | 10      | 16/20             | /1-101     |
|                 | M81714/2-DC4 | TJM120712 |              |           | 10      | 16/20             | /1-101     |
|                 | M81714/2-DD1 | TJM120707 | M81714/7-DD1 | TJM220707 | 10      | 16/20             | /1-101     |
|                 | M81714/2-DD2 | TJM120711 |              |           | 10      | 16/20             | /1-101     |
|                 | M81714/2-DE1 | TJM120708 | M81714/7-DE1 | TJM220708 | 10      | 16/20             | /1-101     |
|                 |              |           | M81714/7-DJ1 | TJM220709 | 10      | 16/20             | /1-101     |

\*Contact quantity for feedthru is double feedback. Quantity figure denotes number of contacts accommodated by module. Modules are supplied with one additional spare contact and sealing plug per MIL-T-81714.  
<sup>1</sup>Mating Pin/Wire Barrel

# MIL-T-81714/3, /8 Series I

## Size 16 Class D

### Operating Range

Temperature:  
-65°C to 200°C

Insulation Resistance:  
5000 Megaohms @ 25°C

Dielectric Withstanding Voltage:  
1500 VRMS at Sea Level  
200 VRMS at 100,000 ft.

Current Rating:  
13 Amps

Vibration & Shock:  
MIL-T-81714 Paragraph  
3.5.8 and 3.5.9

### Materials

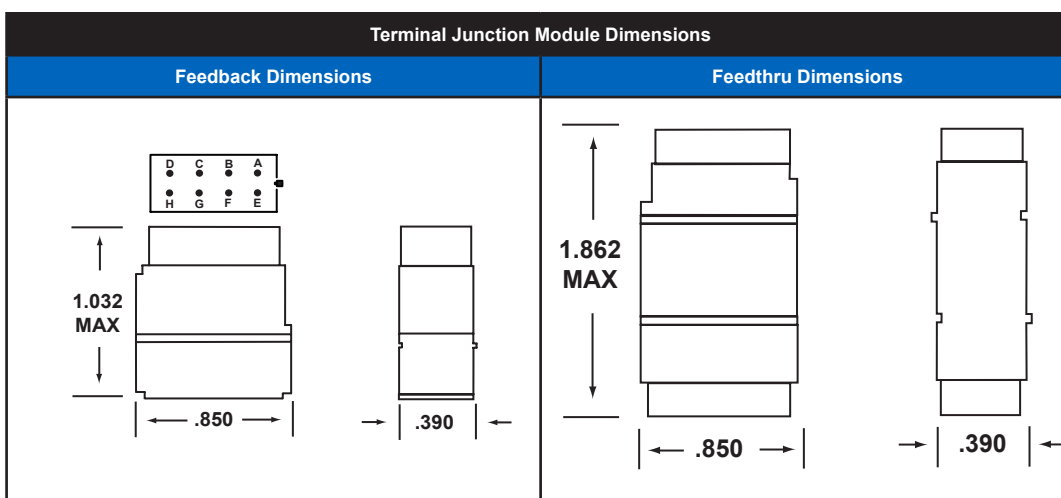
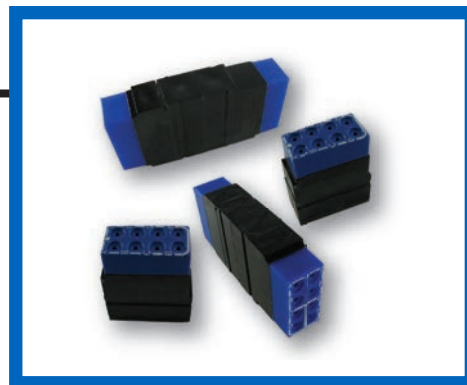
Module Body:  
Polyetherimide per ASTM-D5205

Grommet:  
Silicone Rubber per A-A-59588

Contact Retainers:  
Stainless Steel

Socket Contacts:  
Copper Alloy, Hard Gold Plated in  
Accordance with MIL-G-45204

Accepts Multiple Wire Sizes:  
Size 16, 18, 20 AWG



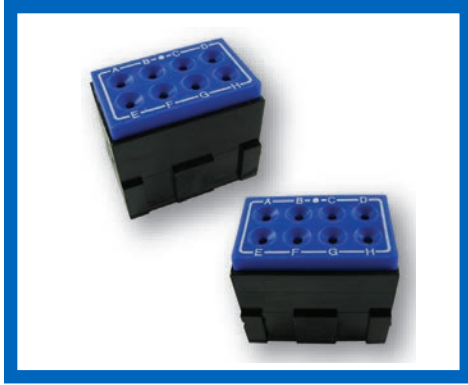
**Amphenol Pcd Terminal Junction Modules**

| Bussing Config. | Feedback     |           | Feedthru     |           | Contact |                   |            |
|-----------------|--------------|-----------|--------------|-----------|---------|-------------------|------------|
|                 | MIL P/N      | APCD P/N  | MIL P/N      | APCD P/N  | QTY*    | Size <sup>1</sup> | P/N M39029 |
|                 | M81714/3-DA1 | TJM116701 | M81714/8-DA1 | TJM216701 | 8       | 14/16             | /1-102     |
|                 | M81714/3-DB1 | TJM116702 | M81714/8-DB1 | TJM216702 | 8       | 14/16             | /1-102     |
|                 | M81714/3-DB2 | TJM116703 | M81714/8-DB2 | TJM216703 | 8       | 14/16             | /1-102     |
|                 | M81714/3-DC1 | TJM116705 | M81714/8-DC1 | TJM216705 | 8       | 14/16             | /1-102     |
|                 | M81714/3-DC2 | TJM116706 | M81714/8-DC2 | TJM216706 | 8       | 14/16             | /1-102     |
|                 | M81714/3-DD1 | TJM116707 | M81714/8-DD1 | TJM216707 | 8       | 14/16             | /1-102     |
|                 |              |           | M81714/8-DG1 | TJM216708 | 8       | 14/16             | /1-102     |
|                 |              |           | M81714/8-DH1 | TJM216709 | 8       | 14/16             | /1-102     |

\*Contact quantity for feedthru is double feedback. Quantity figure denotes number of contacts accommodated by module. Modules are supplied with one additional spare contact and sealing plug per MIL-T-M81714.  
<sup>1</sup>Mating Pin/Wire Barrel

# MIL-T-81714/4, /9 Series I

## Size 12 Class D



### Operating Range

Temperature:  
-65°C to 200°C

Insulation Resistance:  
5000 Megaohms @ 25°C

Dielectric Withstanding  
Voltage:  
1500 VRMS at Sea Level  
200 VRMS at 100,000 ft.

Current Rating:  
23 Amps

Vibration & Shock:  
MIL-T-81714 Paragraph  
3.5.8 and 3.5.9

### Materials

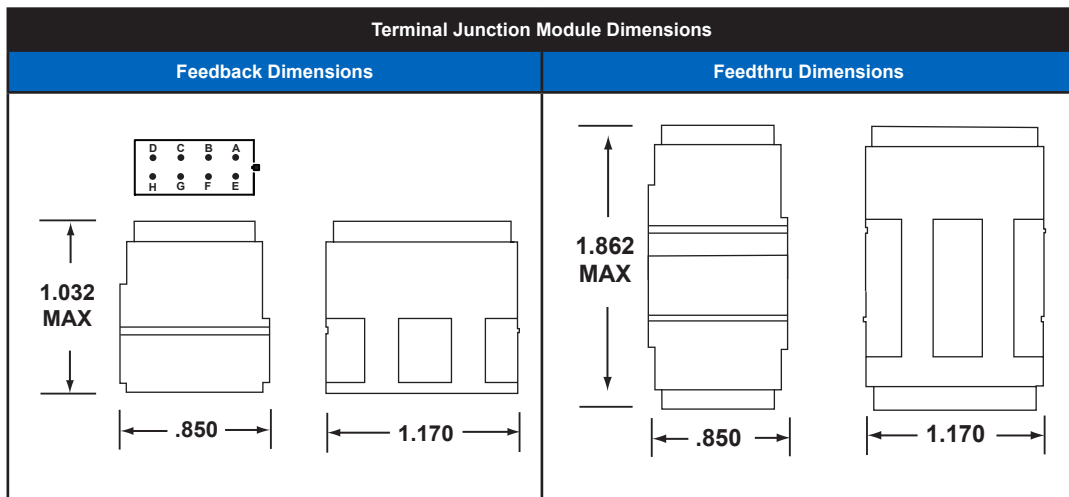
Module Body:  
Polyetherimide per ASTM-D5205

Grommet:  
Silicone Rubber per A-A-59588

Contact Retainers:  
Stainless Steel

Socket Contacts:  
Copper Alloy, Hard Gold Plated in Accordance  
MIL-G-45204

Accepts Multiple Wire Sizes:  
Size 12, 14 AWG



**Amphenol Pcd Terminal Junction Modules**

| Bussing Config. | Feedback     |           | Feedthru     |           | Contact |                   |            |
|-----------------|--------------|-----------|--------------|-----------|---------|-------------------|------------|
|                 | MIL P/N      | APCD P/N  | MIL P/N      | APCD P/N  | QTY*    | Size <sup>1</sup> | P/N M39029 |
|                 | M81714/4DA1  | TJM112701 | M81714/9-DA1 | TJM212701 | 8       | 12/12             | /1-103     |
|                 | M81714/4-DB1 | TJM112702 | M81714/9-DB1 | TJM212702 | 8       | 12/12             | /1-103     |
|                 | M81714/4-DB2 | TJM112703 | M81714/9-DB2 | TJM212703 | 8       | 12/12             | /1-103     |
|                 | M81714/4-DC1 | TJM112705 | M81714/9-DC1 | TJM212705 | 8       | 12/12             | /1-103     |
|                 | M81714/4-DC2 | TJM112706 | M81714/9-DC2 | TJM212706 | 8       | 12/12             | /1-103     |
|                 | M81714/4-DD1 | TJM112707 | M81714/9-DD1 | TJM212707 | 8       | 12/12             | /1-103     |
|                 |              |           | M81714/9-DH1 | TJM212709 | 8       | 12/12             | /1-103     |

\*Contact quantity for feedthru is double feedback. Quantity figure denotes number of contacts accommodated by module. Modules are supplied with one additional spare contact and sealing plug per MIL-T-M81714.  
<sup>1</sup>Mating Pin/Wire Barrel

# MIL-T-81714/17 Series I

## Size 22D Class D High Density Modules

### Operating Range

Temperature:  
-65°C to 200°C

Insulation Resistance:  
5000 Megaohms @ 25° C

Dielectric Withstanding Voltage:  
1000 VRMS at Sea Level  
200 VRMS at 100,000 ft.

Current Rating:  
5 Amps

Vibration & Shock:  
MIL-T-81714 Paragraph  
3.5.8 and 3.5.9

### Materials

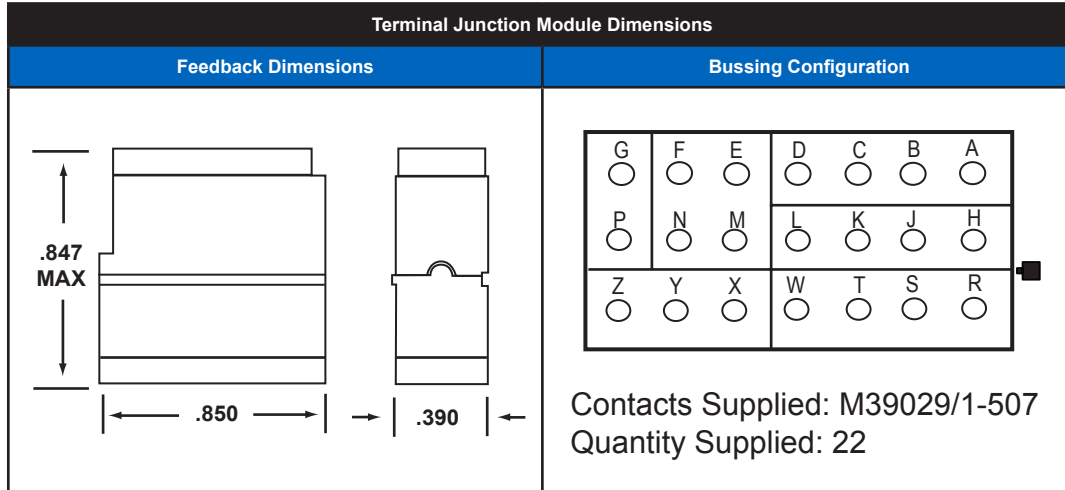
Module Body:  
Polyetherimide per ASTM-D5205

Grommet:  
Silicone Rubber per A-A-59588

Contact Retainers:  
Stainless Steel

Internal Socket Contacts:  
Copper Alloy, Hard Gold Plated in  
Accordance with MIL-G-45204

Accepts Multiple Wire Sizes:  
Size 22, 26, AWG



**Amphenol Pcd Terminal Junction Module**

| Bussing Config. | Feedback        |           | Bussing Config. | Feedback (Con.)  |           |
|-----------------|-----------------|-----------|-----------------|------------------|-----------|
|                 | MIL P/N         | APCD P/N  |                 | MIL P/N          | APCD P/N  |
|                 | M81714/17-D30   | TJHD22700 |                 | M81714/ 17 8-D38 | TJHD22708 |
|                 | M81714/17 -D31  | TJHD22701 |                 | M81714/ 17 -D39  | TJHD22709 |
|                 | M81714/ 17 -D32 | TJHD22702 |                 | M81714/ 17 -D40  | TJHD22710 |
|                 | M81714/ 17 -D33 | TJHD22703 |                 | M81714/ 17 -D42  | TJHD22712 |
|                 | M81714/ 17 -D34 | TJHD22704 |                 | M81714/ 17 -D43  | TJHD22713 |
|                 | M81714/ 17 -D35 | TJHD22705 |                 | M81714/ 17 -D44  | TJHD22714 |
|                 | M81714/ 17 -D36 | TJHD22706 |                 | M81714/ 17 -D45  | TJHD22715 |
|                 | M81714/ 17 -D37 | TJHD22707 |                 |                  |           |

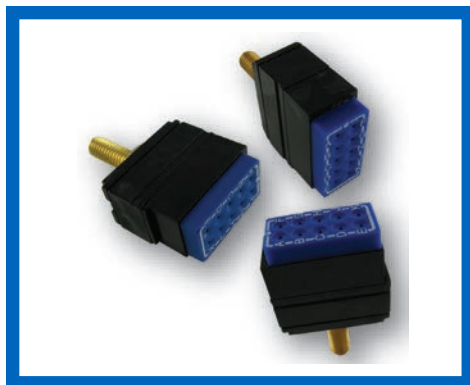
Contacts Supplied: M39029/1-507 Qty 22



# Ground Stud Modules, Class D

MIL-T-81714/27 Series I Compatible

Size 12, 16, 20, 22



## Operating Range

Temperature:  
-65°C to 200°C

Current Rating:  
5 Amps (Size 22)  
7.5 Amps (Size 20)  
13 Amps (Size 16)  
23 Amps (Size 12)

Shock:  
MIL-T-81714 Paragraph  
3.5.8 and 3.5.9

## Materials

Socket Body:  
Polyetherimide per ASTM-D5205

Grommet:  
Silicone Rubber per A-A-59588

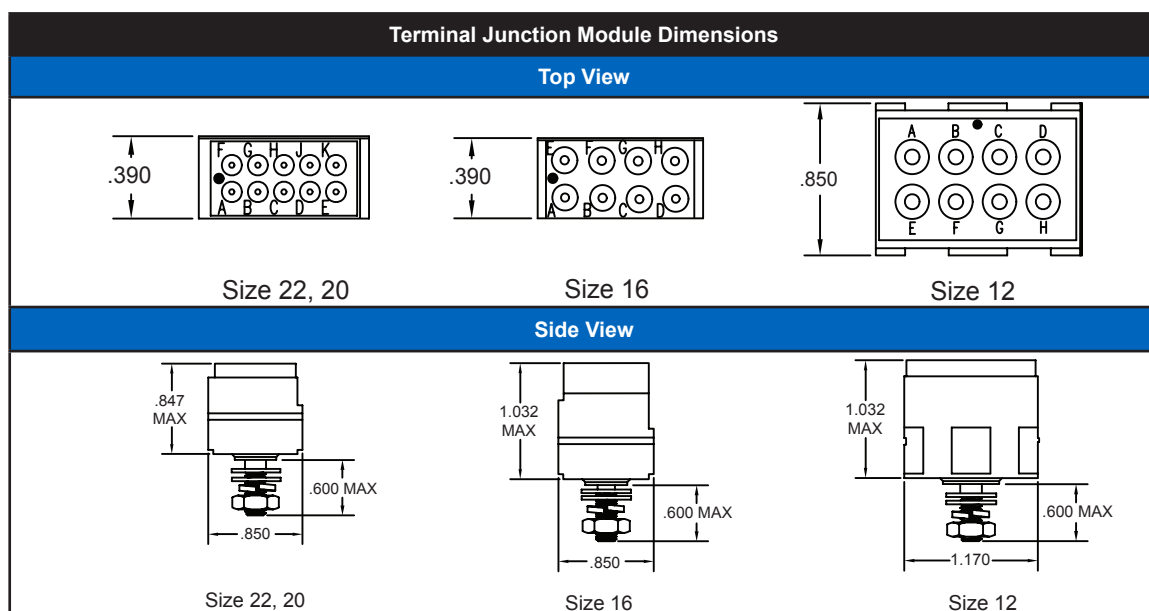
Mounting Stud:  
Copper Alloy, Gold Plated per  
SAE-AMS-2422

Contact Retainers:  
Stainless Steel

Internal Socket Contacts:  
Copper Alloy, Hard Gold Plated in  
Accordance with MIL-G-45204

## Product Description

Multi-contact grounding/bus connection modules are provided with an integral threaded grounding stud. The stud is electrically and mechanically common to all internal contacts of the module. Electrical connection and mechanical mounting are achieved through a single #10-32 stud. The modules are dimensionally identical to the compatible MIL-T-81714/27 grounding stud modules, but are not QPL. Direct mounting to a ground plane or ground wire with the terminal lug creates a convenient multi-wire sealed grounding device. Direct attachment to a bus bar transforms the device into a bus connection module for multi-contact power distribution, sensing or metering. All modules are furnished with complete mounting hardware.



| Terminal Grounding Modules |           |         |                   |            |
|----------------------------|-----------|---------|-------------------|------------|
| Part Numbers               |           | Contact |                   |            |
| MIL P/N                    | APCD P/N  | QTY*    | Size <sup>1</sup> | P/N M39029 |
| M81714/27-22               | TJG122701 | 10      | 16/22             | /1-100     |
| M81714/27-20               | TJG120701 | 10      | 16/20             | /1-101     |
| M81714/27-16               | TJG116701 | 8       | 14/16             | /1-102     |
| M81714/27-12               | TJG112701 | 8       | 12/12             | /1-103     |

\*Quantity figure denotes number of contacts accommodated by module. Modules are supplied with two additional spare contacts and sealing plugs  
<sup>1</sup>Mating Pin/Wire Barrel

# Electronic Terminal Junction Modules

MIL-T-81714/25, /26 Series I Compatible

Size 20, 22

## Operating Range

Temperature:  
-65°C to 200°C

Insulation Resistance:  
5000 Megaohms @ 25° C

Dielectric Withstanding Voltage:  
1500 VRMS at Sea Level  
200 VRMS at 100,000 ft.

Current Rating:  
7.5 Amps

Vibration & Shock:  
Per AS-81714  
Paragraph 3.5.8 and 3.5.9

## Materials

Module Body:  
Polyetherimide per ASTM-D5205

Grommet:  
Silicone Rubber per A-A-59588

Internal Contact:  
Copper Alloy, Gold Finish



## Product Description

Electronic Terminal Junction Modules meet all environmental and performance requirements of M81714/25 & /26 (but are not QPL) and are specifically developed for electronic component packaging. Available for size 20 and 22 contacts, these modules function as highly efficient and reliable electronic component packages. They improve system efficiency and density by permitting various electronic components such as diodes, resistors, fuses, and capacitors which usually take up valuable space elsewhere in the system, to be securely packaged within the module housing. Electronic components are encapsulated in semi-rigid elastomer that provides electrical spacing and insulation as well as shock and vibration protection.

| Circuit Diagram | APCD P/N   | Part      | Part P/N    | Quantity | Circuit Diagram | APCD P/N   | Part  | Part P/N    | Quantity |
|-----------------|--|-----------|-------------|----------|-----------------|--|-------|-------------|----------|
|                 | TJE120514  | Capacitor | 620pF       | 1*       |                 | TJE120820  | Diode | 1N4003      | 3        |
|                 | TJE120515  | Capacitor | 610pF       | 1*       |                 | TJE120822  | Diode | 1N4007      | 5        |
|                 | TJE120810<br><small>M81714/26-D-002 compatible</small> | Diode     | JANTX1N5552 | 5        |                 | TJE120824  | Diode | JANTX1N5622 | 5*       |
|                 | TJE120811  | Diode     | JANTX1N5552 | 4        |                 | TJE120826  | Diode | 1N4006      | 5*       |
|                 | TJE120812  | Diode     | JANTX1N5522 | 4        |                 | TJE120827  | Diode | JANTX1N5552 | 4*       |
|                 | TJE120815  | Diode     | 1N4005      | 2        |                 | TJE120828  | Diode | 1N5618      | 1*       |
|                 | TJE120816  | Diode     | 1N4003      | 3        |                 | TJE120829  | Diode | 1N5618      | 2*       |
|                 | TJE120817  | Diode     | 1N4003      | 2        |                 | TJE120831<br><small>M81714/26-D-001 compatible</small> | Diode | JANTX1N5618 | 5*       |
|                 | TJE120818  | Diode     | 1N4003      | 3        |                 | TJE120833  | Diode | JAN1N5418   | 1*       |
|                 | TJE120819  | Diode     | 1N4003      | 3        |                 |  |       |             |          |

\* With Contacts

# Electronic Terminal Junction Modules

MIL-T-81714/25, /26 Series I Compatible

Size 20, 22

| Amphenol Pcd Electronic Terminal Junction Modules Compatible Size 20 |           |          |                                      |          |                 |           |                    |                                     |          |
|--|-----------|----------|--------------------------------------|----------|-----------------|-----------|--------------------|-------------------------------------|----------|
| Circuit Diagram  | APCD P/N  | Part     | Value or P/N                         | Quantity | Circuit Diagram | APCD P/N  | Part               | Value or P/N                        | Quantity |
|  | TJE120835 | Diode    | IN4005                               | 2        |                 | TJE120911 | Resistor           | 5.1KΩ 1/2W                          | 1*       |
|  | TJE120839 | Diode    | JANTX1N5554                          | 5*       |                 | TJE120914 | Resistor           | 2K 1W<br>590Ω 1W                    | 2        |
|  | TJE120842 | Resistor | 10Ω, 3/4W                            | 5*       |                 | TJE120915 | Diode              | IN4005                              | 4*       |
|  | TJE120843 | Resistor | 100Ω, 3/4W                           | 5*       |                 | TJE120916 | Diode              | IN4005                              | 4*       |
|  | TJE120860 | Diode    | IN4005                               | 5        |                 | TJE120917 | Resistor           | 240K 1/2W<br>10KΩ 1/2W              | 1*       |
|  | TJE120900 | Resistor | 10KΩ 1/8W                            | 5*       |                 | TJE120918 | Resistor           | 300K 1/2W<br>10KΩ 1/2W              | 1*       |
|  | TJE120902 | Resistor | 150KΩ 1/8W                           | 5*       |                 | TJE120922 | Resistor           | 4.42K, 3.4K,<br>3K, 2.75K,<br>1.75K | 5        |
|  | TJE120903 | Resistor | 33Ω 1/4W                             | 2*       |                 | TJE120924 | Resistor           | 1KΩ 1W                              | 4*       |
|  | TJE120904 | Resistor | 1KΩ 1/8W                             | 2*       |                 | TJE120925 | Resistor           | 499Ω 1W                             | 5*       |
|  | TJE120905 | Resistor | 1KΩ 1/2W                             | 2*       |                 | TJE120927 | Fuse               | 1 Amp 125V                          | 5        |
|  | TJE120906 | Resistor | 150Ω 1/2W                            | 1        |                 | TJE120928 | Resistor           | 1.3KΩ 1/4W                          | 5        |
|  | TJE120907 | Resistor | 180Ω 1/2W                            | 1        |                 | TJE120929 | Resistor Thyristor | 2N5604<br>100KΩ 1/4W                | 1<br>1   |
|  | TJE120908 | Resistor | 2K, 1.6K,<br>1.3 K, 1K,<br>750, 1/2W | 5        |                 | TJE120932 | Resistor           | 1N4007<br>4.75KΩ 1W                 | 4*       |
|  | TJE120909 | Resistor | 70K, x2,<br>280K, 500K               | 4        |                 | TJE120935 | Resistor           | 100KΩ 1/4W                          | 5*       |

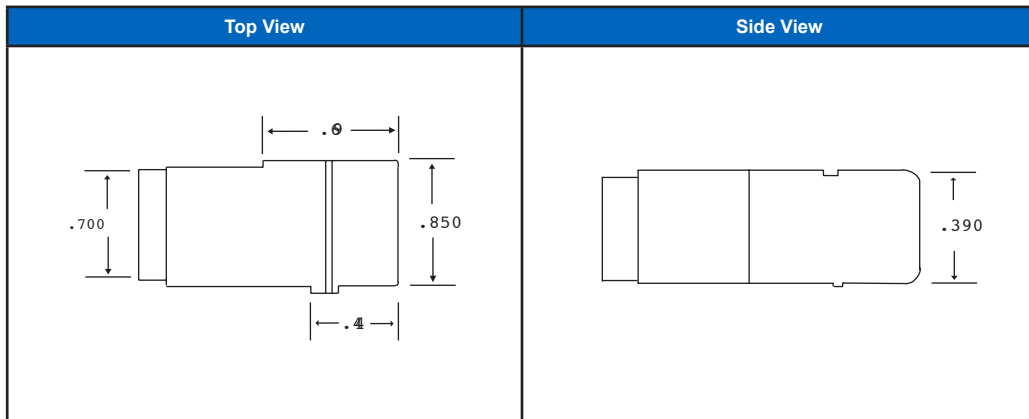
\* With Contacts

# Electronic Terminal Junction Modules

MIL-T-81714/25, /26 Series I Compatible

Size 20, 22

| Amphenol Pcd Electronic Terminal Junction Modules Compatible Size 20,22 |           |          |                                |          |                 |           |           |              |                 |
|---|-----------|----------|--------------------------------|----------|-----------------|-----------|-----------|--------------|-----------------|
| Circuit Diagram   | APCD P/N  | Part     | Value or P/N                   | Quantity | Circuit Diagram | APCD P/N  | Part      | Value or P/N | Quantity        |
|   | TJE120936 | Resistor | 271K 1/4 W<br>27.1KΩ 1/4 W     | 2*<br>2* |                 | TJE120991 | Resistor  | 56Ω<br>100Ω  | 1*<br>2*        |
|   | TJE120939 | Resistor | 200KΩ 1/8W<br>100K 1/8W        | 2*<br>3* |                 | TJE120993 | Resistor  | 39Ω<br>120Ω  | 1*<br>2*        |
|   | TJE120941 | Diode    | JANTX1N5618                    | 1*       |                 | TJE120996 | Resistor  | 220Ω 1/4W    | 2               |
|   | TJE120942 | Resistor | 1K, 220,<br>100, 10K,<br>5.62K | 5*       |                 | TJE120997 | Resistor  | 100Ω 1/4W    | 2               |
|   | TJE120970 | Resistor | 10K 1/2W                       | 2*       |                 | TJE120998 | Rectifier | BYW56        | 2               |
|   | TJE120971 | Resistor | 47.5K 1/2W                     | 2*       |                 | TJE120999 | Rectifier | BYW56        | 2               |
|   | TJE120973 | Resistor | 2.2KΩ                          | 5        |                 | TJE122904 | Resistor  | 1K 1/8W      | 2*              |
|   | TJE120974 | Resistor | 4.7KΩ                          | 5        |                 |           |           |              | * With Contacts |



# MIL-T-81714/11, /12 Series I

## Single/Dual/Diode

MIL-T-81714/24 Series I Compatible



### Operating Range

Temperature:  
-65°C to 200°C  
Insulation Resistance:  
5000 Megaohms  
Dielectric Withstanding Voltage:  
1500 VRMS at Sea Level  
200 VRMS at 100,000 ft.  
Vibration & Shock:  
Per AS-81714  
Paragraph 3.5.8 and 3.5.9

### Materials

Insulator Body:  
Polyetherimide per ASTM-D5205  
Grommet:  
Silicone Rubber per A-A-59588  
Internal contact  
Copper Alloy, Gold Finish  
Accordance with MIL-G-45204

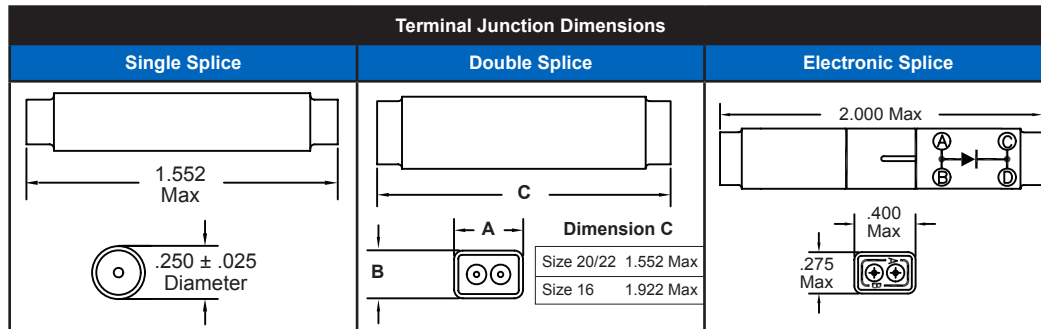
### Product Description

Single, Dual, and Electronic Splices are designed to provide a quick and efficient solution to customer wiring requirements.

Single and Dual Wire Splices meet MIL-T-81714/11 & 12 requirements and are highly resistant to temperature and fluids.

TJSE electronic modules can be supplied with a wide variety of diodes, resistors, capacitors, and fuses within the splice itself.

TJSE electronic splices meet the electronic parameters of MIL-81714/24 and allow customers to incorporate system modifications into a wire bundle, avoiding changes in panels or boards, but are not QPL.



| Single Wire Splices |               |           |         |      |               |
|---------------------|---------------|-----------|---------|------|---------------|
|                     | Part Numbers  |           | Contact |      |               |
|                     | MIL P/N       | APCD P/N  | QTY     | Size | P/N           |
|                     | M81714/11-22D | TJS322700 | 2       | 22   | M39029/1-100* |
|                     | M81714/11-20D | TJS320700 | 2       | 20   | M39029/1-101* |
|                     | M81714/11-16D | TJS316700 | 2       | 16   | M39029/1-102* |
|                     | M81714/11-12D | TJS312700 | 2       | 12   | M39029/1-103* |

| Dual Wire Splices |               |           |         |      |        |            |       |
|-------------------|---------------|-----------|---------|------|--------|------------|-------|
| Bussing Type      | Numbers       |           | Contact |      |        | Dimensions |       |
|                   | MIL P/N 81714 | APCD P/N  | QTY     | Size | P/N    | A          | B     |
|                   | /12-22D-1     | TJS322701 | 4       | 22   | /1-100 | .400       | .275* |
|                   | /12-20D-1     | TJS320701 | 4       | 20   | /1-101 | .400       | .275* |
|                   | /12-16D-1     | TJS316701 | 4       | 16   | /1-102 | .500       | .300* |
|                   | /12-22D-2     | TJS322702 | 4       | 22   | /1-100 | .400       | .275* |
|                   | /12-20D-2     | TJS320702 | 4       | 20   | /1-101 | .400       | .275* |
|                   | /12-16D-2     | TJS316702 | 4       | 16   | /1-102 | .500       | .300* |

| Electronic Splices Compatible |                |           |         |      |            |             |     |
|-------------------------------|----------------|-----------|---------|------|------------|-------------|-----|
| Circuit Type                  | Numbers        |           | Contact |      |            | Diode       |     |
|                               | MIL P/N* 81714 | APCD P/N  | QTY     | Size | P/N M39029 | Diode P/N   | QTY |
|                               | /24-1D001      | TJSE22701 | 4       | 22   | 1-100      | JANTX1N5618 | 1*  |
|                               | /24-1D002      | TJSE20701 | 4       | 20   | 1-101      | JANTX1N5618 | 1*  |
|                               | /24-2D001      | TJSE22702 | 4       | 22   | 1-100      | JANTX1N5618 | 2*  |
|                               | /24-2D002      | TJSE20702 | 4       | 20   | 1-101      | JANTX1N5618 | 2*  |

\*MIL STD Compatible

\*With Contacts

# MIL-T-81714/21, /23 Series I

## MIL-T-81714/21, /23 Series I Compatible Electronic Splices Single/Dual/Diode

### Operating Range

Temperature:  
-65°C to 200°C

Insulation Resistance:  
5000 Megaohms

Dielectric Withstanding Voltage:  
1500 VRMS at Sea Level  
200 VRMS at 100,000 ft.

Vibration & Shock:  
Per AS-81714  
Paragraph 3.5.8 and 3.5.9

### Materials

Insulator Body:  
Polyetherimide per ASTM-D5205

Grommet:  
Silicone Rubber per A-A-59588

Internal contact  
Copper Alloy, Gold Finish  
Accordance with MIL-G-45204



### Product Description

Amphenol Pcd is pleased to announce the support for MIL-T-81714/21 and /23 Series I Inline Electronic Splices, with Fuses and Diodes. These products are QPL. Typical applications include power distribution on aircraft, military ground vehicles and seaborne systems in harsh environments. Amphenol Pcd electronic splices provide a convenient way to insert electronics into your circuit using our proven technology.

Amphenol Pcd Terminal Junction Splices MIL-T-81714/21 Single MIL STD

| Circuit Diagram | APCD P/N                                     | Part  | Part P/N  | Quantity | Circuit Diagram | APCD P/N                                      | Part  | Part P/N  | Quantity |
|-----------------|--|-------|-----------|----------|-----------------|---|-------|-----------|----------|
|                 | TJSE22311<br><small>*M81714/21-1D001</small> | Diode | JAN1N5618 | 1*       |                 | TJSE20312<br><small>*M81714/21-1D003</small>  | Diode | JAN1N4148 | 1*       |
|                 | TJSE20311<br><small>*M81714/21-1D002</small> | Diode | JAN1N5618 | 1*       |                 | TJSE20313<br><small>**M81714/21-1D004</small> | Diode | JAN1N5620 | 1*       |

Amphenol Pcd Terminal Junction Splices MIL-T-81714/21 Single Compatible

| Circuit Diagram | APCD P/N  | Part     | Value or P/N | Quantity | Circuit Diagram | APCD P/N  | Part     | Part P/N    | Quantity |
|-----------------|-----------|----------|--------------|----------|-----------------|-----------|----------|-------------|----------|
|                 | TJSE20100 | Resistor | 10KΩ 1/2W    | 1        |                 | TJSE20106 | Resistor | 110Ω 1W     | 1        |
|                 | TJSE20101 | Resistor | 22Ω 1/2W     | 1        |                 | TJSE20107 | Resistor | 80.6Ω 1W    | 1        |
|                 | TJSE20102 | Resistor | 56Ω 1/2W     | 1        |                 | TJSE20108 | Resistor | 49.9Ω 1W    | 1        |
|                 | TJSE20103 | Resistor | 330Ω 1/2W    | 1        |                 | TJSE20109 | Diode    | JANTX1N4488 | 1        |
|                 | TJSE20104 | Resistor | 430Ω 1/2W    | 1        |                 | TJSE20110 | Diode    | 1N4005      | 1        |
|                 | TJSE20113 | Resistor | 120Ω 1/2W    | 1        |                 | TJSE20111 | Diode    | JANTX1N5618 | 1        |
|                 | TJSE20105 | Resistor | 75Ω 1W       | 1        |                 | TJSE22112 | Diode    | 1N4007      | 1*       |

Amphenol Pcd Terminal Junction Splices MIL-T-81714/23 Single MIL STD

| Circuit Diagram | APCD P/N                                    | Part | Vale          | Quantity | Circuit Diagram | APCD P/N                                    | Part | Value        | Quantity |
|-----------------|---|------|---------------|----------|-----------------|---|------|--------------|----------|
|                 | TJSE20331<br><small>M81714/23-1D001</small> | Fuse | 1/16 Amp 125V | 1*       |                 | TJSE20332<br><small>M81714/23-1D002</small> | Fuse | 1/8 Amp 125V | 1*       |

\* With Contacts

# MIL-T-81714/23 Series 1

## Electronic Terminal Junction Splices

MIL-T-81714/24 Series I Compatible



### Product Description

Amphenol Pcd's Electronic Terminal Junction Splices are available with a variety of components and in a wide range of configurations. Components available include but are not limited to diodes, resistors, fuses, capacitors, thyristors, and inductors, and are also available with multiple components within one module. The following are currently available, but new configurations are produced regularly and customized components are also available. M81714/23 are QPL. M81714/24 are not QPL.

Amphenol Pcd Terminal Junction Splices MIL-T-81714/23 Single MIL STD

| Circuit Diagram | APCD P/N                      | Part | Value or P/N    | Quantity | Circuit Diagram | APCD P/N                      | Part | Part P/N       | Quantity |
|-----------------|-------------------------------|------|-----------------|----------|-----------------|-------------------------------|------|----------------|----------|
|                 | TJSE20333<br>*M81714/23-1D003 | Fuse | 1/4 Amp 125V    | 1*       |                 | TJSE20340<br>*M81714/23-1D010 | Fuse | 2-1/2 Amp 125V | 1*       |
|                 | TJSE20334<br>*M81714/23-1D004 | Fuse | 3/8 Amp 125V    | 1*       |                 | TJSE20341<br>*M81714/23-1D011 | Fuse | 3 Amp 125V     | 1*       |
|                 | TJSE20335<br>*M81714/23-1D005 | Fuse | 1/2 Amp 125V    | 1*       |                 | TJSE20342<br>*M81714/23-1D012 | Fuse | 3-1/2 Amp 125V | 1*       |
|                 | TJSE20336<br>*M81714/23-1D006 | Fuse | 3/4 Amp 125V    | 1*       |                 | TJSE20343<br>*M81714/23-1D013 | Fuse | 4 Amp 125V     | 1*       |
|                 | TJSE20337<br>*M81714/23-1D007 | Fuse | 1 Amp 125V      | 1*       |                 | TJSE20344<br>*M81714/23-1D014 | Fuse | 5 Amp 125V     | 1*       |
|                 | TJSE20338<br>*M81714/23-1D008 | Fuse | 1-1/2 Amp 125 V | 1*       |                 | TJSE20345<br>*M81714/23-1D015 | Fuse | 7 Amp 125V     | 1*       |
|                 | TJSE20339<br>*M81714/23-1D009 | Fuse | 2 Amp 125V      | 1*       |                 | TJSE20346<br>*M81714/23-1D016 | Fuse | 10 Amp 125V    | 1*       |

Amphenol Pcd Terminal Junction Splices MIL-T-81714/24 Double Compatible Size 20

| Circuit Diagram | APCD P/N  | Part     | Value or P/N | Quantity | Circuit Diagram | APCD P/N  | Part      | Part P/N    | Quantity |
|-----------------|-----------|----------|--------------|----------|-----------------|-----------|-----------|-------------|----------|
|                 | TJSE20501 | Inductor | 100 μH       | 1*       |                 | TJSE20513 | Capacitor | 620pF       | 1*       |
|                 | TJSE20503 | Fuse     | 5 Amp 125V   | 1*       |                 | TJSE20514 | Fuse      | 1.5Amp 125V | 1*       |
|                 | TJSE20505 | Resistor | 39Ω 1W       | 1*       |                 | TJSE20515 | Resistor  | 3KΩ 1/4W    | 1*       |
|                 | TJSE20506 | Resistor | 120Ω 1W      | 2*       |                 | TJSE20516 | Resistor  | 3KΩ 1/4W    | 1*       |
|                 | TJSE20509 | Fuse     | 5 Amp 125V   | 2*       |                 | TJSE20517 | Resistor  | 470Ω 1/4 W  | 1        |
|                 | TJSE20510 | Fuse     | 1 Amp 125V   | 1*       |                 | TJSE20518 | Resistor  | 3KΩ 1W      | 2*       |

\* With Contacts

# Electronic Terminal Junction Splices

MIL-T-81714/24 Series I Compatible

Size 20, 22

Amphenol Pcd Terminal Junction Splices MIL-T-81714/24 Double Compatible Size 20

| Circuit Diagram | APCD P/N  | Part       | Value or P/N     | Quantity | Circuit Diagram | APCD P/N  | Part     | Part P/N       | Quantity |
|-----------------|-----------|------------|------------------|----------|-----------------|-----------|----------|----------------|----------|
|                 | TJSE20519 | Resistor   | 50Ω 1W           | 2*       |                 | TJSE20566 | Resistor | 120Ω 0.5W 350V | 2*       |
|                 | TJSE20520 | Capacitor  | 390pF            | 1*       |                 | TJSE20571 | Fuse     | 3Amp 125V      | 1*       |
|                 | TJSE20523 | Resistor   | 15KΩ 1/4W        | 1*       |                 | TJSE20602 | Diode    | JANTX1N5618    | 2        |
|                 | TJSE20524 | Resistor   | 5.1KΩ 1/4W       | 1*       |                 | TJSE20603 | Resistor | 5.1KΩ 1/4W     | 2*       |
|                 | TJSE20525 | Resistor   | 10KΩ 1/8W        | 1        |                 | TJSE20703 | Diode    | 1N5819         | 2*       |
|                 | TJSE20526 | Resistor   | 910KΩ 1/4W       | 1        |                 | TJSE20704 | Diode    | JANTX1N5614    | 1*       |
|                 | TJSE20527 | Resistor   | 1.3KΩ 1/4W       | 1        |                 | TJSE20705 | Diode    | JANTX1N5622    | 1*       |
|                 | TJSE20530 | Resistor   | 1KΩ 1W<br>1N5244 | 1*<br>1  |                 | TJSE20706 | Diode    | JANTX1N5622    | 2*       |
|                 | TJSE20533 | Fuse Diode | 2Amp 125 V       | 1*       |                 | TJSE20707 | Diode    | JANTX1N5622    | 2*       |
|                 | TJSE20535 | Fuse       | 7Amp 125V        | 1*       |                 | TJSE20708 | Diode    | JANTX1N5622    | 2*       |
|                 | TJSE20537 | Resistor   | 69.8Ω 1/4W       | 1*       |                 | TJSE20709 | Diode    | JANTX1N5622    | 2*       |
|                 | TJSE20553 | Resistor   | 1KΩ 1/2W         | 1*       |                 | TJSE20710 | Diode    | 1N4006         | 1        |
|                 | TJSE20554 | Resistor   | 18KΩ 1W          | 2*       |                 | TJSE20711 | Diode    | 1N4006         | 2        |
|                 | TJSE20555 | Resistor   | 18KΩ 1W          | 1*       |                 | TJSE20712 | Diode    | 1N4007         | 1        |
|                 | TJSE20559 | Diode      | JANTX1N5554      | 1        |                 | TJSE20713 | Diode    | JANTX1N3957    | 1        |
|                 | TJSE20561 | Diode      | 1N5061           | 1*       |                 | TJSE20716 | Resistor | 200Ω 1/8W      | 1*       |

\* With Contacts



# Electronic Terminal Junction Splices

MIL-T-81714/24 Series I Compatible

Size 20, 22

| Amphenol Pcd Electronic Terminal Junction Splices MIL-T-81714/24 Double Compatible Size 20 |           |          |              |          |                 |           |          |             |          |
|--|-----------|----------|--------------|----------|-----------------|-----------|----------|-------------|----------|
| Circuit Diagram  | APCD P/N  | Part     | Value or P/N | Quantity | Circuit Diagram | APCD P/N  | Part     | Part P/N    | Quantity |
|  | TJSE20722 | Diode    | JANTX1N5819  | 1*       |                 | TJSE20818 | Resistor | 100KΩ 1/4W  | 2        |
|  | TJSE20723 | Diode    | JANTX1N5622  | 2*       |                 | TJSE20820 | Resistor | 2MΩ 1/4W    | 1        |
|  | TJSE20724 | Diode    | 1N4006       | 2*       |                 | TJSE20821 | Resistor | 1MΩ 1/4W    | 1        |
|  | TJSE20725 | Diode    | JANTX1N5622  | 2*       |                 | TJSE20822 | Resistor | 49.9KΩ 1/4W | 1        |
|  | TJSE20726 | Diode    | 1N4006       | 2*       |                 | TJSE20826 | Resistor | 3.9Ω 1W     | 2        |
|  | TJSE20727 | Resistor | 4.7KΩ 3/4W   | 1*       |                 | TJSE20828 | Resistor | 4Ω 1/2W     | 1        |
|  | TJSE20804 | Resistor | 4.9KΩ 1/2W   | 1        |                 | TJSE20829 | Resistor | 16Ω 1/2W    | 1        |
|  | TJSE20805 | Diode    | 1N6075       | 2        |                 | TJSE20830 | Fuse     | 0.5Amp 125V | 1*       |
|  | TJSE20806 | Diode    | 1N4448       | 2        |                 | TJSE20834 | Resistor | 4.02Ω 1W    | 1*       |
|  | TJSE20807 | Resistor | 5KΩ 1W       | 2        |                 | TJSE20835 | Resistor | 1KΩ 1/4W    | 1*       |
|  | TJSE20808 | Resistor | 1KΩ 1W       | 2        |                 | TJSE20836 | Resistor | 3.1KΩ 1/4W  | 1*       |
|  | TJSE20809 | Resistor | 5.76KΩ 1W    | 2        |                 | TJSE20838 | Resistor | 750Ω 1W     | 1*       |
|  | TJSE20810 | Resistor | 7.87KΩ 1W    | 2        |                 | TJSE20843 | Diode    | 1N5622      | 1*       |
|  | TJSE20811 | Resistor | 16.2KΩ 1W    | 2        |                 | TJSE20901 | Resistor | 100KΩ 1/4W  | 1*       |
|  | TJSE20812 | Resistor | 20KΩ 1W      | 2        |                 | TJSE20902 | Resistor | 200KΩ 1/4W  | 1*       |
|  | TJSE20813 | Resistor | 22.1KΩ 1W    | 2        |                 | TJSE20903 | Resistor | 300KΩ 1/4W  | 1*       |
|  | TJSE20816 | Resistor | 10KΩ 1/4W    | 2        |                 | TJSE20904 | Resistor | 402KΩ 1/4W  | 1*       |
|  | TJSE20817 | Resistor | 30.1KΩ 1/4W  | 2        |                 | TJSE20905 | Diode    | JANTX1N4488 | 2        |

\* With Contacts

# Electronic Terminal Junction Splices

MIL-T-81714/24 Series I Compatible

Size 20, 22

Amphenol Pcd Electronic Terminal Junction Splices MIL-T-81714/24 Double Compatible Size 22

| Circuit Diagram | APCD P/N  | Part               | Value or P/N                    | Quantity | Circuit Diagram | APCD P/N  | Part               | Value or P/N                | Quantity |
|-----------------|-----------|--------------------|---------------------------------|----------|-----------------|-----------|--------------------|-----------------------------|----------|
|                 | TJSE22503 | Fuse               | 5 Amp 125V                      | 1*       |                 | TJSE22706 | Diode              | JANTX1N5622                 | 2*       |
|                 | TJSE22504 | Diode Resistor     | JANTX1N5618<br>1K $\Omega$ 1/4W | 1*<br>1* |                 | TJSE22707 | Diode              | JANTX1N5622                 | 2*       |
|                 | TJSE22510 | Fuse               | 1 AMP 125V                      | 1*       |                 | TJSE22708 | Diode              | JANTX1N5622                 | 2*       |
|                 | TJSE22514 | Resistor           | 10K $\Omega$ 1/4W               | 1        |                 | TJSE22709 | Diode              | JANTX1N5622                 | 1*       |
|                 | TJSE22517 | Resistor           | 120 $\Omega$ 1W                 | 1*       |                 | TJSE22711 | Diode              | 1N4006                      | 2*       |
|                 | TJSE22518 | Resistor           | 120 $\Omega$ 1W                 | 1        |                 | TJSE22720 | Resistor           | 78.7 $\Omega$ 1/4W          | 2*       |
|                 | TJSE22519 | Resistor Capacitor | 120 $\Omega$ 1W<br>1000pF       | 1*<br>1* |                 | TJSE22839 | Resistor           | 4.99 $\Omega$ 1/4W          | 1*       |
|                 | TJSE22521 | Resistor           | 49.9 $\Omega$ 1W                | 1*       |                 | TJSE22840 | Resistor           | 3.24 $\Omega$ 1/4W          | 1*       |
|                 | TJSE22523 | Resistor           | 75 $\Omega$ 1/4W                | 2        |                 | TJSE22841 | Resistor           | 39.2 $\Omega$ 1/4W          | 1*       |
|                 | TJSE22550 | Resistor           | 274 $\Omega$ 1W                 | 1*       |                 | TJSE22842 | Resistor           | 47.5 $\Omega$ 1/4W          | 1*       |
|                 | TJSE22701 | Diode              | JANTX1N5618                     | 1*       |                 | TJSE22843 | Resistor           | 100 $\Omega$ 1/4W           | 1*       |
|                 | TJSE22702 | Diode              | JANTX1N5618                     | 2*       |                 | TJSE22845 | Resistor Capacitor | 120 $\Omega$ 1W<br>10,000pF | 1*<br>1* |
|                 | TJSE22705 | Diode              | JANTX1N5622                     | 1*       | * With Contacts |           |                    |                             |          |

# MIL-T-81714/5, /10, /16 Series I

## Terminal Junction Module Mounting Tracks MIL-T-81714/29 Series I Compatible



### Operating Range

Temperature:  
-65°C to 200°C

Corrosion:  
No Exposure of Base Metal After  
48 Hours of Salt Spray

Magnetic Permeability:  
2.0 MU Max.

Vibration & Shock:  
Per MIL-T-81714  
Paragraph 3.5.5 and 3.5.8

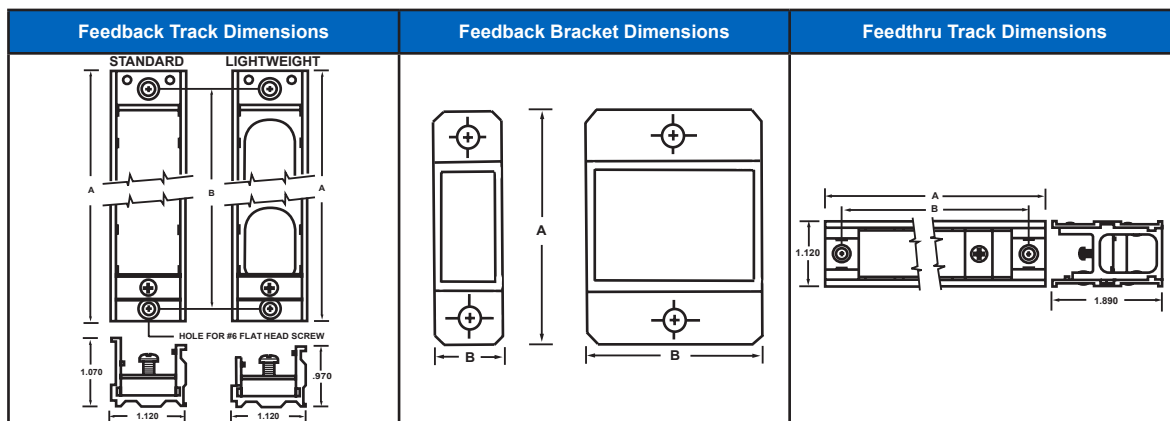
### Materials

Rail:  
Aluminum Alloy, Black Anodized  
Finish per MIL-A-8625

Locking Clamp Screw:  
Corrosion Resistant, Passivated,  
Self Locking

### Product Description

Amphenol Pcd offers feedback and feedthru mounting tracks, as well as a lightweight feedback type with weight reduction cutouts per MIL-T-81714/16 for weight critical applications. One track holds all module sizes - with size 22, 20, and 16 modules requiring one mounting space and size 12 requiring three. Each track unit consists of an aluminum alloy track and MIL-T-81714/16 anodized black locking clamp. The stainless steel clamp screw is self-locking to meet vibration, shock and temperature variation requirements.



| Feedback Mounting Tracks |           |              |           |                |      |      |  |
|--------------------------|-----------|--------------|-----------|----------------|------|------|--|
| Standard                 |           | Lightweight  |           | Dimensions     |      |      |  |
| MIL P/N                  | APCD P/N  | MIL P/N      | APCD P/N  | Mounting Pos.* | A"   | B"   |  |
| M81714/5-1               | TJT701010 | M81714/16-1  | TJT703010 | 10             | 5.29 | 4.79 |  |
|                          | TJT701002 |              | TJT703002 | 2              | 2.17 | 1.67 |  |
| M81714/5-2               | TJT701003 | M81714/16-2  | TJT703003 | 3              | 2.56 | 2.06 |  |
| M81714/5-3               | TJT701004 | M81714/16-3  | TJT703004 | 4              | 2.95 | 2.45 |  |
| M81714/5-4               | TJT701005 | M81714/16-4  | TJT703005 | 5              | 3.34 | 2.84 |  |
| M81714/5-5               | TJT701006 | M81714/16-5  | TJT703006 | 6              | 3.73 | 3.23 |  |
| M81714/5-6               | TJT701007 | M81714/16-6  | TJT703007 | 7              | 4.12 | 3.62 |  |
| M81714/5-7               | TJT701008 | M81714/16-7  | TJT703008 | 8              | 4.51 | 4.01 |  |
| M81714/5-8               | TJT701009 | M81714/16-8  | TJT703009 | 9              | 4.90 | 4.40 |  |
| M81714/5-9               | TJT701011 | M81714/16-9  | TJT703011 | 11             | 5.68 | 5.18 |  |
| M81714/5-10              | TJT701012 | M81714/16-10 | TJT703012 | 12             | 6.07 | 5.57 |  |
| M81714/5-11              | TJT701013 | M81714/16-11 | TJT703013 | 13             | 6.46 | 5.96 |  |
| M81714/5-12              | TJT701014 | M81714/16-12 | TJT703014 | 14             | 6.85 | 6.35 |  |
| M81714/5-13              | TJT701015 | M81714/16-13 | TJT703015 | 15             | 7.24 | 6.74 |  |
|                          | TJT701016 |              | TJT703016 | 16             | 7.63 | 7.13 |  |
|                          | TJT701017 |              | TJT703017 | 17             | 8.02 | 7.52 |  |
|                          | TJT701018 |              | TJT703018 | 18             | 8.41 | 7.91 |  |
|                          | TJT701019 |              | TJT703019 | 19             | 8.80 | 8.30 |  |
|                          | TJT701020 |              | TJT703020 | 20             | 9.19 | 8.69 |  |

| Feedback Mounting Bracket Compatible Tracks |           |                |       |       |  |
|---|-----------|----------------|-------|-------|--|
| Standard                                    |           | Dimensions     |       |       |  |
| MIL P/N                                     | APCD P/N  | Mounting Pos.* | A"    | B"    |  |
| M81714/29-1                                 | TJT400100 | 1              | 1.725 | 0.531 |  |
| M81714/29-2                                 | TJT400200 | 3              | 1.725 | 1.321 |  |

\* Divide by 3 for Size 12 Module Mounting

| Feedthru Mounting Tracks |           |                |      |      |  |
|--------------------------|-----------|----------------|------|------|--|
| Standard                 |           | Dimensions     |      |      |  |
| MIL P/N                  | APCD P/N  | Mounting Pos.* | A"   | B"   |  |
| M81714/10-1              | TJT702010 | 10             | 5.55 | 5.05 |  |
|                          | TJT702002 | 2              | 2.43 | 1.91 |  |
| M81714/10-2              | TJT702003 | 3              | 2.82 | 2.32 |  |
| M81714/10-3              | TJT702004 | 4              | 3.21 | 2.71 |  |
| M81714/10-4              | TJT702005 | 5              | 3.60 | 3.10 |  |
| M81714/10-5              | TJT702006 | 6              | 3.90 | 3.49 |  |
| M81714/10-6              | TJT702007 | 7              | 4.38 | 3.88 |  |
| M81714/10-7              | TJT702008 | 8              | 4.77 | 4.27 |  |
| M81714/10-8              | TJT702009 | 9              | 5.16 | 4.66 |  |

# Socket Junction Modules

## MIL-T-81714 Series II Class D

The high pin count, low weight MIL-T-81714 Series II Socket Junction Module System is available in four basic module sizes, accommodating 12-26 AWG wire in a broad selection of bussing arrangements. Modules are supplied with the appropriate and specified AS39029/22 socket contacts (formerly MIL-C-39029/22).



### Key Features and Benefits

#### Improved Performance

Significant Amphenol Pcd design innovations over conventional Series II systems assure superior performance in wire sealing, contact alignment & retention, and module extraction.

#### Feedback Modules

The SJM feedback modules and mounting track system offer a lightweight junction system with a full range of bussing arrangements.

#### Distribution Modules

Distribution modules provide a variety of contact combinations for power distribution applications and have the same construction and features as the standard Series II modules.

#### Ground Modules

SJM grounding modules are available in both center stud and mounting flange versions.

#### Board Mount Pin Modules

The socket junction modules indicate on the following pages can also be provided in a solder pin version for mounting directly to printed circuit boards, providing a flexible, compact wiring package and eliminating the need for mounting a track.

# General Table of Contents

*MIL-T-81714 Series II, Class D*  
(Go directly to your desired product by clicking on Page Number)

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| M81714/67            | Socket Junction Module Mounting Track    | 65    |
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# MIL-T-81714/60-22 Series II

## Size 22

### Operating Range

Temperature Limits:  
-65°C to 200°C

Insulation Resistance:  
5000 Megaohms @ 25°C

Dielectric Withstanding Voltage:  
1500 VRMS at Sea Level  
200 VRMS at 110,000 ft.

Current Rating:  
5 Amps

Vibration & Shock:  
MIL-T-81714 Paragraph  
3.5.8 and 3.5.9

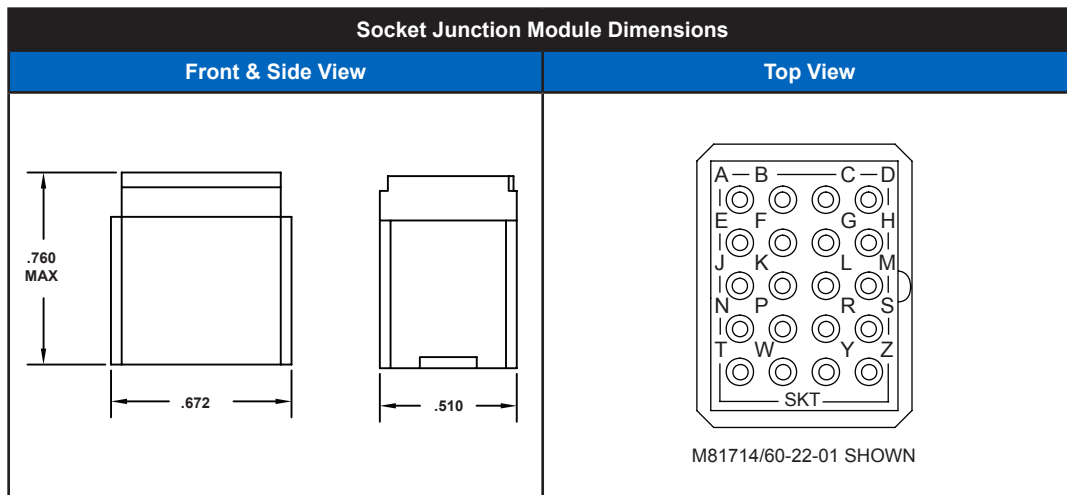
### Materials

Module Body:  
Polyetherimide per ASTM-D5205

Grommet:  
Silicone Blend Elastomer  
per A-A-59588

Contact Retainers:  
Stainless Steel

Internal Pin and Socket Contacts:  
Copper Alloy, Hard Gold Plated in  
Accordance with MIL-G-45204



| Amphenol Pcd Socket Junction Modules |                 |           |         |                   |            |
|--------------------------------------|-----------------|-----------|---------|-------------------|------------|
| Bussing Config.                      | Part Numbers    |           | Contact |                   |            |
|                                      | MIL P/N         | APCD P/N  | QTY*    | Size <sup>1</sup> | P/N M39029 |
|                                      | M81714/60-22-01 | SJM022100 | 20      | 22/22             | /22-191    |
|                                      | M81714/60-22-02 | SJM022200 | 20      | 22/22             | /22-191    |
|                                      | M81714/60-22-04 | SJM022400 | 20      | 22/22             | /22-191    |
|                                      | M81714/60-22-05 | SJM022500 | 20      | 22/22             | /22-191    |
|                                      | M81714/60-22-06 | SJM022600 | 20      | 22/22             | /22-191    |
|                                      | M81714/60-22-10 | SJM022700 | 20      | 22/22             | /22-191    |

\* Quantity figure denotes number of contacts accommodated by module. Modules are supplied with one additional spare contact and two sealing plugs per MIL-T-M81714.  
<sup>1</sup>Mating End / Wire Barrel.

# MIL-T-81714/60-20 Series II

Size 20

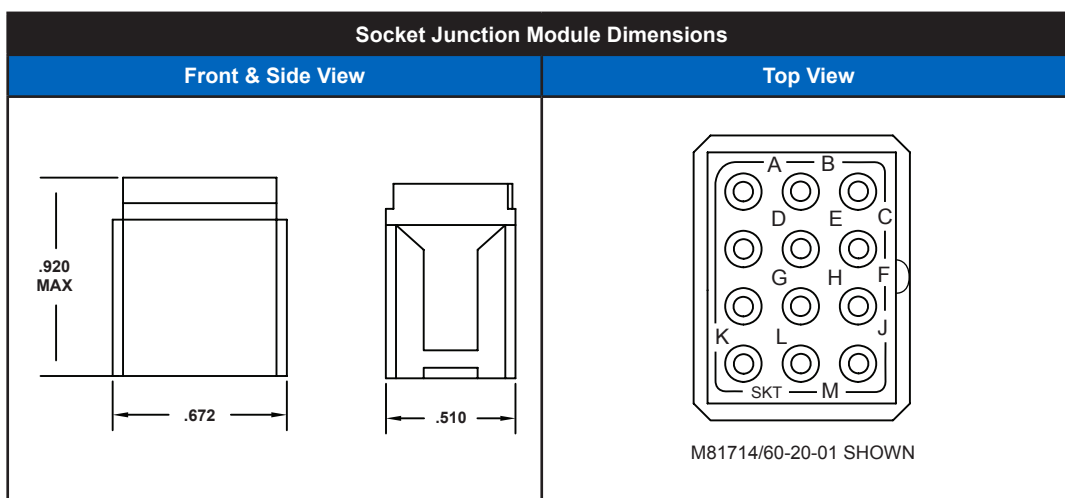


## Operating Range

Temperature Limits:  
-65°C to 200°C  
Insulation Resistance:  
5000 Megaohms @ 25°C  
Dielectric Withstanding Voltage:  
1500 VRMS at Sea Level  
200 VRMS at 110,000 ft.  
Current Rating:  
7.5 Amps  
Vibration & Shock:  
MIL-T-81714 Paragraph  
3.5.8 and 3.5.9

## Materials

Module Body:  
Polyetherimide per ASTM-D5205  
Grommet:  
Silicone Blend Elastomer  
per A-A-59588  
Contact Retainers:  
Stainless Steel  
Internal Pin and Socket Contacts:  
Copper Alloy, Hard Gold Plated in  
Accordance with MIL-G-45204



| Amphenol Pcd Socket Junction Modules |                 |           |         |                   |            |
|--------------------------------------|-----------------|-----------|---------|-------------------|------------|
| Bussing Config.                      | Part Numbers    |           | Contact |                   |            |
|                                      | MIL P/N         | APCD P/N  | QTY*    | Size <sup>1</sup> | P/N M39029 |
|                                      | M81714/60-20-01 | SJM020100 | 12      | 20/20             | /22-192    |
|                                      | M81714/60-20-02 | SJM020200 | 12      | 20/20             | /22-192    |
|                                      | M81714/60-20-03 | SJM020300 | 12      | 20/20             | /22-192    |
|                                      | M81714/60-20-04 | SJM020400 | 12      | 20/20             | /22-192    |
|                                      | M81714/60-20-06 | SJM020600 | 12      | 20/20             | /22-192    |

\* Quantity figure denotes number of contacts accommodated by module. Modules are supplied with one additional spare contact and two sealing plugs per MIL-T-81714.  
<sup>1</sup>Mating End / Wire Barrel.

# MIL-T-81714/60-16 Series II

## Size 16

### Operating Range

Temperature Limits:  
-65°C to 200°C

Insulation Resistance:  
5000 Megaohms @ 25°C

Dielectric Withstanding Voltage:  
1500 VRMS at Sea Level  
200 VRMS at 110,000 ft.

Current Rating:  
13 Amps

Vibration & Shock:  
MIL-T-81714 Paragraph  
3.5.8 and 3.5.9

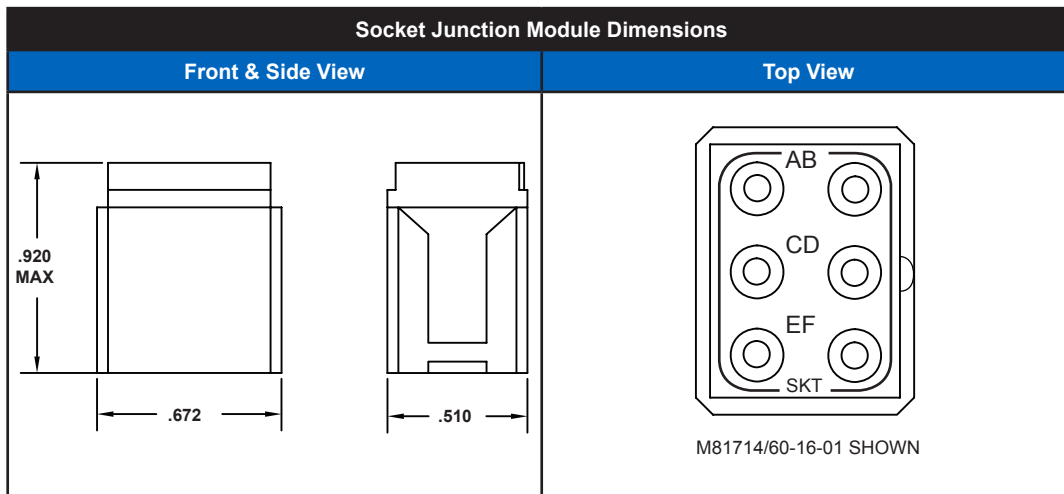
### Materials

Module Body:  
Polyetherimide per ASTM-D5205

Grommet:  
Silicone Blend Elastomer  
per A-A-59588

Contact Retainers:  
Stainless Steel

Internal Pin and Socket Contacts:  
Copper Alloy, Hard Gold Plated in  
Accordance with MIL-G-45204



| Amphenol Pcd Socket Junction Modules |                 |           |         |                   |            |
|--------------------------------------|-----------------|-----------|---------|-------------------|------------|
| Bussing Config.                      | Part Numbers    |           | Contact |                   |            |
|                                      | MIL P/N         | APCD P/N  | QTY*    | Size <sup>1</sup> | P/N M39029 |
|                                      | M81714/60-16-01 | SJM016100 | 6       | 16/16             | /22-193    |
|                                      | M81714/60-16-02 | SJM016200 | 6       | 16/16             | /22-193    |
|                                      | M81714/60-16-03 | SJM016300 | 6       | 16/16             | /22-193    |

\*Quantity figure denotes number of contacts accommodated by module. Modules are supplied with one additional spare contact and two sealing plugs per MIL-T-81714.  
<sup>1</sup>Mating End / Wire Barrel.



# MIL-T-81714/60-12 Series II

## Size 12



### Operating Range

Temperature Limits:  
-65°C to 200°C

Insulation Resistance:  
5000 Megaohms @ 25°C

Dielectric Withstanding Voltage:  
1500 VRMS at Sea Level  
200 VRMS at 110,000 ft.

Current Rating:  
23 Amps

Vibration & Shock:  
MIL-T-81714 Paragraph  
3.5.8 and 3.5.9

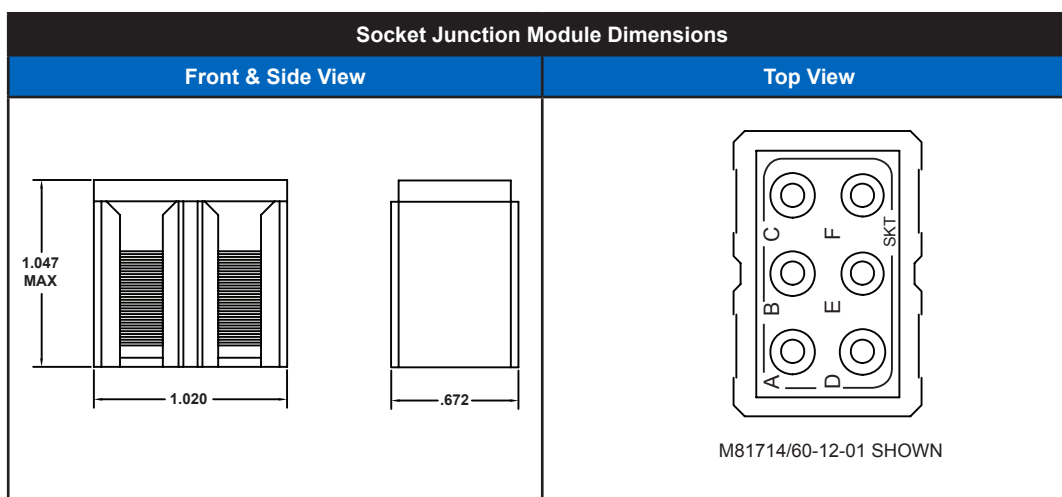
### Materials

Module Body:  
Polyetherimide per ASTM-D5205

Grommet:  
Silicone Blend Elastomer  
per A-A-59588

Contact Retainers:  
Stainless Steel

Internal Pin and Socket Contacts:  
Copper Alloy, Hard Gold Plated  
in Accordance with MIL-G-45204



| Amphenol Pcd Socket Junction Modules |                 |           |         |                   |            |
|--------------------------------------|-----------------|-----------|---------|-------------------|------------|
| Bussing Config.                      | Part Numbers    |           | Contact |                   |            |
|                                      | MIL P/N         | APCD P/N  | QTY*    | Size <sup>1</sup> | P/N M39029 |
|                                      | M81714/60-12-01 | SJM012100 | 6       | 12/12             | /22-605    |
|                                      | M81714/60-12-02 | SJM012200 | 6       | 12/12             | /22-605    |
|                                      | M81714/60-12-03 | SJM012300 | 6       | 12/12             | /22-605    |

Quantity figure denotes number of contacts accommodated by module. Modules are supplied with one additional spare contact and two sealing plugs per MIL-T-81714. <sup>1</sup>Mating End / Wire Barrel.

# MIL-T-81714/61

## Series II Distribution Socket Junction Modules

### Operating Range

Temperature Limits:  
-65°C to 200°C

Insulation Resistance:  
5000 Megaohms @ 25°C

Dielectric Withstanding Voltage:  
1500 VRMS at Sea Level  
200 VRMS at 110,000 ft.

Current Rating:  
5 Amps (Size 22)  
7.5 Amps (Size 20)  
13 Amps (Size 16)  
23 Amps (Size 12)

Vibration & Shock:  
MIL-T-81714 Paragraph  
3.5.8 and 3.5.9

### Materials

Module Body:  
Polyetherimide per ASTM-D5205

Grommet:  
Silicone Blend Elastomer  
per A-A-59588

Contact Retainers:  
Stainless Steel

Internal Pin and Socket Contacts:  
Copper Alloy, Hard Gold Plated in  
Accordance with MIL-G-45204



| Socket Junction Module Dimensions                    |   |
|--|---|
| M81714/61-OY: Front View                             | M81714/61-OY: Side View                             |
|  |   |
| M81714/61-OZ, M81714/61-OX, M81714/61-OW: Front View | M81714/61-OZ, M81714/61-OX, M81714/61-OW: Side View |
|  |   |

| Amphenol Pcd Socket Junction Modules |              |           |         |                   |            |  |
|--------------------------------------|--------------|-----------|---------|-------------------|------------|--|
| Bussing Config.                      | Feedback     |           | Contact |                   |            | Bussing  |
|                                      | MIL P/N      | APCD P/N  | QTY*    | Size <sup>1</sup> | P/N M39029 | Bus Description  |
|                                      | M81714/61-OZ | SJM000100 | 6       | 16                | /22-193    | 1 Bus<br>Two, size 12 & Six, size 16                         |
|                                      |              |           | 2       | 12                | /22-605    |  |
|                                      | M81714/61-OY | SJM000800 | 6       | 20                | /22-192    | 1 Bus<br>Two, size 16 & Six, size 20                         |
|                                      |              |           | 2       | 16                | /22-193    |  |
|                                      | M81714/61-OX | SJM000200 | 6       | 16                | /22-193    | 2 Busses<br>One, size 12 & Three, size 16 per Bus            |
|                                      |              |           | 2       | 12                | /22-605    |  |
|                                      | M81714/61-OW | SJM000500 | 5       | 22                | /22-191    | 5 Busses<br>One, size 22 & one, size 20; One size 16 per Bus |
|                                      |              |           | 5       | 20                | /22-192    |  |
|                                      |              |           | 5       | 16                | /22-193    |  |

# MIL-T-81714/63 Series II Stud Mount

## Size 16, 20, 22 Socket Ground Modules



### Operating Range

Temperature Limits:  
-65°C to 200°C

Current Rating:  
5 Amps (Size 22)  
7.5 Amps (Size 20)  
13 Amps (Size 16)  
23 Amps (Size 12)

Vibration & Shock:  
MIL-T-81714 Paragraph  
3.5.8 and 3.5.9

### Materials

Module Body:  
Polyetherimide per  
ASTM-D5205

Grommet:  
Silicone Blend Elastomer per A-A-  
59588

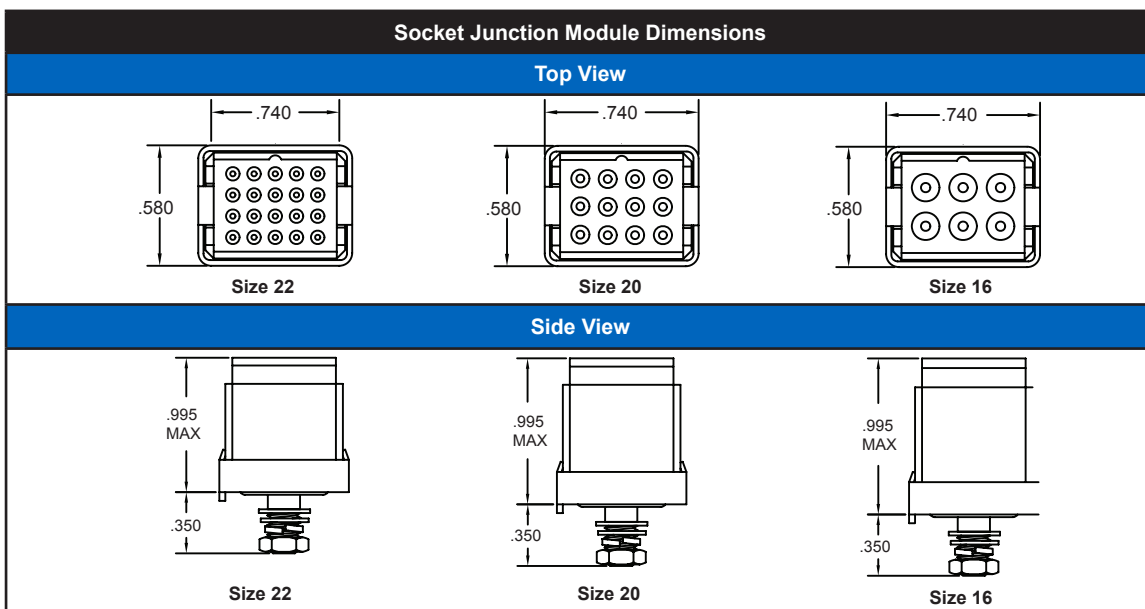
Contact Retainers:  
Stainless Steel

Stud / Shell:  
Copper Alloy, Gold Plated per  
SAE-AMS-2422.  
Tin Plating per ASTM-B545 also  
available as an alternate

Socket Contacts:  
Copper Alloy, Hard Gold Plated in  
Accordance with MIL-G-45204

### Product Description

M81714/63 Stud Mount, Socket Grounding Modules mount directly to a ground plane or ground lug, creating a multi-wire sealed grounding device. The grounding modules could also be mounted to a bus bar for power distribution, sensing or metering. All mounting hardware is furnished and custom hardware configurations are available. The mounting stud is available in gold or tin plating.



| Socket Grounding Modules |           |         |                   |            |         |
|--------------------------|-----------|---------|-------------------|------------|---------|
| Part Numbers             |           | Contact |                   |            | Stud    |
| MIL P/N                  | APCD P/N  | QTY*    | Size <sup>1</sup> | P/N M39029 | Plating |
| M81714/63-22S            | SJG022170 | 20      | 22/22             | /22-191    | Gold    |
|                          | SJG022100 | 20      | 22/22             | /22-191    | Tin     |
| M81714/63-20S            | SJG020170 | 12      | 20/20             | /22-192    | Gold    |
|                          | SJG020100 | 12      | 20/20             | /22-192    | Tin     |
| M81714/63-16S            | SJG016170 | 6       | 16/16             | /22-193    | Gold    |
|                          | SJG016100 | 6       | 16/16             | /22-193    | Tin     |

<sup>1</sup>Quantity figure denotes number of contacts accommodated by module. Modules are supplied with one additional spare contact and two sealing plugs per MIL-T-81714  
\*Mating End / Wire Barrel

# MIL-T-81714/63 Series II Flange Mount

## Size 12, 16, 20, 22 Socket Ground Modules

### Operating Range

Temperature Limits:

-65°C to 200°C

Current Rating:

5 Amps (Size 22)

7.5 Amps (Size 20)

13 Amps (Size 16)

23 Amps (Size 12)

Vibration & Shock:

MIL-T-81714 Paragraph 3.5.8 and 3.59

### Materials

Module Body:

Polyetherimide per ASTM-D5205

Grommet:

Silicone Blend Elastomer per A-A-59588

Stud/Shell:

Copper Alloy, Gold Plated per SAE-AMS-2422.

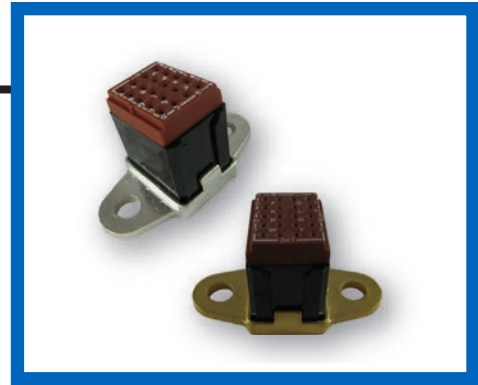
Tin Plating per ASTM-B545 also available as an alternate

Contact Retainers:

Stainless Steel

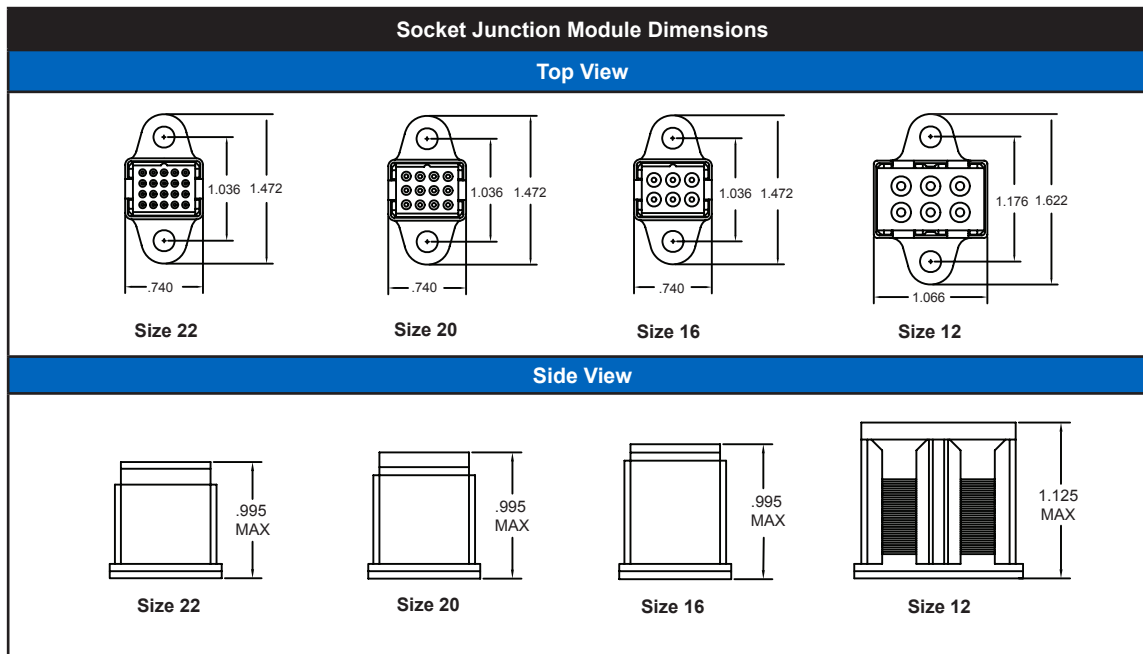
Socket Contacts:

Copper Alloy, Hard Gold Plated in Accordance with MIL-G-45204



### Product Description

M81714/63, flange mount, socket grounding modules mount directly to a ground plane or ground lug creating a multi-wire sealed grounding device. The grounding modules could also be mounted to a bus bar for power distribution, sensing or metering. All mounting hardware is furnished and custom hardware configurations are available. The mounting stud is available in gold or tin plating.



| Socket Grounding Modules |           |         |                   |            |         |
|--------------------------|-----------|---------|-------------------|------------|---------|
| Feedback                 |           | Contact |                   |            | Flange  |
| MIL P/N                  | APCD P/N  | QTY*    | Size <sup>1</sup> | P/N M39029 | Plating |
| M81714/63-22F            | SJG022270 | 20      | 22/22             | /22-191    | Gold    |
|                          | SJG022200 | 20      | 22/22             | /22-191    | Tin     |
| M81714/63-20F            | SJG020270 | 12      | 20/20             | /22-192    | Gold    |
|                          | SJG020200 | 12      | 20/20             | /22-192    | Tin     |
| M81714/63-16F            | SJG016270 | 6       | 16/16             | /22-193    | Gold    |
|                          | SJG016200 | 6       | 16/16             | /22-193    | Tin     |
| M81714/63-12F            | SJG012270 | 6       | 12/12             | /22-605    | Gold    |
|                          | SJG012200 | 6       | 12/12             | /22-605    | Tin     |

\*Quantity figure denotes number of contacts accommodated by module. Modules are supplied with one additional spare contact and two sealing plugs  
<sup>1</sup>Mating End / Wire Barrel

# Board Mount Socket Junction Modules

MIL-T-81714/62 Series II Compatible

Size 12, 16, 20, 22



## Operating Range

Temperature:  
-65°C to 125°C

Insulation Resistance:  
1000 Megaohms Min.

Dielectric Withstanding Voltage:  
1500 VRMS at Sea Level  
200 VRMS at 80,000 ft.

Current Rating:  
5 Amps (Size 22)  
7.5 Amps (Size 20)  
13 Amps (Size 16)  
23 Amps (Size 12)

Vibration & Shock:  
MIL-T-81714 Paragraph  
3.5.8 and 3.5.9

## Materials

Module Body:  
Polyetherimide per ASTM-D5205

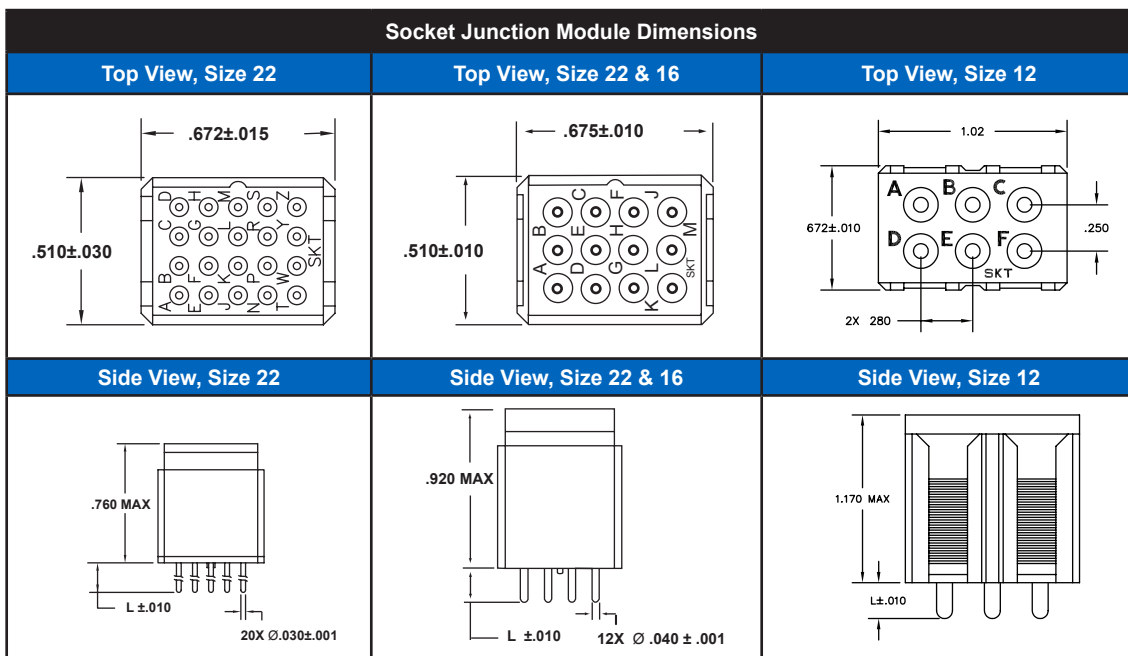
Grommet:  
Silicone Blend Elastomer per  
A-A-59588

Contact Retainers:  
Stainless Steel

Socket Contacts:  
Copper Alloy, Hard Gold Plated in  
Accordance with MIL-G-45204

## Product Description

The Socket Junction Modules can be provided in a solder pin version for mounting directly to printed circuit boards, while providing a flexible, compact wiring package and eliminating the need for a mounting track. Support size 12, 16, 20, & 22 contacts; and PCB thicknesses of .187 and .250. They are not QPL.



| Board Mount Socket Junctions |     |                   |               |         |        | Module Configurations |
|------------------------------|-----|-------------------|---------------|---------|--------|-----------------------|
| APCD P/N                     | QTY | Size <sup>1</sup> | Contact P/N   | Config. | DIM. L |                       |
| SJP022000                    | 20  | 22/22             | M39029/22-191 | A       | .187   |                       |
| SJP022010                    | 20  | 22/22             | M39029/22-191 | A       | .250   |                       |
| SJP020000                    | 12  | 20/20             | M39029/22-192 | B       | .187   |                       |
| SJP020010                    | 12  | 20/20             | M39029/22-192 | B       | .250   |                       |
| SJP016000                    | 6   | 16/16             | M39029/22-193 | C       | .187   |                       |
| SJP016010                    | 6   | 16/16             | M39029/22-193 | C       | .250   |                       |
| SJP012000                    | 6   | 12/12             | M39029/22-605 | D       | .187   |                       |
| SJP012010                    | 6   | 12/12             | M39029/22-605 | D       | .250   |                       |
| SJP012020                    | 6   | 12/12             | M39029/22-605 | D       | .335   |                       |

<sup>1</sup>Mating End / Wire Barrel

# Electronic Socket Junction Modules

MIL-T-81714/62 Series II Compatible

SJE Component Modules

## Operating Range

Temperature Limits:  
-65°C to 200°C

Insulation Resistance:  
5000 Megaohms @ 25°C

Dielectric Withstanding Voltage:  
1500 VRMS at Sea Level  
200 VRMS at 110,000 ft.

Vibration & Shock:  
MIL-T-81714 Paragraph  
3.5.8 and 3.5.9

## Materials

Module Body:  
Polyetherimide per ASTM-D5205

Grommet:  
Silicone Blend Elastomer per A-A-59588

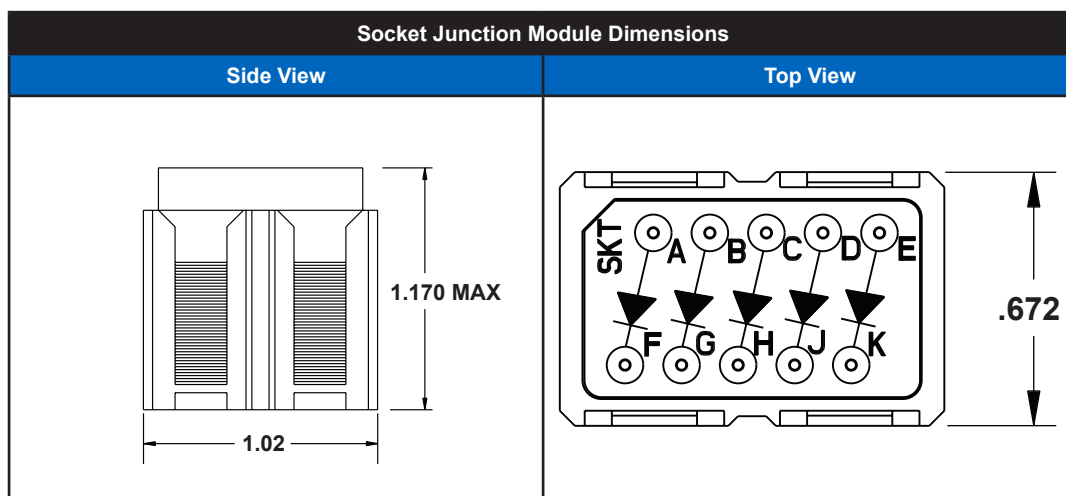
Contact Retainers:  
Stainless Steel

Internal Pin and Socket Contacts:  
Copper Alloy, Hard Gold Plated in  
Accordance with MIL-G-45204



## Product Description

Amphenol Pcd's Electronic Socket Junction Modules are available with a variety of components and in a wide range of configurations. Components available include, but are not limited to, diodes, resistors, fuses, thyristors, and inductors, and are also available with multiple components within one module. There are new configurations produced regularly and customized components are also available. They are not QPL. Contact us for more details.



| Electronic Socket Junction Modules |           |          |              |          |                 |           |          |              |          |
|------------------------------------|-----------|----------|--------------|----------|-----------------|-----------|----------|--------------|----------|
| Circuit Diagram                    | APCD P/N  | Part     | Value or P/N | Quantity | Circuit Diagram | APCD P/N  | Part     | Value or P/N | Quantity |
|                                    | SJE020001 | Diode    | JANTX1N5552  | 5        |                 | SJE020011 | Resistor | 10KΩ 1/10W   | 5        |
|                                    | SJE020003 | Diode    | JANTX1N6052A | 2        |                 | SJE020015 | Diode    | JANTX1N649-1 | 6        |
|                                    | SJE020006 | Resistor | 470Ω 1/2W    | 5        |                 | SJE020016 | Diode    | JANTX1N5618  | 5        |
|                                    | SJE020008 | Diode    | JANTX1N5550  | 5        |                 | SJE020022 | Diode    | JANTX1N5618  | 5        |
|                                    | SJE020009 | Diode    | JANTX1N4246  | 5        |                 | SJE020023 | Diode    | JANTX1N3613  | 6        |
|                                    | SJE020010 | Diode    | JANTX1N5618  | 5        |                 |           |          |              |          |

# Electronic Socket Junction Modules

MIL-T-81714/62 Series II Compatible

SJE Component Modules

Amphenol Pcd Electronic Terminal Junction Splices MIL-T-81714/24 Double Compatible Size 20, 22

| Circuit Diagram | APCD P/N  | Part     | Value or P/N     | Quantity | Circuit Diagram | APCD P/N  | Part     | Value or P/N          | Quantity |
|-----------------|-----------|----------|------------------|----------|-----------------|-----------|----------|-----------------------|----------|
|                 | SJE020025 | Diode    | 100Ω 1/8W        | 5        |                 | SJE020063 | Diode    | JANTX1N3613           | 5        |
|                 | SJE020026 | Diode    | 51.1Ω 1/8W       | 5        |                 | SJE020064 | Diode    | JANTX1N5618           | 1        |
|                 | SJE020045 | Diode    | 1N4001           | 5        |                 | SJE020065 | Diode    | 1N5616                | 5        |
|                 | SJE020047 | Diode    | 1N4007           | 5        |                 | SJE020067 | Resistor | 56.2KΩ                | 5        |
|                 | SJE020048 | Diode    | 1N4007<br>1N5406 | 32       |                 | SJE020068 | Diode    | JANTX1N649-1          | 6        |
|                 | SJE020053 | Resistor | 10KΩ 1/4W        | 5        |                 | SJE020071 | Resistor | 120Ω                  | 5        |
|                 | SJE020056 | Diode    | JANTX1N5618      | 4        |                 | SJE020075 | Resistor | 90.9Ω 2W              | 3        |
|                 | SJE020058 | Diode    | JANTX1N5550      | 3        |                 | SJE020919 | Resistor | 2KΩ 1/8W              | 5        |
|                 | SJE020059 | Diode    | JANTX1N5618      | 3        |                 | SJE020920 | Resistor | 54KΩ 1/8W<br>6KΩ 1/8W | 11       |
|                 | SJE020061 | Resistor | 4.7KΩ 1/4W       | 6        |                 | SJE020924 | Resistor | 1KΩ 1/8W              | 4        |
|                 | SJE020062 | Resistor | 100KΩ 1/10W      | 5        |                 | SJE020927 | Fuse     | 1Amp 125V             | 5        |

# MIL-T-81714/65 Series II

## SJS Single & Double Sealed In-Line Splices

### Operating Range

Temperature:  
-65°C to 200°C

Insulation Resistance:  
5000 Megaohms

Dielectric Withstanding Voltage:  
1500 VRMS at Sea Level  
200 VRMS at 110,000 ft.

Vibration & Shock:  
Paragraph 3.5.8 & 3.5.9  
Per MIL-T-81714

Current Rating:  
13 Amps (Size 16)  
7.5 Amps (Size 20)  
5 Amps (Size 22)

### Materials

Insulator Body:  
Polyetherimide per ASTM-D5205

Grommet:  
Silicone Rubber per A-A-59588

Internal Contact:  
Copper Alloy, Gold Finish in  
Accordance with MIL-G-45204



### Product Description

Series II In-Line Splices are available in single and double configurations. They come in sizes 16, 20, and 22 AWG. M81714/65 Splices use the same advanced polyetherimide body, one-piece bus assembly and construction as Amphenol Pcd's other M81714 connectors.

| Sealed Splice Contacts |               |
|------------------------|---------------|
| In-Line Splice         | Contact       |
| M81714/65-16-1         | M39029/22-193 |
| M81714/65-20-1         | M39029/22-192 |
| M81714/65-22-1         | M39029/22-191 |
| M81714/65-16-2         | M39029/22-193 |
| M81714/65-20-2         | M39029/22-192 |
| M81714/65-22-2         | M39029/22-191 |

| Splice Dimensions             |             |                               |             |
|-------------------------------|-------------|-------------------------------|-------------|
| Single SJS Splices: Side View |             | Double SJS Splices: Side View |             |
|                               |             |                               |             |
| Wire Size                     | Dimension L | Wire Size                     | Dimension L |
| Size 16                       | 1.452 Max   | Size 16                       | 1.428 Max   |
| Size 20                       | 1.434 Max   | Size 20                       | 1.428 Max   |
| Size 22                       | 1.310 Max   | Size 22                       | 1.322 Max   |

| Single SJS Splices |                |           |            |
|--------------------|----------------|-----------|------------|
|                    | Military P/N   | APCD P/N  | Ø Diameter |
|                    | M81714/65-16-1 | SJS316700 | .324 Max   |
|                    | M81714/65-20-1 | SJS320700 | .290 Max   |
|                    | M81714/65-22-1 | SJS322700 | .230 Max   |

| Double SJS Splices |                |           |          |          |          |
|--------------------|----------------|-----------|----------|----------|----------|
|                    | Military P/N   | APCD P/N  | A        | B        | C        |
|                    | M81714/65-16-2 | SJS316701 | .548 Max | .304 Max | .180 Max |
|                    | M81714/65-20-2 | SJS320701 | .481 Max | .271 Max | .150 Max |
|                    | M81714/65-22-2 | SJS322701 | .384 Max | .204 Max | .120 Max |



# MIL-T-81714/67 Series II

## Socket Junction Module Mounting Tracks



### Operating Range

Temperature Limits:  
-65°C to 200°C

Corrosion:  
No Exposure of Base Metal After  
48 Hours of Salt Spray

Magnetic Permeability:  
2.0 MU Max.

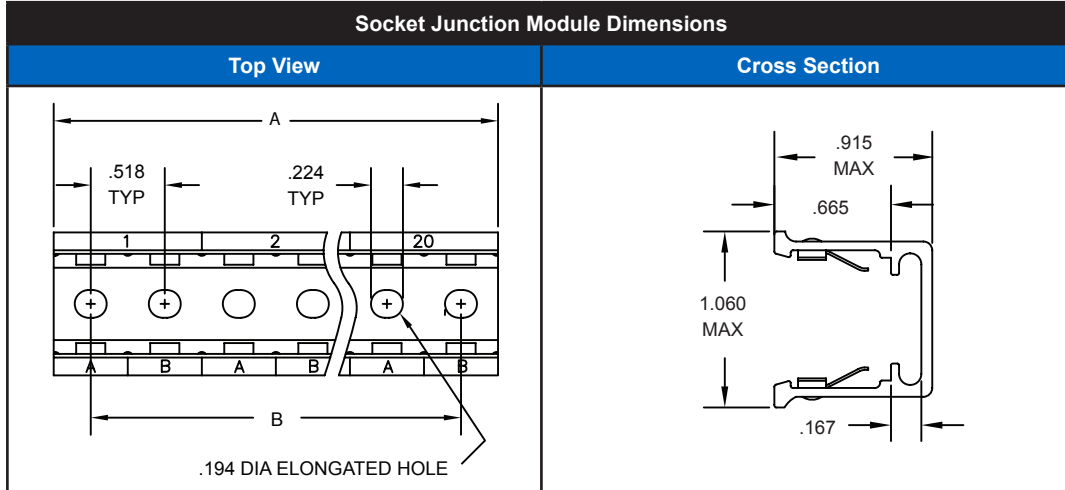
Vibration & Shock:  
Per MIL-T-81714 Paragraph  
3.5.8 and 3.5.9

### Materials

Rail:  
Aluminum Alloy, Black  
Anodized

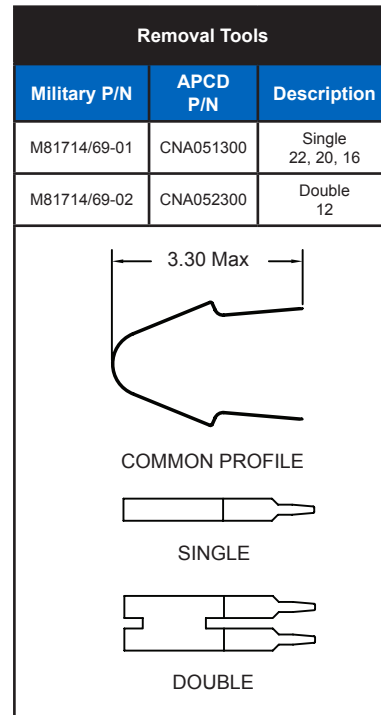
Spring Clips:  
Stainless Steel

Rivets:  
Stainless Steel



| Socket Junction Modules Mounting Track |           |                |            |        |
|--|-----------|----------------|------------|--------|
| Military P/N                           | APCD P/N  | Mounting Pos.* | Dimensions |        |
|  |           |                | A          | B      |
| M81714/67-02                           | SJT502404 | 2              | 1.036      | 0.518  |
| M81714/67-03                           | SJT503404 | 3              | 1.554      | 1.036  |
| M81714/67-04                           | SJT504404 | 4              | 2.072      | 1.554  |
| M81714/67-05                           | SJT505404 | 5              | 2.590      | 2.072  |
| M81714/67-06                           | SJT506404 | 6              | 3.108      | 2.590  |
| M81714/67-07                           | SJT507404 | 7              | 3.626      | 3.108  |
| M81714/67-08                           | SJT508404 | 8              | 4.144      | 3.626  |
| M81714/67-09                           | SJT509404 | 9              | 4.662      | 4.144  |
| M81714/67-10                           | SJT510404 | 10             | 5.180      | 4.662  |
| M81714/67-12                           | SJT512404 | 12             | 6.216      | 5.698  |
| M81714/67-13                           | SJT513404 | 13             | 6.734      | 6.216  |
| M81714/67-14                           | SJT514404 | 14             | 7.252      | 6.734  |
| M81714/67-15                           | SJT515404 | 15             | 7.770      | 7.252  |
| M81714/67-16                           | SJT516404 | 16             | 8.288      | 7.770  |
| M81714/67-18                           | SJT518404 | 18             | 9.324      | 8.806  |
| M81714/67-19                           | SJT519404 | 19             | 9.842      | 9.324  |
| M81714/67-20                           | SJT520404 | 20             | 10.360     | 9.842  |
| M81714/67-21                           | SJT521404 | 21             | 10.878     | 10.360 |
| M81714/67-25                           | SJT525404 | 25             | 12.950     | 12.432 |
| M81714/67-30                           | SJT530404 | 30             | 15.540     | 15.022 |
| M81714/67-32                           | SJT532404 | 32             | 16.576     | 16.058 |
| M81714/67-40                           | SJT540404 | 40             | 20.720     | 20.202 |

\*Size 12 Modules require two mounting positions; alternate marking styles available



# Composite Socket Junction Modules Mounting Tracks

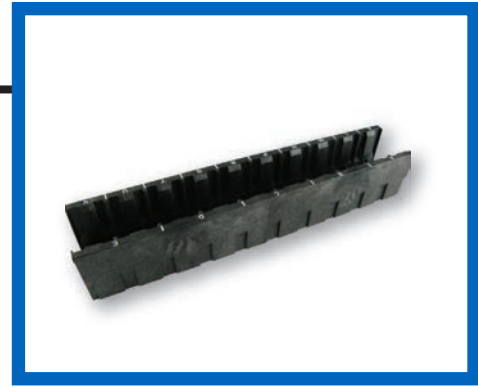
MIL-T-81714/67 Series II Compatible

## Operating Range

Temperature:  
-65°C to 175°C  
Vibration & Shock:  
MIL-T-81714 Paragraph  
3.5.8 and 3.5.9

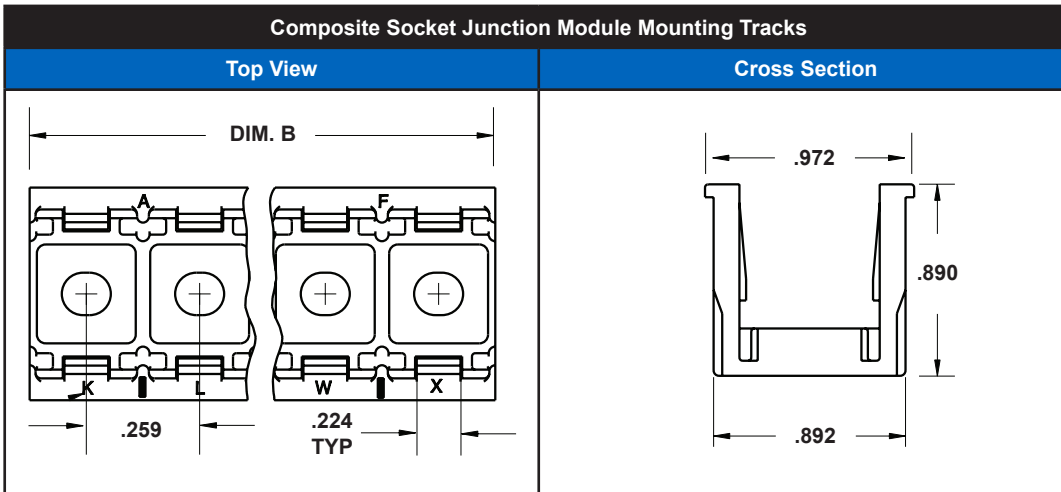
## Materials

Rail:  
Glass filled Polyetherimide  
Color: Black



## Product Description

The SJTC Mounting Track is fabricated of glass-filled polyetherimide which was selected for its unique combination of high strength, light weight, chemical resistance and dimensional stability. The track is available with 2 through 20 mounting positions, and is inter-changeable with existing aluminum tracks. This new track is 45% lighter than the aluminum track and 10% lighter than any other Series II track available. It also meets all dimensional requirements of MIL-T-81714.



| Composite Socket Junction Module Mounting Tracks |           |                |            |       |
|--|-----------|----------------|------------|-------|
| Military P/N                                     | APCD P/N  | Mounting Pos.* | Dimensions |       |
|  |           |                | A          | B     |
| M81714/67-02                                     | SJTC02000 | 2              | 1.036      | 0.518 |
| M81714/67-03                                     | SJTC03000 | 3              | 1.554      | 1.036 |
| M81714/67-04                                     | SJTC04000 | 4              | 2.072      | 1.554 |
| M81714/67-05                                     | SJTC05000 | 5              | 2.590      | 2.072 |
| M81714/67-06                                     | SJTC06000 | 6              | 3.108      | 2.590 |
| M81714/67-07                                     | SJTC07000 | 7              | 3.626      | 3.108 |
| M81714/67-08                                     | SJTC08000 | 8              | 4.144      | 3.626 |
| M81714/67-09                                     | SJTC09000 | 9              | 4.662      | 4.144 |
| M81714/67-10                                     | SJTC10000 | 10             | 5.180      | 4.662 |
| M81714/67-11                                     | SJTC11000 | 11             | 5.698      | 5.180 |
| M81714/67-12                                     | SJTC12000 | 12             | 6.216      | 5.698 |
| M81714/67-13                                     | SJTC13000 | 13             | 6.734      | 6.216 |
| M81714/67-14                                     | SJTC14000 | 14             | 7.252      | 6.734 |
| M81714/67-15                                     | SJTC15000 | 15             | 7.770      | 7.252 |
| M81714/67-16                                     | SJTC16000 | 16             | 8.288      | 7.770 |
| M81714/67-17                                     | SJTC17000 | 17             | 8.806      | 8.288 |
| M81714/67-18                                     | SJTC18000 | 18             | 9.324      | 8.806 |
| M81714/67-19                                     | SJTC19000 | 19             | 9.842      | 9.324 |
| M81714/67-20                                     | SJTC20000 | 20             | 10.360     | 9.842 |

\*Size 12 Modules require two mounting positions; alternate marking styles available

| Removal Tools |           |             |
|---------------|-----------|-------------|
| Military P/N  | APCD P/N  | Description |
| M81714/69-01  | CNA051300 | Single      |
| M81714/69-02  | CNA052300 | Double      |

3.30 Max

COMMON PROFILE

SINGLE

DOUBLE

# Ground Blocks

Size 16, 20



## Materials

### Web Membrane:

Silicone per A-A-59588, class 2B, 40 durometer; color: clear

### Grommet:

Silicone per A-A-59588, class 2B, 40 durometer; color: grey

### Housing:

Glass reinforced polyamide; color: red (size 20), blue (size 16)

### Internal Contacts:

BeCu C17410, gold per MIL-DTL-45204, Type II, Grade C, Class 1, over nickel per SAE-AMS-QQ-N-290, class 1

### Base:

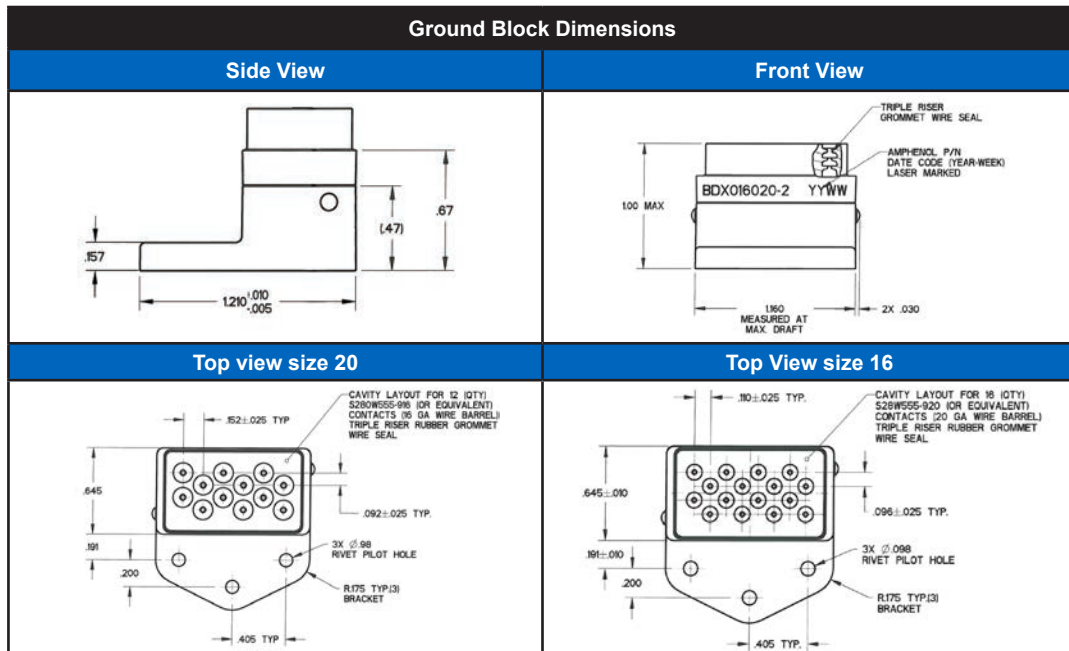
Aluminum A380.0, chromate conversion per MIL-DTL-81706, type 1, class 1A, method C

## Features and Benefits

- Overmold Technology: Simplifies construction and improves sealing and reliability
- Plastic retention clip- made with VICTREX® PEEK Polymer: Simplifies construction; uses 1 plastic piece vs 6 individual metal pieces
- FODSeal Technology (Patented): Reduces FOD, part count and weight by eliminating sealing plugs
- Smart Engineering: Weight Savings - up to 0.06 oz per block vs standard designs, yielding up to 2lbs per plane on typical aircraft

## Product Description

Combining advanced materials with an elegant design, Amphenol Pcd's Ground Blocks provide the lightest weight, highest density solution to tie multiple system components to ground available in the market today. Wired connections are environmentally sealed, providing protection from moisture, spray, and debris. Unused connections are protected via Amphenol's patented FODSeal membrane, which replaces the sealing plugs, reducing FOD, weight, and part count. Amphenol Pcd's Ground Blocks are ideal for use in harsh environments typically found in aircraft, ground vehicle, and naval applications.



| Part Number |                       |                    |              |             |
|-------------|-----------------------|--------------------|--------------|-------------|
| APCD P/N    | With/Without Contacts | Number of Contacts | Contact Size | Boeing P/N  |
| BDX016016-2 | Without               | 12                 | 16           | BACC50AN16H |
| BDX016017-2 | With                  | 12                 | 16           | BACC50AN16  |
| BDX016020-2 | Without               | 16                 | 20           | BACC50AN20H |
| BDX016021-2 | With                  | 16                 | 20           | BACC50AN20  |

# Luminus Series

The Luminus Series are lightweight, cost-effective connectors that are highly reliable and simple to use. With multiple configurations and arrangements available, a solution can be tailored to suit your application's exact requirements. Proven solutions can be found in single engine general aviation, multiple-engine business and passenger jets, and high performance rotary aircraft. Ideal where space is limited, these innovative, "scoop-proof" connectors feature a locking mechanism that ensures stability, are suitable for blind-mating, and are RoHS compliant.



## Features and Benefits

|   |  |
|---|--|
| 1/4 turn bayonet style connection; push and snap connection | Makes wire installation and maintenance easy and efficient; positive "click" when locked                   |
| Interfacial and Triple-Barrier Seal                         | Enables environmental sealing (IP 67 rating)   |
| AS39029 Contacts  | MIL Spec contacts for broad application compatibility  |
| Stamped & Formed Contacts                                   | For applications where MIL Spec contacts are not necessary; lighter vs. MIL Spec contacts & less expensive |
| Multiple Keying Positions                                   | Ensures proper connectivity  |
| Multiple Configurations and Accessories                     | Tailored solutions to application needs  |
| Rugged Polyamide Housings; 500 mating cycles                | Durability   |
| Blind-Mate Connection                                       | Enables simple, blind mating; easy assembly  |
| Visual markings   | Visual aid for easy assembly   |
| D160, M81714, FAR25 Compliance                              | Meets demanding military-aerospace environmental conditions  |

# Luminus Series

## Twist and Lock



### Operating Range

**Temperature Limits:**  
 -65°C to 125°C  
**Insulation Resistance:**  
 5000 Megaohms Min. @ 500 VDS  
**Dielectric Withstanding Voltage:**  
 1000 VRMS at Sea Level  
 300 VRMS at 50,000 ft.  
**Vibration:**  
 10-2000 Hz, 15G Peak  
**Shock:**  
 100G Sawtooth, 6MS  
**Current Ratings:**  
 Size 16: 13 Amps  
 Size 20: 7.5 Amps  
 Size 22: 5 Amps  
**Durability:**  
 500 Mating Cycles  
**Temp Cycling:**  
 5(1) Hour Cycles: -65°C to 125°C  
**Thermal Shock:**  
 -65°C to 200°C

### Materials

**Insulator Body:**  
 Polyamide 6/6 (Nylon)  
**Grommet:**  
 Silicone Rubber  
**Contact Retainers:**  
 Stainless Steel

| Plugs       |                             |        |             |              |            |               |                 |                    |               |
|-------------|-----------------------------|--------|-------------|--------------|------------|---------------|-----------------|--------------------|---------------|
| Part Number | Type                        | Color  | Contact Qty | Contact Size | Shell Size | Mating Half   | Self-Adh Cradle | Screw Mount Cradle | Strain Relief |
| SJS830250   | inline                      | black  | 2           | 22           | 5          | SJS830270     | SJS257000       | n/a                | n/a           |
| SJS830210   | inline                      | black  | 3           | 22           | 5          | SJS830230     | SJS257000       | n/a                | n/a           |
| SJS840310   | inline & panel mount (circ) | white  | 3           | 16           | 8          | SJS840300/320 | SJS445000       | SJS450100          | n/a           |
| SJS840340   | panel alt key (circ)        | black  | 3           | 16           | 8          | SJS840330/350 | SJS445000       | SJS450100          | n/a           |
| SJS840410   | inline                      | white  | 4           | 16           | 8          | SJS840400     | SJS445000       | SJS450100          | n/a           |
| SJS860510   | inline & panel mount (circ) | white  | 5           | 22           | 8          | SJS860500/520 | SJS445000       | SJS450100          | n/a           |
| SJS870510*  | panel mount (circ)          | white  | 5           | 22           | 8          | SJS870520     | SJS445000       | SJS450100          | n/a           |
| SJS861700   | inline                      | black  | 6           | 22           | 7          | SJS861800     | SJS883000       | SJS450250          | SJS450300     |
| SJS830100   | inline & panel mount (sqr)  | black  | 8           | 22           | 7          | SJS830200/220 | SJS883000       | SJS450250          | SJS450300     |
| SJS830101   | inline & panel mount (sqr)  | green  | 8           | 22           | 7          | SJS830201/221 | SJS883000       | SJS450250          | SJS450300     |
| SJS830102   | inline & panel mount (sqr)  | yellow | 8           | 22           | 7          | SJS830202/222 | SJS883000       | SJS450250          | SJS450300     |
| SJS860100   | inline                      | white  | 9           | 16/22        | 8          | SJS860200     | SJS445000       | SJS450100          | n/a           |
| SJS860910   | inline                      | white  | 9           | 16/22        | 10         | SJS860900     | SJS991000       | n/a                | n/a           |
| SJS862100   | inline                      | black  | 9           | 22           | 8          | SJS862200     | SJS445000       | SJS450100          | n/a           |
| SJS861100   | inline                      | white  | 10          | 16/22        | 10         | SJS861200     | SJS991000       | n/a                | n/a           |
| SJS861300   | inline                      | white  | 12          | 22           | 8          | SJS861400     | SJS445000       | SJS450100          | n/a           |

Note: SJS870510 uses pin contacts; SJS870520 uses socket contacts

| Accessories |                      |       |             |             |            |                       |  |
|-------------|----------------------|-------|-------------|-------------|------------|-----------------------|--|
| Part Number | Series               | Color | Length (in) | Height (in) | Weight (g) | Shell Size            |  |
| SJS257000   | Self-Adhesive Cradle | Black | 1.033       | 0.645       | 2.5        | 5                     |  |
| SJS445000   | Self-Adhesive Cradle | White | 1.031       | 0.701       | 2.7        | 8                     |  |
| SJS883000   | Self-Adhesive Cradle | Black | 1.031       | 0.701       | 2.7        | 7                     |  |
| SJS991000   | Self-Adhesive Cradle | White | 1.031       | 0.846       | 2.8        | 10                    |  |
| SJS450100   | Screw Mount Cradle   | Black | 1.033       | 0.982       | 3.3        | 8                     |  |
| SJS450250   | Screw Mount Cradle   | Black | 1.033       | 0.976       | 3.9        | 7                     |  |
| SJS450300   | Strain Relief        | Black | 0.95        | 0.539       | 0.6        | 7                     |  |
| SJS450400   | Strain Relief        | Black | 1.00        | 0.685       | 0.8        | SJS8201xx & SJS8202xx |  |

# Luminus Series

## Twist and Lock

### Operating Range

**Temperature Limits:**

-65°C to 125°C

**Insulation Resistance:**

5000 Megaohms Min. @ 500 VDC

**Dielectric Withstanding Voltage:**

1500 VAC, 60Hz @ Sea Level, 5ma

300 VAC, 60Hz @ 70,000 ft, 2ma

300 VAC, 60Hz @ 100,000 ft, 2ma

**Vibration:**

10-2000 Hz, 15G Peak, Sinusoidal

50z-2000 Hz, 16G Peak, Random

**Shock:**

100G Sawtooth, 6MS

**Current Ratings:**

Size 16: 13 Amps

Size 20: 7.5 Amps

Size 22: 5 Amps

**Durability:**

500 Mating Cycles

**Temp Cycling:**

5(1) Hour Cycles: -65°C to 125°C

**Thermal Shock:**

-65°C to 200°C

### Materials

**Insulator Body:**

Polyamide 6/6 (Nylon)

**Grommet:**

Silicone Rubber

**Contact Retainers:**

Stainless Steel



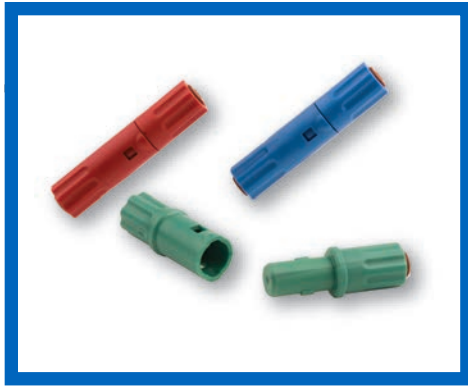
### Receptacles

| Part Number | Type                       | Color  | Contact Qty | Contact Size | Shell Size | Mating Half | Self-Adh Cradle | Screw Mount Cradle | Strain Relief |
|-------------|----------------------------|--------|-------------|--------------|------------|-------------|-----------------|--------------------|---------------|
| SJS830270   | inline                     | black  | 2           | 22           | 5          | SJS830250   | SJS257000       | n/a                | n/a           |
| SJS830230   | inline                     | black  | 3           | 22           | 5          | SJS830210   | SJS257000       | n/a                | n/a           |
| SJS840300   | inline                     | white  | 3           | 16           | 8          | SJS840310   | SJS445000       | SJS450100          | n/a           |
| SJS840350   | inline alt key             | black  | 3           | 16           | 8          | SJS840340   | SJS445000       | SJS450100          | n/a           |
| SJS840320   | panel mount (circ)         | white  | 3           | 16           | 8          | SJS840310   | SJS445000       | SJS450100          | n/a           |
| SJS840330   | panel mount alt key (circ) | black  | 3           | 16           | 8          | SJS840340   | SJS445000       | SJS450100          | n/a           |
| SJS840400   | inline                     | white  | 4           | 16           | 8          | SJS840410   | SJS445000       | SJS450100          | n/a           |
| SJS860500   | inline                     | white  | 5           | 22           | 8          | SJS840510   | SJS445000       | SJS450100          | n/a           |
| SJS860520   | panel mount (circ)         | white  | 5           | 22           | 8          | SJS840510   | SJS445000       | SJS450100          | n/a           |
| SJS870520*  | panel mount (circ)         | white  | 5           | 22           | 8          | SJS870510   | SJS445000       | SJS450100          | n/a           |
| SJS861800   | inline                     | black  | 6           | 22           | 7          | SJS861700   | SJS883000       | SJS450250          | SJS450300     |
| SJS830200   | inline                     | black  | 8           | 22           | 7          | SJS830100   | SJS883000       | SJS450250          | SJS450300     |
| SJS830201   | inline alt key             | green  | 8           | 22           | 7          | SJS830101   | SJS883000       | SJS450250          | SJS450300     |
| SJS830202   | inline alt key             | yellow | 8           | 22           | 7          | SJS830102   | SJS883000       | SJS450250          | SJS450300     |
| SJS830220   | panel mount (sqr)          | black  | 8           | 22           | 7          | SJS830100   | n/a             | n/a                | n/a           |
| SJS830221   | panel mount (sqr)          | green  | 8           | 22           | 7          | SJS830101   | n/a             | n/a                | n/a           |
| SJS830222   | panel mount (sqr)          | yellow | 8           | 22           | 7          | SJS830102   | n/a             | n/a                | n/a           |
| SJS860200   | inline                     | white  | 9           | 16/22        | 8          | SJS860100   | SJS445000       | SJS450100          | n/a           |
| SJS860900   | inline                     | white  | 9           | 16/22        | 10         | SJS860910   | SJS991000       | n/a                | n/a           |
| SJS862200   | inline                     | black  | 9           | 22           | 8          | SJS862100   | SJS445000       | SJS450100          | n/a           |
| SJS861200   | inline                     | white  | 10          | 16/22        | 10         | SJS861100   | SJS991000       | n/a                | n/a           |
| SJS861400   | inline                     | white  | 12          | 22           | 8          | SJS861300   | SJS445000       | SJS450100          | n/a           |

Note: SJS870510 uses pin contacts; SJS870520 uses socket contacts

# Luminus Series

## Push and Pull



### Operating Range

Temperature Limits:  
-65°C to 125°C

Insulation Resistance:  
5000 MΩ Min. @ 500 VDC

Dielectric Withstanding Voltage:  
1500 VRMS at Sea Level  
600VAC, 60Hz @ 45,000 ft.

Vibration:  
EIA-364D-028D, Test Condition V, E

Sealing:  
EIA-364D-03B (55,000 ft)

Flammability Rating:  
UL94, V0

CTI Rating:  
UL746B, 600V

Contact Retention:  
EIA-364D-029B (20 lb)

### Materials

Insulator Body:  
Polyamide 6/6 (Nylon)

Grommet:  
Silicone Rubber per A-A-59588

Contact Retainers:  
Stainless Steel

#### Plugs

| Part Number | Type           | Color | Key | Contact Qty | Contact Size | Shell Size | Mating Half | Strain Relief |
|-------------|----------------|-------|-----|-------------|--------------|------------|-------------|---------------|
| SJS512100   | inline         | blue  | n/a | 1           | 12           | 7          | SJS512200   | n/a           |
| SJS512110   | inline alt key | red   | n/a | 1           | 12           | 7          | SJS512210   | n/a           |
| SJS716100   | inline         | blue  | n/a | 1           | 16           | 6          | SJS716200   | n/a           |
| SJS716100   | inline alt key | red   | n/a | 1           | 16           | 6          | SJS716210   | n/a           |
| SJS720100   | inline         | blue  | n/a | 1           | 20           | 6          | SJS720200   | n/a           |
| SJS720110   | inline alt key | red   | n/a | 1           | 20           | 6          | SJS720210   | n/a           |
| SJS816100   | inline         | red   | A   | 3           | 16           | 11         | SJS816200   | n/a           |
| SJS816110   | inline alt key | white | B   | 3           | 16           | 11         | SJS816210   | n/a           |
| SJS816120   | inline alt key | blue  | C   | 3           | 16           | 11         | SJS816220   | n/a           |
| SJS820100   | inline         | red   | A   | 3           | 20           | 8          | SJS820200   | SJS450400     |
| SJS820110   | inline alt key | white | B   | 3           | 20           | 8          | SJS820210   | SJS450400     |
| SJS820120   | inline alt key | blue  | C   | 3           | 20           | 8          | SJS820220   | SJS450400     |

#### Receptacles

| Part Number | Type           | Color | Key | Contact Qty | Contact Size | Shell Size | Mating Half | Strain Relief |
|-------------|----------------|-------|-----|-------------|--------------|------------|-------------|---------------|
| SJS512200   | inline         | blue  | n/a | 1           | 12           | 7          | SJS512100   | n/a           |
| SJS512210   | inline alt key | red   | n/a | 1           | 12           | 7          | SJS512110   | n/a           |
| SJS716200   | inline         | blue  | n/a | 1           | 16           | 6          | SJS716100   | n/a           |
| SJS716210   | inline alt key | red   | n/a | 1           | 16           | 6          | SJS716110   | n/a           |
| SJS720200   | inline         | blue  | n/a | 1           | 20           | 6          | SJS720100   | n/a           |
| SJS720210   | inline alt key | red   | n/a | 1           | 20           | 6          | SJS720110   | n/a           |
| SJS816200   | inline         | red   | A   | 3           | 16           | 11         | SJS816100   | n/a           |
| SJS816210   | inline alt key | white | B   | 3           | 16           | 11         | SJS816110   | n/a           |
| SJS816220   | inline alt key | blue  | C   | 3           | 16           | 11         | SJS816120   | n/a           |
| SJS820200   | inline         | red   | A   | 3           | 20           | 8          | SJS820100   | SJS450400     |
| SJS820210   | inline alt key | white | B   | 3           | 20           | 8          | SJS820110   | SJS450400     |
| SJS820220   | inline alt key | blue  | C   | 3           | 20           | 8          | SJS820120   | SJS450400     |

# Luminus Series

## Contacts and Accessories

### Dimensions

Drawings available upon request

### Plating Options

#### Machined:

Gold plate 50 microinches min over nickel underplate

#### Stamped & Formed:

Selective gold plate over engagement area  
3-5 microinches thick over nickel underplate

### Shipping Format

Loose (tape & reel not included)

### Durability

500 mating cycles

### Material

#### Contact Body:

Copper Alloy

#### Hood:

Stainless steel

#### Sleeve:

Stainless steel



| Contact Matrix |                     |                        |                                 |                              |                  |                              |                                  |                        |
|----------------|---------------------|------------------------|---------------------------------|------------------------------|------------------|------------------------------|----------------------------------|------------------------|
| Contact Size   | Contact Style       | Connector Type         |                                 | Currently Available          |                  | QPL Part No. (Machined Only) | Contact Retention                | Crimp Tensile Strength |
|                |                     | Push-Pull              | Twist-Lock                      | Machined                     | Stamped & Formed |                              |                                  |                        |
| 12             | Pin                 | X                      | X                               | CNP058365                    | n/a              | M39029/58-365                | .012" [0,30mm]<br>@ 30lbf [133N] | 100lbf [445N]          |
|                | Socket              | n/a                    | X                               | CNS057359                    | n/a              | M39029/57-359                |                                  |                        |
|                | Socket-L            | X                      | n/a                             | CNS056353                    | n/a              | M39029/56-353                |                                  |                        |
| 16             | Pin                 | X                      | X                               | CNP058364                    | SCP058364        | M39029/58-364                | .012" [0,30mm]<br>@ 25lbf [111N] | 40lbf [180N]           |
|                | Socket              | n/a                    | X                               | CNS057358                    | SCS057358        | M39029/57-358                |                                  |                        |
|                | Socket-L            | X                      | n/a                             | CNS056352                    | n/a              | M39029/56-352                |                                  |                        |
| 20             | Pin                 | X                      | X                               | CNP058363                    | SCP058363        | M39029/58-363                | .012" [0,30mm]<br>@ 20lbf [90N]  | 20lbf [90N]            |
|                | Socket              | n/a                    | X                               | CNS057357                    | SCS057357        | M39029/57-357                |                                  |                        |
|                | Socket-L            | X                      | n/a                             | CNS056351                    | n/a              | M39029/56-351                |                                  |                        |
| 22D            | Pin                 | n/a                    | X                               | CNP058360                    | n/a              | M39029/58-360                | .012" [0,30mm]<br>@ 10lbf [44N]  | 10 lbf [45N]           |
|                | Socket              | n/a                    | X                               | CNS057354                    | n/a              | M39029/57-354                |                                  |                        |
| Contact Size   | Wire Accommodations |                        |                                 |                              | Tool Information |                              |                                  |                        |
|                | Size (AWG)          | Max Current Rating (A) | OD Range                        | Strip Length                 | Basic Tool       | Positioner                   | Insertion/Removal Tool           |                        |
| 12             | 12                  | 23                     | .097 - .142"<br>[2,46 - 3,61mm] | .209 - .240" [5,31 - 6,10mm] | M22520/1-01      | M22520/1-04 (Yellow)         | M81969/14-04                     |                        |
|                | 14                  | 17                     |                                 |                              |                  |                              |                                  |                        |
| 16             | 16                  | 13                     | .065 - .109"<br>[1,65 - 2,77mm] | .209 - .240" [5,31 - 6,10mm] | M22520/1-01      | M22520/1-04 (Blue)           | M81969/14-03                     |                        |
|                | 18                  | 10                     |                                 |                              |                  |                              |                                  |                        |
|                | 20                  | 7.5                    |                                 |                              | M22520/7-01      | M22520/7-04                  |                                  |                        |
| 20             | 20                  | 7.5                    | .040 - .083"<br>[1,02 - 2,11mm] | .209 - .240" [5,31 - 6,10mm] | M22520/1-01      | M22520/1-04 (Red)            | M81969/14-11                     |                        |
|                | 22                  | 5                      |                                 |                              | M22520/2-01      |                              |                                  | M22520/2-10            |
|                | 24                  | 3                      |                                 |                              | M22520/7-01      |                              |                                  | M22520/7-08            |
| 22D            | 22                  | 5                      | .030 - .054"<br>[0,76 - 1,37mm] | .141 - .172" [3,58 - 4,37mm] | M22520/2-01      | M22520/2-06                  | M81969/14-01                     |                        |
|                | 24                  | 3                      |                                 |                              |                  |                              |                                  |                        |
|                | 26                  | 2                      |                                 |                              | M22520/7-01      | M22520/7-06                  |                                  |                        |
|                | 28                  | 1.5                    |                                 |                              |                  |                              |                                  |                        |



# Crimp Removable Socket Contacts

MIL-C-39029/5, MIL-C-39029/101



## Materials

Body:

Copper Alloy, Hard Gold Plated per MIL-G-45204

Hood:

Stainless Steel Passivated

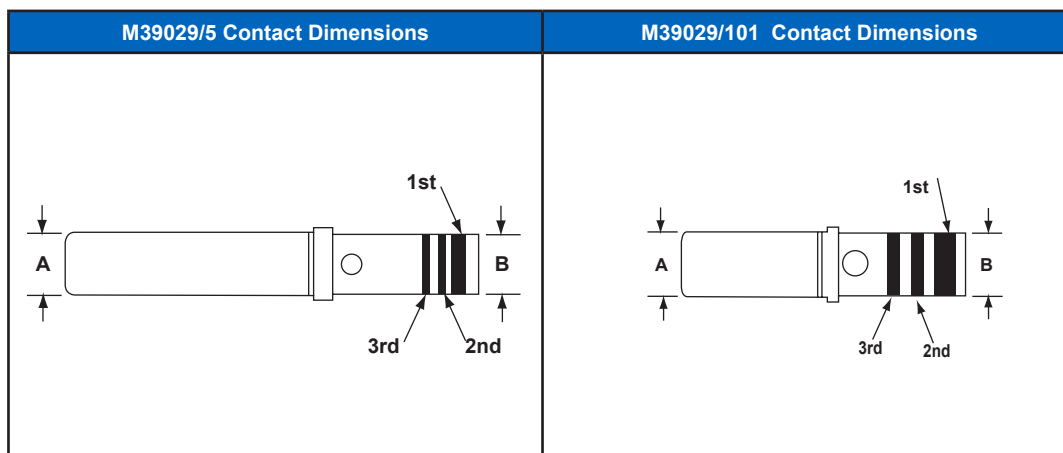
## Performance

Performance in accordance with SAE-AS39209 and related specifications

## Contacts By Relay Socket

**M39029/5** Contacts Used with M12883/40, /41, /47, & /48 Relay Sockets

**M39029/101** Contacts Used with M12883/44, /45, /46, & /52 Relay Sockets



| Contact Design Characteristics |                |           |          |           |             |       |        |          |          |
|--------------------------------|----------------|-----------|----------|-----------|-------------|-------|--------|----------|----------|
| Bin Code                       | Military P/N   | APCD P/N  | Pin Size | Wire Size | Color Bands |       |        | A (Max.) | B (Max.) |
|                                |                |           |          |           | 1st         | 2nd   | 3rd    |          |          |
| M39029/5 Contacts              |                |           |          |           |             |       |        |          |          |
| 116                            | M39029/5-116   | CNS511600 | 16       | 16        | Brown       | Brown | Blue   | .113     | .103     |
| 117                            | M39029/5-117   | CNS511700 | 16       | 20        | Brown       | Brown | Violet | .113     | .078     |
| 118                            | M39029/5-118   | CNS511800 | 12       | 12        | Brown       | Brown | Grey   | .161     | .151     |
| 119                            | M39029/5-119   | CNS511900 | 12       | 16        | Brown       | Brown | White  | .161     | .103     |
| M39029/101 Contacts            |                |           |          |           |             |       |        |          |          |
| 552                            | M39029/101-552 | CNS101552 | 22       | 22        | Green       | Green | Red    | .060     | .048     |
| 553                            | M39029/101-553 | CNS101553 | 20       | 20        | Green       | Green | Orange | .076     | .070     |
| 554                            | M39029/101-554 | CNS101554 | 16       | 16        | Green       | Green | Yellow | .108     | .103     |

| Contact Installation Tooling |                          |                                 |                 |                            |
|------------------------------|--------------------------|---------------------------------|-----------------|----------------------------|
| Bin Code                     | Basic Crimping Tool      | Positioner                      | Installing Tool | Wired Contact Removal Tool |
| M39029/5 Contacts            |                          |                                 |                 |                            |
| 116                          | M22520/1-01, M22520/7-01 | M22520/1-02 Blue or M22520/7-03 | M81969/14-03    | M81969/14-03               |
| 117                          | M22520/1-01, M22520/7-01 | M22520/1-02 Blue or M22520/7-03 | M81969/14-02    | M81969/14-02               |
| 118                          | M22520/1-01              | M22520/1-02 Yellow              | M81969/14-04    | M81969/14-04               |
| 119                          | M22520/1-01              | M22520/1-02 Yellow              | M81969/14-03    | M81969/14-03               |
| M39029/101 Contacts          |                          |                                 |                 |                            |
| 552                          | M22520/7-01              | M22520/7-11                     | M81969/16-04    | M81969/16-04               |
| 553                          | M22520/7-01              | M22520/7-12                     | M81969/16-01    | M81969/16-01               |
| 554                          | M22520/7-01              | M22520/7-13                     | M81969/16-03    | M81969/16-02               |

# Crimp Removable Socket Contacts

MIL-C-39029/1, MIL-C-39029/22

## Materials

Body:  
Copper Alloy, Hard Gold Plated  
per MIL-G-45204

Hood:  
Stainless Steel Passivated

## Performance

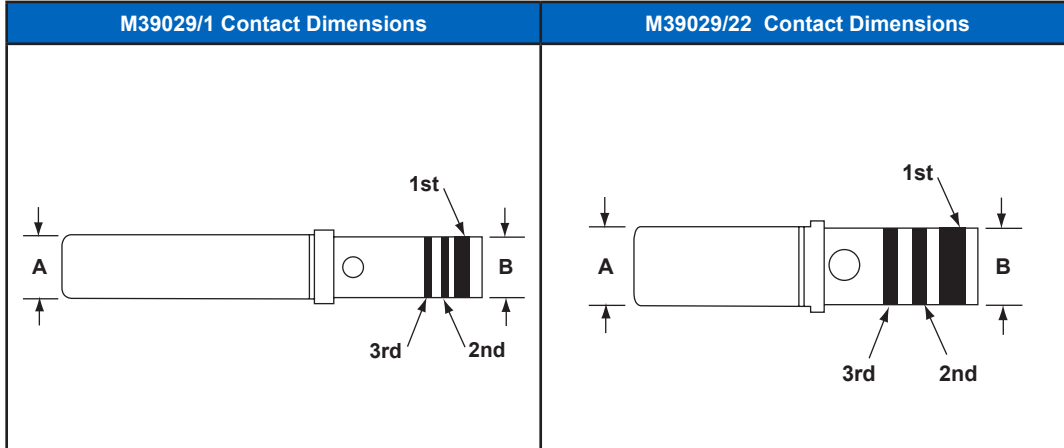
Performance in accordance with  
SAE-AS39209 and related specifications



## Contacts By Modules

**M39029/1** contacts used with M81714 Series I, TJE, TJSE, TJHD, and TJM Modules

**M39029/22** contacts used with M81714/60, /61, /63, Series II Socket Junction Modules



| Contact Design Characteristics |               |           |          |           |             |       |        |          |          |
|--------------------------------|---------------|-----------|----------|-----------|-------------|-------|--------|----------|----------|
| Bin Code                       | Military P/N  | APCD P/N  | Pin Size | Wire Size | Color Bands |       |        | A (Max.) | B (Max.) |
|                                |               |           |          |           | 1st         | 2nd   | 3rd    |          |          |
| M39029/1 Contacts              |               |           |          |           |             |       |        |          |          |
| 100                            | M39029/1-100  | CNP068000 | 16       | 22        | Brown       | Black | Black  | .062     | .051     |
| 101                            | M39029/1-101  | CNP006000 | 16       | 20        | Brown       | Black | Brown  | .063     | .078     |
| 102                            | M39029/1-102  | CNP037000 | 14       | 16        | Brown       | Black | Red    | .078     | .105     |
| 103                            | M39029/1-103  | CNP072000 | 12       | 12        | Brown       | Black | Orange | .095     | .153     |
| 507                            | M39029/1-507  | CNP022507 | 20       | 22D       | Green       | Black | Violet | .041     | .048     |
| M39029/22 Contacts             |               |           |          |           |             |       |        |          |          |
| 191                            | M39029/22-191 | CNS113900 | 22       | 22        | Brown       | White | Brown  | .060     | .048     |
| 192                            | M39029/22-192 | CNS070900 | 20       | 20        | Brown       | White | Red    | .076     | .070     |
| 193                            | M39029/22-193 | CNS072900 | 16       | 16        | Brown       | White | Orange | .108     | .103     |
| 605                            | M39029/22-605 | CNS123900 | 12       | 12        | Blue        | Black | Green  | .168     | .152     |

| Contact Installation Tooling |                          |                              |   |   |
|------------------------------|--------------------------|------------------------------|---|---|
| Bin Code                     | Basic Crimping Tool      | Positioner                   | Installing Tool                         | Wired Contact Removal Tool              |
| M39029/1 Contacts            |                          |                              |   |   |
| 100                          | M22520/2-01              | M22520/2-11                  | M81969/14-02                            | M81969/14-02                            |
| 101                          | M22520/1-01, M22520/2-01 | M22520/1-02 Red, M22520/2-11 | M81969/14-02                            | M81969/14-02                            |
| 102                          | M22520/1-01              | M22520/1-02 Blue             | M81969/14-03                            | M81969/14-03                            |
| 103                          | M22520/1-01              | M22520/1-02 Yellow           | M81969/14-04                            | M81969/14-04                            |
| 507                          | M22520/2-01              | M22520/2-32                  | M81969/14-01, or/1-04 or /8-01 or /8-02 | M81969/14-01, or/1-04 or /8-01 or /8-02 |
| M39029/22 Contacts           |                          |                              |   |   |
| 191                          | M22520/7-01              | M81969/7-11                  | M81969/14-01                            | M81969/14-01                            |
| 192                          | M22520/7-01              | M22520/7-12                  | M81969/14-10                            | M81969/14-10                            |
| 193                          | M22520/7-01              | M22520/7-13                  | M81969/14-03                            | M81969/14-03                            |
| 605                          | M22520/1-01              | Daniels, TH343 or TP405      | M81969/16-03                            | M81969/16-03                            |

# Crimp Removable Socket Contacts

MIL-C-39029/92



## Materials

Body:

Copper Alloy, Hard Gold Plated per MIL-G-45204

Hood:

Stainless Steel Passivated

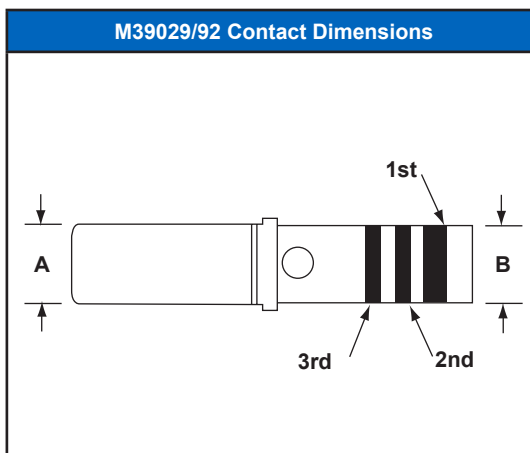
## Performance

Performance in accordance with

SAE-AS39209 and related specifications

## Contacts By Relay Socket

M39029/92 contacts used with M12883/40, /41, /47, /48, /54, /55 Relay Sockets

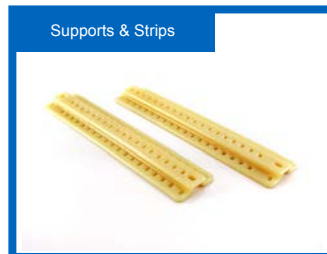


| Contact Design Characteristics |                |           |          |           |             |        |        |          |          |
|--------------------------------|----------------|-----------|----------|-----------|-------------|--------|--------|----------|----------|
| Bin Code                       | Military P/N   | APCD P/N  | Pin Size | Wire Size | Color Bands |        |        | A (Max.) | B (Max.) |
|                                |                |           |          |           | 1st         | 2nd    | 3rd    |          |          |
| M39029/92 Contacts             |                |           |          |           |             |        |        |          |          |
| 531                            | M392029/92-531 | CNS115900 | 22       | 22        | Green       | Orange | Brown  | .062     | .053     |
| 532                            | M392029/92-532 | CNS074900 | 20       | 20        | Green       | Orange | Red    | .078     | .078     |
| 533                            | M392029/92-533 | CNS126900 | 16       | 16        | Green       | Orange | Orange | .113     | .103     |
| 534                            | M392029/92-534 | CNS127900 | 16       | 20        | Green       | Orange | Yellow | .113     | .078     |
| 535                            | M392029/92-535 | CNS128900 | 12       | 12        | Green       | Orange | Green  | .161     | .151     |
| 536                            | M392029/92-536 | CNS129900 | 12       | 16        | Green       | Orange | Blue   | .161     | .103     |

| Contact Installation Tooling |                                       |   |                     |                            |
|------------------------------|---------------------------------------|---|---------------------|----------------------------|
| Bin Code                     | Basic Crimping Tool                   | Positioner                                | Installing Tool     | Wired Contact Removal Tool |
| M39029/92 Contacts           |                                       |   |                     |                            |
| 531                          | M22520/2-01                           | Daniels K1561                             | M81969/8-03, /14-01 | M81969/8-04, /14-01        |
| 532                          | M22520/1-01, M22520/2-01, M22520/7-01 | M22520/1-02 Red, M22520/2-02, M22520/7-02 | M81969/8-05, /14-02 | M81969/8-06, /14-02        |
| 533                          | M22520/1-01 or M22520/7-01            | M22520/1-02 Blue or M22520/7-03           | M81969/8-07, /14-03 | M81969/8-08, /14-03        |
| 534                          | M22520/1-01 or M22520/7-01            | M22520/1-02 Blue or M22520/7-03           | M81969/8-07, /14-03 | M81969/8-08, /14-03        |
| 535                          | M22520/1-01                           | M22520/1-02 Yellow                        | M81969/8-09, /14-04 | M81969/8-10, /14-04        |
| 536                          | M22520/1-01                           | M22520/1-02 Yellow                        | M81969/8-09, /14-04 | M81969/8-10, /14-04        |

# System Attachments

Designed to secure, guide, and manage cable harnesses through aircraft and vehicles, Amphenol Pcd's System Attachments were engineered with strength, stability, and weight reduction in mind. Designed for lean manufacturing, our System Attachments are rugged and durable - able to withstand high vibration and shock, and non-conductive/non-corrosive - able to withstand many harsh environments. Based on the requirement, there are many styles and materials to choose from.



## Applications

- Wire Bundle and Cable Management
- Aircraft Fuel Tank
- Aircraft Insulation
- Hydraulic Tubing
- IFE and Galley
- Instrumentation
- Aircraft Power Distribution
- Weapon Systems
- Oil and Gas
- Radio/Datalink/Antenna/C4I
- Shelter Power Management
- Actuation and Sensors
- Railway
- RF & Fiber Optic Cables

# System Attachments

## High Performance P-Clamps



### Materials

Clamp Base:  
Polyetheretherketone (PEEK™)  
Per MIL-P-46183

Overmolding:  
Silicone Rubber per ASTM-D-2000

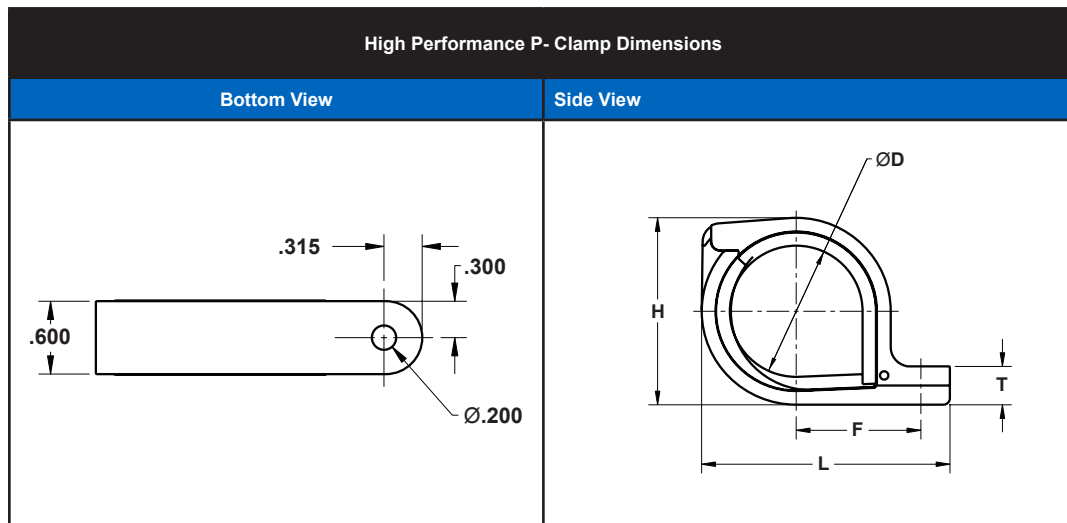
### Performance

Temperature Limits:  
Continuous: -65°F to 350°F  
Excursions: Up to 260°C (500°F)

Flammability:  
UL94, V0, FAR25.853

### Product Description

High Performance P-Clamps are designed to replace and outperform traditional clamps. Consisting of PEEK™ polymer and featuring an over-molded silicone cushion, these clamps are completely non-corrosive and non-conductive. They are designed to be lighter than traditional P-Clamps, are equipped with a locking feature to streamline installation, and are available in 15 different sizes. Alternate cushioning material is available upon request, including Fluorosilicone for fuel tank applications and fiber optic cables.



**High Performance P-Clamps**

| Part Number | Inner Cushion Diameter |      | F    |      | L    |      | H    |      | T    |      | Weight (lbs) per 100 Clamps | Weight (grams) per 100 Clamps |
|-------------|------------------------|------|------|------|------|------|------|------|------|------|-----------------------------|-------------------------------|
|             | Inch                   | cm   | Inch | cm   | Inch | cm   | Inch | cm   | Inch | cm   |                             |                               |
| PCL150101   | 0.12                   | 0.32 | 0.59 | 1.51 | 1.18 | 2.99 | 0.64 | 1.62 | 0.18 | 0.46 | 0.9                         | 408                           |
| PCL150102   | 0.22                   | 0.56 | 0.64 | 1.63 | 1.27 | 3.22 | 0.71 | 1.80 | 0.18 | 0.46 | 1.0                         | 454                           |
| PCL150103   | 0.31                   | 0.79 | 0.71 | 1.81 | 1.41 | 3.59 | 0.82 | 2.07 | 0.24 | 0.61 | 1.4                         | 635                           |
| PCL150104   | 0.41                   | 1.03 | 0.76 | 1.93 | 1.51 | 3.83 | 0.88 | 2.25 | 0.24 | 0.61 | 1.5                         | 680                           |
| PCL150105   | 0.50                   | 1.27 | 0.81 | 2.05 | 1.60 | 4.07 | 0.92 | 2.33 | 0.24 | 0.61 | 1.7                         | 771                           |
| PCL150106   | 0.59                   | 1.51 | 0.85 | 2.17 | 1.69 | 4.31 | 1.05 | 2.68 | 0.24 | 0.61 | 1.8                         | 816                           |
| PCL150107   | 0.69                   | 1.75 | 0.93 | 2.35 | 1.84 | 4.67 | 1.20 | 3.05 | 0.30 | 0.76 | 2.4                         | 1089                          |
| PCL150108   | 0.78                   | 1.99 | 0.97 | 2.47 | 1.93 | 4.91 | 1.32 | 3.35 | 0.30 | 0.76 | 2.7                         | 1225                          |
| PCL150109   | 0.88                   | 2.22 | 1.02 | 2.59 | 2.03 | 5.15 | 1.39 | 3.53 | 0.30 | 0.76 | 2.8                         | 1270                          |
| PCL150110   | 0.97                   | 2.46 | 1.07 | 2.71 | 2.12 | 5.38 | 1.48 | 3.76 | 0.30 | 0.76 | 3.0                         | 1361                          |
| PCL150111   | 1.06                   | 2.70 | 1.14 | 2.89 | 2.26 | 5.75 | 1.62 | 4.12 | 0.36 | 0.91 | 3.7                         | 1678                          |
| PCL150112   | 1.16                   | 2.94 | 1.18 | 3.01 | 2.36 | 5.99 | 1.75 | 4.46 | 0.36 | 0.91 | 4.0                         | 1814                          |
| PCL150113   | 1.25                   | 3.18 | 1.23 | 3.13 | 2.45 | 6.23 | 1.82 | 4.63 | 0.36 | 0.91 | 4.2                         | 1905                          |
| PCL150114   | 1.34                   | 3.41 | 1.29 | 3.28 | 2.57 | 6.54 | 1.93 | 4.91 | 0.40 | 1.00 | 4.7                         | 2132                          |
| PCL150115   | 1.44                   | 3.65 | 1.35 | 3.43 | 2.69 | 6.83 | 2.05 | 5.20 | 0.42 | 1.07 | 5.3                         | 2404                          |

# System Attachments

## High Performance Omega Clamps



### Materials

Clamp Base:  
Polyetheretherketone (PEEK™)  
Per MIL-P-46183

Overmolding:  
Silicone Rubber per ASTM-D-2000

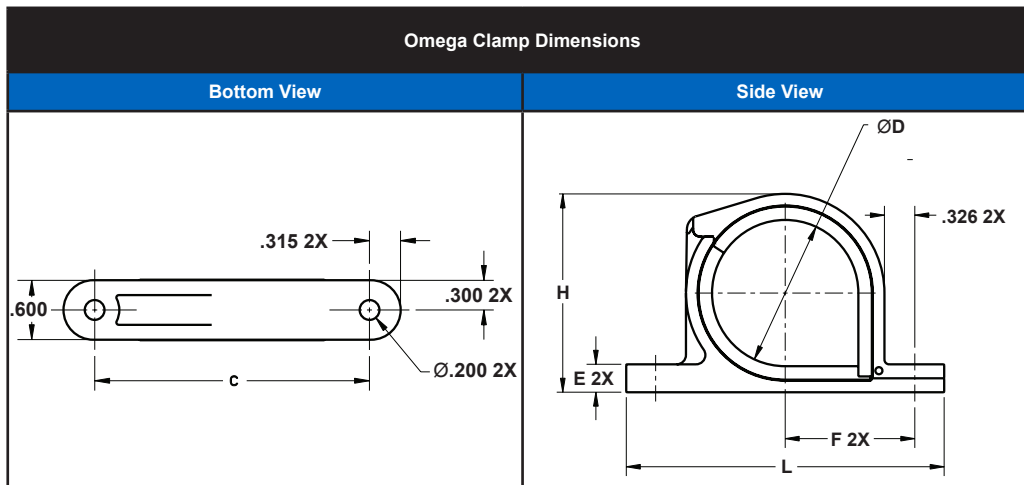
### Performance

Temperature Limits:  
Continuous: -65°F to 350°F  
Excursions: Up to 260°C (500°F)

Flammability:  
UL94, V0, FAR25.853

### Product Description

High Performance Omega Clamps are designed to replace and outperform traditional clamps. Consisting of PEEK™ polymer and featuring an over-molded silicone cushion, these clamps are completely non-corrosive and non-conductive. High Performance Omega Clamps are designed to be lighter than traditional Clamps and are equipped with a locking feature to streamline installation. Alternative cushioning material is available upon request, including Fluorosilicone. This product is available in 20 different sizes.



| High Performance Omega Clamps |               |      |      |      |      |      |      |      |      |      |      |      |                             |                               |
|-------------------------------|---------------|------|------|------|------|------|------|------|------|------|------|------|-----------------------------|-------------------------------|
| Part Number                   | APCD Diameter |      | L    |      | F    |      | H    |      | C    |      | E    |      | Weight (lbs) per 100 Clamps | Weight (grams) per 100 Clamps |
|                               | Inch          | cm   | Inch | cm   | Inch | cm   | Inch | cm   | Inch | cm   | Inch | cm   |                             |                               |
| PCL250008                     | 0.45          | 1.14 | 2.19 | 5.56 | 0.78 | 1.98 | 0.91 | 2.31 | 1.56 | 3.96 | 0.20 | 0.51 | 2.0                         | 907                           |
| PCL250009                     | 0.51          | 1.30 | 2.25 | 5.72 | 0.81 | 2.06 | 0.97 | 2.46 | 1.62 | 4.11 | 0.20 | 0.51 | 2.1                         | 952                           |
| PCL250010                     | 0.57          | 1.45 | 2.31 | 5.87 | 0.84 | 2.13 | 1.03 | 2.62 | 1.68 | 4.27 | 0.20 | 0.51 | 2.2                         | 997                           |
| PCL250011                     | 0.63          | 1.60 | 2.42 | 6.15 | 0.89 | 2.26 | 1.14 | 2.90 | 1.79 | 4.55 | 0.25 | 0.64 | 2.9                         | 1315                          |
| PCL250012                     | 0.70          | 1.78 | 2.49 | 6.32 | 0.93 | 2.36 | 1.21 | 3.07 | 1.86 | 4.72 | 0.25 | 0.64 | 3.0                         | 1360                          |
| PCL250013                     | 0.77          | 1.96 | 2.56 | 6.50 | 0.96 | 2.44 | 1.28 | 3.25 | 1.93 | 4.90 | 0.25 | 0.64 | 3.2                         | 1451                          |
| PCL250014                     | 0.83          | 2.11 | 2.62 | 6.65 | 1.00 | 2.54 | 1.34 | 3.40 | 1.99 | 5.05 | 0.25 | 0.64 | 3.3                         | 1496                          |
| PCL250015                     | 0.89          | 2.26 | 2.68 | 6.81 | 1.03 | 2.62 | 1.40 | 3.56 | 2.05 | 5.21 | 0.25 | 0.64 | 3.4                         | 1542                          |
| PCL250016                     | 0.95          | 2.41 | 2.79 | 7.09 | 1.08 | 2.74 | 1.51 | 3.84 | 2.16 | 5.49 | 0.30 | 0.76 | 4.2                         | 1905                          |
| PCL250017                     | 1.01          | 2.57 | 2.85 | 7.24 | 1.11 | 2.82 | 1.57 | 3.99 | 2.22 | 5.64 | 0.30 | 0.76 | 4.4                         | 1995                          |
| PCL250018                     | 1.07          | 2.72 | 2.91 | 7.39 | 1.14 | 2.90 | 1.63 | 4.14 | 2.28 | 5.79 | 0.30 | 0.76 | 4.5                         | 2041                          |
| PCL250019                     | 1.13          | 2.87 | 2.97 | 7.54 | 1.17 | 2.97 | 1.69 | 4.29 | 2.34 | 5.94 | 0.30 | 0.76 | 4.7                         | 2131                          |
| PCL250020                     | 1.20          | 3.05 | 3.07 | 7.80 | 1.22 | 3.10 | 1.79 | 4.55 | 2.44 | 6.20 | 0.33 | 0.84 | 5.3                         | 2404                          |
| PCL250021                     | 1.26          | 3.20 | 3.10 | 7.87 | 1.24 | 3.15 | 1.82 | 4.62 | 2.47 | 6.27 | 0.30 | 0.76 | 5.0                         | 2268                          |
| PCL250022                     | 1.33          | 3.38 | 3.17 | 8.05 | 1.27 | 3.23 | 1.89 | 4.80 | 2.54 | 6.45 | 0.30 | 0.76 | 5.2                         | 2358                          |
| PCL250023                     | 1.39          | 3.53 | 3.23 | 8.20 | 1.30 | 3.30 | 1.95 | 4.95 | 2.60 | 6.60 | 0.30 | 0.76 | 5.3                         | 2404                          |
| PCL250024                     | 1.45          | 3.68 | 3.29 | 8.36 | 1.33 | 3.38 | 2.01 | 5.11 | 2.66 | 6.76 | 0.30 | 0.76 | 5.4                         | 2449                          |
| PCL250025                     | 1.51          | 3.84 | 3.35 | 8.51 | 1.36 | 3.45 | 2.07 | 5.26 | 2.72 | 6.91 | 0.30 | 0.76 | 5.6                         | 2540                          |
| PCL250026                     | 1.57          | 3.99 | 3.41 | 8.66 | 1.39 | 3.53 | 2.13 | 5.41 | 2.78 | 7.06 | 0.30 | 0.76 | 5.7                         | 2585                          |
| PCL250032                     | 1.95          | 4.95 | 3.82 | 9.70 | 1.60 | 4.06 | 2.54 | 6.45 | 3.19 | 8.10 | 0.33 | 0.84 | 7.3                         | 3311                          |

# System Attachments

## LDG P-Clamps

The LDG P-Clamps are the result of continuous Amphenol development of overmold technology - an engineering/ manufacturing process that is a major strength of the company. Through the perfection of this technology, engineering is able to use a softer rubber for the clamp cushioning, thereby reducing wear and tear on mission critical cable harnesses - all without compromising the strength and performance of the clamp itself.

Specifically designed for the high performance aerospace cables, such as the MT/MTL product lines, the LDG P-Clamps are easy to use, simple to maintain, and are available in 17 different sizes.



### Feature and Benefits

#### Smart Engineering

- **High Performance**
  - Specifically designed for MIL TECH transmission lines
  - Compatible with cables between 0.06"-1.65"
  - Helps ensure no interruption of data or signal transfer
  - Dedicated to pressurized and unpressurized areas
  - Smaller envelope than existing metal P-Clamps
- **Mechanical Design**
  - Lock open & close feature increases ease of installation & maintenance
  - Available in 17 different sizes
  - Easily recognizable labels makes inspection easy
  - Uses standard 10-32 screws

#### Overmold Technology

- Over 30 years experience in overmold technology
- Cushion will not come off or slide off
- Each clamp able to meet wide range of diameter sizes

#### Victrex PEEK™ Polymer

- High temperature resistance; chemical resistance
- Completely non-corrosive and non-conductive
- Improved strength and stability
- Withstands constant vibrations and shock loads
- Lighter than traditional P-clamps by up to 40%

# System Attachments

## LDG P-Clamps

### Materials

#### Clamp Base:

Polyetheretherketone (PEEK™)  
Per MIL-P-46183; Black

#### Cushion:

Silicone Rubber; 20 Durometer Shore  
A; Light Green

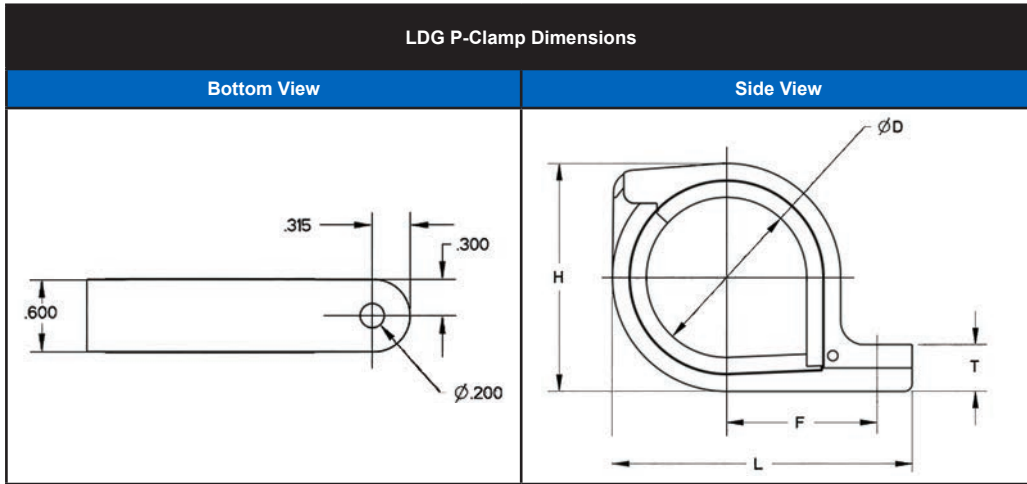
### Performance

#### Temperature Limits:

Continuous: -65°F to 350°F  
Excursions: Up to 260°C (500°F)

#### Flammability:

Clamp Base:  
UL94, V0, FAR25.853  
Cushion: Meets UL 94, HB



**LDG P- Clamps**

| Part Number | Size No. | Nom: Inner Cushion dia. (OD) |       | Min. Cable Size |       | Max. Cable Size |       | F    |      | Length (L) |      | H    |      | T    |      | Weight (lbs) per 100 Clamps | Weight (grams) per 100 Clamps |
|-------------|----------|------------------------------|-------|-----------------|-------|-----------------|-------|------|------|------------|------|------|------|------|------|-----------------------------|-------------------------------|
|             |          | Inch                         | cm    | Inch            | cm    | Inch            | cm    | Inch | cm   | Inch       | cm   | Inch | cm   | Inch | cm   |                             |                               |
| PCL400100   | 100      | 0.030                        | 0.076 | 0.060           | 0.152 | 0.190           | 0.483 | 0.59 | 1.51 | 1.18       | 2.99 | 0.64 | 1.62 | 0.18 | 0.46 | 0.9                         | 430                           |
| PCL400101   | 101      | 0.125                        | 0.318 | 0.155           | 0.394 | 0.248           | 0.630 | 0.59 | 1.51 | 1.18       | 2.99 | 0.64 | 1.62 | 0.18 | 0.46 | 0.9                         | 408                           |
| PCL400102   | 102      | 0.219                        | 0.556 | 0.249           | 0.632 | 0.342           | 0.869 | 0.64 | 1.63 | 1.27       | 3.22 | 0.71 | 1.80 | 0.18 | 0.46 | 1.1                         | 499                           |
| PCL400103   | 103      | 0.313                        | 0.795 | 0.343           | 0.871 | 0.436           | 1.107 | 0.71 | 1.81 | 1.41       | 3.59 | 0.81 | 2.06 | 0.24 | 0.61 | 1.5                         | 681                           |
| PCL400104   | 104      | 0.407                        | 1.034 | 0.437           | 1.110 | 0.530           | 1.346 | 0.76 | 1.93 | 1.51       | 3.83 | 0.88 | 2.25 | 0.24 | 0.61 | 1.7                         | 771                           |
| PCL400105   | 105      | 0.501                        | 1.273 | 0.531           | 1.349 | 0.623           | 1.582 | 0.81 | 2.05 | 1.60       | 4.07 | 0.96 | 2.44 | 0.24 | 0.61 | 1.9                         | 862                           |
| PCL400106   | 106      | 0.594                        | 1.509 | 0.624           | 1.585 | 0.718           | 1.824 | 0.85 | 2.17 | 1.70       | 4.32 | 1.05 | 2.68 | 0.24 | 0.61 | 2.1                         | 953                           |
| PCL400107   | 107      | 0.689                        | 1.750 | 0.719           | 1.826 | 0.811           | 2.060 | 0.93 | 2.35 | 1.84       | 4.67 | 1.20 | 3.05 | 0.30 | 0.76 | 2.6                         | 1180                          |
| PCL400108   | 108      | 0.782                        | 1.986 | 0.812           | 2.062 | 0.905           | 2.299 | 0.97 | 2.47 | 1.93       | 4.91 | 1.32 | 3.35 | 0.30 | 0.76 | 2.9                         | 1316                          |
| PCL400109   | 109      | 0.876                        | 2.225 | 0.906           | 2.301 | 0.998           | 2.535 | 1.02 | 2.59 | 2.03       | 5.15 | 1.39 | 3.53 | 0.30 | 0.76 | 3.1                         | 1407                          |
| PCL400110   | 110      | 0.969                        | 2.461 | 0.999           | 2.537 | 1.092           | 2.774 | 1.07 | 2.71 | 2.12       | 5.38 | 1.48 | 3.76 | 0.30 | 0.76 | 3.3                         | 1498                          |
| PCL400111   | 111      | 1.063                        | 2.700 | 1.093           | 2.776 | 1.186           | 3.012 | 1.14 | 2.89 | 2.26       | 5.75 | 1.62 | 4.12 | 0.36 | 0.91 | 4.0                         | 1816                          |
| PCL400112   | 112      | 1.157                        | 2.939 | 1.187           | 3.015 | 1.280           | 3.251 | 1.18 | 3.01 | 2.36       | 5.99 | 1.76 | 4.47 | 0.36 | 0.91 | 4.4                         | 1997                          |
| PCL400113   | 113      | 1.251                        | 3.178 | 1.281           | 3.254 | 1.373           | 3.487 | 1.23 | 3.13 | 2.45       | 6.23 | 1.82 | 4.63 | 0.36 | 0.91 | 4.6                         | 2088                          |
| PCL400114   | 114      | 1.344                        | 3.414 | 1.374           | 3.490 | 1.467           | 3.726 | 1.29 | 3.28 | 2.58       | 6.55 | 1.93 | 4.91 | 0.40 | 1.00 | 5.2                         | 2360                          |
| PCL400115   | 115      | 1.438                        | 3.653 | 1.468           | 3.729 | 1.561           | 3.965 | 1.35 | 3.43 | 2.69       | 6.83 | 2.05 | 5.20 | 0.42 | 1.07 | 5.7                         | 2587                          |
| PCL400116   | 116      | 1.532                        | 3.891 | 1.562           | 3.967 | 1.655           | 4.204 | 1.39 | 3.53 | 2.78       | 7.06 | 2.14 | 5.43 | 0.42 | 1.07 | 5.8                         | 2604                          |



# System Attachments

## C-Clamps



### Materials

Black thermoplastic  
Elastomer Protection: Fluorosilicone

### Performance

Temperature Limits:  
Continuous: -55°C to 150°C  
Flammability:  
Conform to ABD031 Standard

### Fluid Resistance

Brown Version:  
NATO F44, AS 1241, MIL PRF 680 (type 1), 5606, 7870, 23699, 87937 (diluted), 87252 and AMS1428

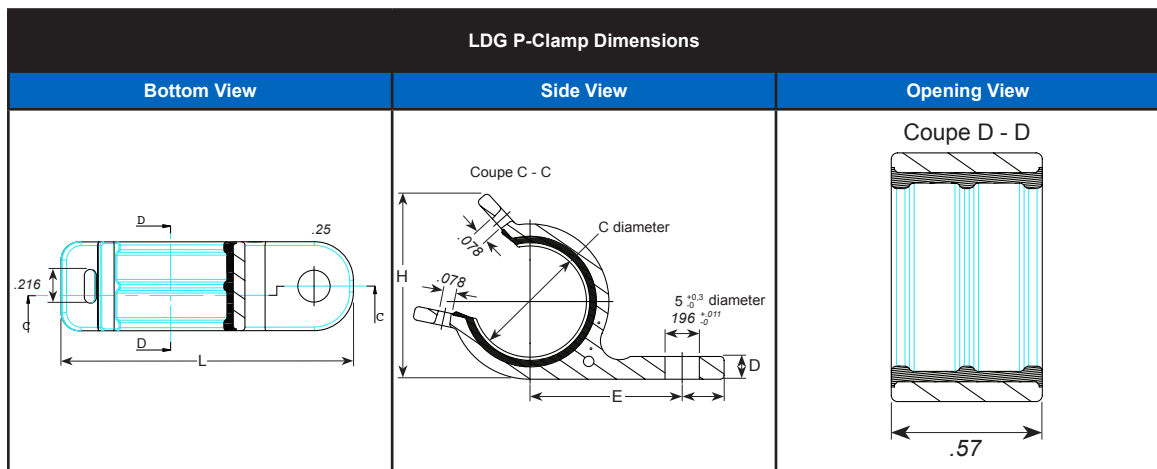
Blue Version:  
Resistant in complete immersion during 96h

### Mechanical

Shocks: 6g in 3 axis, during 11 ms  
Vibrations: RTCA/DO-160 curve C and E

## Product Description

Cable Clamps provide routing, support, and fixing of cable harnesses of various diameters. They are typically used in an aircraft wing's section, in the fuselage for power and electrical cables, as well as inside the cabin for in-flight entertainment or cabin service systems. Different materials and configurations are available depending on temperature and routing of the conduits. This includes versions for use inside the fuel tank.



| C-Clamps      |              |       |      |                 |                  |        |        |           |        |
|---------------|--------------|-------|------|-----------------|------------------|--------|--------|-----------|--------|
| AALBF P/N     | Standard     | Color | Size | Cable Allowable | Center to Center | Length | Height | Thickness | Weight |
|               |              |       |      | Inch            | Inch             | Inch   | Inch   | Inch      | Grams  |
| 003262 101 00 | ABS 1339 D01 | Brown | 01   | 0.2 to 0.28     | 0.67             | 1.37   | 0.61   | .14       | 2.1    |
| 003262 111 00 | ABS 1339 F01 | Blue  |      |                 |                  |        |        |           |        |
| 003262 102 00 | ABS 1339 D02 | Brown | 02   | 0.28 to 0.4     | 0.73             | 1.49   | 0.74   | .14       | 2.5    |
| 003262 112 00 | ABS 1339 F02 | Blue  |      |                 |                  |        |        |           |        |
| 003262 103 00 | ABS 1339 D03 | Brown | 03   | 0.4 to 0.55     | 0.80             | 1.63   | 0.91   | .14       | 3.2    |
| 003262 113 00 | ABS 1339 F03 | Blue  |      |                 |                  |        |        |           |        |
| 003262 104 00 | ABS 1339 D04 | Brown | 04   | 0.55 to 0.77    | 0.91             | 1.87   | 1.14   | .14       | 4.0    |
| 003262 114 00 | ABS 1339 F04 | Blue  |      |                 |                  |        |        |           |        |
| 003262 105 00 | ABS 1339 D05 | Brown | 05   | 0.77 to 1.05    | 1.05             | 2.14   | 1.42   | .14       | 5.3    |
| 003262 115 00 | ABS 1339 F05 | Blue  |      |                 |                  |        |        |           |        |
| 003262 106 00 | ABS 1339 D06 | Brown | 06   | 1.05 to 1.38    | 1.22             | 2.47   | 1.77   | .23       | 8.3    |
| 003262 116 00 | ABS 1339 F06 | Blue  |      |                 |                  |        |        |           |        |
| 003262 107 00 | ABS 1339 D07 | Brown | 07   | 1.38 to 1.77    | 1.42             | 2.85   | 2.16   | .33       | 11.5   |
| 003262 117 00 | ABS 1339 F07 | Blue  |      |                 |                  |        |        |           |        |
| 003262 108 00 | ABS 1339 D08 | Brown | 08   | 1.55 to 1.88    | 1.57             | 2.86   | 2.50   | .32       | 14.6   |
| 003262 118 00 | ABS 1339 F08 | Blue  |      |                 |                  |        |        |           |        |

General tolerance according to JS15, weight ± 10 %

# System Attachments

## High Performance Standoffs

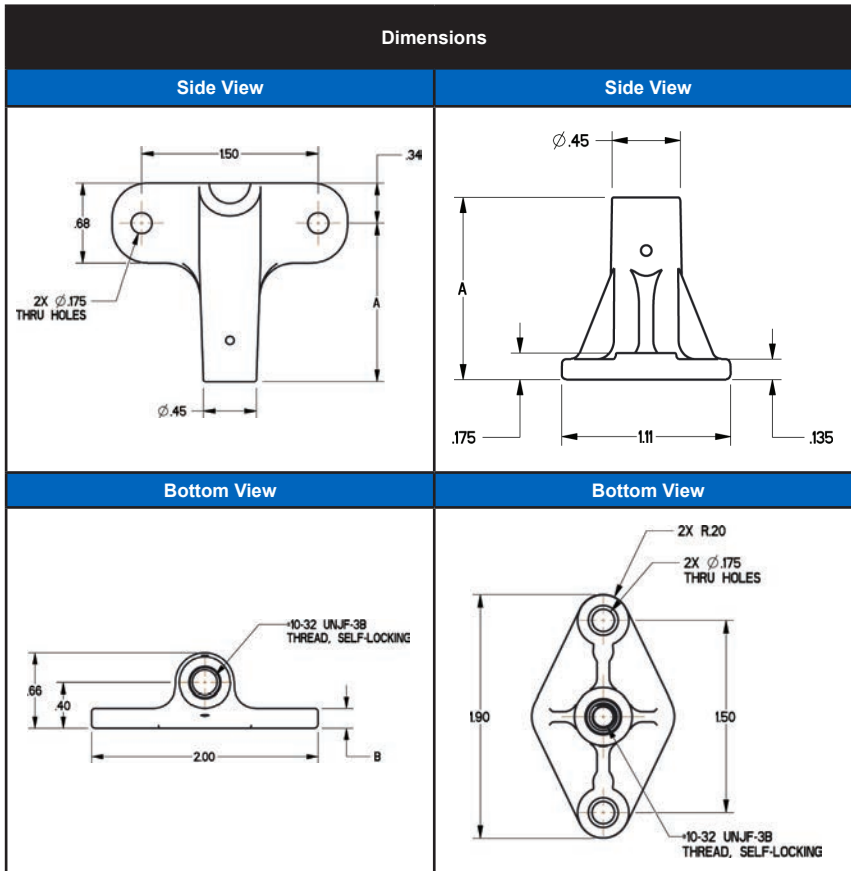


### Features and Benefits

- Completely Non-Conductive & Non-Corrosive
- High Strength PEEK
- Lightweight
- Riveted or Bolted options
- Locking feature on thread
- Designed with ribs for additional strength
- Multiple sizes available
- Aluminum Standoff capability

### Product Description

Designed to help guide wire bundles throughout the aircraft, Amphenol Pcd's High Performance Standoffs were designed with strength, stability, and weight reduction in mind. Our standoffs are made with PEEK, a very strong non-conductive/non-corrosive, and lightweight material. They come with a locking feature for security, are designed with ribs to provide additional strength, and support a wide range of clamp sizes and raceways for added convenience.

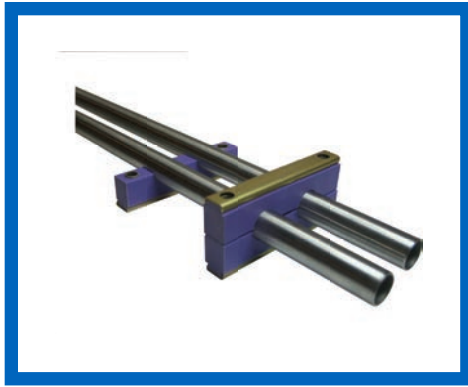


| Dimension Chart |             |
|-----------------|-------------|
| APCD P/N        | Height Inch |
| ALBSTO-051-03   | 0.30        |
| ALBSTO-051-04   | 0.40        |
| ALBSTO-051-06   | 0.60        |
| ALBSTO-051-08   | 0.80        |
| ALBSTO-051-10   | 1.00        |
| ALBSTO-051-12   | 1.20        |
| ALBSTO-051-14   | 1.40        |
| ALBSTO-051-16   | 1.60        |
| ALBSTO-051-18   | 1.80        |
| ALBSTO-051-20   | 2.00        |

| Dimension Chart |                 |                    |
|-----------------|-----------------|--------------------|
| APCD P/N        | Length "A" Inch | Thickness "B" Inch |
| ALBSTO-002-02   | 0.54            | 0.16               |
| ALBSTO-002-04   | 0.74            |                    |
| ALBSTO-002-06   | 0.94            |                    |
| ALBSTO-002-08   | 1.14            |                    |
| ALBSTO-003-10   | 1.34            |                    |
| ALBSTO-003-12   | 1.54            | 0.175              |
| ALBSTO-003-14   | 1.74            |                    |
| ALBSTO-003-16   | 1.94            |                    |
| ALBSTO-003-18   | 2.14            |                    |
| ALBSTO-003-20   | 2.34            |                    |
| ALBSTO-003-22   | 2.54            |                    |
| ALBSTO-003-24   | 2.74            |                    |

# System Attachments

## Fairlead Blocks

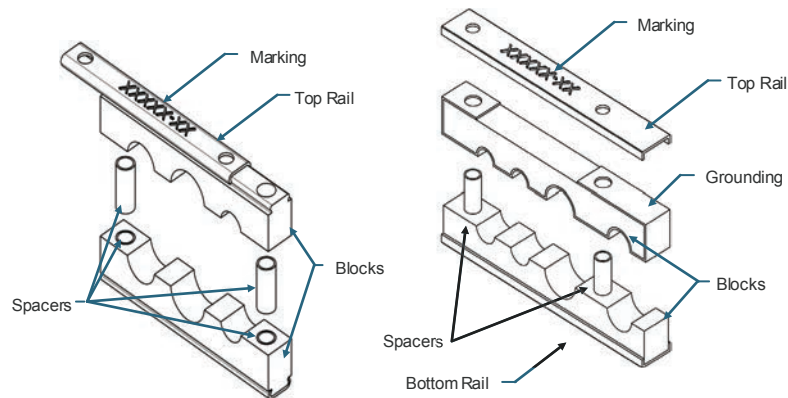


### Features and Benefits

- Strong and Durable
- Can accommodate wide range of tube diameters
- Various materials available
- Designed to prevent wire/tube chaffing
- Protects wires/tubes against surges and harsh vibration
- Captive rail design; No loose parts
- Custom design available
- 24/7 engineering capabilities; quick turn-around time

### Product Description

Amphenol Pcd's Fairlead Blocks designed to ensure that pipes and tubes are properly secured throughout their entire length. They provide stability against surges and vibration, and are developed with material that prevents chaffing. Amphenol's engineering experience enables the company to develop blocks that accommodate a wide range of tube diameters, and the products have no loose parts - reducing weight and the likelihood of FOD.



Rails/Spacers Specifications

| Materials                         | Coating   | Application      |
|-----------------------------------|---|------------------|
| Aluminum Alloy 6061-T6 or 2024-T3 | Chemical Conversion Coating per Mil-C-5541 Class 1A | Light Duty       |
| Stainless Steel per ASTM A109     | Cadmium Plate per QQ-P416, TYPE II Class 1          | High Performance |
| Carbon Fiber Composite            | Contact Amphenol for availability and information.  |                  |

Cushion Block Specifications

| Materials                       | Specifications  |
|---------------------------------|---|
| Ethylene Propylene Rubber (EPR) | Temperature Range: -65°F – 275°F<br>Color: Purple<br>Duro: 55–75<br>Standard usage: Commercial Aircraft — especially in areas contaminated with Skydrol |
| Nitrile Butadiene (Buna-N)      | Temperature Range: -65°F – 275°F<br>Color: Black<br>Duro: 55–75<br>Standard usage: fuel tank applications   |
| Silicone                        | Temperature Range: -65°F – 275°F<br>Duro: 55–75<br>Standard usage: fire resistant, low smoke density, low toxicity requirements                         |
| Fluoro-Silicone                 | Temperature Range: -65°F – 500°F<br>Duro: 55–75<br>Standard usage: High temperature areas; engine applications  |

# System Attachments

## Wiring Accessories: Stringer and Frame Clips

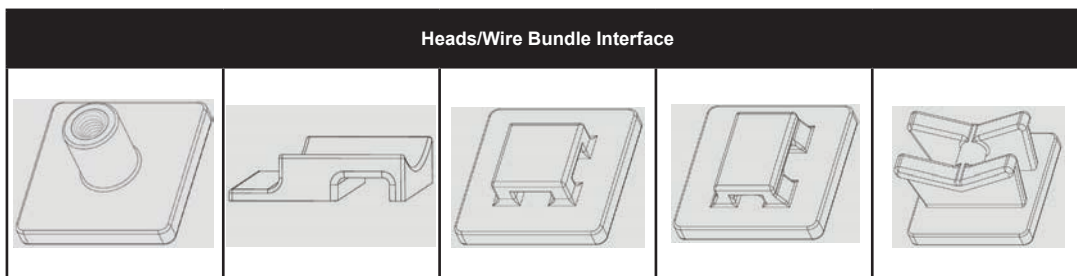
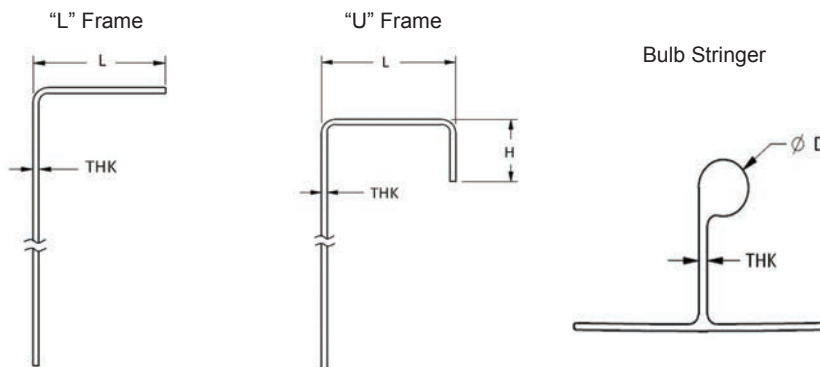
### Features and Benefits

- Easy to install
- Simplifies wire harness installation
- Lightweight
- Durable
- No loose hardware/No FOD
- Multiple colors available-helps identify different sizes
- Customization
- FAR25-853 compliance



### Product Description

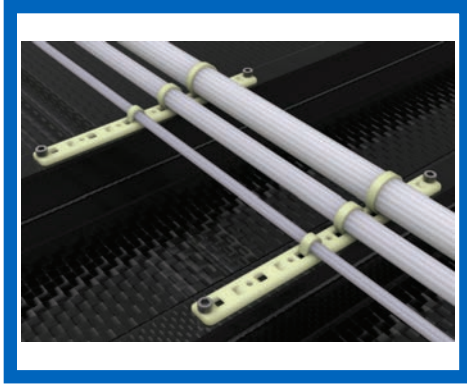
Stringer and Frame Clips are offered in multiple materials and are designed for use in airframe, fuel tank, and engine applications. Available in various standard configurations and sizes, Amphenol Pcd also provides customized clips to help meet specific customer requirements. This combination of customer attention and low-cost manufacturing makes Amphenol Stringer and Frame Clips the best available option for customer needs.



| Materials      |   |
|----------------|---|
| Nylon 6/6 (PA) | <ul style="list-style-type: none"> <li>• Polyamide 6/6 Resin – Nylon Zytel</li> <li>• Grade : 103HSL (Heat Stabilized)</li> <li>• Temperature Performance: - 65 F to 185 F</li> <li>• Very flexible</li> <li>• Can be used in a clipping system</li> <li>• Available with glass for higher strength requirements</li> <li>• Excellent chemical resistance to most aerospace fluids</li> </ul> |
| Ultem (PEI)    | <ul style="list-style-type: none"> <li>• High mechanical strength</li> <li>• Available with glass for higher strength requirements</li> <li>• Excellent chemical resistance to most aerospace fluids</li> <li>• High temperature resistance *</li> </ul> <p>*Except for Skydroll under excessive strain</p>   |
| PEEK           | <ul style="list-style-type: none"> <li>• Victrex PEEK polymer</li> <li>• High Performance</li> <li>• Non Conductive</li> <li>• Non-Corrosive</li> <li>• Extremely Durable</li> <li>• High Temperature resistance</li> </ul>   |

# System Attachments

## Wiring Accessories: Supports and Strips



### Features and Benefits

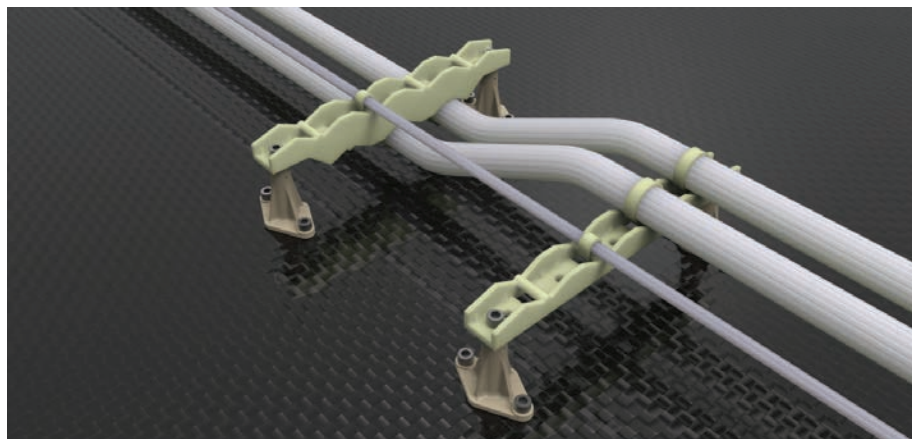
- Simplifies wire bundle installation & maintenance
- Multiple fixing points offer convenience and ease of use
- One-Piece design simplifies installation and inventory management
- New generation of very low profile cable support
- Variety of sizes to accommodate different cable routing requirements
- Uses standard tie-wraps
- Lightweight and Durable
- Replacement for aluminum Z-brackets
- Cost-Effective

### Product Description

Designed to secure and guide wire bundles throughout the aircraft, Amphenol Pcd's Raceways were designed with lean manufacturing and durability in mind. Built in a one-piece, lightweight design with multiple fixing points, our raceways are strong, durable, and make wire bundle installation and maintenance easy. Our Harness Supports were developed to secure large bundles and high loads, while our Hat Supports were developed to support a wide range of load requirements. Our Spacer Strips were designed to separate wire bundles a specific distance from one another, while our low-profile Tie-Down Strips secure bundles directly to the structure.

| Material Specifications |                   |              |
|-------------------------|-------------------|--------------|
| Material                | Temperature Range | Flammability |
| Polyamide 6/6 (Nylon)   | -55°C to 150°C    | FAR 25.853   |

| Technical Specifications |   |                                       |
|--------------------------|---|---------------------------------------|
| Parts                    | Application   | Maximum Weight                        |
| Harness Supports         | To accommodate large bundles and high loads                   | 27.3 g—72.6 g<br>(0.06 lbs—0.16 lbs)  |
| Spacer Strips            | To separate wire bundles a specific distance from one another | n/a                                   |
| Hat Supports             | To accommodate a wide range of load requirements              | 32.9 g—65.7 g<br>(0.72 lbs—0.145 lbs) |
| Tie-Down Strips          | To fix cables directly to the structure (low profile)         | n/a                                   |



# System Attachments

## Jig Board Clamps

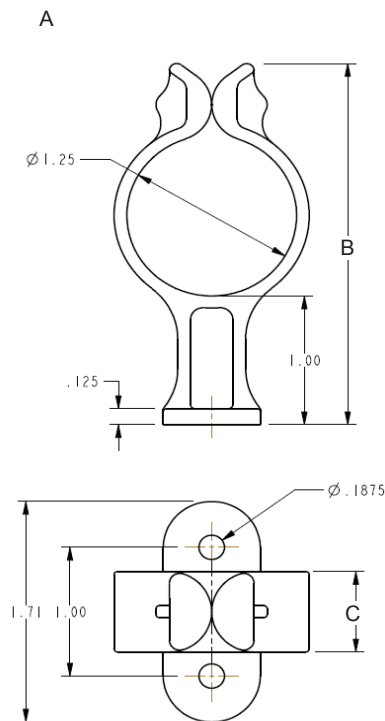
### Features and Benefits

- Easy to use
- Smooth edges
- Various sizes
- Durable
- No elastic band or straps required



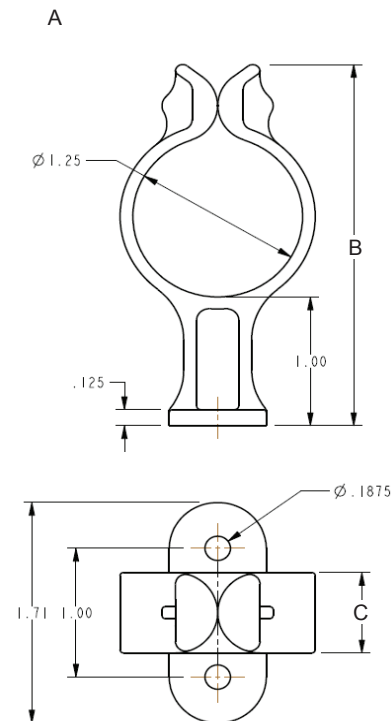
### Product Description

Designed for pre-installation wire harness assembly, the Jig Board Clamps from Amphenol Pcd outlast and outperform other jig board clamping devices in the market. Made of Acetal, our durable clamps maintain their original shape after continued use, yet the smooth design of their edges diminish wear on the harnesses as they're being assembled. Developed in multiple sizes, our Jig Board Clamps can accommodate a wide range of cable diameters, while the one-piece design enables efficient inventory management. Amphenol Pcd's clamps make wire harness assembly simple and convenient saving both time and money.



| Amphenol Part Number | Ø A   | B     | C      |
|----------------------|-------|-------|--------|
| ALBCLP -001 -05      | 0.50" | 1.85" | 0.375" |
| ALBCLP -001 -06      | 1.25" | 2.81" | 0.625" |
| ALBCLP -001 -07      | 2.00" | 3.80" | 0.625" |
| ALBCLP -001 -08      | 0.88" | 2.36" | 0.500" |

Material: Acetal  
Screw: 10/32



| Amphenol Part Number | Ø A   | B     | C      |
|----------------------|-------|-------|--------|
| ALBCLP -001 -01      | 0.50" | 1.85" | 0.375" |
| ALBCLP -001 -02      | 1.25" | 2.81" | 0.625" |
| ALBCLP -001 -03      | 2.00" | 3.80" | 0.625" |
| ALBCLP -001 -04      | 0.88" | 2.36" | 0.500" |

Material: Acetal  
Screw: 10/32

# System Attachments

## Customization



### About Customization

In addition to Amphenol Pcd's extensive System Attachment product line, custom solutions are available as well. We offer many different materials, such as thermoplastics, elastomers, and metals. We also offer different manufacturing processes to meet the particular requirement. Also, our engineering team prides itself on smart designs, creating cost-effective products that always meet and/or exceed customer expectations. This page provides a snapshot of some of the custom solutions we offer.

| Materials      |   |
|----------------|---|
| Thermoplastics | <ul style="list-style-type: none"> <li>• Typical materials include Nylon (PA), PEEK, Ultem (PEI), Torlon (PAI)</li> <li>• Thermoplastics may be reinforced with glass-fiber or carbon-fiber, drastically increasing strength and stiffness. Resulting parts can be made lighter due to higher strength-to-weight ratio</li> <li>• Injection molded parts may incorporate features that are impossible to replicate with typical metal forming processes. Snapping features and tool-less assembly can reduce installation time and promote lean manufacturing</li> <li>• Thermoplastic parts do not corrode and thus do not require additional plating or coating</li> </ul>  |
| Elastomers     | <ul style="list-style-type: none"> <li>• Amphenol has compression molding capabilities to produce rubber products in most common aerospace elastomers:                             <ul style="list-style-type: none"> <li>• EPDM per AMS3248 and AMS3253 for Phosphate Ester Hydraulic Fluid (Skydrol) environment</li> <li>• Nitrile (NBR) per AMS3213, AMS3215, and Mil-DTL-85052/1 for oil or fuel environment</li> <li>• Chloroprene per AMS3209</li> <li>• Silicone rubber per A-A-59588, AMS3302, AMS3303, and AMS3310</li> <li>• Fluorosilicone per Mil-DTL-25988 for fuel environment</li> </ul> </li> <li>• Amphenol can overmold silicone and fluorosilicone onto thermoplastics for a permanent and durable bond between rubber and plastic components.</li> </ul> |
| Metals         | <ul style="list-style-type: none"> <li>• Stainless steel and aluminum parts can be produced through typical methods including conventional and CNC machining, sheet forming, etc.</li> <li>• Available coatings for metal components include chemical film, anodizing, cadmium plating, passivation, painting, and more.</li> </ul>   |

| Engineering   |
|---|
| <p>Amphenol offers a unique expertise in the design of thermoplastic aerospace components with a notable focus on Lean Manufacturing. Core values when designing new products are innovation, performance, weight, and cost-efficiency. Engineering capabilities include:</p> <ul style="list-style-type: none"> <li>• Custom design of plastic parts from concept generation to production</li> <li>• Part optimization for plastic production</li> <li>• Finite Element Analysis (FEA)</li> <li>• Testing and qualification. Access to A2LA-certified laboratory with capabilities for:                             <ul style="list-style-type: none"> <li>• Load testing at ambient, low, and high temperatures</li> <li>• Vibration</li> <li>• Chemical resistance</li> <li>• Thermal shock</li> <li>• Thermal cycling</li> <li>• Temperature and humidity conditioning</li> </ul> </li> <li>• AS9100 quality system</li> <li>• Customer technical support</li> </ul> |

# Galley Connectors

Intermateable and interchangeable with other ARINC 810 galley connectors, Amphenol Pcd's APeX Galley Connector, Rectangular is a reliable, robust, connector that uses overmold technology to set it apart from the rest.



## Key Features and Benefits

### Intermateable and Interchangeable

Ability to mate with other ARINC 810 galley connectors in the market

### Blind-Mate Connection

Guide pin feature enables quick and simple mating

### Overmold Technology

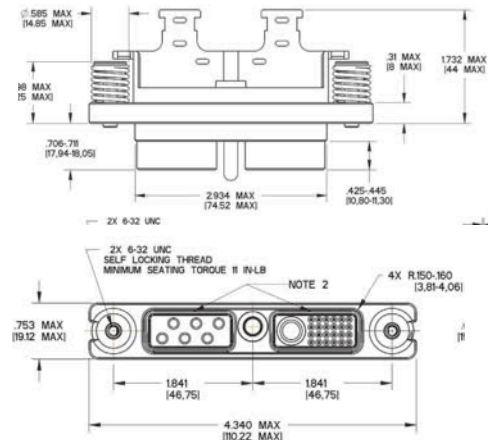
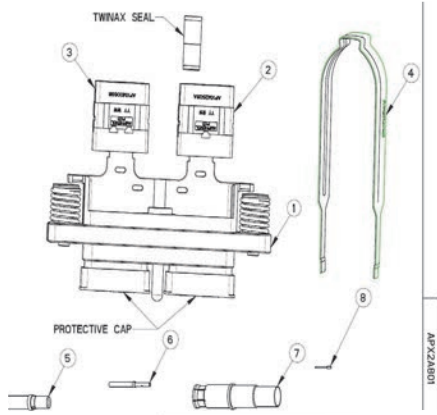
Enables exceptional sealing that improves safety and reliability

### Intuitive and Ergonomic

Smooth, low insertion force to mate connector



# APeX Galley Connector, Rectangular Plug

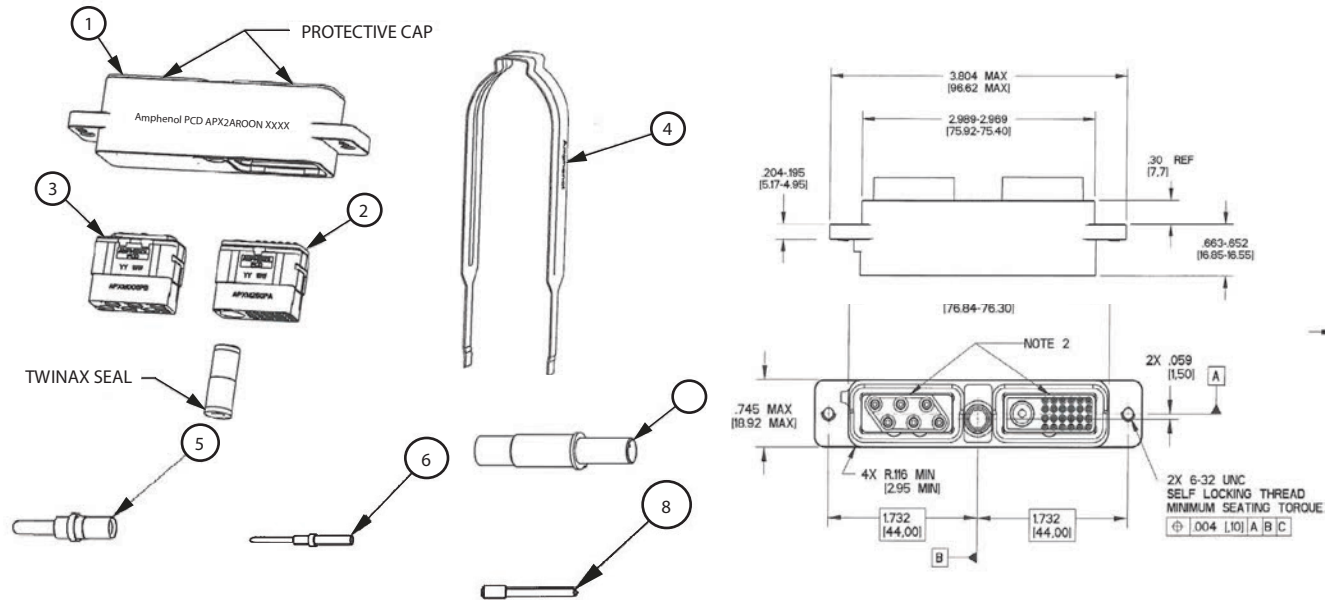


| Item   | Part                                 | Material  |
|--|--------------------------------------|---|
| 1<br>Plug shell assembly   | Strain relief                        | PEI thermoplastic 40% carbon fiber  |
|  | Retention nut                        | Stainless steel per AISI 316, passivated  |
|  | Male fastener body                   | Stainless steel per AISI 316, passivated  |
|  | Insert retention clip                | Copper alloy per ASTM B194  |
|  | Float -mounted eyelet                | Stainless steel per AISI 316, passivated  |
|  | Float -mounted spring                | Stainless steel per AISI 302, passivated  |
|  | Shell                                | Aluminum allow 6061T651 per AMS-QQ -A-250/11, electroless nickel per Mil-C-26074 0.001 inch min                                 |
|  | Protective cap                       | EPDM elastomer per ASTM D3568   |
| 2 & 3<br>25 socket insert with<br>Twinax seal 6 socket<br>insert | Housing                              | Polyetherimide thermoplastic per ASTM D5205   |
|  | Retention clips                      | PEEK thermoplastic per Mil-P-46183  |
|  | Grommet                              | Silicone elastomer per ASTM-D-2000  |
|  | Twinax seal housing                  | Polyetherimide thermoplastic per ASTM D5205   |
|  | Twinax seal grommet                  | Silicone elastomer per A -A-59588A class 3B   |
| 4 Insertion/Removal tool   | Tool                                 | Stainless steel per AISI 301  |
| 5 & 6 Socket contact size 12<br>Socket contact size 22           | Body                                 | Copper alloy per ASTM B196, gold plate per AMS2422, 50 micro-inches min. over nickel plate, 40 to 200 microinches per QQ -N-290 |
|  | Sleeve                               | Stainless steel per AISI 305 per ASTM A 580, passivated   |
| 7 Socket Twinax<br>contact size 8                                | Outer and Inner contacts             | Copper alloy per ASTM B196, gold plated per Mil-G -45204, 50 microinch min. over nickel plate per QQ -N-290, 50 microinch min   |
|  | Shield ferrule                       | Brass per ASTM B453, gold plated per Mil -G -45204, 50 microinch min. over nickel plate per QQ -N-290, 50 microinch min         |
|  | Front insulator and spacer insulator | TFE thermoplastic per AMS 3651  |
| 8 Sealing plug   | Sealing plug                         | PTFE thermoplastic per ASTM - D1710   |

## Plug Part Numbers and Description

| Item | Amphenol Pcd P/N | Description                                      | Amphenol Pcd KIT P/N |           |           |            |            |            |             |
|------|------------------|--|----------------------|-----------|-----------|------------|------------|------------|-------------|
|      |                  |  | APX2A801K            | APX2A801C | APX2A801G | APX2A801S1 | APX2A801S2 | APX2A801S3 | APX2A801S2K |
|      |                  |  | QTY/Assy             | QTY/Assy  | QTY/Assy  | QTY/Assy   | QTY/Assy   | QTY/Assy   | QTY/Assy    |
| 1    | APX2BL00N        | Plug Shell Assembly with Protective Cap          | 1                    | 1         | 1         | 1          | 1          | 1          | 1           |
| 2    | APXM25QSA        | 25 Socket Insert Polarization A with Twinax Seal | 1                    | 1         | 1         | 1          | 0          | 1          | 0           |
| 3    | APXM006SB        | 6 Socket Insert Polarization B                   | 1                    | 1         | 1         | 1          | 1          | 1          | 1           |
| 4    | APXIN 0001       | Blank Insert                                     | 0                    | 0         | 0         | 0          | 1          | 0          | 1           |
| 5    | CNS812100        | APeX Socket Contact Size 12                      | 0                    | 6         | 6         | 6          | 6          | 6          | 0           |
| 6    | CNS822100        | APeX Socket Contact Size 22                      | 0                    | 15        | 15        | 0          | 0          | 24         | 0           |
| 7    | CNS882100        | APeX Socket Twinax Contact Size 8                | 0                    | 1         | 0         | 0          | 0          | 0          | 0           |
| 8    | CNA032401        | Sealing Plug Size 22                             | 0                    | 9         | 9         | 0          | 0          | 0          | 0           |

# APeX Galley Connector, Rectangular Receptacle



| Item  | Part                               | Material   |
|---|------------------------------------|--|
| 1<br>Receptacle shell assembly                          | Shell                              | Aluminum alloy 6061T651 per AMS -QQ -A-250/11 electroless nickel per MIL-C-26074 .001 inch min                               |
|   | Retention nut                      | Stainless steel per AISI 316, passivated   |
|   | Guide sleeve                       | Stainless steel per AISI 316, passivated   |
|   | Insert retention clip              | Copper alloy per ASTM B194   |
|   | Protective cap                     | EPDM elastomer per ASTM D3568  |
| 2 & 3<br>25 pin insert with<br>Twinax seal 6 pin insert | Housing                            | Polyetherimide thermoplastic per ASTM D5205  |
|   | Retention clips                    | Peek thermoplastic per MIL-P-46183   |
|   | Grommet                            | Silicone elastomer per ASTM-D-2000   |
|   | Twinax seal housing                | Polyetherimide thermoplastic per ASTM D5205  |
|   | Twinax seal grommet                | Silicon elastomer per A-A-59588A class 3B  |
| 4 Insertion/removal tool                                | Tool                               | Stainless steel per AISI 301   |
| 5 & 6 Pin contact size 12<br>Pin contact size 22        | Contact                            | Copper alloy C97, gold plate per AMS 2422 50 microinches min over nickel per AMS 2403 40-200 microinches min                 |
| 7 Pin Twinax contact size 8                             | Outer & inner contacts             | Copper alloy per ASTM B196, gold plated per Mil-G -45204 50 microinch min. over nickel plate per QQ -N-290 50 microinch min. |
|   | Shield ferrule                     | Brass per ASTM B453, gold plated per MIL-G -45204 50 microinch min. over nickel plate per QQ -N-290 50 microinch min.        |
|   | Front insulator & spacer insulator | TFE thermoplastic per AMS 3651   |
| 8 Sealing plug  | Sealing plug                       | PTFE thermoplastic per ASTM -D1710   |

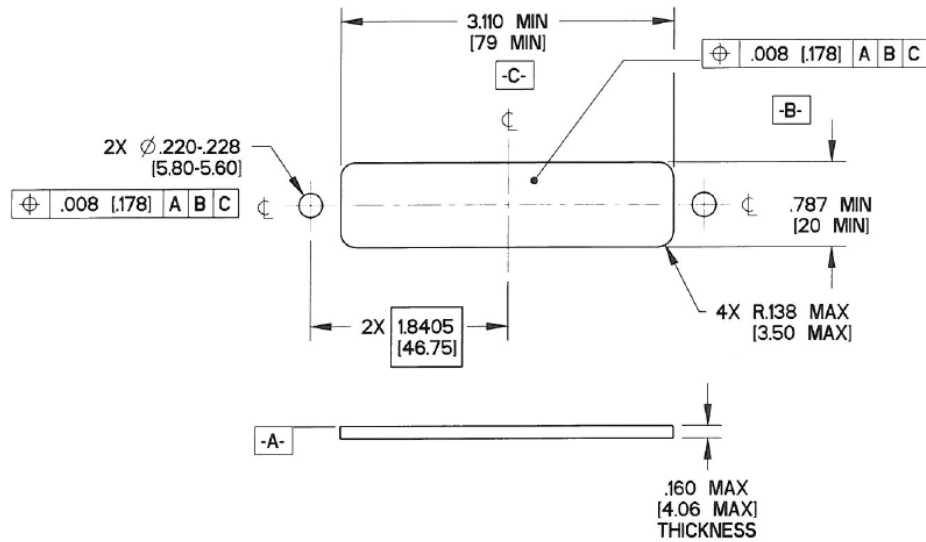
## Receptacle Part Numbers and Description

| Item | Amphenol Pcd P/N | Description                                   | Amphenol Pcd KIT P/N |           |           |            |            |            |
|------|------------------|---|----------------------|-----------|-----------|------------|------------|------------|
|      |                  |   | APX2B801K            | APX2B801C | APX2B801G | APX2B801S1 | APX2B801S2 | APX2B801S3 |
|      |                  |   | QTY/Assy             | QTY/Assy  | QTY/Assy  | QTY/Assy   | QTY/Assy   | QTY/Assy   |
| 1    | APX2AR00N        | Receptacle Shell Assembly with Protective Cap | 1                    | 1         | 1         | 1          | 1          | 1          |
| 2    | APXM25QPA        | 25 Pin Insert Polarization A with Twinax Seal | 1                    | 1         | 1         | 1          | 0          | 1          |
| 3    | APXM006PB        | 6 Pin Insert Polarization B                   | 1                    | 1         | 1         | 1          | 1          | 1          |
| 4    | APXIN0001        | Blank Insert                                  | 0                    | 0         | 0         | 0          | 1          | 0          |
| 5    | CNP812100        | APeX Pin Contact Size 12                      | 0                    | 6         | 6         | 6          | 6          | 6          |
| 6    | CNP822100        | APeX Pin Contact Size 22                      | 0                    | 15        | 15        | 0          | 0          | 24         |
| 7    | CNP882100        | APeX Pin Twinax Contact Size 8                | 0                    | 1         | 0         | 0          | 0          | 0          |
| 8    | CNA032401        | Sealing Plug Size 22                          | 0                    | 9         | 9         | 0          | 0          | 0          |

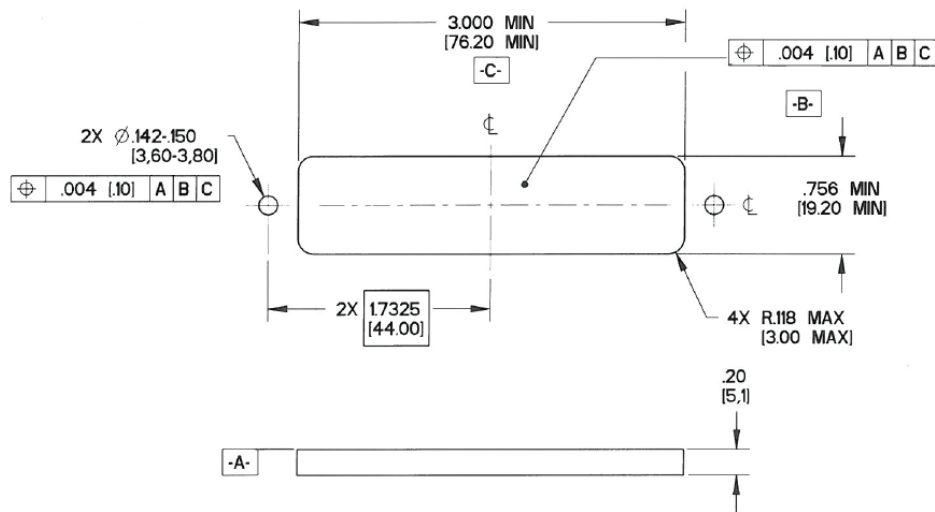
# APeX Galley Connector, Rectangular

## Cable Accommodations

### Recommended Plug Panel Cutout Dimensions



### Recommended Receptacle Panel Cutout Dimensions



| Contact Size | Wire Size (AWG) | Crimping Tool   | Positioner   | Installing Tool | Removal Tool |
|--------------|-----------------|---|--|-----------------|--------------|
| 22           | 26              | M22520/2-01   | M22520/2-23  | M81969/ 14-01   | M81969/14-01 |
|              | 24              |   |  |                 |              |
|              | 22              |   |  |                 |              |
| 12           | 16              | M22520/1-01   | M22520/1-02  | M81969/14-04    | M81969/14-04 |
|              | 14              |   |  |                 |              |
|              | 12              |   |  |                 |              |
| 8            | 24              | Center Contacts:<br>M22520/2-01; Outer Body<br>M22Metal Band Material520/5-01 | Center Contacts: Daniels K709;<br>Outer Body M22520/5-45 | M81969/14-12    | M81969/14-12 |

# Galley Connector

## *APeX Galley Connector, Circular*

The new APeX Galley Connector, Circular is the latest circular connector from Amphenol Pcd. Designed specifically for legacy and new generation galley systems, it was tested to MIL-STD-1344 and EN 2591 contact standards. Highly reliable and easy to use, this blind-mate connector is also interchangeable and intermateable with other pre-existing equipment in the field.



### Key Features and Benefits

#### **Intermateable and Interchangeable**

Ability to mate with other pre-existing equipment in the field

#### **Highly Reliable and Durable**

Tested to MIL-STD-1344 and EN 2591 standards; high frequency mating

#### **Versatility**

Crimp termination connection system with 3 Power (10 AWG) & 3 Control (16 AWG)

#### **Many Choices**

Configurable to PCB contacts; plating options available

#### **Blind-Mate Connection**

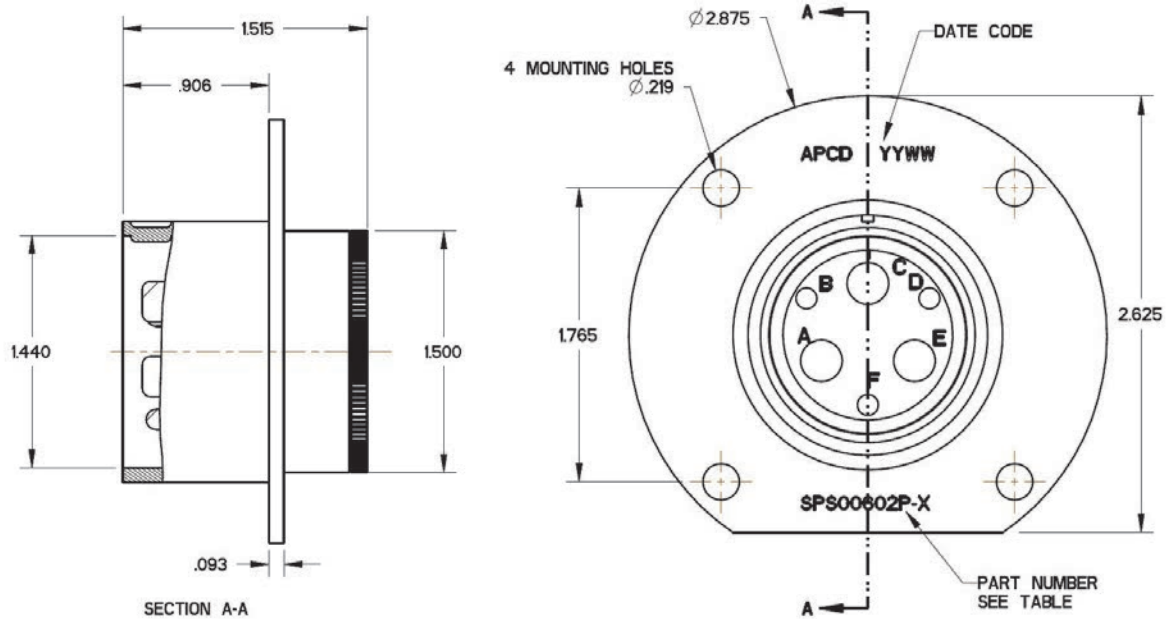
Designed with a key feature to enable quick and simple, blind-mating

#### **Intuitive and Ergonomic**

Smooth, low insertion force to mate connector

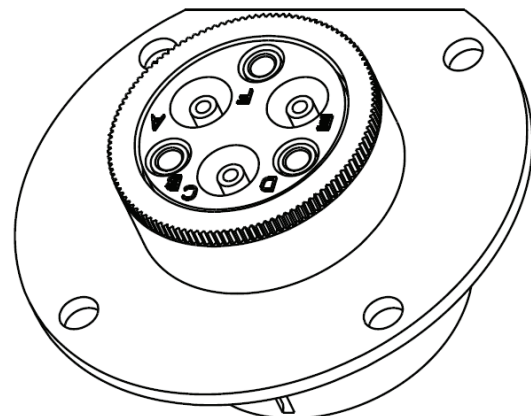
# APeX Galley Connector, Circular

Panel Mount, Plug-6 Position, Crimp Termination



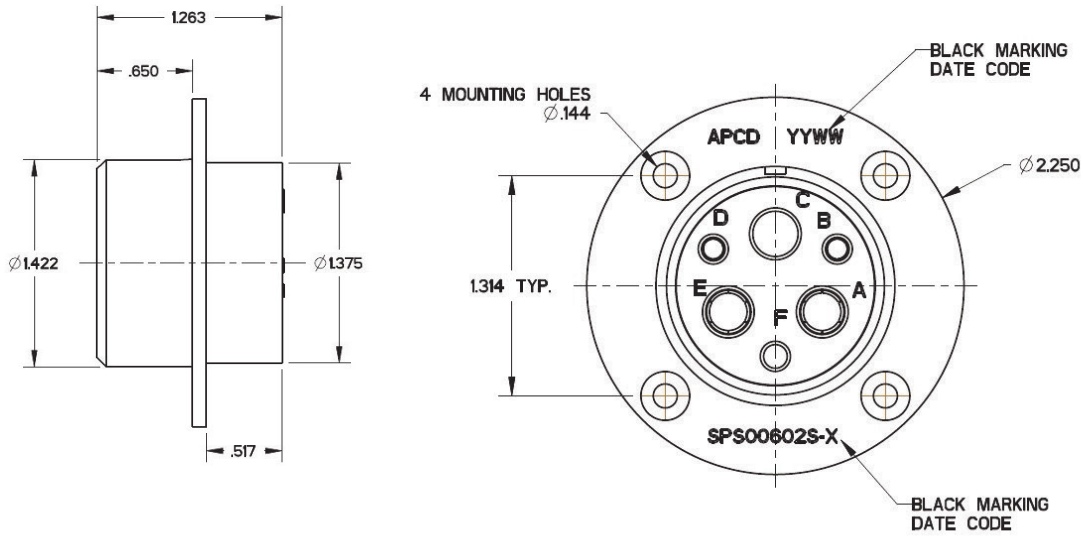
| Part Number | Contact Qty | Contact Gauge | Crimp Well Wire Awg | Contact Part No. |
|-------------|-------------|---------------|---------------------|------------------|
| SPS00602P-1 | 1           | 10            | 10                  | CNP910100-SZ     |
|             | 2           | 10            | 14/16               | CNP910100-SZ     |
|             | 3           | 4             | 14/16               | CNP904100-SZ     |
| SPS00602P-2 | 2           | 10            | 10                  | CNP910100-SZ     |
|             | 1           | 10            | 14/16               | CNP910200-SZ     |
|             | 3           | 4             | 14/16               | CNP904100-SZ     |
| SPS00602P-3 | 3           | 10            | 10                  | CNP910100-SZ     |
|             | 3           | 4             | 14/16               | CNP904100-SZ     |
| SPS00602P-4 | 3           | 10            | 14/16               | CNP910200-SZ     |
|             | 3           | 4             | 14/16               | CNP904100-SZ     |
| SPS00602P-5 | Without     | n/a           | n/a                 | n/a              |

| Material               |                        |
|------------------------|------------------------|
| Shell                  | Aluminum Alloy 6061 T6 |
| Shell Finish           | Clear Anodized Finish  |
| Housing                | PPS- V0 1140A6         |
| Color, Hsg             | Black                  |
| Contact Retainer       | Ultem CRS5011          |
| Color, CR              | Black                  |
| Internal Contact       | Copper Alloy           |
| Intern. Contact Finish | Silver Plate           |
| Seal                   | EPDM Rubber            |
| Mating Part            | SPS00602S- X           |



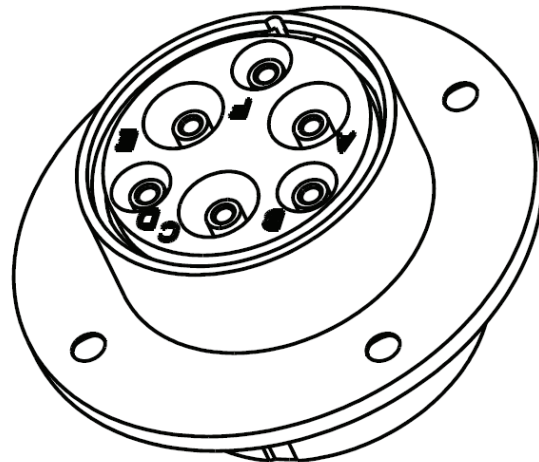
# APeX Galley Connector, Circular

Panel Mount, Receptacle-6 Position, Crimp Termination



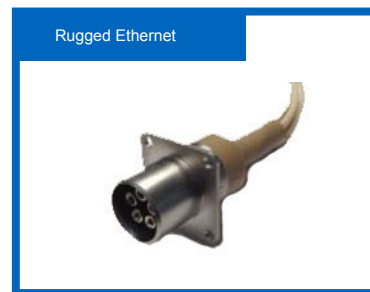
| Part Number | Contact Qty | Contact Gauge | Crimp Well Wire Awg | Contact Part No. |
|-------------|-------------|---------------|---------------------|------------------|
| SPS00602S-1 | 1           | 10            | 10                  | CNS910100-SZ     |
|             | 2           | 10            | 14/16               | CNS910100-SZ     |
|             | 3           | 4             | 14/16               | CNS904100-SZ     |
| SPS00602S-2 | 2           | 10            | 10                  | CNS910100-SZ     |
|             | 1           | 10            | 14/16               | CNS910200-SZ     |
|             | 3           | 4             | 14/16               | CNS904100-SZ     |
| SPS00602S-3 | 3           | 10            | 10                  | CNS910100-SZ     |
|             | 3           | 4             | 14/16               | CNS904100-SZ     |
| SPS00602S-4 | 3           | 10            | 14/16               | CNS910200-SZ     |
|             | 3           | 4             | 14/16               | CNS904100-SZ     |
| SPS00602S-5 | Without     | n/a           | n/a                 | n/a              |

| Material               |                        |
|------------------------|------------------------|
| Shell                  | Aluminum Alloy 6061 T6 |
| Shell Finish           | Clear Anodized Finish  |
| Housing                | PPS- V0 1140A6         |
| Color, Hsg             | Black                  |
| Contact Retainer       | Ultem CRS5011          |
| Color, CR              | Black                  |
| Internal Contact       | Copper Alloy           |
| Intern. Contact Finish | Silver Plate           |
| Seal                   | EPDM Rubber            |
| Mating Part            | SPS00602S- X           |



# Cable Solutions

Our cables are built for all harsh environments and designed to meet and exceed customer expectations. We have close alliances with other Amphenol divisions, enabling us to competitively offer full-turnkey terminations of any connector onto a cable assembly. We offer quick-turn prototype services and production programs with short lead-times. Our experienced engineering staff is ready to assist you with any new design ranging from connector selection to full cable assembly design. Our facility is ITAR registered and ISO 9001:2008 and AS9100-C certified.



## Applications

- Wire Bundle and Cable Management
- Aircraft Fuel Tank
- Aircraft Insulation
- Hydraulic Tubing
- IFE and Galley
- Instrumentation
- Aircraft Power Distribution
- Weapon Systems
- Oil and Gas
- Radio/Datalink/Antenna/C4I
- Shelter Power Management
- Actuation and Sensors
- Railway
- RF & Fiber Optic Cables

# AN/PRC 117F Manpack Radio

## Data and Remote Control “Y” Cable



- Connects manpack radios to a computer for asynchronous (RS -232) and synchronous (DTE) data applications
- Can be used with RF-6550M Radio Programming Application (RPA) or RF-6650M Communications Planning Application (CPA)
- 25-Pin and 9-Pin D connectors for attaching data devices
- Uses Y cable that connects to front panel data connector, J3
- Harris P/N: 10513-0730-A1 (6 ft); 10513-0730-A2 (10 ft)
- Amphenol Pcd P/N: MCA10513-0730-06 (6 ft); MCA10513-0730-10 (10ft)

## High Performance Wave Form Cable



- Cable is an asynchronous, PPP cable for use with the HPW and IP functions on the AN/PRC-117F(C )
- Connects to the front panel J3 Data and a COM port on a computer using a 9-pin D style connector
- Typical length is 6 ft (~1.8 m)
- Harris P/N: 10513-0710-AXXX
  - A006 6 ft (~1.8 m )
  - A015 15 ft (~4.6m )
  - A025 25 ft (~7.6 m )
- Amphenol Pcd P/N: MCA10513-0710-AXXX
  - MCAA006 6 ft (~1.8 m )
  - MCAA015 15 ft (~4.6m )
  - MCAA025 25 ft (~7.6 m )

## Synchronous/Asynchronous Data Cable



- This cable provides a synchronous or asynchronous data interface to the radio
- The data terminal connection end utilizes a 25-pin (DB-25) connector
- Typical Length is 6 ft (~1.8 m )
- Harris P/N: 1053 5-0780-A006
- Amphenol Pcd P/N: MCA105 35-0780-A006



# AN/PRC 117F Manpack Radio

- A generic Audio/Data Cable
- Terminated on one end with a data connector (J3 orange dot)
- Unterminated on opposite end
- Cable used for test and build-your-own applications
- Typical Length is 6 ft (~1.8 m)
- Harris P/N: 10511-0707-A006
- Amphenol Pcd P/N: MCA10511-0707-A006

## Audio/Data Cable



- Interface cable to connect a NMEA compatible GPS receiver to the radio via the front panel J2 connector
- GPS end is a 9-pin D style male connector
- Length is 9 ft (22.7m)
- Harris P/N: 12005-0740-A009
- Amphenol Pcd P/N: MCA12005-0740-A009

## NMEA Interface Cable



- Interface cable to connect a PLGR to the radio via the front panel J2 Connector
- Typical Length is 6 ft (~1.8 m)
- Harris P/N: 12005-0730-A006
- Amphenol Pcd P/N: MCA12005-0730-A006

## PLGR/DAGR Interface Cable



# AN/PRC 1117G Wideband Tactical Radio

## PPP Data Connector (HPW)



- Cable exits the radio to the front right side
- Terminated in a DB9 (9 Pin Female) connector
- Cable Length: 6ft (~1.8m)
- Sealed Design
- Overmolded and Shielded
- Harris P/N: 12043-2710-A006
- Amphenol Pcd P/N: MCA12043-2710-A006

## Top Data Connector (J3 Port)



- Also used with VAA Vehicle Mount J1 Port
- Cable Length: 6ft (~1.8m)
- Wire with RS -232 and Twisted Pair Ethernet Lines
- AWG 26, 19C, TPE Jacket, 3 Twisted Pair, Shielded Watertight Design
- Custom Cable Lengths and Wire Sizes Available
- Cable exits to the right side of Radio (Front exit is also available)
- Harris P/N: 1206-0760- A006 or 1204- 2760- A006
- Amphenol Pcd p/n: MCA 12046-0760-A006 or MCA 12046-2760-A006

## J3 Front Exit Cable



- Cable exits the radio to the front right side
- Cable Length: 6ft (~1.8m)
- RS -223 and Ethernet Signals
- 19C Wire, TPE Jacket, 3 Twisted Pair
- Overmolded Shielded AWG 26 Wire, 19C
- Custom Cable Lengths and Wire Sizes Available

# AN/PRC 1117G Wideband Tactical Radio

- Data Connector for AN/PRC 1117G
- 32 position pogo pins
- EMI gaskets
- Watertight Design
- Field Repairable
- Overmolded Shielded Teflon Cable

## J6 Port



- Wire exits the radio to the rear
- Cable Length: 6ft (~1.8m)
- RS-223 and Ethernet Signals
- 19C Wire, TPE Jacket, 3 Twisted Pair
- Overmolded Design
- Harris P/N: 12046-0760-A006 or 12046-2760-A006
- Amphenol Pcd P/N: MCA12046-0760-A006 or MCA12046-2760-A006

## J3 Rear Exit Cable



- Consists of 2M (Series 807 micro miniature)
- Mates to AN/PRC 1117 G
- Cable length: 3 ft, 6 ft, 10 ft
- Interminable with Glenair Mighty Mouse Series

## PRC Micro Miniature Cable



# AN/PRC 152 Handheld Radio

## Data and Remote Control "Y" Cable



- Connects handheld radios to computer for asynchronous (RS-232) and synchronous (DTE) data applications
- Used with RF-6550M Radio Programming Application (RPA) or RF-6650M Communications Planning Application (CPA)
- 25-Pin and 9-Pin D connectors for attaching data devices
- Components: Cable and RDA driver software
- USB: 1.1 or 2.0
- Operating Systems Supported – Windows XP, Windows Vista (x86 & x64), Windows 7 (x86 & x64)
- Connections – Latching USB Type A (PC) PRC-152 32 pin side data connector on radio side

## USB Programming Cable



- Connects handheld radios to computers when loading waveforms and plan data
- Used with RF-6550M Radio Programming Application (RPA) or RF-6650M Communications Planning Application (CPA)
- USB interface permits drag-and-drop radio programming
- Cable Length: 6 ft (~1.8 meters)
- Components: Cable and RDA driver software
- USB: 1.1 or 2.0
- Operating Systems Supported – Windows XP, Windows Vista (x86 & x64), Windows 7 (x86 & x64)
- Connections – Latching USB Type A (PC) PRC-152 32 pin side data connector on radio side

## PPP Cable



- PPP and HPW data interface
- Used to connect an external computer for data applications
- Cable Length: 6 ft (~1.8 meters)
- Components: Cable and RDA driver software
- USB: 1.1 or 2.0
- Operating Systems Supported – Windows XP, Windows Vista (x86 & x64), Windows 7 (x86 & x64)
- Connections – Latching USB Type A (PC) PRC-152 32 pin side data connector on radio side
- DB9 Pin Female Connector
- Sealed Design; Overmolded, Shielded Cable

# AN/PRC 152 Handheld Radio

- Connects external GPS receiver for time-of-day synchronization and position reporting operations
- Compatible with PLGR and DAGR GPS receivers
- Standard length: 6 ft (~1.8 meters)
- Harris P/N: 12041-7170-01\*
- Amphenol P/N: MCA12041-7170-01

## GPS Interface Cable



- Interconnects transceivers with internal GPS devices to RF-387-AT002 and RF-3182-AT antennas' GPS connectors
- Connectors are SMB male on the transceiver end and SMA male on the antenna end
- Standard length is 25 ft (~7.6 meters)
- Specify cable length by replacing AXXX
  - A015 15 ft (~4.6 m)
  - A025 25 ft (~7.6m)
  - A035 35 ft (~10.7 m)
  - A050 50 ft (~15m)
- Harris P/N: 10511-0730-AXXX
- Amphenol P/N: MCA10511-0730-AXX X

## Coaxial Cable, GPS/Multiband Antenna



- Used when connecting two AN/PRC-152(C) radios in a repeater configuration
- High-power retransmission system can be created by using these cables with the AN/VR -C 110 50-watt vehicular power amplifier
- Internal co-location filtering in the AN/VRC-110 power amplifier reduces the need for external filters
- Harris P/N: 12041-7130-A1 = 50'; 12041-7130-A2 = 32.5"
- Amphenol Pcd P/N: MCA12041-7130-A1 = 50'; MCA12041 7130-A2 = 32.5"

## Retransmission Cable Assembly



\*Drawing verification required from customers upon ordering to ensure accessory cables are capable with end use application.

# Amphenol Pcd Shenzhen

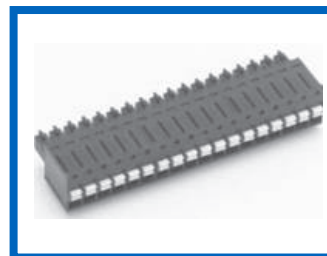
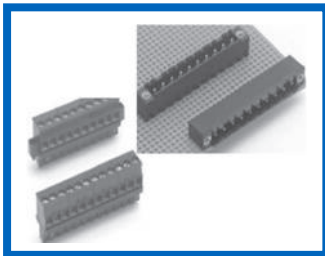
## Industrial Terminal Blocks

Amphenol Pcd Shenzhen Co., LTD designs and manufactures high quality Terminal Blocks, Cable Assemblies, and Custom Interconnect Solutions for the Industrial Market. Amphenol Pcd Shenzhen's Terminal Block line comprises a family of high quality, durable, high-temperature pluggable terminal blocks and headers on numerous centerline spacings. We pride ourselves in providing our customers flexible wire-to-wire and wire-to-board interconnect solutions for a wide variety of applications.

### Pluggable Terminal Blocks and Headers

#### Key Features and Benefits

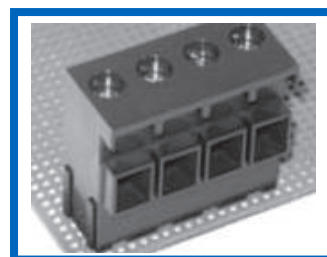
- Wide selection of variations, configurations, and options
- Plugs are available in Cage Clamp and Spring Clamp with spacing's from 2.5mm to 10.16mm and multiple wire entry options
- Vertical, Horizontal, Multi-Tiered, Open/Closed, SMT options for Headers 125°C standard temperature range, but high temperature headers are available to 260°C
- Mounting Ears available on all Plugs and Headers; black and green colors are standard
- Other options include: Keying Tabs, Marking, Gold plating
- Rising Cage Clamp design ensures high reliability wire termination by providing a direct high pressure connection between contact and wire
- Precision Molding and dual beam contact design provides smooth mating/unmating



### Wire to Board Terminal Blocks

#### Key Features and Benefits

- Wide product offering: 2.54mm to 15mm spacing's available
- Ultra Mini, Low Profile, Modular, and Multi-Tiered options in Vertical, Horizontal, and Angled Wire Entry
- High Current and High Voltage product offering
- 120°C Standard, but high temperature options to 260°C for reflow soldering
- Available in Cage Clamp and Spring Clamp with/without mounting ears
- Thru hole and SMT options
- Black and Green are standard colors



# Amphenol Pcd Shenzhen

## Industrial Terminal Blocks

### Amphenol Pcd Shenzhen

Building 21, 1st Liao Keng Industrial Zone, Shi Yan Street

Bao An District Shenzhen, China 518108

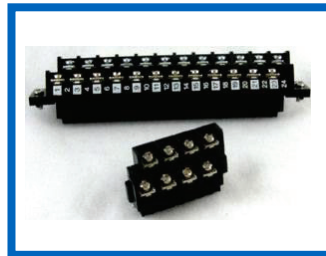
Tel +86 755-81738000

[www.amphenolpcd.com.cn](http://www.amphenolpcd.com.cn)

#### FlexiPlug® – FXPT Series Hybrid Pluggable Block

##### Key Features and Benefits

- Flexiplug® Hybrid terminal blocks combine US style standard screw driver barrier block wire terminations with a European style pluggable block nose
- Screw/pressure-plate terminations enclosed in a tri-barrier configuration. Screws accept a Philips head or flat screwdriver and will accommodate up to two 12 AWG wires or ring lug/fork-tongue terminals.
- Available in 5.08mm spacing and mates with ELFH Series Header. 105°C standard temperature and UL Rated to 15A @ 300V. Available as in-line, even/uneven positions, and with or without Ears.
- Other options include “finger proof” safety covers, high retention and gold plated contacts, markings, and keying
- Black and green colors standard



#### Wire & Cable Hoods for Industrial Terminal Blocks

##### Key Features and Benefits

- Accommodates 3.5mm, 3.87mm, 5mm/5.08mm Right Angle Plugs
- 2-20 Positions available in black & green
- Application: Strain relief
- Cost-competitive, re-usable, and can be provided as kit

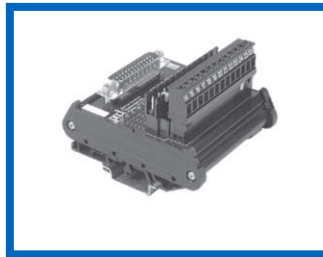
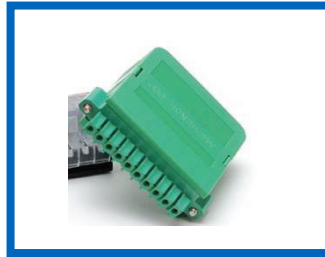


# Amphenol Pcd Shenzhen

## Industrial Terminal Blocks

### Custom Interconnect Solutions

Industrial Terminal Blocks are frequently used for control and equipment I/O purposes, so it is particularly important to many equipment manufactures to provide their end users with I/O terminal blocks tailored to their specific appearance, application, and/or performance criteria. Amphenol Pcd Shenzhen is dedicated to responding to unique customer needs for custom Interconnect Solutions more rapidly than any other supplier.



### Cable Assembly Capabilities

- Amphenol Pcd Shenzhen is a UL Approved cable Assembly House, UL E356215
- Use of advanced software such as ProE and Ansys (a comprehensive suite of simulation software)
- Amphenol Pcd Shenzhen has the ability to handle small and complicated cable assemblies, such as jumpers for high speed train, heavy duty cable assemblies for hybrid electrical vehicles and factory automation.





Amphenol Air LB GmbH is a name that connects innovative development and precise manufacturing with high quality. As an internationally established enterprise, Amphenol Air LB GmbH globally operates as part of the Amphenol group. Whether in Western or Eastern Europe, China, USA or India – the company creates reliable connections. Amphenol Air LB GmbH business activities include passive components as particularly flexible plug-in connectors in all variants as well as application-specific special developments, fiber optics and system solutions. Amphenol Air LB GmbH is a leading provider in the field of plug-in connectors for the aircraft industry and in the fields of military technology, diagnosis, automotive, and industrial ethernet connectors.

### ECTA 133 Connector

The ECTA 133 Connector is equipped with a rugged design, convenient push-pull operation, wide range of contact sizes and high contact densities and is designed for industrial applications. It provides an ideal component to use in a wide range of applications, including robotics, laboratory test equipment, transportation (automobile, trucks and railway) and tool interconnection.

**Series 1331:** power transmission connector (to 125 A) equipped with lead ground contact (and pilot contacts for the arrangement 605 for 100 A current and 706 for 125 A current).

**Series 1332:** signal transmission connector (to 25 A) for data or signal transmission. The current ratings of the contacts also permit the connector to be used for low power transmission.

A fiber optic version is available on request, and overmolded cables as well as customer specific arrangements are available in large quantity applications.

### Amphenol Air LB GmbH Solutions

#### ECTA 544 Composite Connectors



#### ECTA 133 Connectors



# Amphenol Socapex

## Military, Aerospace & Industrial Connectors

### Amphenol Socapex

948 Promenade de l'Arve-B.P 29

74311 Thyez Cedex-France

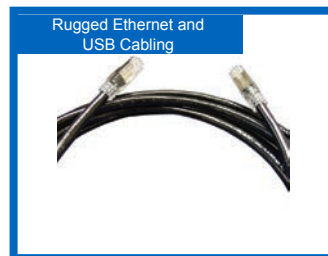
Tel. +33 (0)4 50 89 2800

[www.amphenol-socapex.com](http://www.amphenol-socapex.com)

Amphenol Socapex provides reliable electrical and optical connectors and interconnect solutions to a large base of customers worldwide. The company designs & manufactures both standard connectors and custom solutions suited for harsh environments.

Key markets include: Security & Defense with C4ISR, ground vehicles, weapons, munitions, military airframe, homeland security, Commercial Avionics and Industry.

Today, Amphenol Socapex employs more than 450 people at two facilities in Thyez (France), Puna (India) with two antennas in Shenzhen (China) and Beverly, MA (USA). Find more information on [www.amphenol-socapex.com](http://www.amphenol-socapex.com). Please contact the Beverly, MA facility (Amphenol Pcd) for any inquiries regarding Amphenol Socapex products in North America.



# Amphenol Socapex

## Military, Aerospace & Industrial Connectors

Amphenol Socapex Field Series Connectors are designed to allow a user to transform a standard infocom cord set into a rugged waterproof connector for harsh environments. The Field Series offers a full range of versions for a variety of applications, and are designed to reduce installation time and simplify installation and maintenance procedures. The Field Series Connectors are environmentally sealed to an IP67 rating and provide resistance to shock, vibration, traction, as well as provide EMI protection. The Field Series Connectors also provide rugged solutions for USB, Firewire, and RJ11 connectors, as well as Rugged Ethernet Switches and accessories.



- RJ Field allows you to use an Ethernet class D/Cat 5e connection for 10 BaseT, 100 BaseTX



- Sealed against fluids and dusts (IP68)
- Shock, vibration and traction resistant
- No cabling operation in the field, no tools required
- Keys available in several capacities (up to 256 GB)
- Keys sealed (IP68), metallic shell with various plating



- Rugged Gigabit Ethernet Media converters
- Intended for network extension of Land, Marine, and Aerial application
- MIL-STD-461 (EMI), MIL-STD-810 (Environment)
- Butt joint or expanded beam optical connectors



- Full MIL-STD compliant
- Managed and Unmanaged available
- Can be exposed to EMI & RFI perturbation, vibrations, shock
- IP67 sealed
- Possibility to have mixed copper and fiber optic ports



- Derived from MIL-38999 Series connectors



- Ergonomic, Robust & Sealed (IP68 mated)
- High current capabilities
- Safe for user & electronics (IP2X Unmated & Interlock)
- High mating cycles (3,000)
- Easy to connect and disconnect (Push-Lock mating mechanism)



- Find out about our high-performance board-to-board connectors (HDAS, SMASH, Hilinx) to ensure a secure data transmission for the most demanding industries ([www.pcb-interconnect.com](http://www.pcb-interconnect.com))



- Ideal for I/O Power for boxes, power connectors spread on the field (drums)<sup>®</sup>
- IP68 sealing and temperature resistance ranging from -65°C to +200°C
- Innovative connector with applications in many fields when user safety is a concern

# Amphenol Socapex

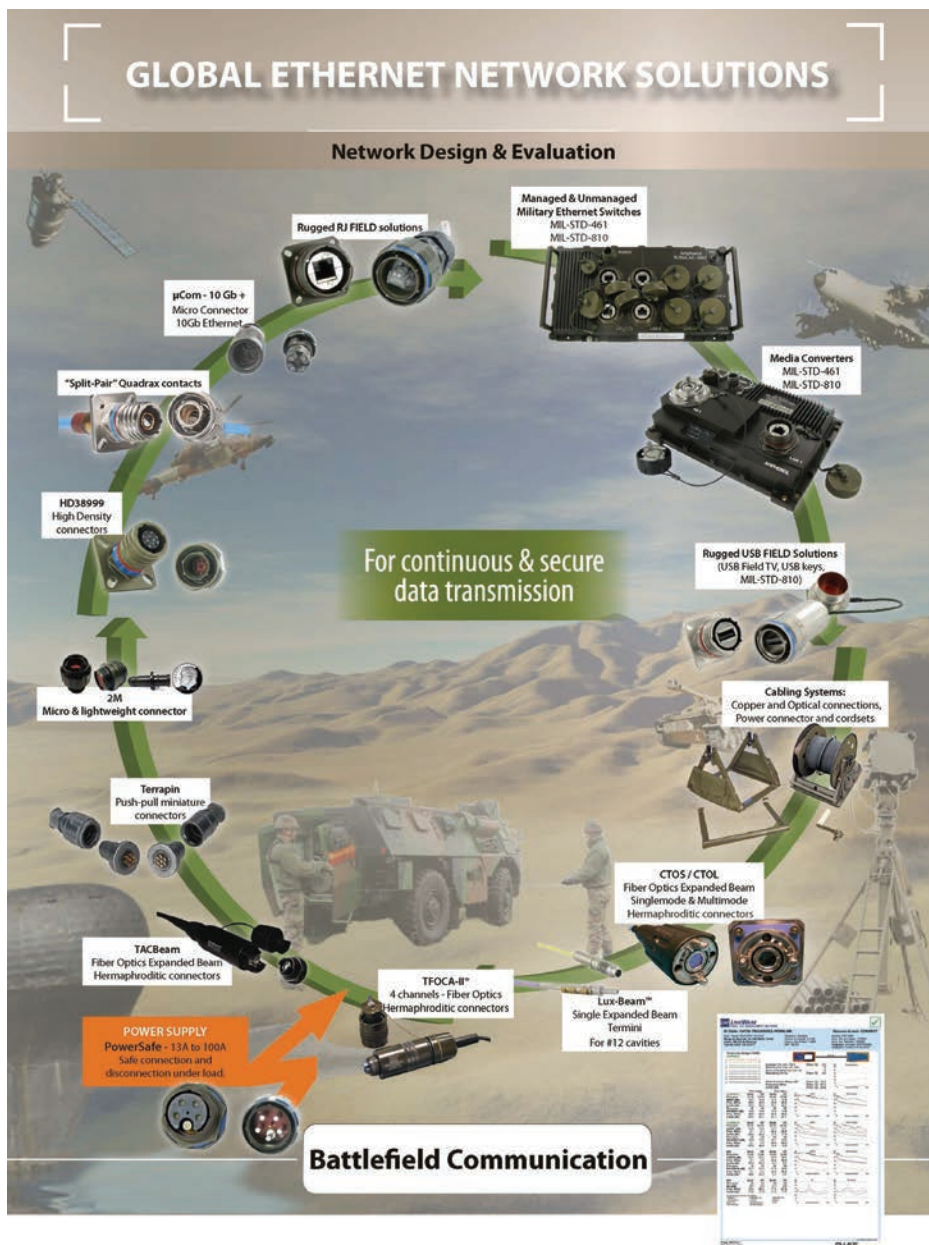
## Amphenol Socapex Global Network Solutions For Harsh Environments

Amphenol Socapex Capabilities in Ethernet Networks Include:

- Network Design
- Network Evaluation
- Strong Expertise in Internet Protocol Communication
- Measurement Equipment

Based on its expertise in harsh environments, Amphenol Socapex provides the Security & Defense markets with both the interconnection products and the Ethernet network design and installation.

The company's rugged and reliable solutions give the insurance of a continuous and secure data transmission between all communication devices in the harshest environments.



# Amphenol Air LB France

Interconnect Systems

## Amphenol Air LB France

29 Voie d' Yvois  
F-08110 Blagny, France  
Tel. +33 (0)3 24 22 32 66  
[www.amphenol-airlb.fr](http://www.amphenol-airlb.fr)

Part of Amphenol Corporation, Amphenol Air LB France employs 220 people and is located in North-East of France, close to Belgian and Luxembourg borders. Aiming at "Operational Excellence," Amphenol Air LB France successfully combines its traditional "engineering culture" with a proactive "customer focus" attitude and can claim excellent performances in terms of Service, Quality and Logistics ("A" rated by customers in 2012). Specializing in new product development for harsh environments, Amphenol Air LB France works in close cooperation with OEM's, system suppliers, and subcontractors in order to develop innovative and custom designed interconnect solutions. The company is structured to deliver worldwide. Please contact Amphenol Pcd for any inquiries regarding Amphenol Air LB products in North America.



Amphenol Air LB

SYSTEME DE CONNEXIONS ELECTRIQUES ET ELECTRONIQUES  
ELECTRIC AND ELECTRONIC CONNECTION SYSTEM

## Amphenol Air LB SIM Connector System

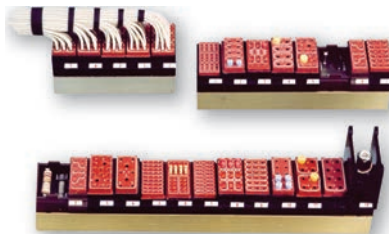
The SIM (Modular Interconnect System), is a modular, multi-contact, multifunctional rectangular connector.

The connector is available in metallic or composite versions, as well as in shielded and unshielded versions.

The SIM Connector uses over-molded SIM modules that are specifically designed to be environmentally

sealed and are available in a wide variety of contact sizes. SIM Connectors are qualified to the European MIL-SPEC EN 4165 and are equivalent to a MIL-38999 Connector.

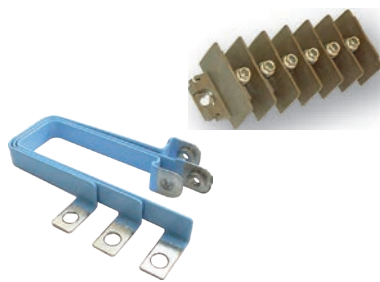
### European Specification Junction Modules



### 1900 Series Rectangular Connectors



### Terminal Block and Aluminum Bus Bars



### European Specification Relay Sockets



# Amphenol Air LB France

## Electronic Connection Systems

### Amphenol Air LB France Push and Pull Connectors For interiors and IFE Systems

Amphenol Air LB France offers a variety of Push-Pull connectors in variety of styles, wire sizes, and configurations. Series 3559 Push-Pull connectors are fully compatible with Air LB SIM modules allowing for flexibility in wiring applications. Amphenol Air LB France also recently designed their new ARINC 809 connector, which has shielding capabilities along with the push-pull design.

Amphenol Air LB France is a world leading manufacturer of high performance standard and custom interconnect solutions and accessories for wiring and fixing:

- Quick Connection Junction Modules
- Rectangular Connectors (EN4165, EN3545, Push-Pull)
- Industrial Circular Connectors
- Relay Sockets
- Terminal Blocks and Terminal Block Assemblies
- Fixing Accessories for Cable Harnesses and Hydraulic Conduits
- Specific Products and High Value-Added Solutions (wiring boxes, etc)

#### Markets

- Commercial Aerospace
- Defense
- Rail and Mass Transit
- Industrial
- Energy
- Medical

#### In-Line Junctions



- Sealed
- In 1, 2, or 3 circuits
- Contact size: 16, 20, or 22
- Fire, Smoke, Toxicity: ABD031 and FAR25.853



- Sealed
- In 1, 2, or 3 circuits
- Contact size: 16 or 20



- Qualified for K1 and K2 environment
- Sealed
- Satisfy environmental test specification EDF/DER



- Qualified for K1 and K2 environment
- Quick disconnect/reconnect
- Suited to interconnect cables with different ction (1 to 35 mm<sup>2</sup> for male contacts and 2.5 to 6.8 mm<sup>2</sup> for female contacts)
- Sealed
- Satisfy environment test specification EDF/DER n° HM 63-7195/5 relating to class, IE-A materials for PWR nuclear power stations
- Quick and easy maintenance

# Amphenol Air LB France

## Interconnect Systems

### In-Line Junctions

#### In-Line Junctions for Aluminum Cable Contacts



- Sealed
- In 1, 2, 3 or 4 circuits
- Contact size: 20 and 22
- Fire, Smoke, Toxicity: ABD031 and FAR25.853

### Quick Connection Junction Modules

#### 1750 Modules



- Many contacts layouts (even mixed)
- From 6 to 36 contacts, sizes 10 to 22
- 26 to 8 AWG for cable sections from 0.15 to 8.98 mm<sup>2</sup>
- Sealing assured by a patented over-molded grommet
- In/Out the rail without special tools nor adjacent modules removing
- Contacts: NF L53-105-EN 3155-016
- Modules: NF/UTE C93-462
- Fire, Smoke, Toxicity: ABD031 and FAR25.853

#### 1767 PA Modules with "Positive Locking"



- Same performance as 1750 modules. Besides:
- 100% guarantee of properly contact locking: PA technology prevents contacts from being insecurely locked in position, and then from becoming faulty while in service
  - Wire pulling tests becomes unnecessary with PA modules
  - Weight of modules reduced about 50%
  - Contacts: NF/UTE L53-105 NAS 1749 & EN 3155-016
  - Modules: derived from NF/UTE C 93-462
  - Fire, Smoke, Toxicity: ABD031 and FAR25.853

#### 1777 Component Carrier Modules



- Like the 1777 type module, they snap on the same rail side-by-side and take the space of two modules (1.102 in pitch)
- Consists of sealed quick junction connection for male crimp contacts P size 20 and a component carrier shell
- Components may be mounted by means of solder pads

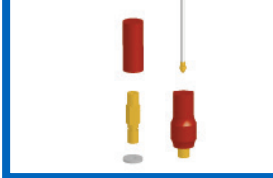
#### Nuclear Module (Pending)



- Qualified for K1 and K2 environment
- Suited to interconnect cables with different cross section
- Satisfy environmental tests specification EDF/DER n° HM 63-7195/5 relating to class IE-A materials for PWR nuclear power stations
- Removable mini-modules/socket mounted on rail
- Contacts shunted by 2 or 3 contacts
- Cable cross section from 0.38 to 3.3 mm<sup>2</sup>

### Individual Junction Terminals

#### Individual Junction Terminals



- Available in screw or crimp types
- Contact size: 12, 16, or 20
- Contacts: NF L53-105-EN 3155-016
- Fire, Smoke, Toxicity: ABD031 and FAR25.853

#### 1765 Electronic Component Carrier Modules



- Same performances as 1750 modules. Besides:
- Component s mounting means: solder pads, fuseholder clamps, inserted or welded directly on PCB
  - Protection of components by a cover
  - Components may be protected by resin or insulating foam
  - Contacts: NF/UTE L53-105, NAS 1749 & EN 3155-016
  - Modules: derived from NF/UTE C 93-462 standard
  - Fire, Smoke, Toxicity: ABD031 and FAR25.853

#### 1777 Modules



- Many contacts layouts (even mixed)
- From 6 to 18 contacts, sizes 10 to 20
- Cable sections from 0.25 to 6 mm<sup>2</sup>
- IP 66
- In/out without special tools nor adjacent module removing
- Contacts: NF L53105 & EN 3155 - 016
- Modules: NF/UTE C 93462

#### 1200 Modules



- Modules comply with ABS1569 standard
- Crimp socket contacts comply with EN 3155-015F2018 standards. May be inserted or extracted with standard tools.
- Two types of metal rails, cut to measure
- Large range of contact layouts
- Modules mounted individually
- Modules can be mounted with 1100 series
- Fire, Smoke, Toxicity: ABD031 and FAR25.853

#### Nuclear Modules (Current Generation)



- 18 contacts sizes 20
- Sealing assured by a patented overmolded grommet
- F/UTE L53-105 - NAS 1749 & EN 3155-016
- Modules: NF/UTE C 93-462

# Amphenol Air LB France

## Interconnect Systems

### Quick Connection Junction Modules

1100 Modules



- Various contact arrangements
- Contact sizes: 12, 16, 20, and 22
- 26 to 12 AWG for cable sections from 0.15 to 3.18 mm<sup>2</sup>
- Sealing assured by a patented over-molded grommet
- Contacts: NF/UTE L53-105-NAS 1749 & EN 3155-016
- Modules: NF/UTE C93-462
- Fire, Smoke, Toxicity: ABD031 and FAR25.853

Feedthru Circular Modules



- With female shunts for male contacts or male shunts for female contacts
- Contact sizes: 20, from 18 to 24 AWG
- Sealed and unsealed versions
- Contacts: ASNE 0396, EN 3155 & MIL-C-39029
- Fire, Smoke, Toxicity: ABD031 and FAR25.853

Rectangular Grounding Modules



- Sealed grounding modules (1750, 1100, and 1400 types)
- 1750 types mounted on individual brackets or metallic rail
- 1750 types: 8 to 36 cts size 12 to 22
- 1100 and 1400 types mounted on individual brackets
- 1100 and 1400 types: 8 to 10 cts size 12 to 20
- Contacts: NF L53-105, NAS 1749 & EN 3155
- Fire, Smoke, Toxicity: ABD031 and FAR25.853

### PCB Modules

PCB 1750 Modules



- 18 contacts sizes 20
- Sealing assured by a patented overmolded grommet
- Contacts: NF/UTE L53-105 - NAS 1749 & EN 3155-016
- Modules: NF/UTE C 93-462
- Fire, Smoke, Toxicity: ABD031 and FAR25.853

PCB 1100 Modules



- 21 cts size 22 or 10 cts 20
- Sealing assured by a patented overmolded grommet
- Contacts: NF/UTE L53-105 - NAS 1749 & EN 3155-016
- Modules: NF/UTE C93-462
- Fire, Smoke, Toxicity: ABD031 and FAR25.853

### In-Line Junction with Components

In-Line Junctions with Components



- Sealed
- Models with diodes, fuses, resistors
- Contact size: 20, gauge 18 to 24 AWG, section from 0.21 to 0.93 mm<sup>2</sup>
- Contacts: NF/UTE L53-105 - NAS 1749 & EN 3155 - 016
- Fire, Smoke, Toxicity: ABD031 and FAR25.853

Circular Grounding Modules with Components



- Sealed or unsealed versions
- Component: resistors
- Contact size: 20, from 18-24 AWG
- Fire, Smoke, Toxicity: ABD031 and FAR25.853

PCB 1777 Modules



- 8 cts size 12 or 18 cts sizes 20
- Sealing assured by a patented overmolded grommet
- Contacts: NF/UTE L53-105 - EN 3155-016
- Modules: NF/UTE C 93-462



Amphenol Limited, based in the UK, designs and manufactures interconnect product, cables and electronics packaging for the Military Aerospace, Civil Aerospace, Defense, Rail Mass Transit and Industrial Markets.

### Military and Aerospace

Amphenol is the world leader in the design, manufacture, and supply of high-performance interconnect systems for military and commercial aerospace harsh environment applications. Amphenol provides an unparalleled product breadth, from military specification connectors to customized high-speed board level interconnects; from flexible to rigid printed circuit boards; from backplane systems to completely integrated assemblies. Key markets supported are avionics, radar, communications, ordnance, missiles, engines, ground vehicles and tanks, space, and all levels of aviation. Amphenol is a technology innovator that designs to meet customers' needs from program inception.

### Industrial

Amphenol is a technology leader in the design, manufacture, and supply of high-performance interconnect systems for a broad range of industrial applications, including medical equipment, factory automation, heavy equipment, instrumentation, motion control, rail mass transportation, alternative energy, and natural resource exploration. Amphenol's core competencies include application-specific industrial interconnect solutions utilizing integrated assemblies with flexible printed circuits as well as high-power interconnects requiring a high degree of engineering and system integration. Our innovative solutions facilitate the increasing demands of embedded computing and power distribution.

**TV-CTV Tri-Start MIL-DTL-38999 Series III** connectors have high-density contact arrangements in a miniature circular shell. Originally designed for the high-performance requirements of military and commercial aircraft, these circular connectors are perfect for applications requiring extremely reliable interconnections. Amphenol TV-CTV connectors are quick-mating and environmentally-sealed and represent the highest performing connectors from the 38999 range. They are available in aluminum alloy, composite, stainless steel, and marine bronze.



- Operates at extreme temperatures
- 100% Scoop proof contact protection
- High coupling durability with outstanding EMI shielding protection
- Moisture and corrosion resistance
- Different plating options available, including Black Zinc Nickel (RoHS)
- Self-locking connector systems provide the best performance for threaded connectors in high vibration applications

**SJT MIL-DTL-38999 series** miniature circular connectors offer high-density contact arrangements in a bayonet coupling style. They are environmentally-sealed and have a wide operating temperature range. These lightweight and scoop proof connectors meet the requirements of VG96912, are qualified to 1003 and are NATO-standard. They are commonly called 38999 Series I.



- Lightweight
- 100% Scoop proof contact protection
- Environmentally sealed
- Different plating options available, including Black Zinc Nickel (RoHS)
- Typical Applications; Battlefield, ground vehicles, aircrafts, communication systems, advanced industrial applications.

**LJT MIL-DTL-38999 Series I** miniature connectors offer high-density contact arrangements and are suitable for extremely high-reliability connections including use in military and commercial aviation. They are environmentally sealed, have a wide operating temperature range and meet the requirements of HE308.



- Bayonet coupling
- 100% scoop proof
- Rugged
- Typical Applications; Military avionics, military vehicles, battlefield communication

# Amphenol Limited

## Military, Aerospace & Industrial Connectors



**JT MIL-DTL-38999 Series II** miniature connectors offer high-density contact arrangements in a small size. They were designed for high-performance requirements, including military and commercial aviation applications. These connectors are environmentally-sealed and have a wide operating temperature range.

- Bayonet coupling
- Lightweight
- Low profile shell
- Typical Applications: military aeronautics, applications requiring very low profile connector form

**Terrapin** a miniature series of circular push-pull connectors intended for harsh environment applications and used extensively in soldier communications. Within a rugged shell design, Terrapin offers superior EMC performance and high environmental sealing to IP68. Resilient in severe battlefield situations, the RoHS compliant black-silver plating is both low-luster and corrosion resistant. Featuring an optional locking mechanism, multiple shell sizes with up to 37 contacts and suitability for overmolding, Terrapin is the preferred choice for miniature connectors in military and other harsh environment applications.



- Miniature circular interconnect with push-pull or locking mating style
- IP68 sealed in mated & unmated condition
- Optimized for low cost overmolding
- Widely used for soldier equipment
- Multiple keying options

**EMI Filtered Terrapin** has the same miniature size and footprint of the standard Terrapin connector series. EMI Filtered Terrapin connectors are widely used for applications where space is at a premium i.e. hand-held devices and highly connectorised equipment. Embedding the filtering within the connector eliminates the need for 'dirty' areas or additional filter boards and circuitry within the box, resulting in weight and space savings.



- Standard Terrapin panel cut-out dimensions
- Minimal increase in overall length
- Intermateable with standard product
- 2,000 mating cycles

**Rugged Micro-USB Terrapin** now replaces the majority of Mini-USB connections for equipment, such as PDAs and Smartphones. The specification of the Micro-USB supports the current USB On-The-Go (OTG) supplement and provides total mobile interconnectivity by enabling portable devices to communicate directly with each other without the need for a host computer.



- Backshell for strain relief and screen termination
- 2,000 mating cycles
- 5 keying options
- Miniature footprint <16mm

**Lightweight Aluminum Terrapin** is fully intermateable and backwards compatible with original Terrapin connectors, but is up to 50% lighter. All popular performance features and high specification of the Terrapin product range have been retained, i.e. IP68 sealing in mated and unmated conditions, platforms with up to 37-contacts, integral backshell for low cost overmolding and of course the unique mating mechanism which allows the same plug to mate with either break-away or locking receptacles.



- Up to 50% lighter vs Terrapin
- Hermetic glass-to-metal sealing including matched seals and low to high compression seals.
- Conveyor and batch ovens, and brazing facilities with a variable protective atmosphere oven.
- IR/BD testing facilities up to 10GΩ/12Kv
- Helium leak testing up to: 5.10-12 cm<sup>3</sup>.s<sup>-1</sup> at 1 bar ΔP Helium
- Multiple keying options

# Amphenol Limited

## Military, Aerospace & Industrial Connectors

**Hermetic Solutions** uses glass-to-metal sealing technology that provides exceptional mechanical performance in extreme pressure and temperature environments while providing excellent hermeticity. Many of our Hermetic connector and feed through technologies can be customized to match existing or new specialty requirements, and are designed and manufactured for compliance with the appropriate standards, including Mil-DTL-38999, Mil-C-26482, Mil-C-24308, Mil-C-5015 and EN2997.



- Hermetic glass-to-metal sealing including matched seals and low to high compression seals
- Conveyor and batch ovens, and brazing facilities with a variable protective atmosphere oven
- IR/BD testing facilities up to 10GΩ/12Kv
- Helium leak testing up to: 5.10-12 cm<sup>3</sup>.s-1 at 1 bar ΔP Helium

**Rhino 38999** combines the benefits of field-proven Mil-DTL-38999 Series III circular connectors with hyperbolic contacts that extend the boundaries of high power connector technology. Designed to meet the latest military and industrial specifications, Rhino 38999 connectors also meet stringent safety requirements.



- 38999 Series III or Bulldog connector interface
- Jam-nut flange mount and inline connections
- 500+ mating cycle durability
- Up to 1000A current capacity

**Filtered Rhino 38999** are available with a standard range of cost-effective MOTS (Military off-the-shelf) filters suitable for EMC suppression of COTS (Commercial off-the-shelf) equipment on military vehicles. This, combined with the benefits of field-proven Mil-DTL-38999 Series III circular connectors and hyperbolic contacts, extend the boundaries of high power connector technology.



- 38999 Series III connector interface
- Jam-nut flange mount and inline connections
- 500+ mating cycle durability

**Bulldog** is a quick release, breakaway connector with the additional benefit of IP68 sealing. This RoHS compliant connector range has been specifically developed for harsh environment vehicle applications. The products are designed for quick, safe disconnection and is ideal for jettison applications where damage limitations are critical. The Bulldog Series is designed to use standard MIL-DTL-38999 specification insert arrangements within a rugged and non-reflective shell design. The use of standard insert arrangements ensures the connectors' suitability for Power, Signal and Strength.



- Quick release, break away
- Standard Series III D38999 insert platforms
- IP68 sealed in mated condition
- 1,000 mating cycles

# Amphenol Interconnect India

## Amphenol Interconnect India

105, Bhosari Industrial Area

Pune – 411 026

Tel. +91 20 30688304

[www.amphenol-in.com](http://www.amphenol-in.com)

**Amphenol 164 Series Audio Connectors** are water-resistant, polarized, five and six contact electrical connectors for use in low voltage audio frequency circuits and applications. They are qualified to the MIL-DTL-55116 specification.

The connectors employ three-point bayonet coupling for quick disconnect and self-wipe contact. Although designed for use in communications equipment, these versatile connectors have been successfully adapted for use in numerous industrial, scientific and educational applications.



**MW Series Power Connectors** are qualified to MIL-DTL-55181. They are designed with a center lock coupling screw. The connectors are waterproof, polarized and can withstand high shock and vibrations. They are primarily used for interconnection of power and control circuits of electric equipment by the US Army Communication System.



**D-Sub M2000 Series Connectors** are qualified to the MIL-DTL-24308 specification. These connectors are subminiature Rack & Panel type with polarized shell and fully gold plated machined contacts. It's a time tested design and widely used for power and signal. They have excellent performance features like easy mating and positive contact pressure. Application-specific variants are supported as well.



# Amphenol Interconnect India

## Protective Caps for Circular Connectors (MIL-C-26482, MIL-DTL-38999 I II III, MIL-C-5015, MIL-C-22992)

Amphenol India Protective Caps are developed for environmental protection needs of circular connectors in Threaded & Bayonet versions. These are designed to meet the Military standard.



**AGE96929 Power Series Connectors** are single pole connectors. They are used for transmitting very high current at very low voltage and are used in various military & seaborne vehicle applications & industrial equipment. The AGE96929 Power Series Connectors are derived on the basis of VG95234 with consideration of all mating dimensions and mechanical characteristics. This series meets the VG96929 specification.



**The EV Series Power Connectors** are specifically designed for connecting the power cables within a mobile or stationary power supply. The power supplies may be used with vehicle drive systems or stationary power. The connectors meet the necessary specifications for commercial transportation requirements. The IP2X or TUV Fingerproof design on both the plug and receptacle allow much greater flexibility when connectorizing 'always hot' systems, such as battery packs, fuel cells, capacitor packs, and more.

