



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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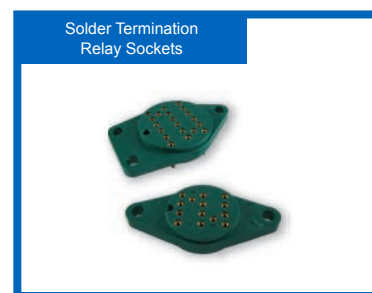
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# Relay Sockets

## 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 M83536/16-006, -014, -031, -034 M83726/1, /2, /3, /4, /28, /29, /30, /31* MS27709-2	M12883/40-01 M12883/40-05 M12883/40-07 M12883/40-11 M12883/40-13 M12883/40-17 M12883/40-19 M12883/40-23	RSL116079 RSL116087 RSL116051 RSL116059 RSE116661 RSE116669 RSE116673 RSE116681	4 Pole / 10 Amp	10-11
M83536/17-002, 17-005	M12883/40-02 M12883/40-08 M12883/40-14 M12883/40-20	RSL116081 RSL116053 RSE116663 RSE116675	4 Pole / 10 Amp	10-11
M83536/18-002, -005, -008, -012 M83536/19-002, -005, -008, -012 M83536/20-002	M12883/40-06 M12883/40-12 M12883/40-18 M12883/40-24	RSL116089 RSL116061 RSL116671 RSE116683	4 Pole / 10 Amp	10-11
M83536/21-006, -014, -022, -030 M83536/22-006, -014, -022, -031	M12883/46-01	RSE116747	3 Pole / 10 Amp	17
M83536/25-002 M83536/26-002	M12883/47-01 M12883/47-04 M12883/47-07 M12883/47-10	RSE116755 RSE116761 RSL116101 RSL116073	6 Pole / 10 Amp	18
M6106/27-002	M12883/47-02 M12883/47-05 M12883/47-08 M12883/47-11	RSE116757 RSE116763 RSL116103 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 M12883/48-02 M12883/48-03 M12883/48-04	RSE112061 RSE112063 RSL112105 RSL112101	3 Pole / 25 Amp	19
MS27743-09, -15, -21, -27	M12883/48-05 M12883/48-06 M12883/48-07 M12883/48-08	RSE112065 RSE112067 RSL112107 RSL112103	3 Pole / 25 Amp	19
Leach Corp. JA-D4E & J	M12883/41-03 M12883/41-08 M12883/41-13 M12883/41-18	RSL116095 RSL116067 RSE116689 RSE116699	2 Pole / 10 Amp	12-13
Leach Corp. KA-D4E & J	M12883/40-04 M12883/40-10 M12883/40-16 M12883/40-22	RSL116085 RSL116057 RSE116667 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 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 2 Pole / 5 Amp	20
M83536/5-006,-014, -022, -030 M83536/6-006, -015, -022, -032	M12883/44-01	RSE120151	4 Pole / 5 Amp	14
M83536/6-025	M12883/52-002	RSE116185	Track Mount 4 Pole / 5 Amp	20
M83536/7-022	M12883/44-02	RSE120153	4 Pole / 5 Amp	14
M83536/9, -006, -015, -024, -035 M83536/10-006,-015,-024, -034,-038	M12883/41-01 M12883/41-04 M12883/41-06 M12883/41-09 M12883/41-11 M12883/41-14 M12883/41-16 M12883/41-19	RSL116091 RSL116097 RSL116063 RSL116069 RSE116685 RSE116691 RSE116695 RSE116701	2 Pole / 10 Amp	12-13
M83536/11-002, 004, 007	M12883/41-02 M12883/41-07 M12883/41-12 M12883/41-17	RSL116093 RSL116065 RSE116687 RSE116697	2 Pole / 10 Amp	12-13
M83536/13-002, 005, 008, 012 M83536/14-002	M12883/41-05 M12883/41-10 M12883/41-15 M12883/41-20	RSL116099 RSL116071 RSE116693 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

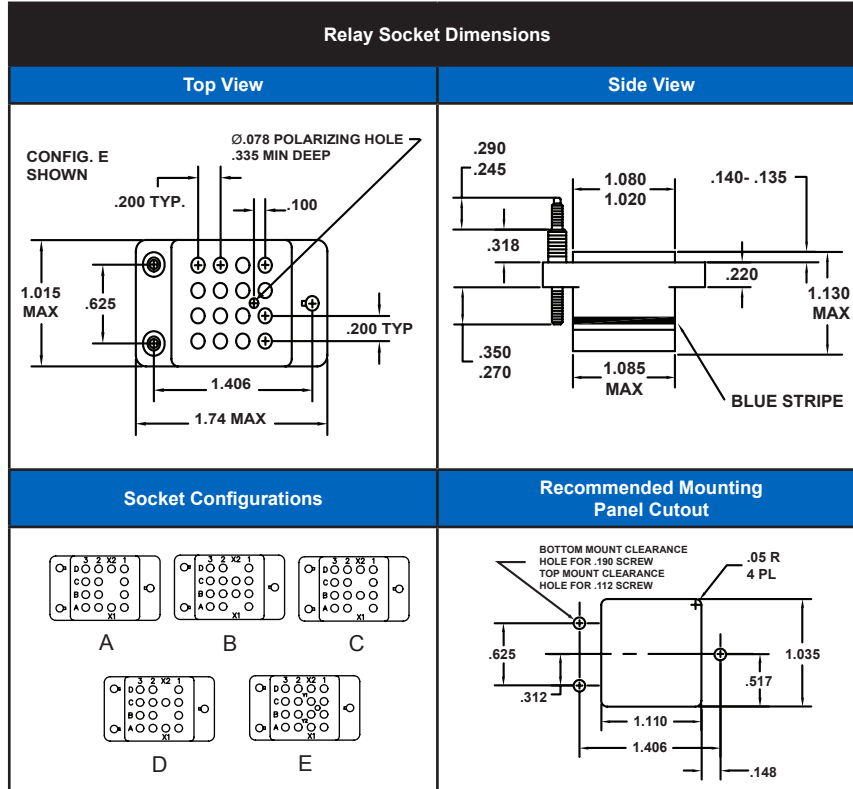
Hardware:  
Stainless Steel or Steel  
w/Cadmium Chromate Finish

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 M12883	APCD P/N	Mounting Stud	QTY	Size <sup>1</sup>	Contact 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 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 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 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 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 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 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



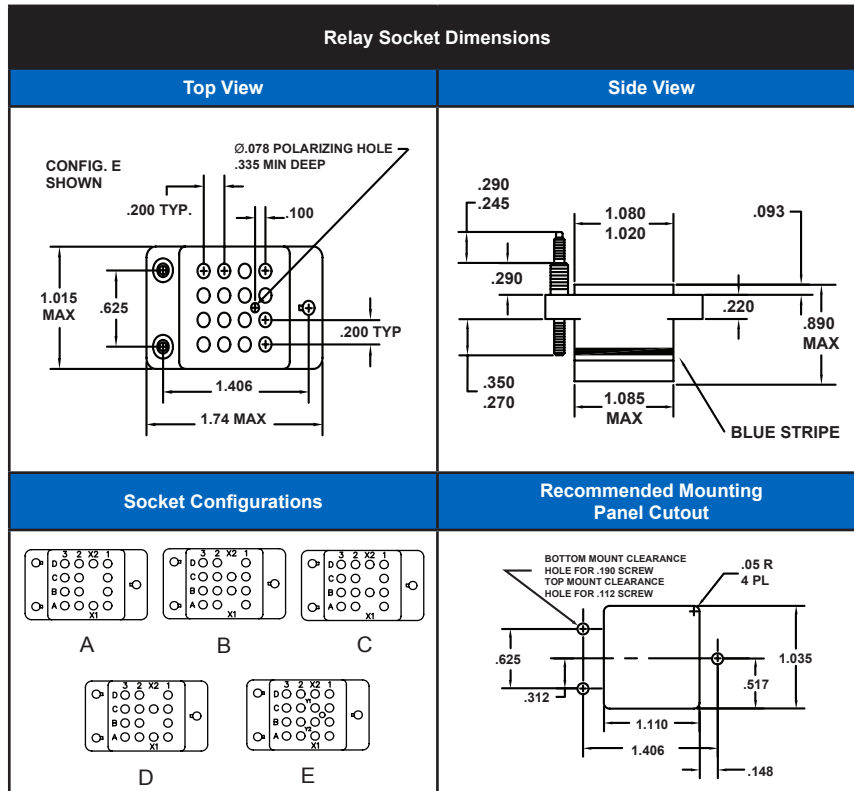
Mates with M83536, M6106,  
M27709, M83726 Relays

## 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 M12883	APCD P/N	Mounting Stud	QTY	Size <sup>1</sup>	Contact 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 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 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 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 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 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 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

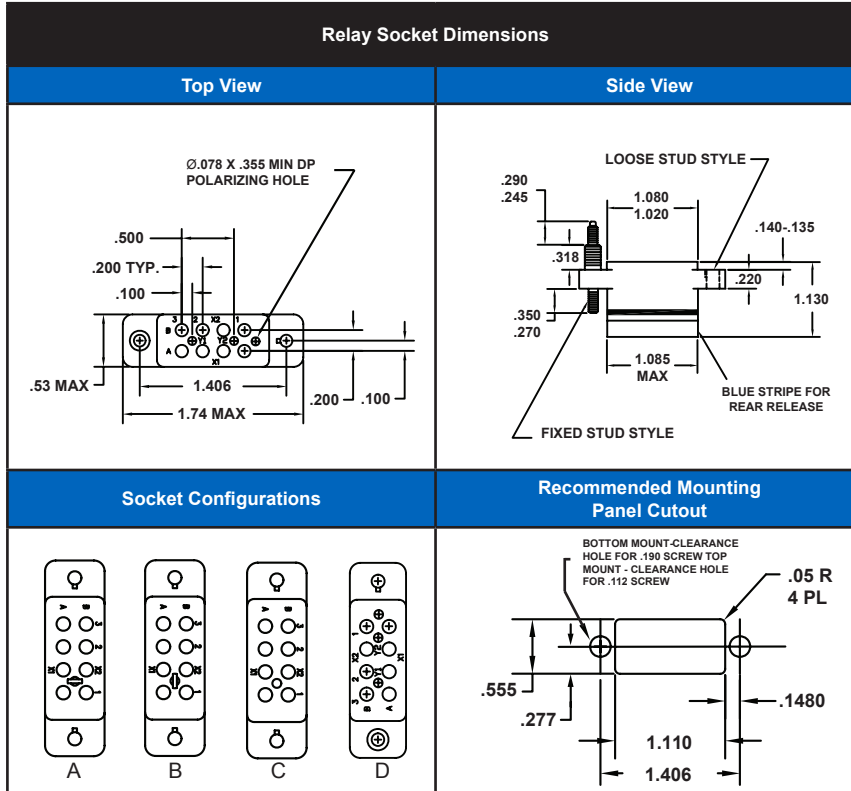
Socket Body:  
Polyetherimide per ASTM-D5205

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 M12883	APCD P/N	Mounting Stud	QTY	Size <sup>1</sup>	Contact P/N	Config.	Mating Relay	Pounds	Grams
/41-01	RSL116091	Loose	8	16/16	/5-116	C	M83536/9-006, 015, 024, 035 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 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 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 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

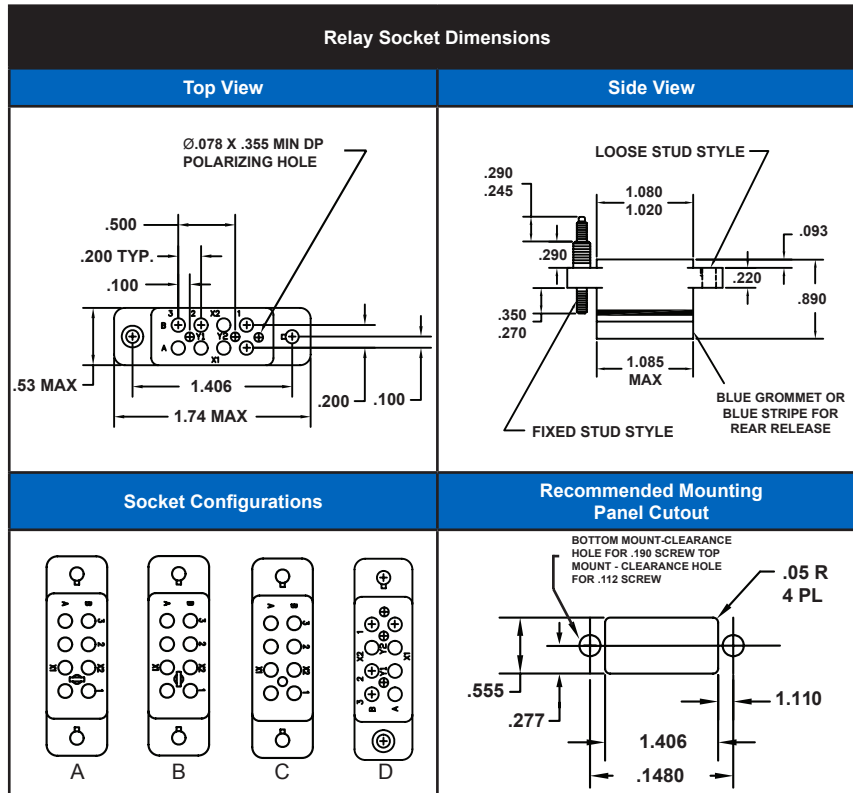
Socket Body:  
Polyetherimide per ASTM-D5205

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 M12883	APCD P/N	Mounting Stud	QTY	Size <sup>1</sup>	Contact P/N	Config.	Mating Relay	Pounds	Grams
/41-11	RSE116685	Loose	8	16/16	/92-533	C	M83536/9-006, 015, 024, 035 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 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 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 M83536/10-006, 015, 024, 034, 038		
/41-20	RSE116703	Fixed	8	16/16	/92-553	D	M83536/13-002, -005, -008, -012 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

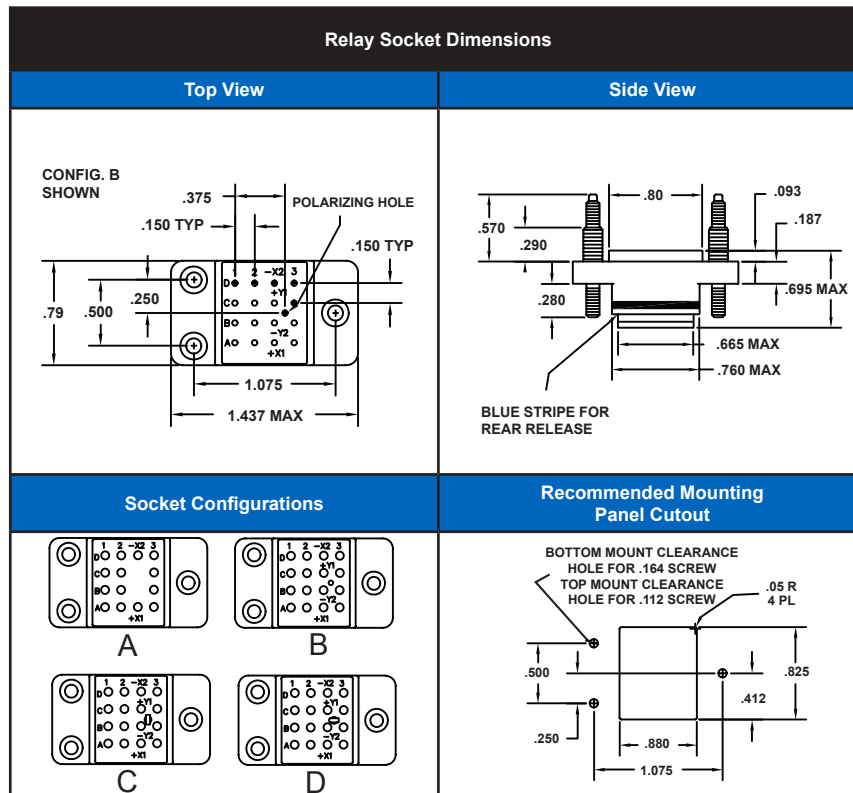
Hardware:  
Stainless Steel or Steel  
w/Cadmium Chromate Finish

Contact Retainers:  
Stainless Steel

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



Mates with M83536, M6106 Relays



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
/44-01	RSE120151	Fixed	14	20/20	/101-553	A	M83536/5-006,-014,-022,-030 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

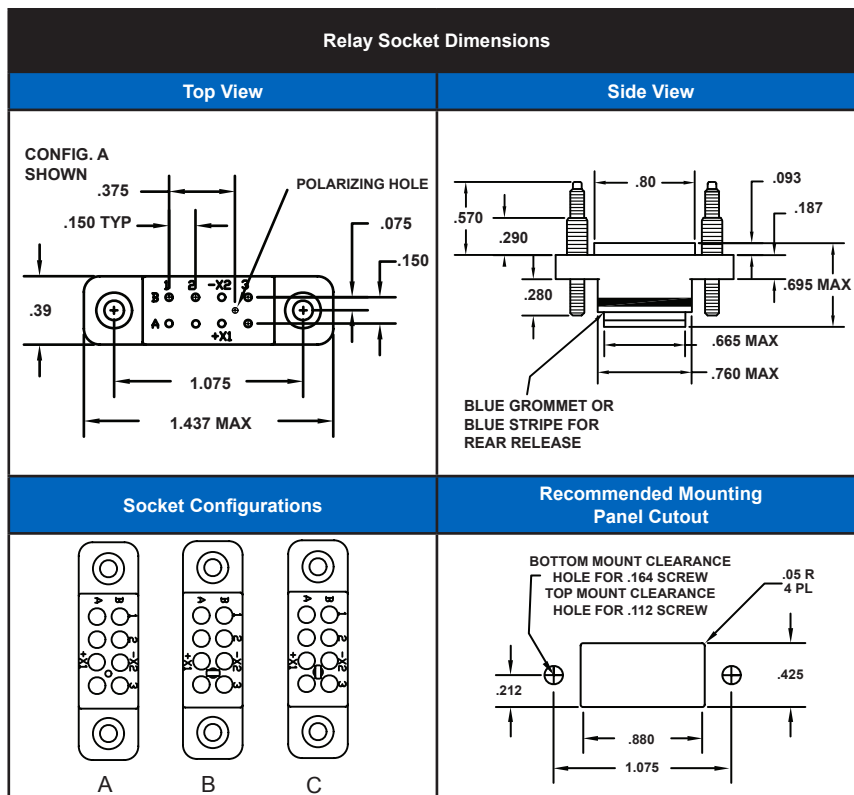
Socket Body:  
Polyetherimide per ASTM-D5205

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 M12883	APCD P/N	Mounting Stud	QTY	Size <sup>1</sup>	Contact P/N	Config.	Mating Relay	Pounds	Grams
/45-01	RSE120159	Fixed	8	20/20	/101-533	A	M83536/1-006, -015, -024, -033 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

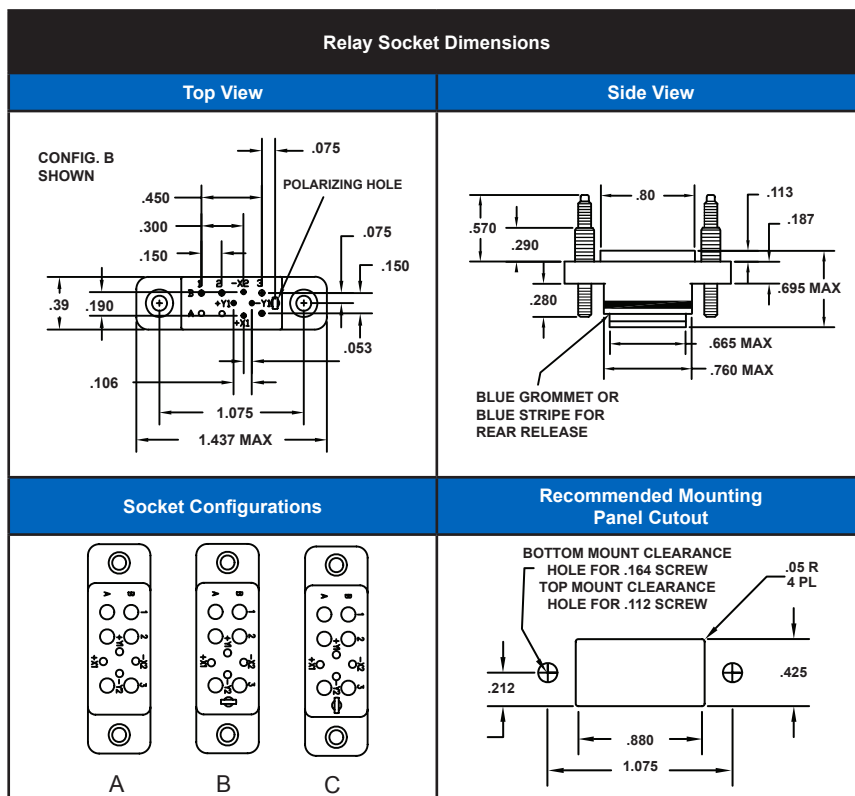
Socket Body:  
Polyetherimide per ASTM-D5205

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



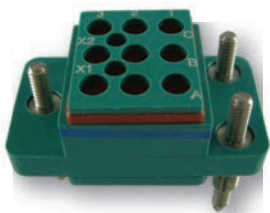
Low Profile Relay Sockets								Weight	
MIL P/N M12883	APCD P/N	Mounting Stud	QTY	Size <sup>1</sup>	Contact P/N	Config.	Mating Relay	Pounds	Grams
/45-04	RSE120165	Fixed	6	20/20	/101-553	A	M6106/38-002	.033	15
			4	20/22	/101-552				
/45-05	RSE120167	Fixed	6	20/20	/101-553	B			
			4	20/22	/101-552		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



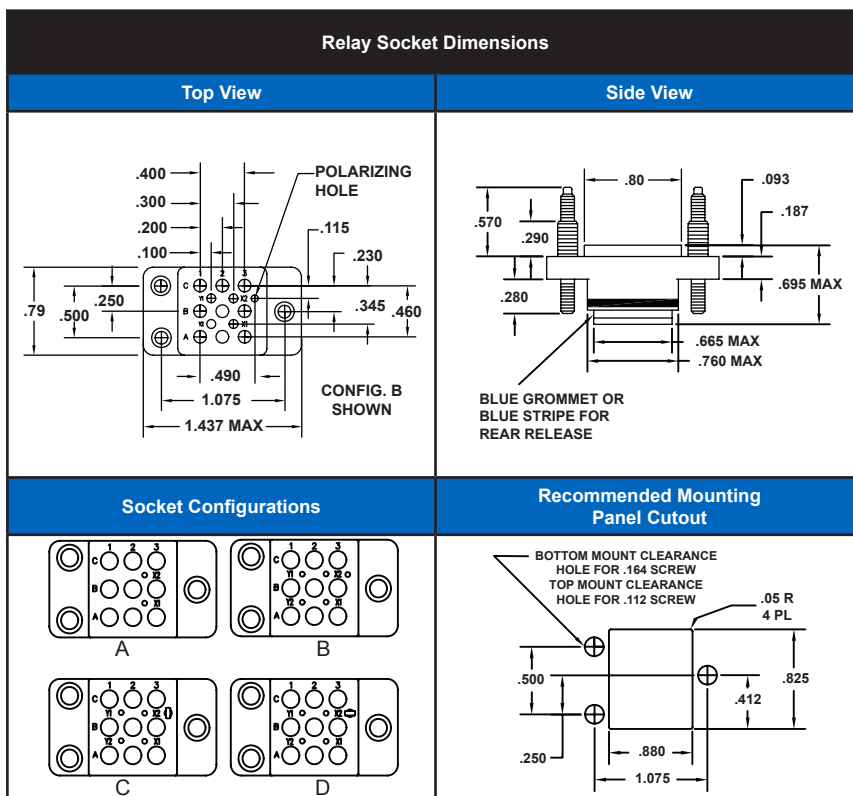
Mates with M83536, M6106 Relays

## 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 M83536/22-006,-014,-022,-030	.055	25
			2	20/20	/101-553				
/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

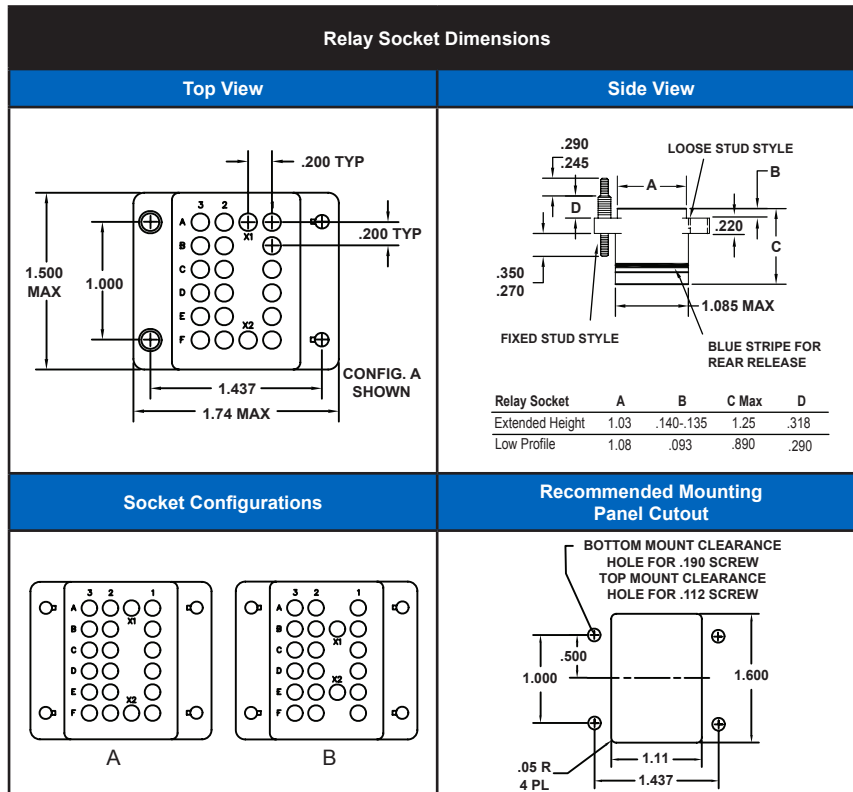
Hardware:  
Stainless Steel or Steel  
w/Cadmium Chromate Finish

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 M12883	APCD P/N	Mounting Stud	QTY	Size <sup>1</sup>	Contact 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 M12883	APCD P/N	Mounting Stud	QTY	Size <sup>1</sup>	Contact 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

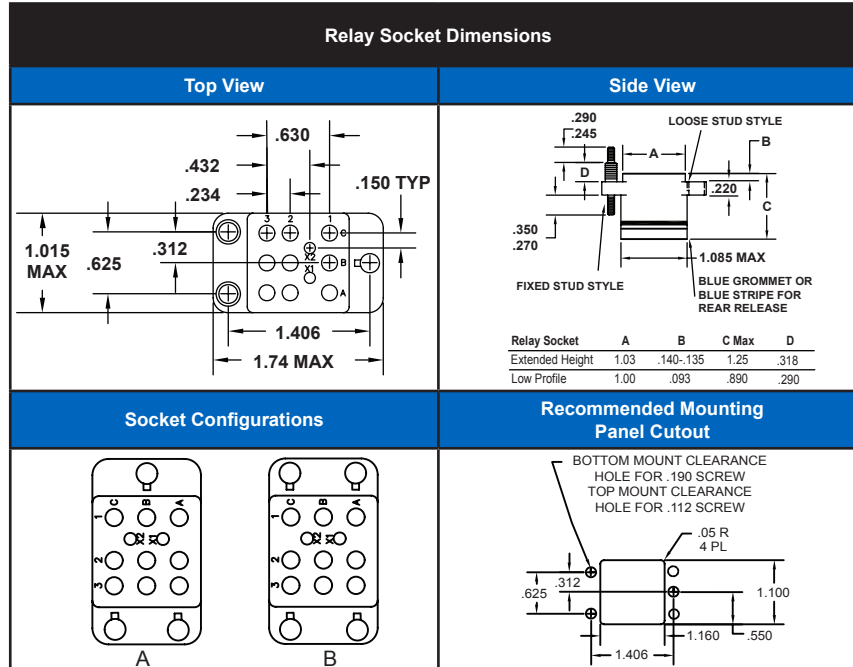
Socket Body:  
Polyetherimide per ASTM-D5205

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 M12883	APCD P/N	Mounting Stud	QTY	Size <sup>1</sup>	Contact 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 M12883	APCD P/N	Mounting Stud	QTY	Size <sup>1</sup>	Contact 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

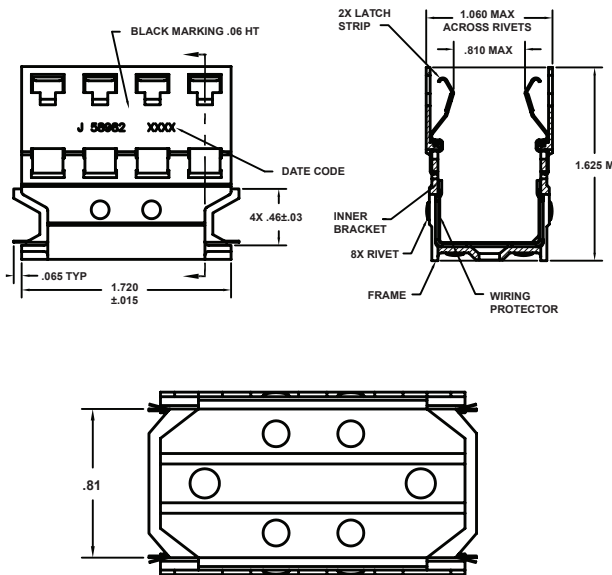
Socket Contacts:  
Copper Alloy, Hard Gold Plated in Accordance with MIL-G-45204



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

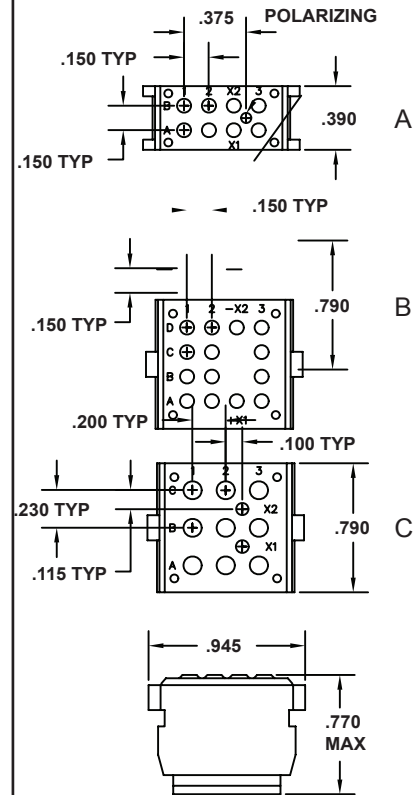
Wiring Protector:  
Aramid Paper per MIL-I-24202  
Track Operating Range:  
-65°C to 125°C

#### 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 M12883*	APCD P/N	QTY	Size <sup>1</sup>	Contact P/N	Config.	Mating Relay	Weight	
							Pounds	Grams
/52-001	RSE116175	8	20/20	/101-553	A	M83536/2-028, 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				

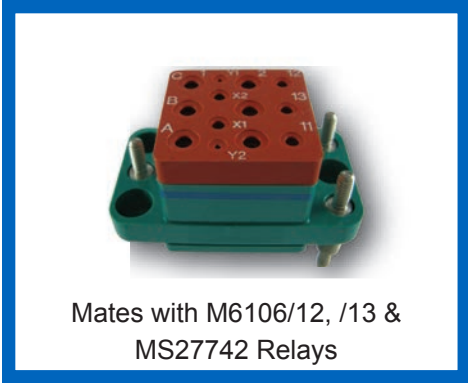
\*Mating End/ Wire Barrel

<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



## 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

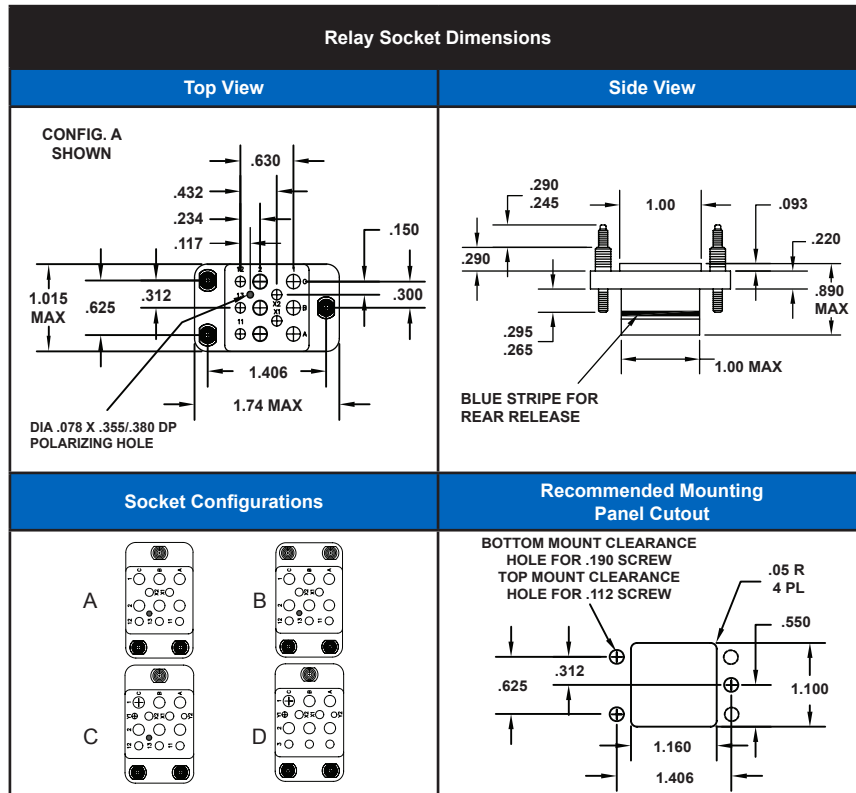
Socket Body:  
Polyetherimide per ASTM-D5205

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 M12883	APCD P/N	Mounting Stud	QTY	Size <sup>1</sup>	Contact 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

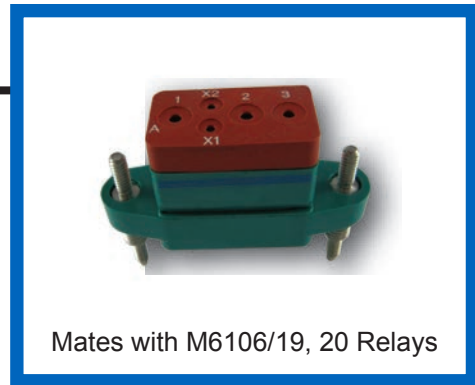
Socket Body:  
Polyetherimide per ASTM-D5205

Grommet:  
Silicone Rubber per A-A-59588

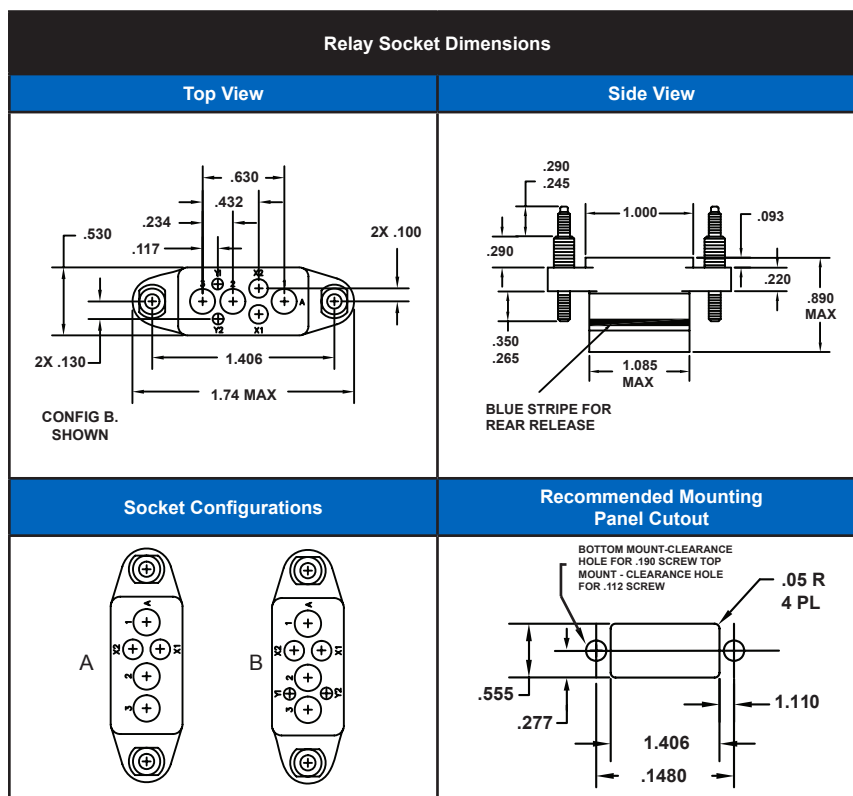
Hardware:  
Stainless Steel or Steel  
w/Cadmium Chromate Finish

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 M12883	APCD P/N	Mounting Stud	QTY	Size <sup>1</sup>	Contact 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



## Operating Range

Temperature:  
-65°C to 125°C

Insulation Resistance:  
1000 Megohms 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

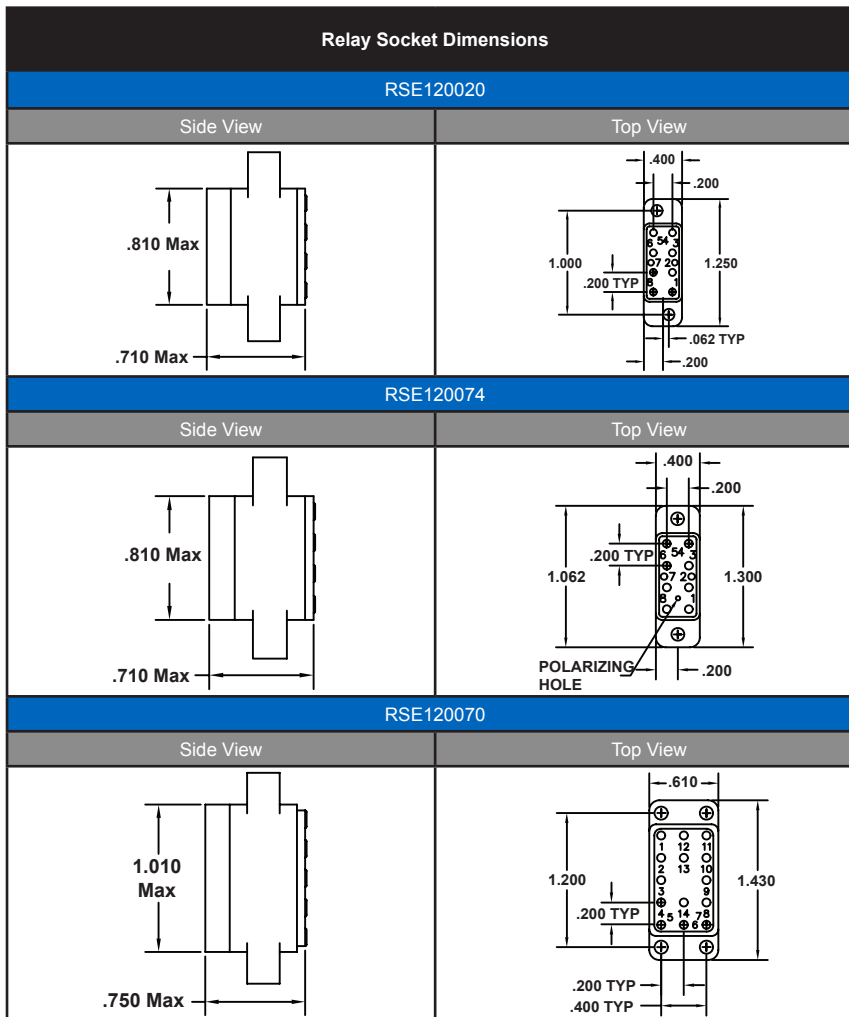
Socket Body:  
Polyetherimide per ASTM-D5205

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

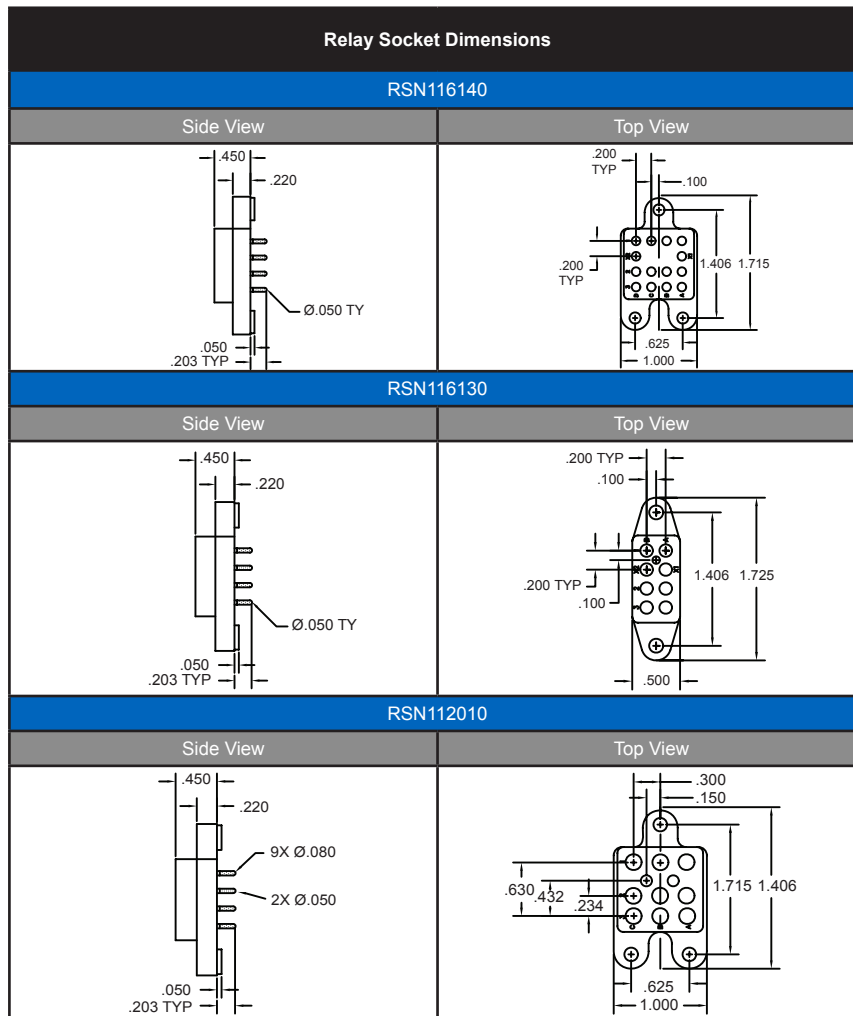
Socket Contacts:  
Copper Alloy, Hard Gold Plated  
in Accordance with SAE-AMS-2422



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

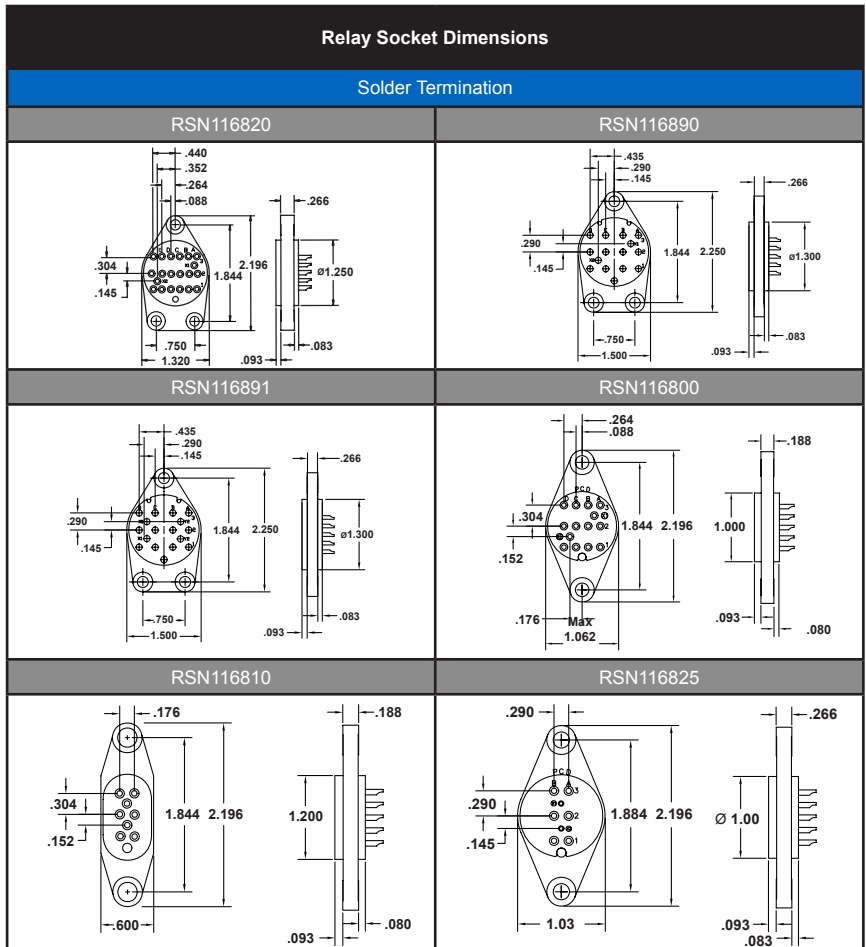
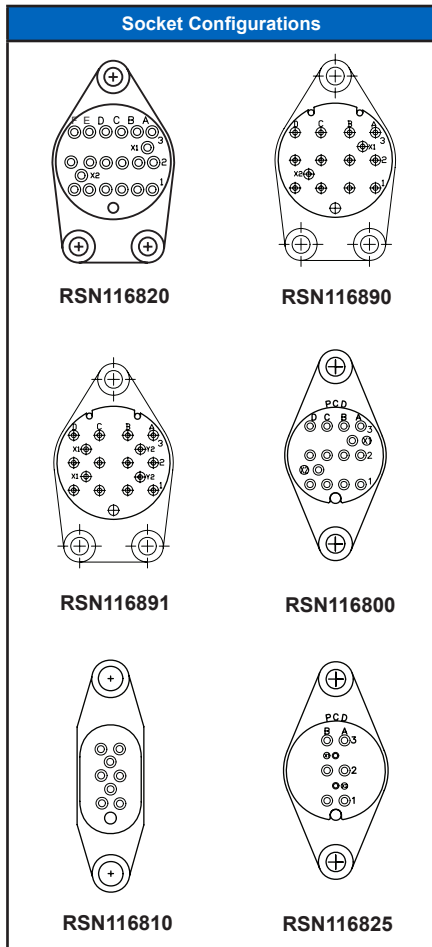
Temperature:  
-65°C to 125°C  
Insulation Resistance:  
1000 Megaohms Min.  
Dielectric Withstanding  
Voltage:  
1500 VRMS at Sea Level  
500 VRMS at 80,000 ft.  
Vibration:  
MIL-STD-202, Method 204  
Test Condition G  
Shock:  
MIL-STD-202, Method 213  
Test Condition C

### 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

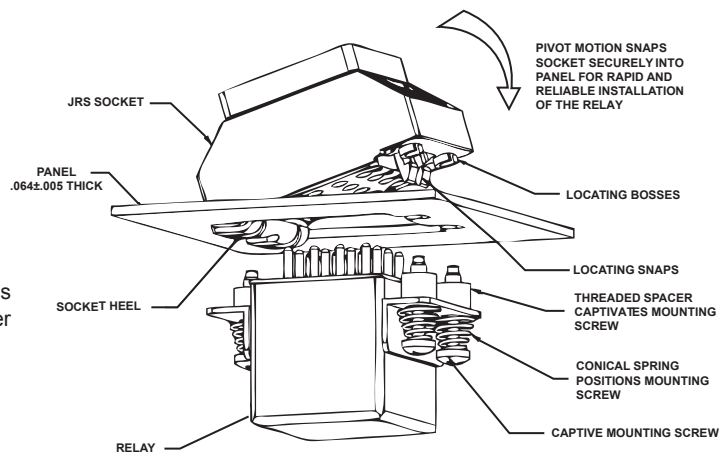
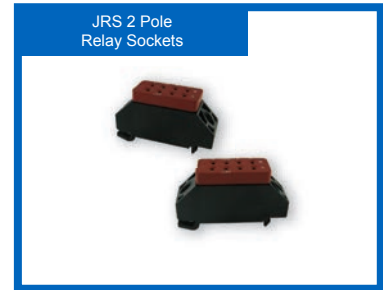
## Top Mount & Bottom Mount

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

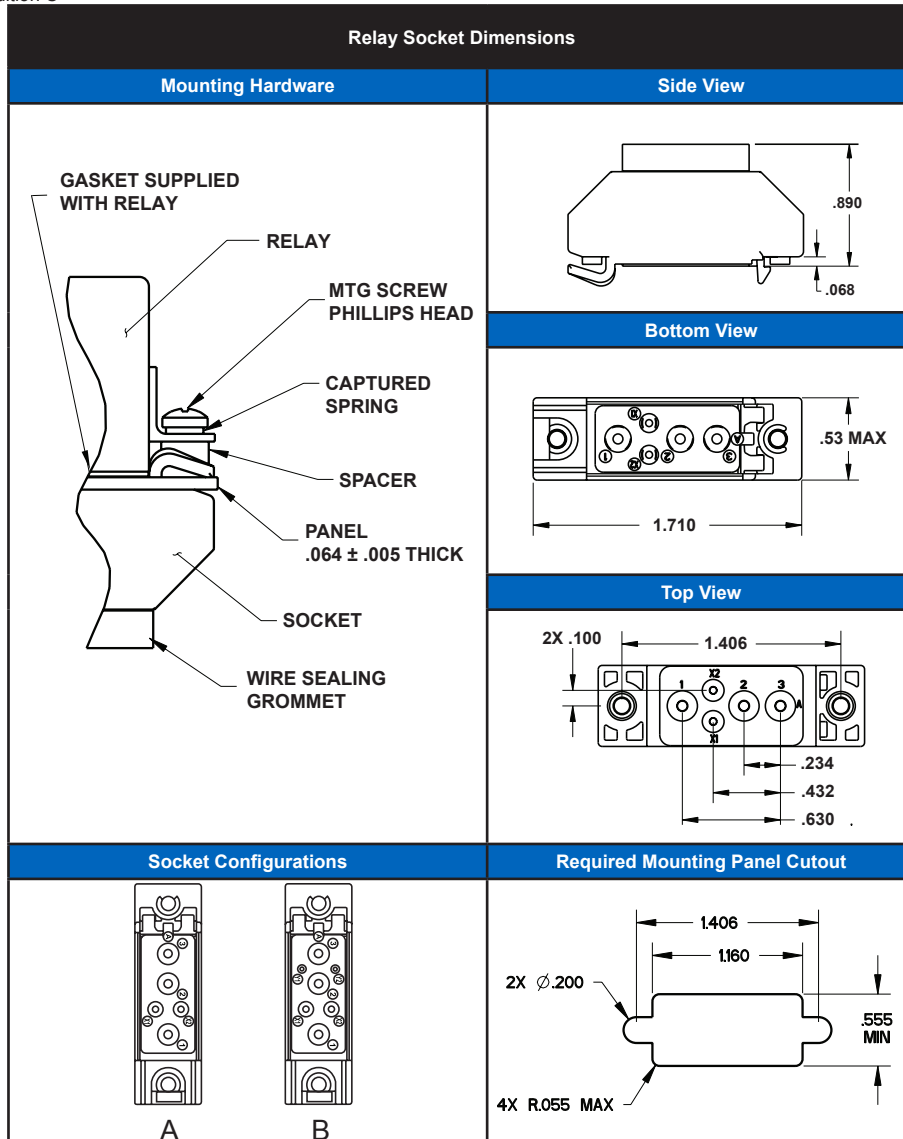
Grommet:  
Silicone Rubber per A-A-59588

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



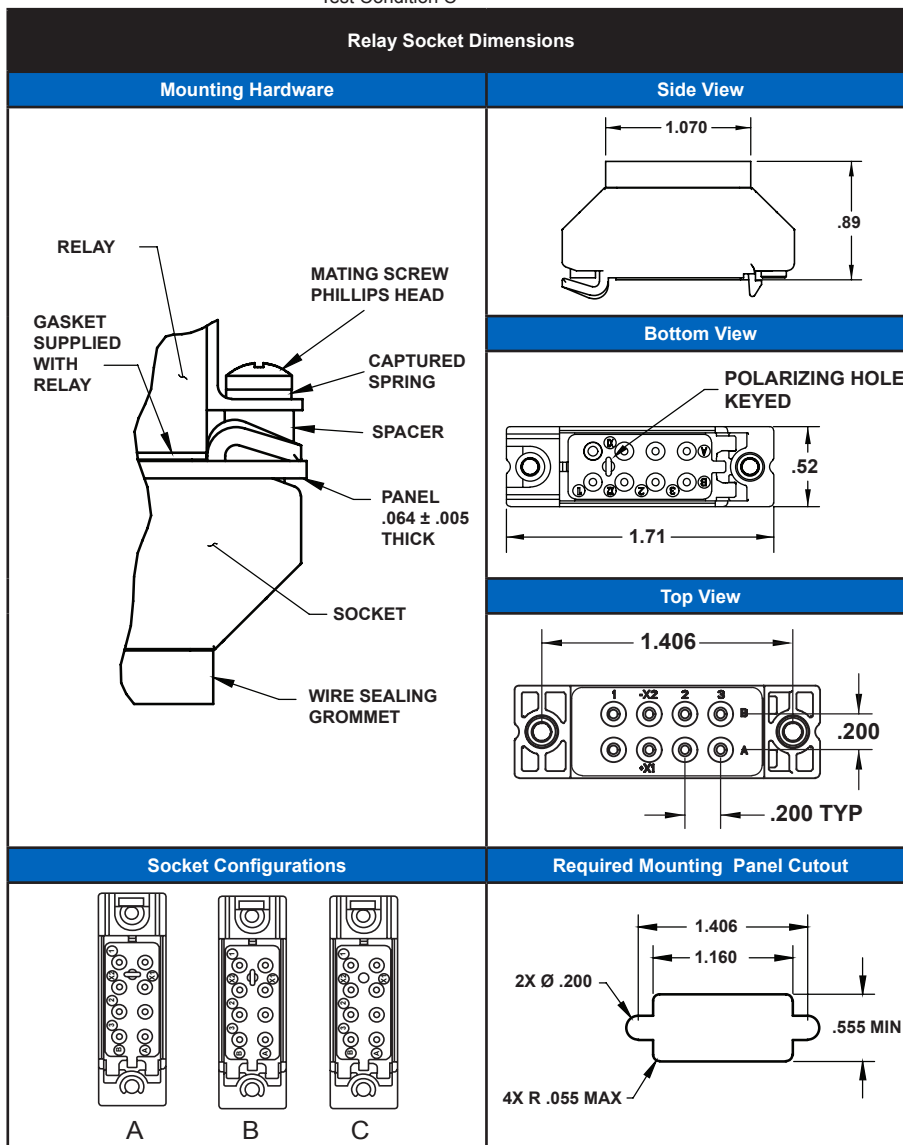
Replaces MIL-PRF-12883/41  
Mates with M83536 Relays

## 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

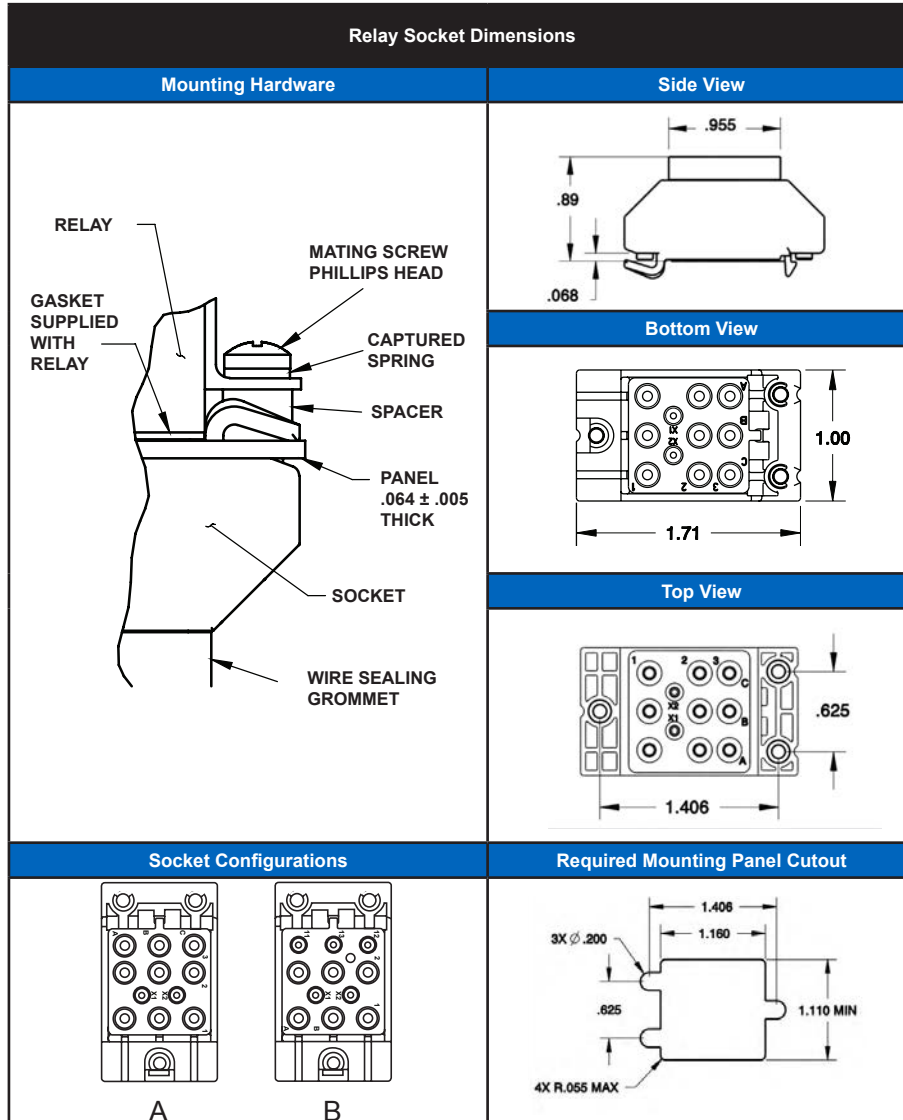
Grommet:  
Silicone Rubber per A-A-59588

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

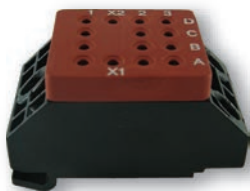


Extended Height Relay Sockets					
APCD P/N	QTY	Size <sup>1</sup>	Contact P/N	Config.	Mating Relay
JRS300100	2	16/16	/92-533	A	M6106/13, MS27743
	9	12/12	/92-535		
JRS310100	5	16/16	/92-533	B	M6106/13, MS27743
	6	12/12	/92-535		

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

# Quick-Mount Relay Sockets

JRS 4 Pole / 10 Amp / Size 16



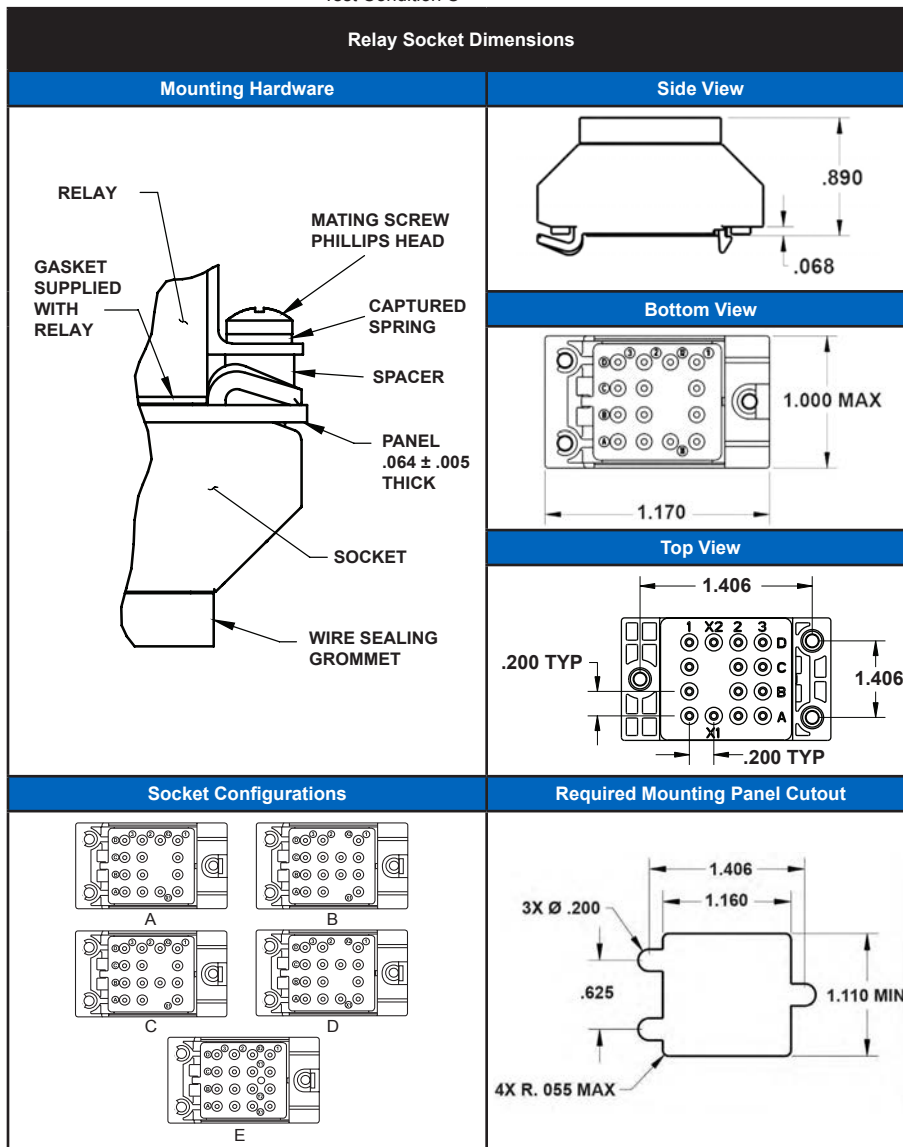
Replaces MIL-PRF-12883/40  
Mates with M83536,83726  
& MS27709 Relays

## 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

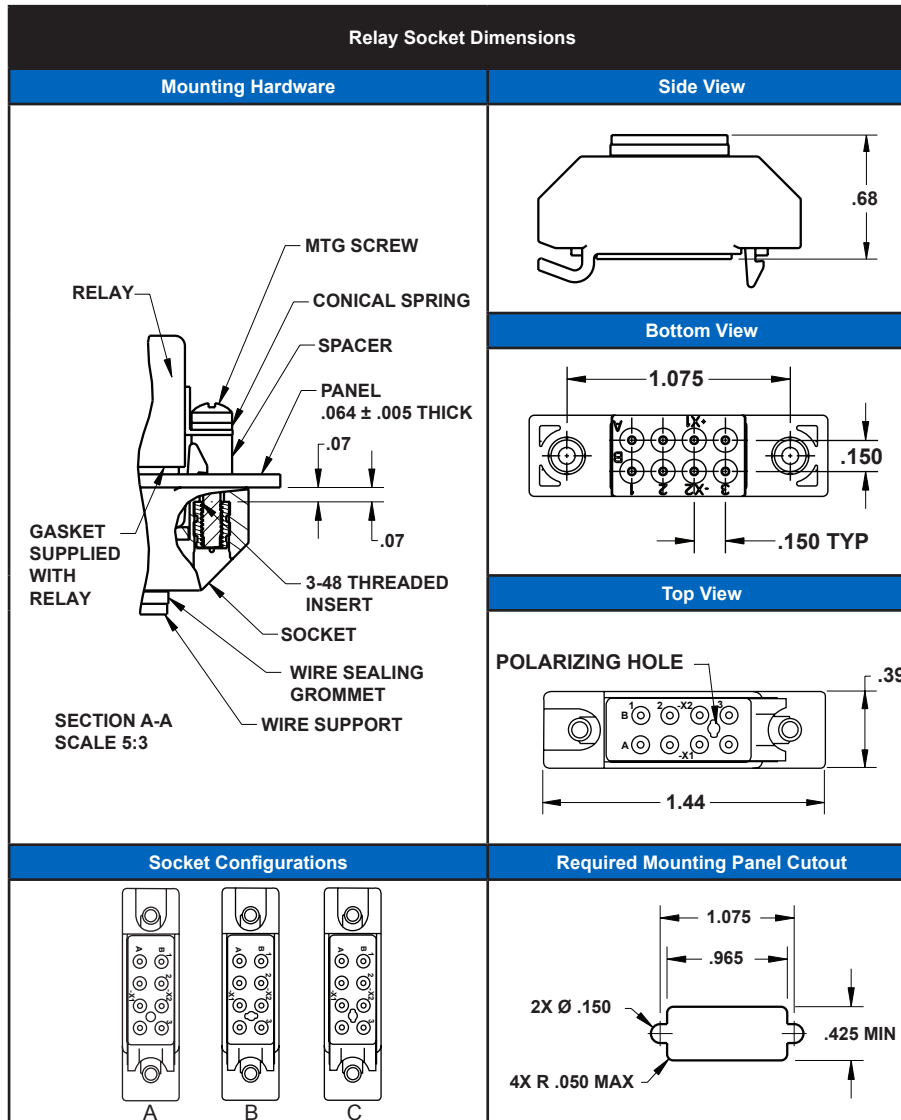
Grommet:  
Silicone Rubber per A-A-59588

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



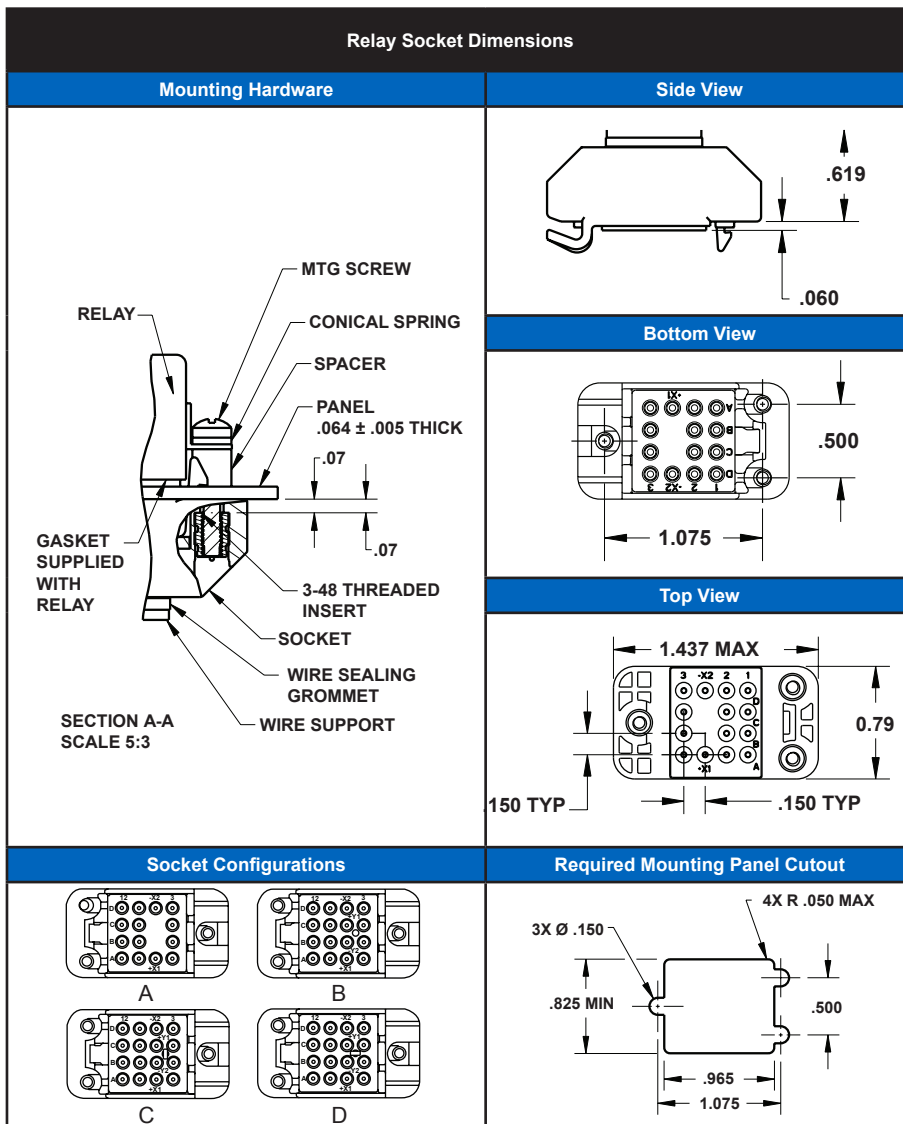
Replaces MIL-PRF-12883/44  
Mates with M83536 Relays

## 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.

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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

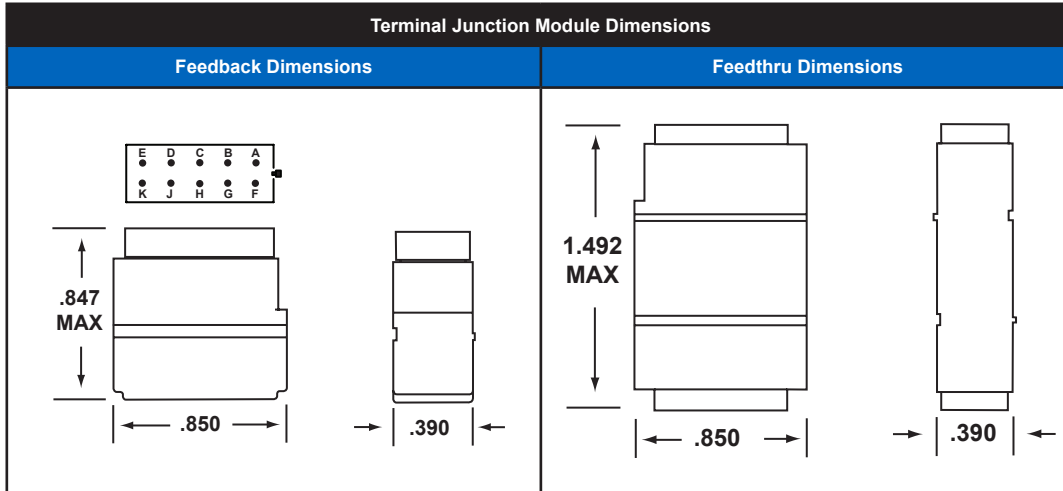
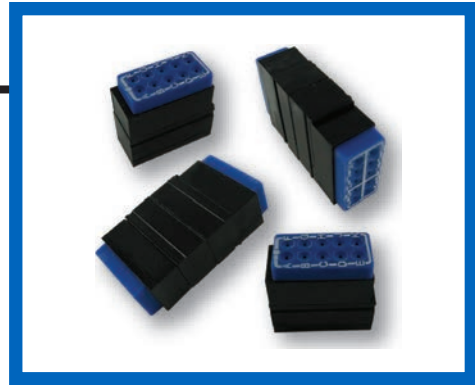
Grommet:  
Silicone Rubber per A-A-59588

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

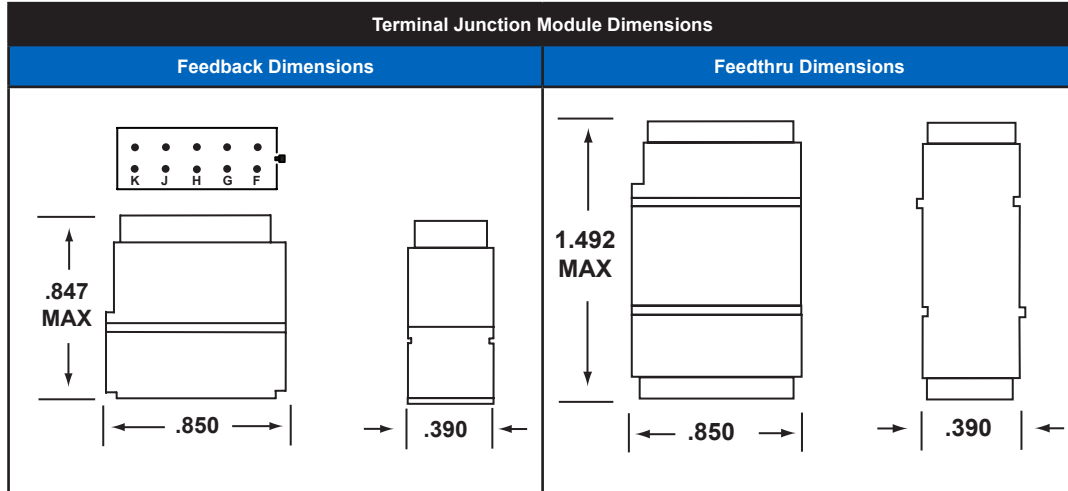


### Operating Range

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

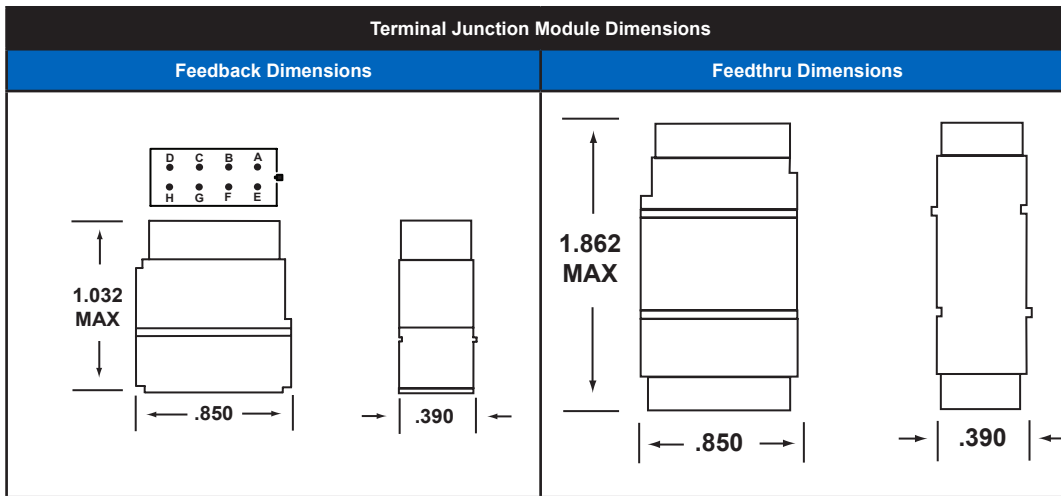
Module Body:  
Polyetherimide per ASTM-D5205

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

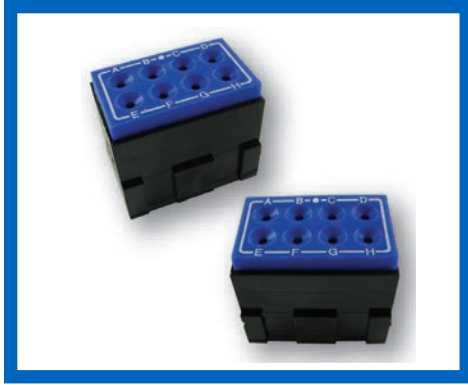


Amphenol Pcd Terminal Junction Modules							
Bussing Config.	Feedback		Feedthru		Contact		
	MIL P/N	APCD P/N	MIL P/N	APCD P/N	QTY*	Size <sup>1</sup>	P/N M39029
	M81714/3-DA1	TJM116701	M81714/8-DA1	TJM216701	8	14/16	/1-102
	M81714/3-DB1	TJM116702	M81714/8-DB1	TJM216702	8	14/16	/1-102
	M81714/3-DB2	TJM116703	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-81714.  
<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

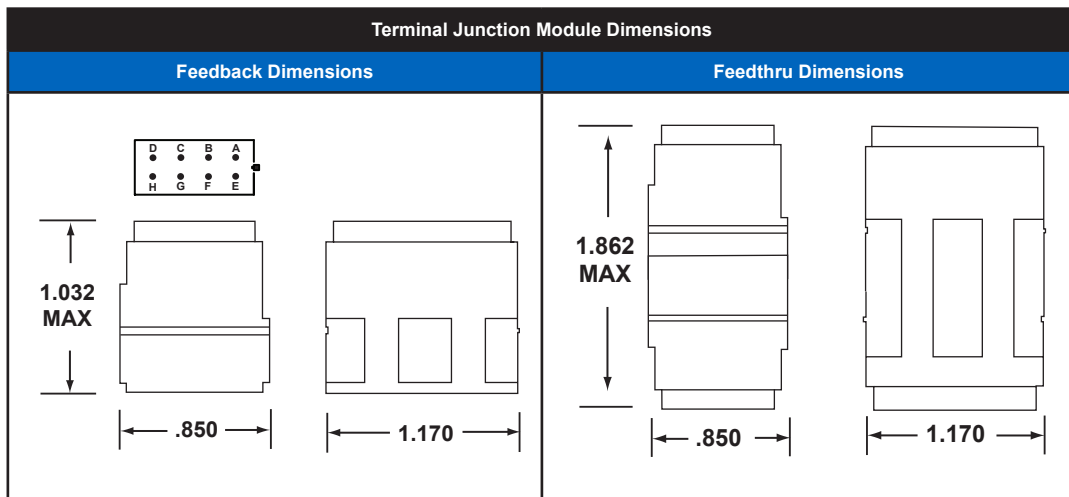
Module Body:  
Polyetherimide per ASTM-D5205

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-81714.  
<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

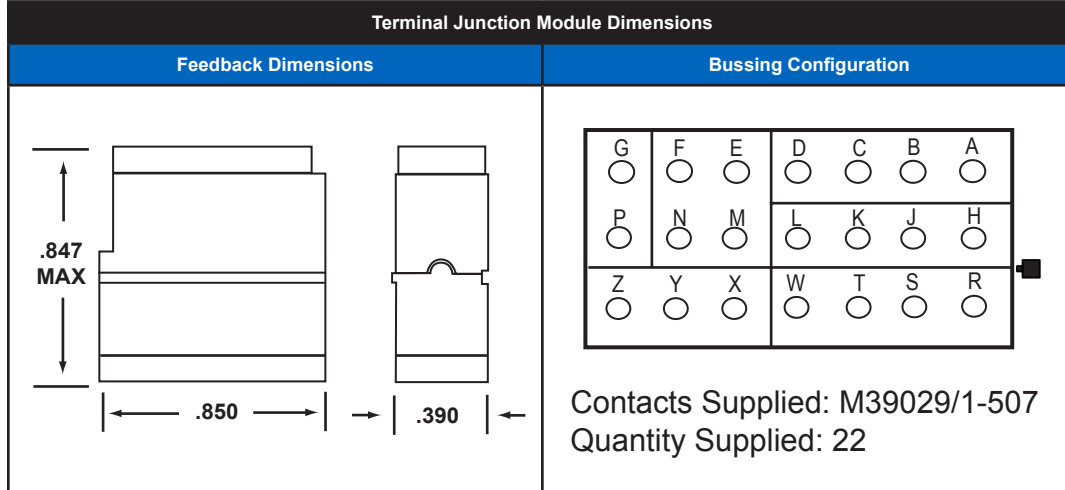
Module Body:  
Polyetherimide per ASTM-D5205

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**

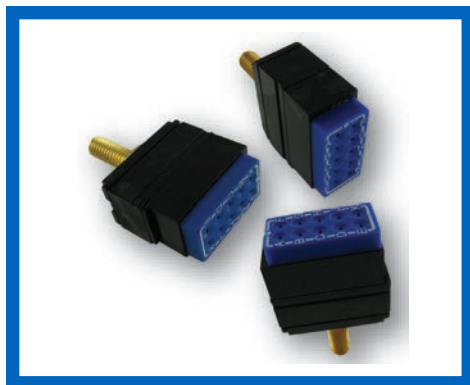
Bussing Config.	Feedback		Bussing Config.	Feedback (Con.)	
	MIL P/N	APCD P/N		MIL P/N	APCD P/N
	M81714/17-D30	TJHD22700		M81714/ 17 8-D38	TJHD22708
	M81714/17 -D31	TJHD22701		M81714/ 17 -D39	TJHD22709
	M81714/ 17 -D32	TJHD22702		M81714/ 17 -D40	TJHD22710
	M81714/ 17 -D33	TJHD22703		M81714/ 17 -D42	TJHD22712
	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

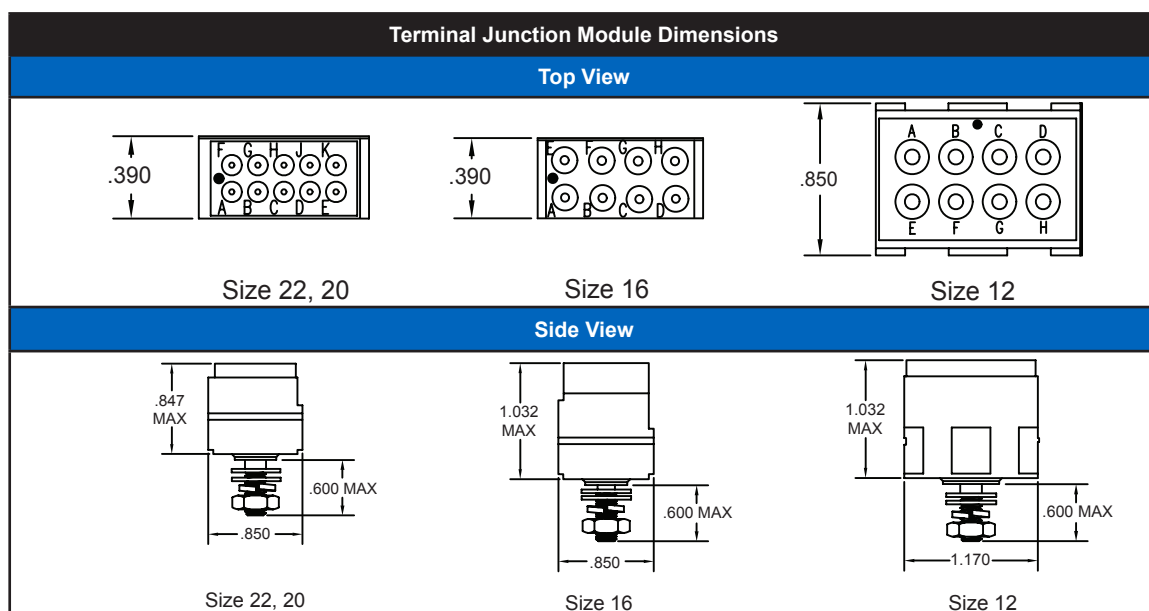
Mounting Stud:  
Copper Alloy, Gold Plated per  
SAE-AMS-2422

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 <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 <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 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 10KΩ 1/2W	1*
	TJE120900	Resistor	10KΩ 1/8W	5*		TJE120918	Resistor	300K 1/2W 10KΩ 1/2W	1*
	TJE120902	Resistor	150KΩ 1/8W	5*		TJE120922	Resistor	4.42K, 3.4K, 3K, 2.75K, 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 100KΩ 1/4W	1 1
	TJE120908	Resistor	2K, 1.6K, 1.3 K, 1K, 750, 1/2W	5		TJE120932	Resistor	1N4007 4.75KΩ 1W	4*
	TJE120909	Resistor	70K, x2, 280K, 500K	4		TJE120935	Resistor	100KΩ 1/4W	5*

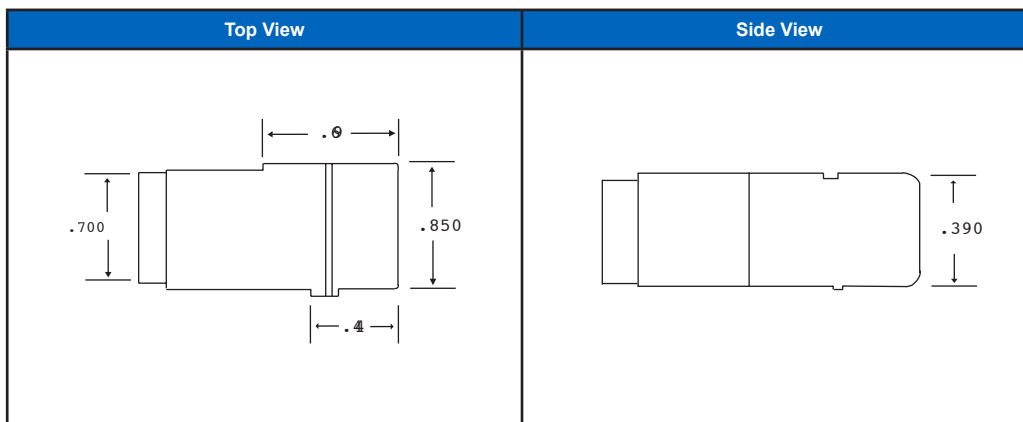
\* With Contacts

# 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 27.1KΩ 1/4 W	2* 2*		TJE120991	Resistor	56Ω 100Ω	1* 2*
	TJE120939	Resistor	200KΩ 1/8W 100K 1/8W	2* 3*		TJE120993	Resistor	39Ω 120Ω	1* 2*
	TJE120941	Diode	JANTX1N5618	1*		TJE120996	Resistor	220Ω 1/4W	2
	TJE120942	Resistor	1K, 220, 100, 10K, 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

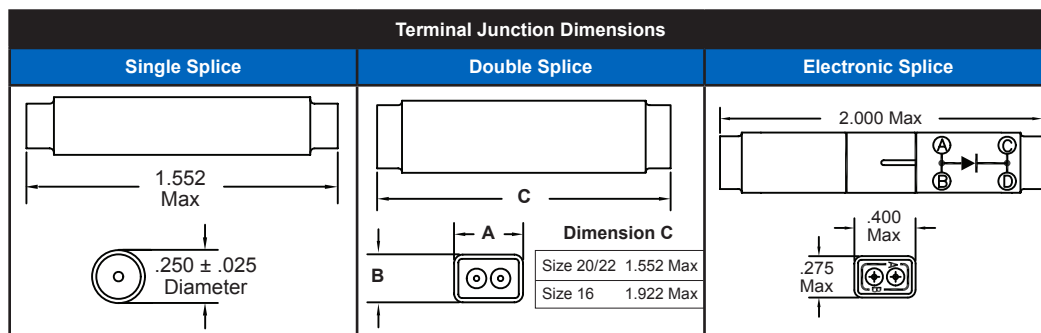
### Product Description

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 <small>*M81714/21-1D001</small>	Diode	JAN1N5618	1*		TJSE20312 <small>*M81714/21-1D003</small>	Diode	JAN1N4148	1*
	TJSE20311 <small>*M81714/21-1D002</small>	Diode	JAN1N5618	1*		TJSE20313 <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 <small>M81714/23-1D001</small>	Fuse	1/16 Amp 125V	1*		TJSE20332 <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 *M81714/23-1D003	Fuse	1/4 Amp 125V	1*		TJSE20340 *M81714/23-1D010	Fuse	2-1/2 Amp 125V	1*
	TJSE20334 *M81714/23-1D004	Fuse	3/8 Amp 125V	1*		TJSE20341 *M81714/23-1D011	Fuse	3 Amp 125V	1*
	TJSE20335 *M81714/23-1D005	Fuse	1/2 Amp 125V	1*		TJSE20342 *M81714/23-1D012	Fuse	3-1/2 Amp 125V	1*
	TJSE20336 *M81714/23-1D006	Fuse	3/4 Amp 125V	1*		TJSE20343 *M81714/23-1D013	Fuse	4 Amp 125V	1*
	TJSE20337 *M81714/23-1D007	Fuse	1 Amp 125V	1*		TJSE20344 *M81714/23-1D014	Fuse	5 Amp 125V	1*
	TJSE20338 *M81714/23-1D008	Fuse	1-1/2 Amp 125 V	1*		TJSE20345 *M81714/23-1D015	Fuse	7 Amp 125V	1*
	TJSE20339 *M81714/23-1D009	Fuse	2 Amp 125V	1*		TJSE20346 *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 1N5244	1* 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 1K $\Omega$ 1/4W	1* 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 1000pF	1* 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 10,000pF	1* 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

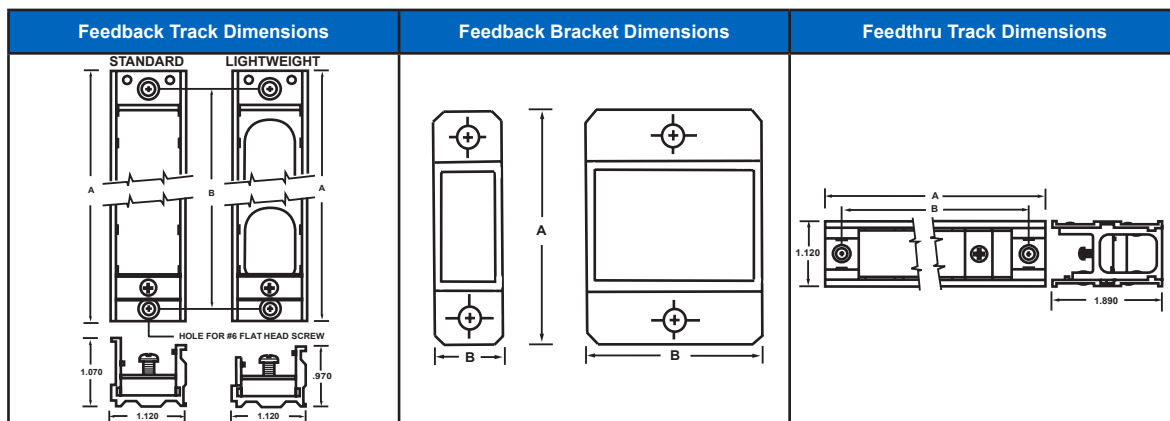
### Materials

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.

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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

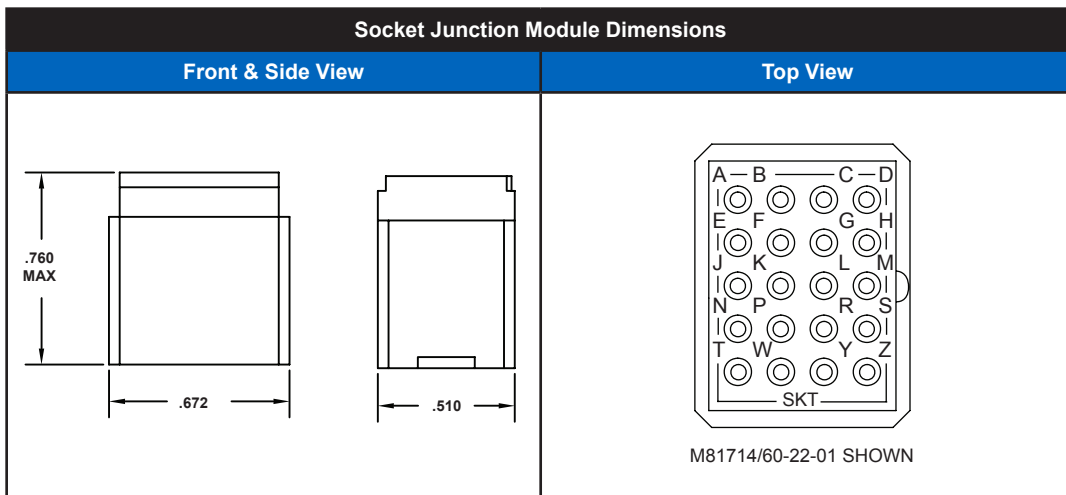
### Materials

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

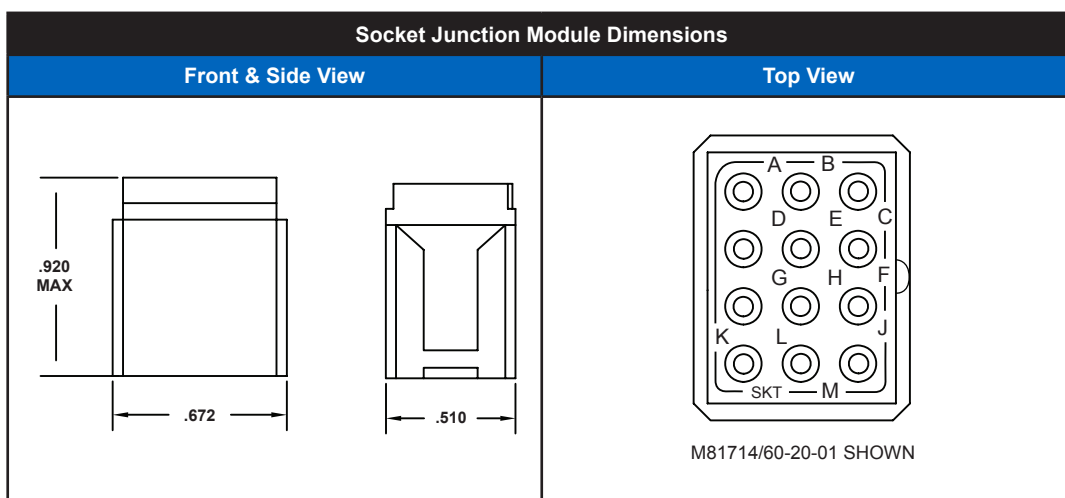


## Operating Range

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

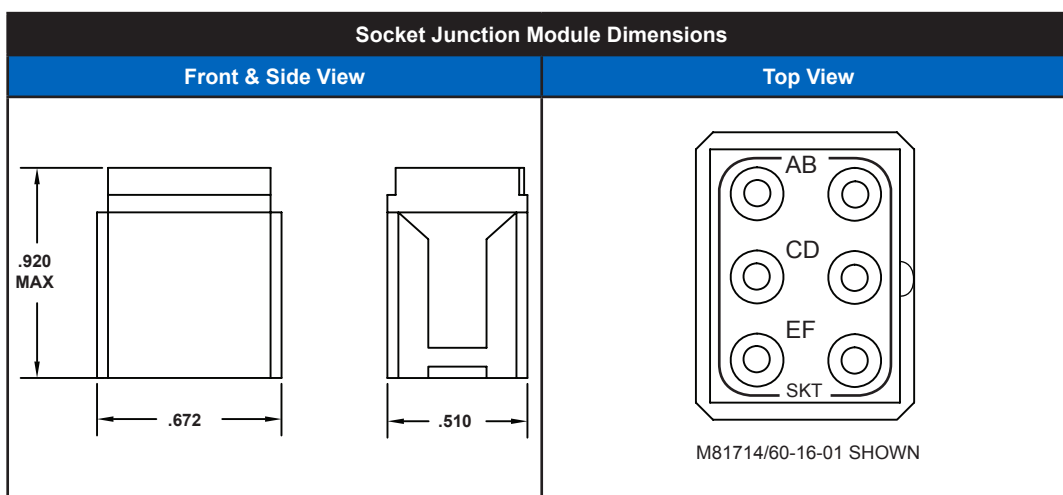
### Materials

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

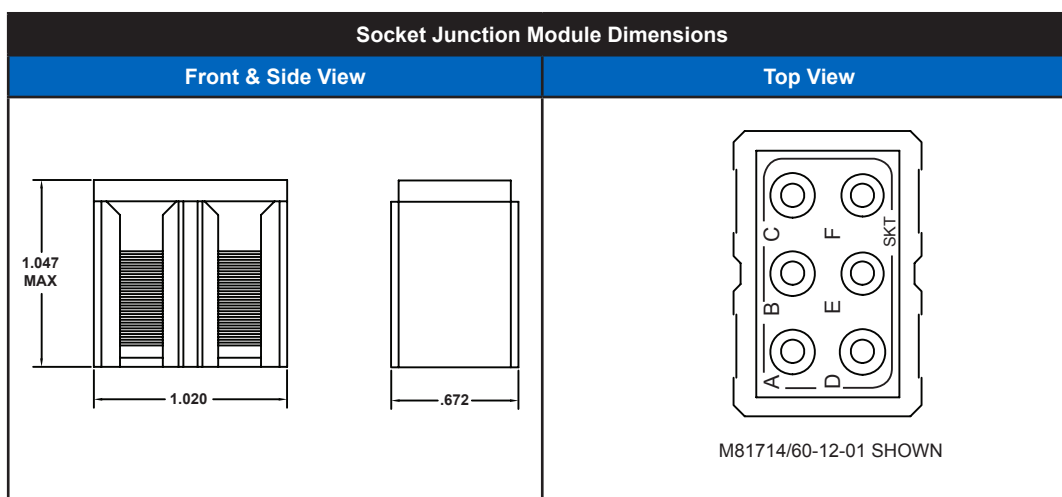


## Operating Range

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-M81714. <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 Two, size 12 & Six, size 16
			2	12	/22-605	
	M81714/61-OY	SJM000800	6	20	/22-192	1 Bus Two, size 16 & Six, size 20
			2	16	/22-193	
	M81714/61-OX	SJM000200	6	16	/22-193	2 Busses One, size 12 & Three, size 16 per Bus
			2	12	/22-605	
	M81714/61-OW	SJM000500	5	22	/22-191	5 Busses 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

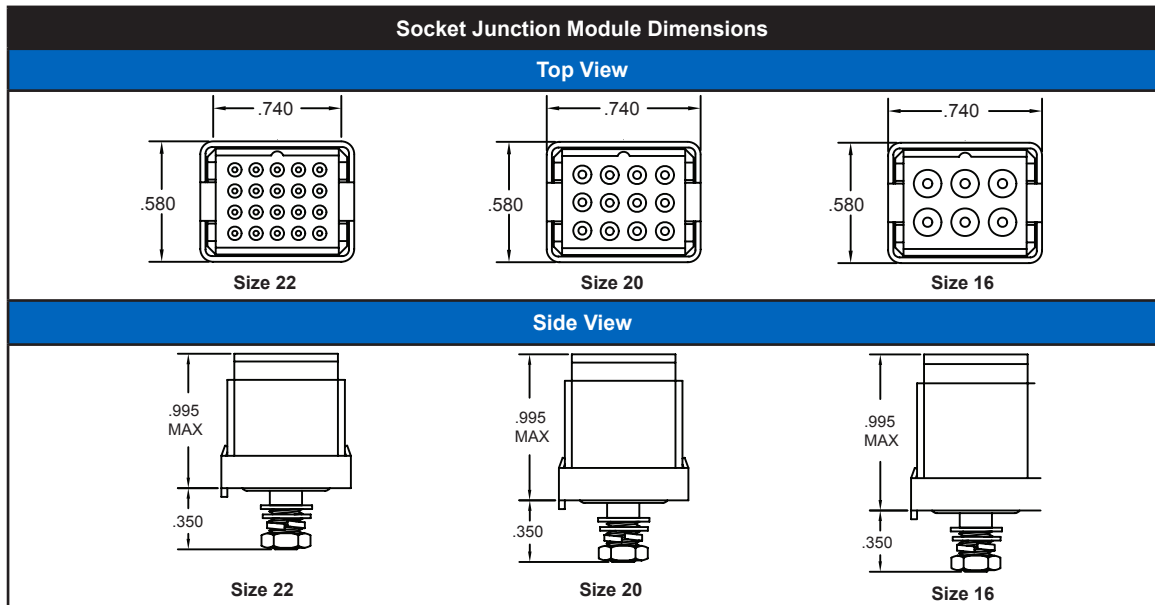
Contact Retainers:  
Stainless Steel

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 3.5.9

### Materials

Module Body:

Polyetherimide per ASTM-D5205

Grommet:

Silicone Blend Elastomer per A-A-59588

Stud/Shell:

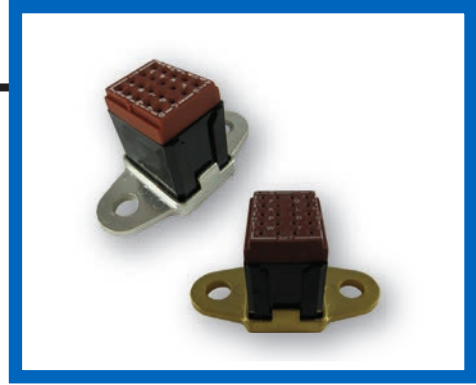
Copper Alloy, Gold Plated per SAE-AMS-2422.  
Tin Plating per ASTM-B545 also available as an alternate

Contact Retainers:

Stainless Steel

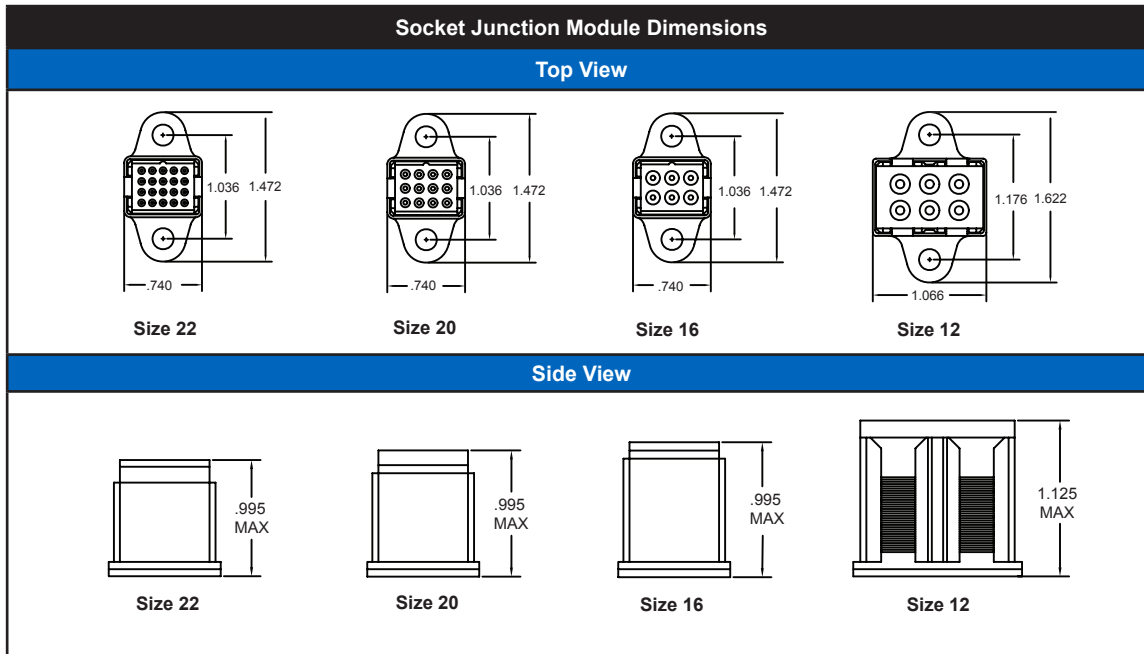
Socket Contacts:

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

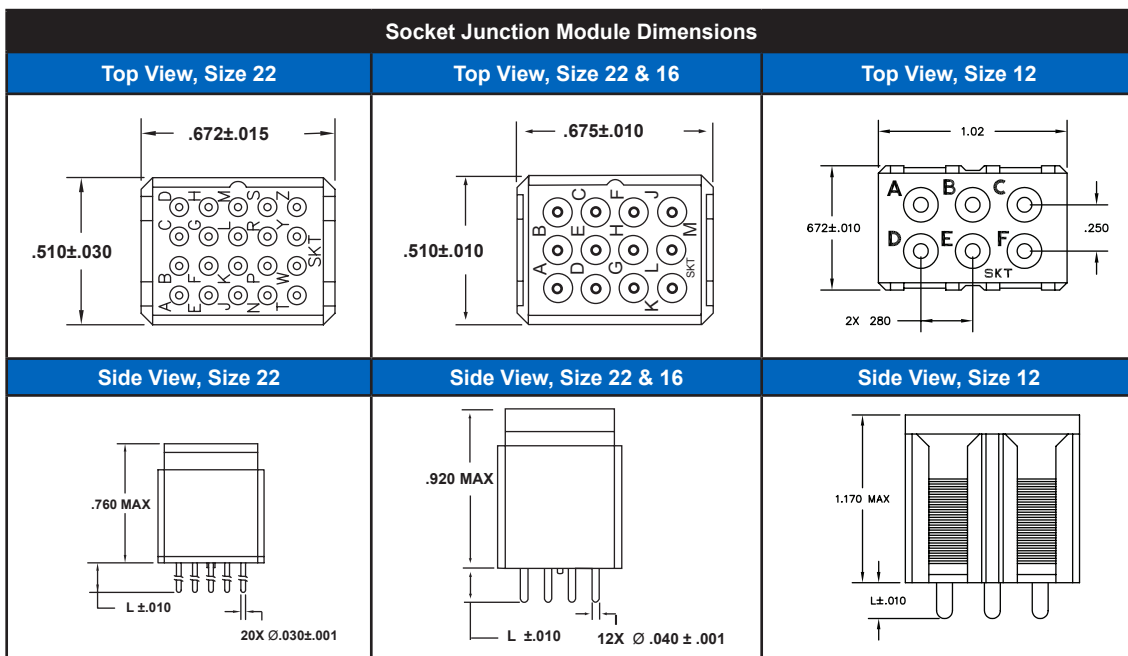
Grommet:  
Silicone Blend Elastomer per  
A-A-59588

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

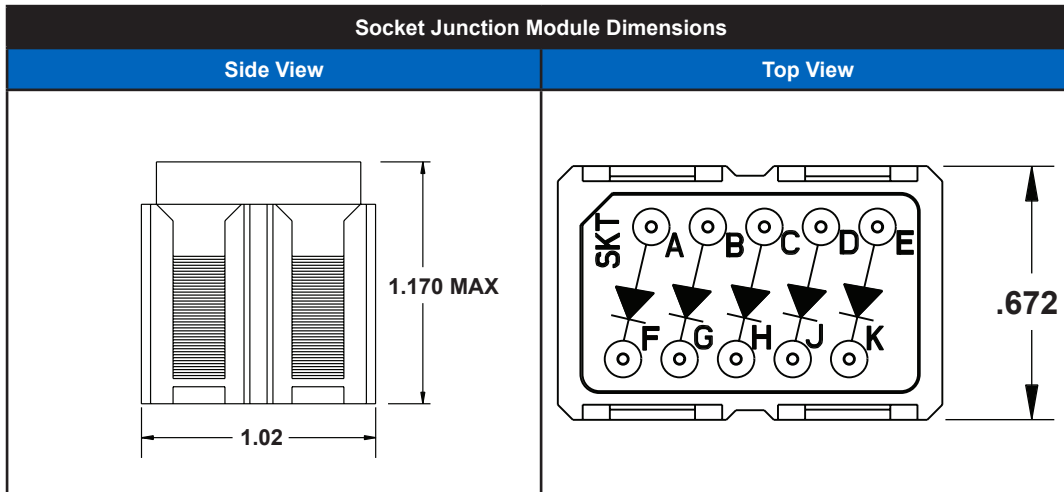
Contact Retainers:  
Stainless Steel

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 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 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.

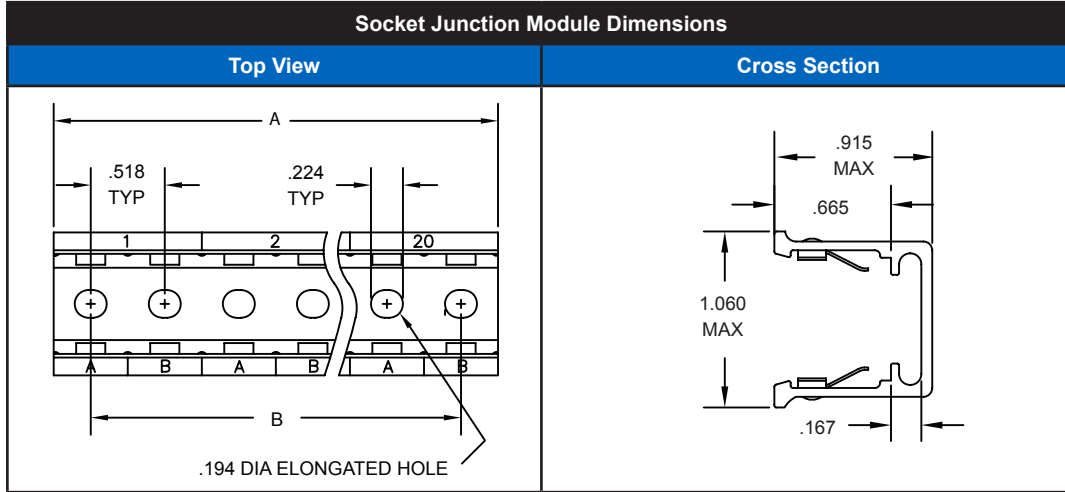
Vibration & Shock:  
Per MIL-T-81714 Paragraph  
3.5.8 and 3.5.9

### Materials

Rail:  
Aluminum Alloy, Black  
Anodized

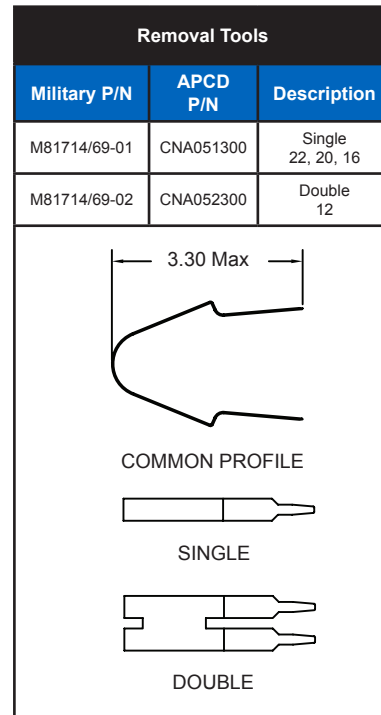
Spring Clips:  
Stainless Steel

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

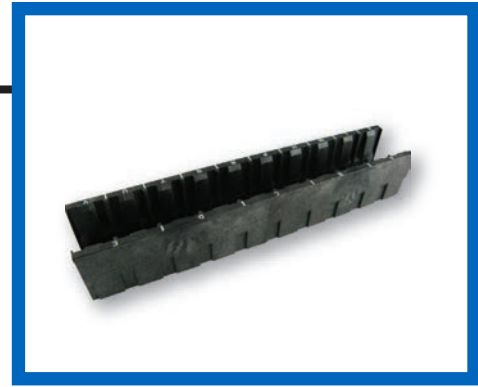
MIL-T-81714/67 Series II Compatible

## Operating Range

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

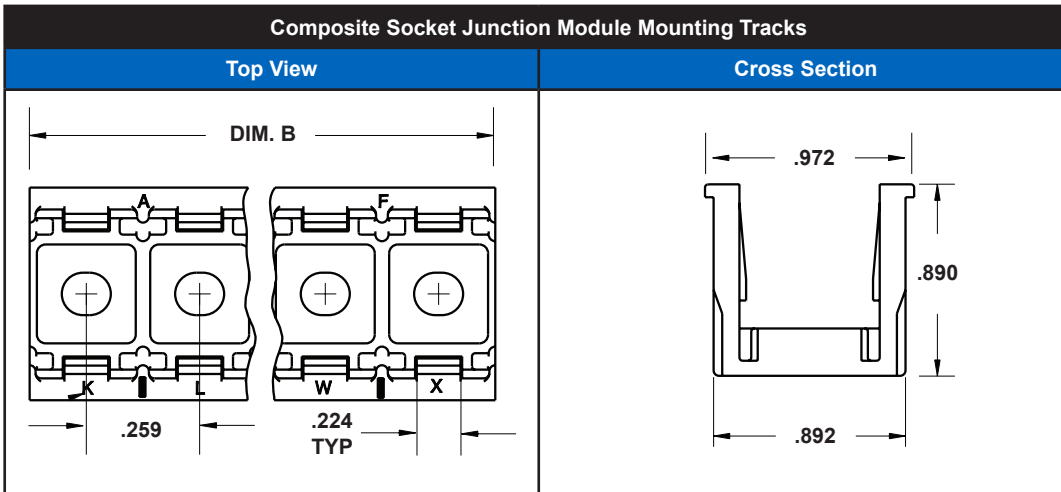
## Materials

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:

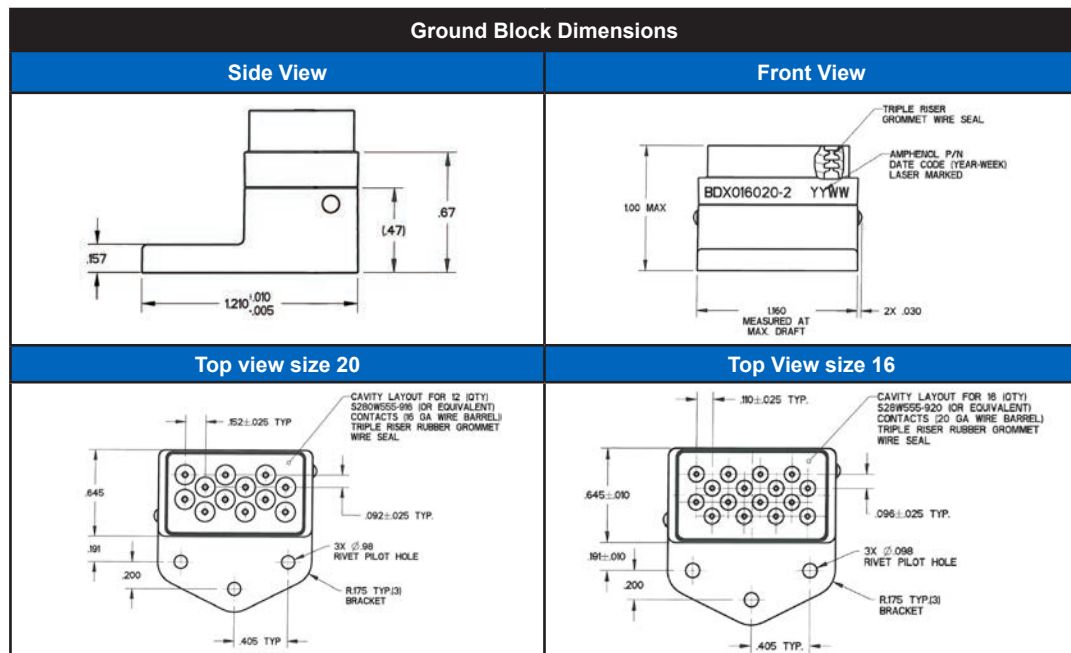
Aluminum A380.0, chromate conversion per MIL-DTL-81706, type 1, class 1A, method C

## 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



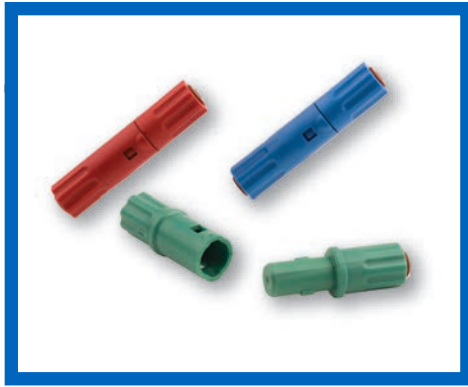
### Receptacles

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] @ 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] @ 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] @ 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] @ 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" [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" [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" [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" [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

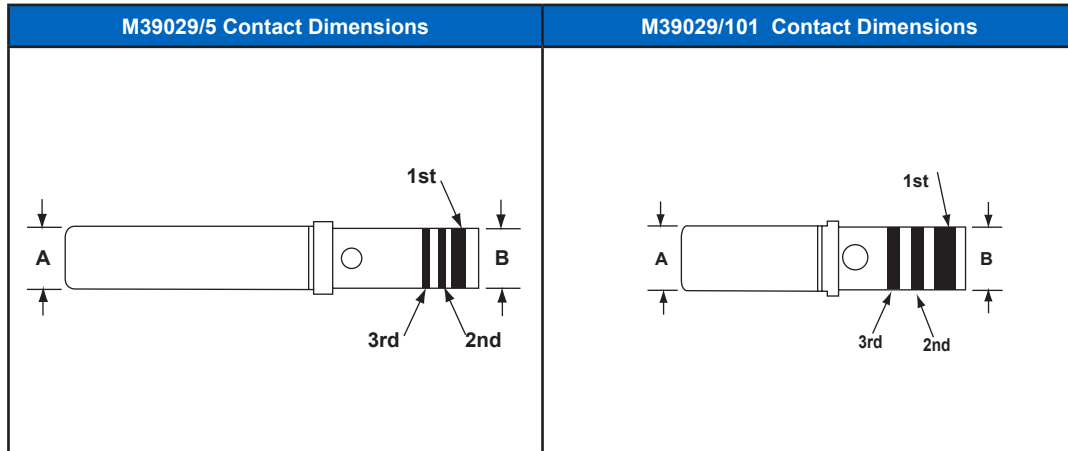
## Performance

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

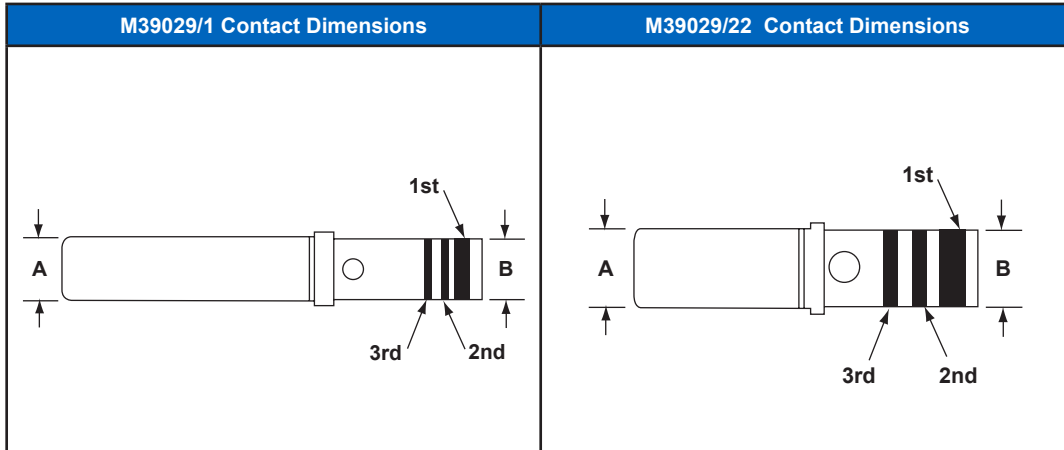
Performance in accordance with  
SAE-AS39209 and related specifications



## 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:

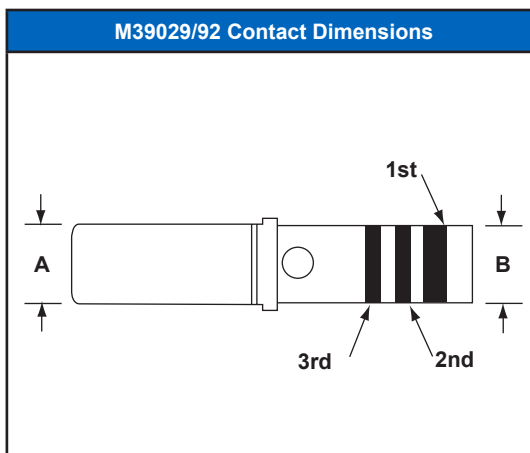
Stainless Steel Passivated

## 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



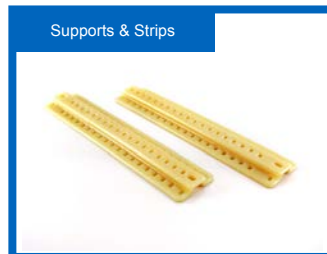
Contact Design Characteristics									
Bin Code	Military P/N	APCD P/N	Pin Size	Wire Size	Color Bands			A (Max.)	B (Max.)
					1st	2nd	3rd		
M39029/92 Contacts									
531	M392029/92-531	CNS115900	22	22	Green	Orange	Brown	.062	.053
532	M392029/92-532	CNS074900	20	20	Green	Orange	Red	.078	.078
533	M392029/92-533	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

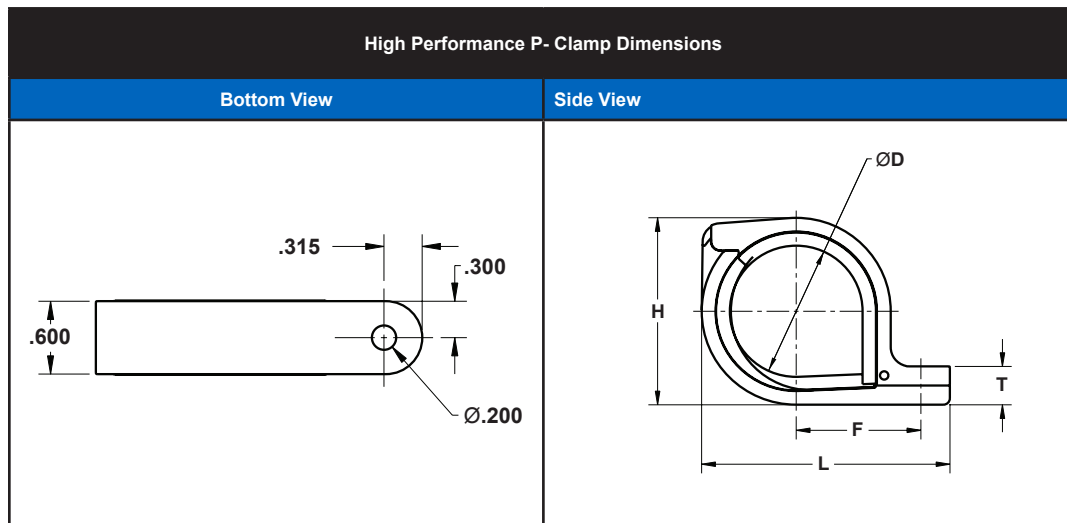
### Performance

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

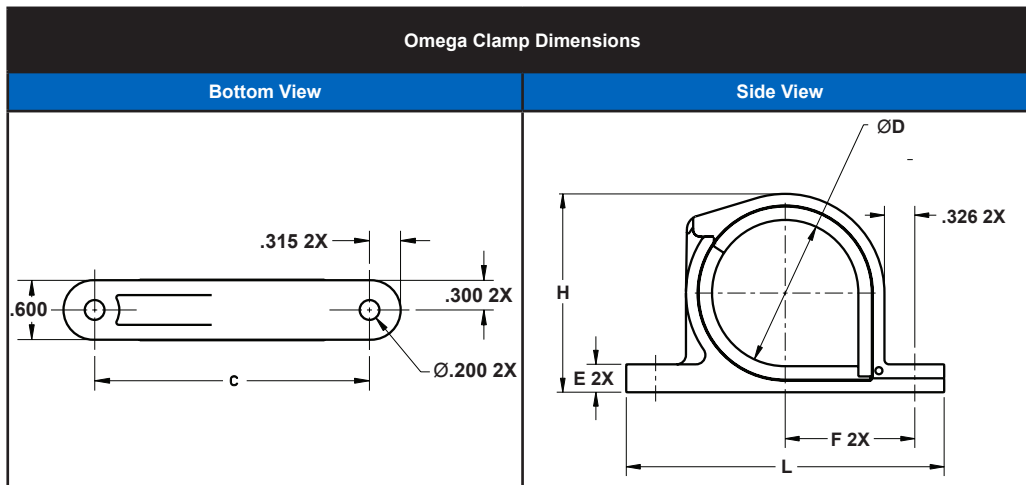
Clamp Base:  
 Polyetheretherketone (PEEK™)  
 Per MIL-P-46183  
 Overmolding:  
 Silicone Rubber per ASTM-D-2000

### 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

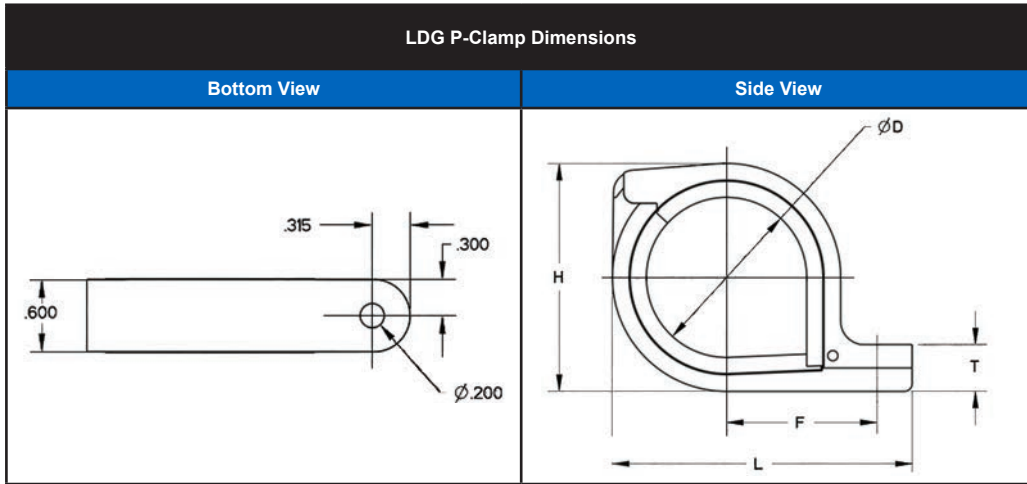
### Performance

#### 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

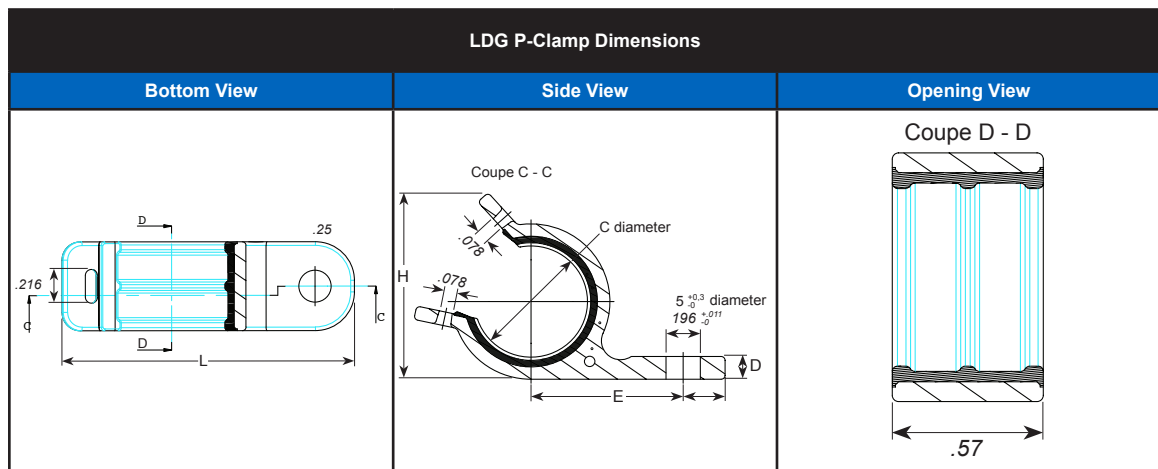
Blue Version:  
Resistant in complete immersion during 96h

### 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

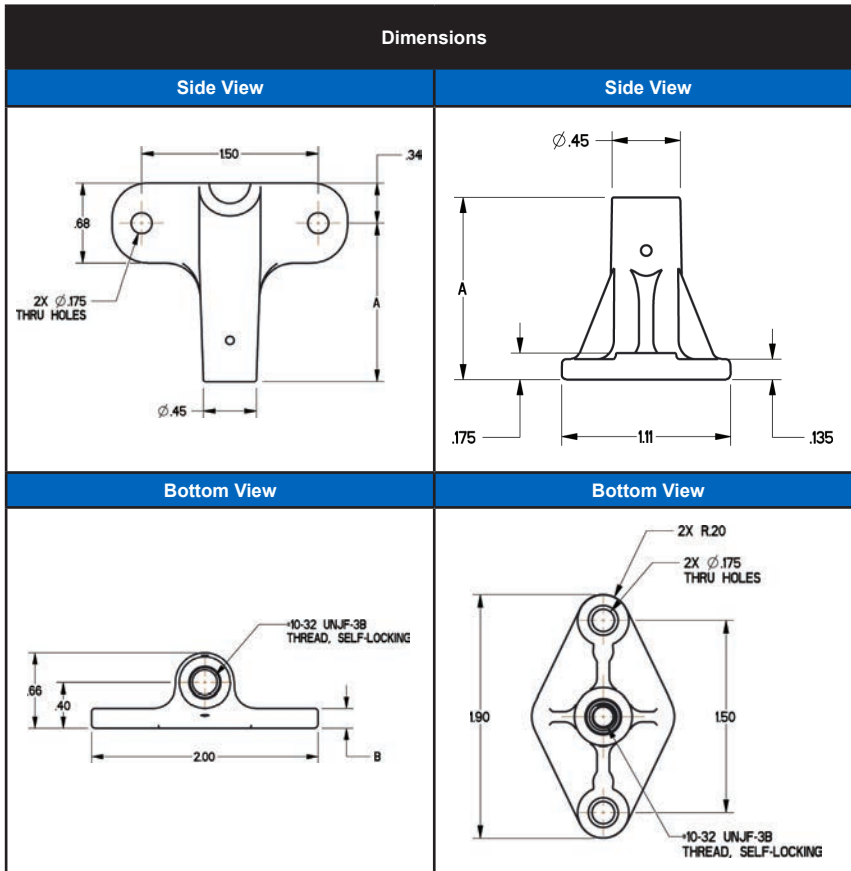


### Features and Benefits

- 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.



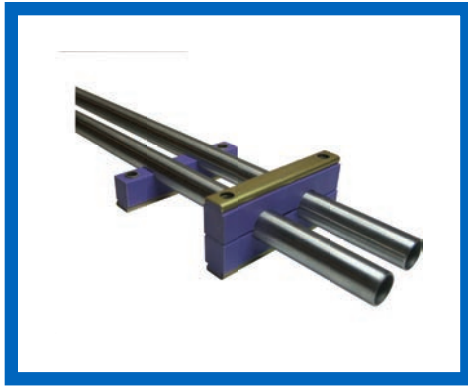
Dimension Chart	
APCD P/N	Height Inch
ALBSTO-051-03	0.30
ALBSTO-051-04	0.40
ALBSTO-051-06	0.60
ALBSTO-051-08	0.80
ALBSTO-051-10	1.00
ALBSTO-051-12	1.20
ALBSTO-051-14	1.40
ALBSTO-051-16	1.60
ALBSTO-051-18	1.80
ALBSTO-051-20	2.00

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

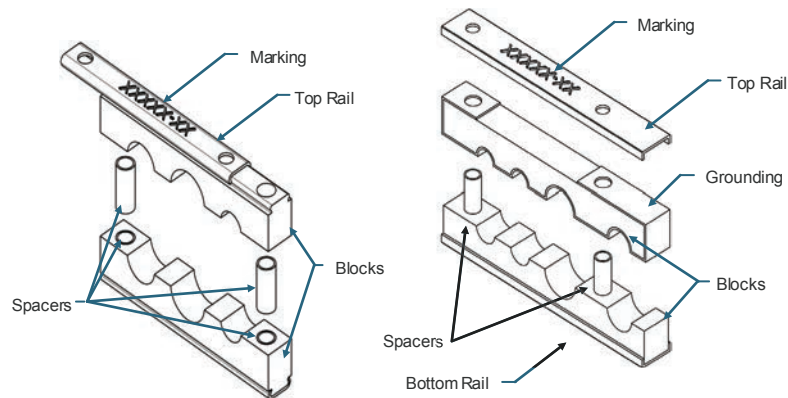


### Features and Benefits

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

# System Attachments

## Wiring Accessories: Stringer and Frame Clips

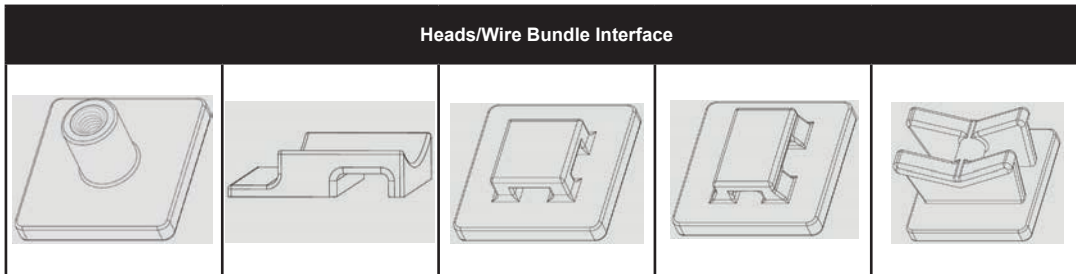
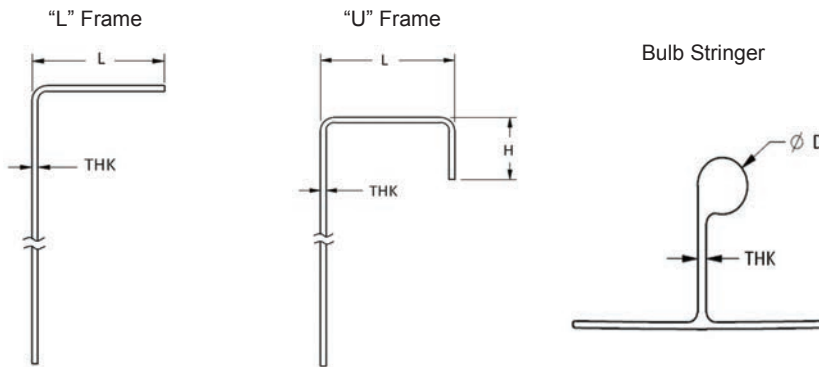
### Features and Benefits

- 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

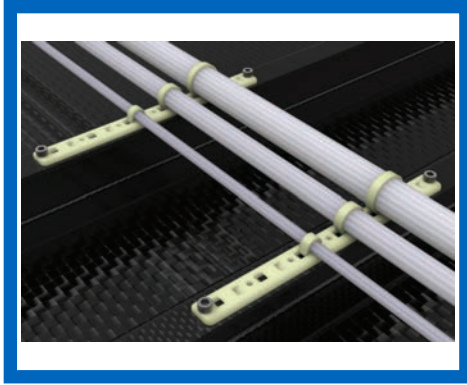
Stringer and Frame Clips are offered in multiple materials and are designed for use in airframe, fuel tank, and engine applications. Available in various standard configurations and sizes, Amphenol Pcd also provides customized clips to help meet specific customer requirements. This combination of customer 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

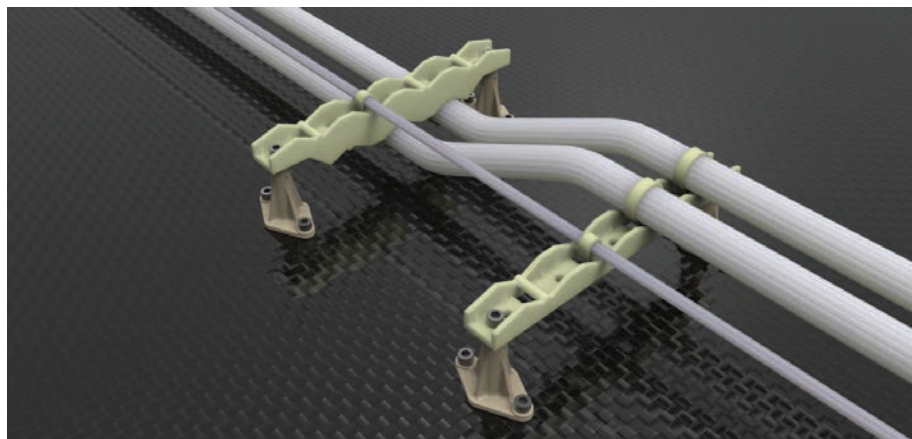
- Simplifies wire bundle installation & maintenance
- Multiple fixing points offer convenience and ease of use
- One-Piece design simplifies installation and inventory management
- New generation of very low profile cable support
- Variety of sizes to accommodate different cable routing requirements
- 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 (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 (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

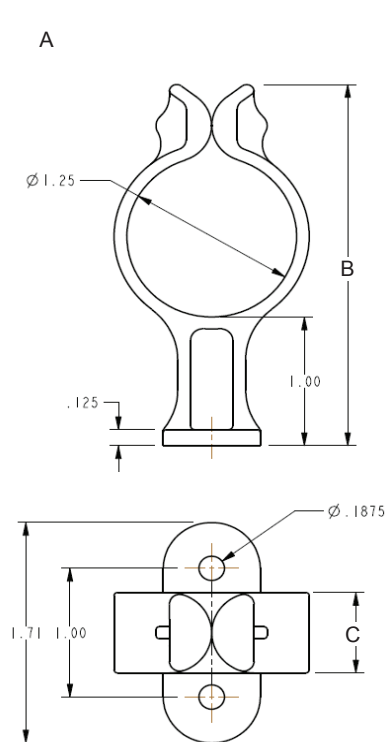
### Features and Benefits

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



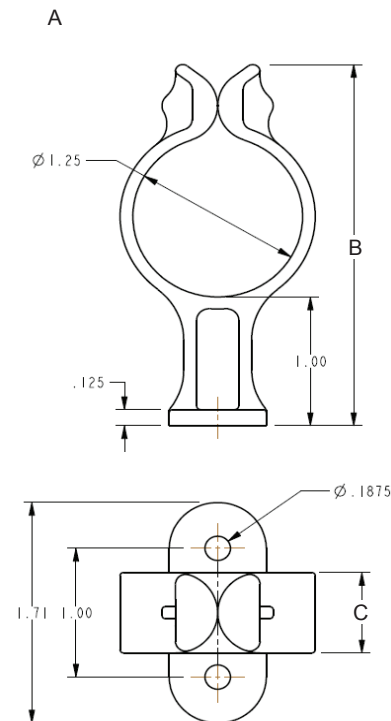
### Product Description

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

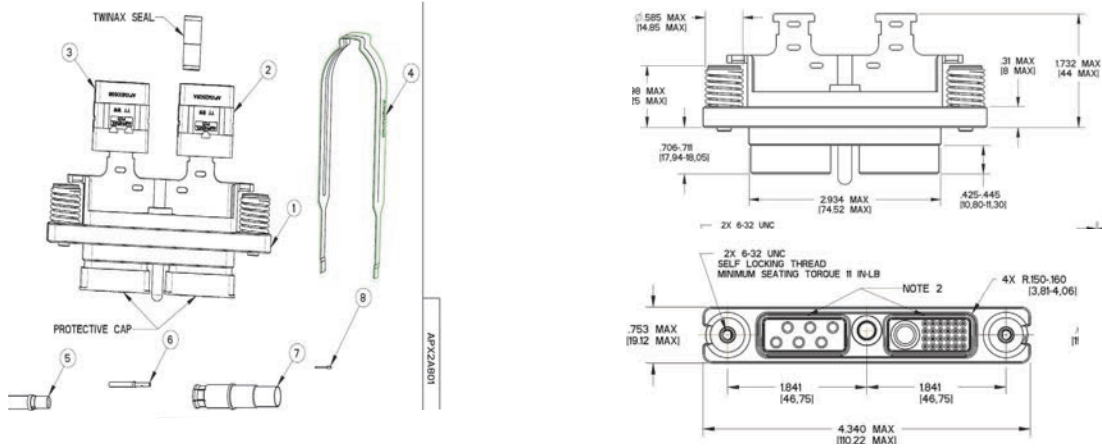
Enables exceptional sealing that improves safety and reliability

### Intuitive and Ergonomic

Smooth, low insertion force to mate connector



# APeX Galley Connector, Rectangular Plug



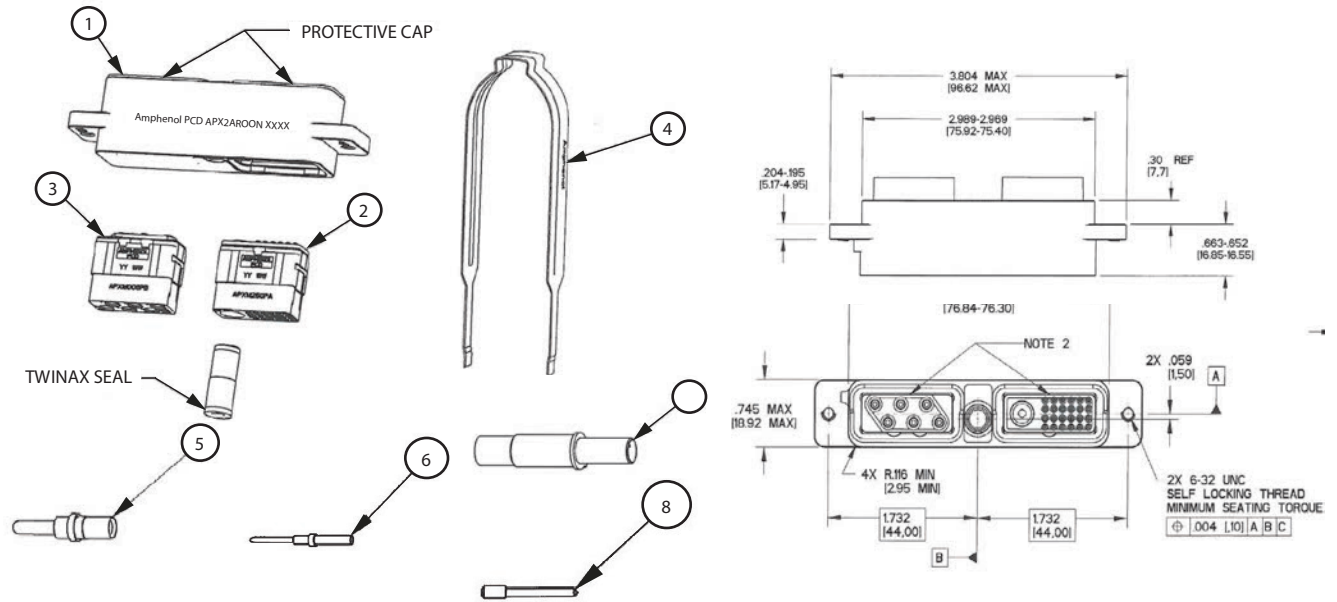
Item	Part	Material
1 Plug shell assembly	Strain relief	PEI thermoplastic 40% carbon fiber
	Retention nut	Stainless steel per AISI 316, passivated
	Male fastener body	Stainless steel per AISI 316, passivated
	Insert retention clip	Copper alloy per ASTM B194
	Float -mounted eyelet	Stainless steel per AISI 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 25 socket insert with Twinax seal 6 socket 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 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 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 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 25 pin insert with 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 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

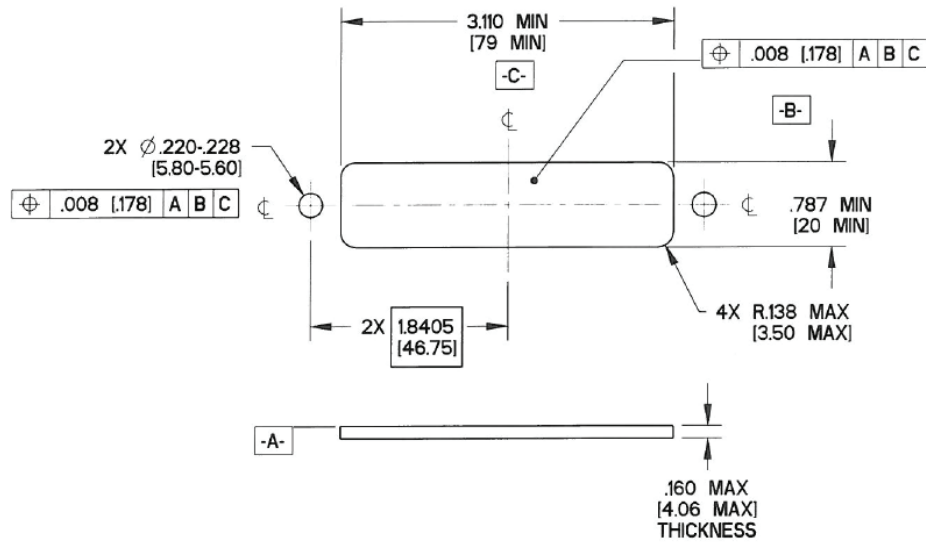
## Receptacle Part Numbers and Description

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

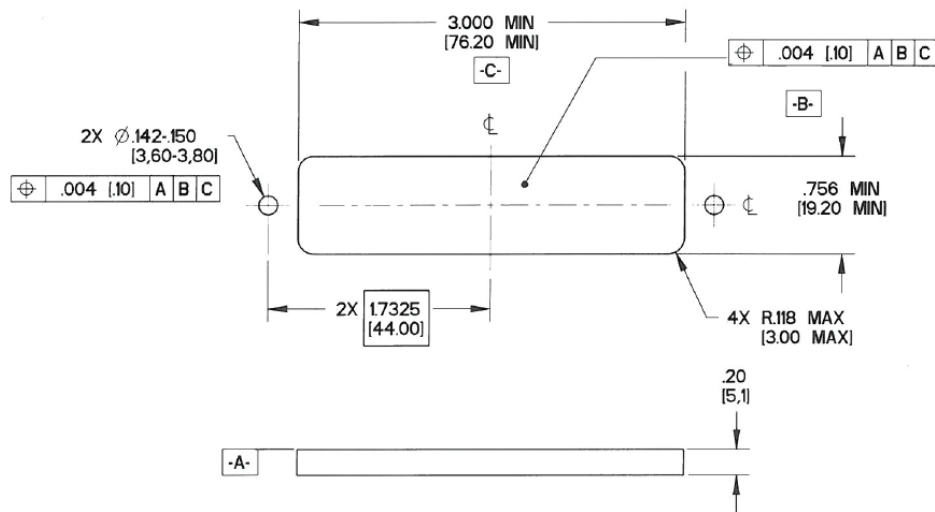
# APeX Galley Connector, Rectangular

## 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: M22520/2-01; Outer Body M22Metal Band Material520/5-01	Center Contacts: Daniels K709; 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**

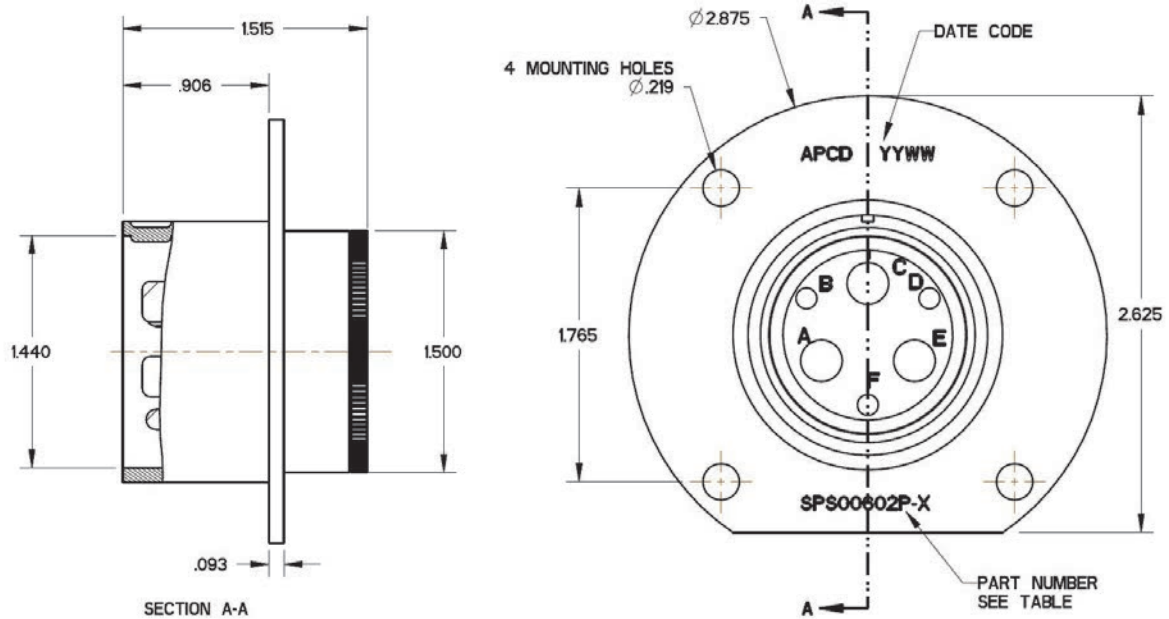
Designed with a key feature to enable quick and simple, blind-mating

#### **Intuitive and Ergonomic**

Smooth, low insertion force to mate connector

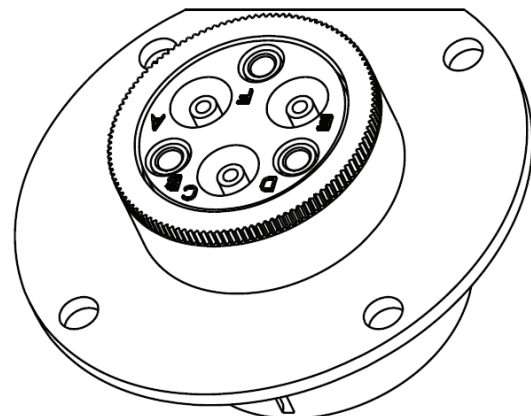
# APeX Galley Connector, Circular

Panel Mount, Plug-6 Position, Crimp Termination



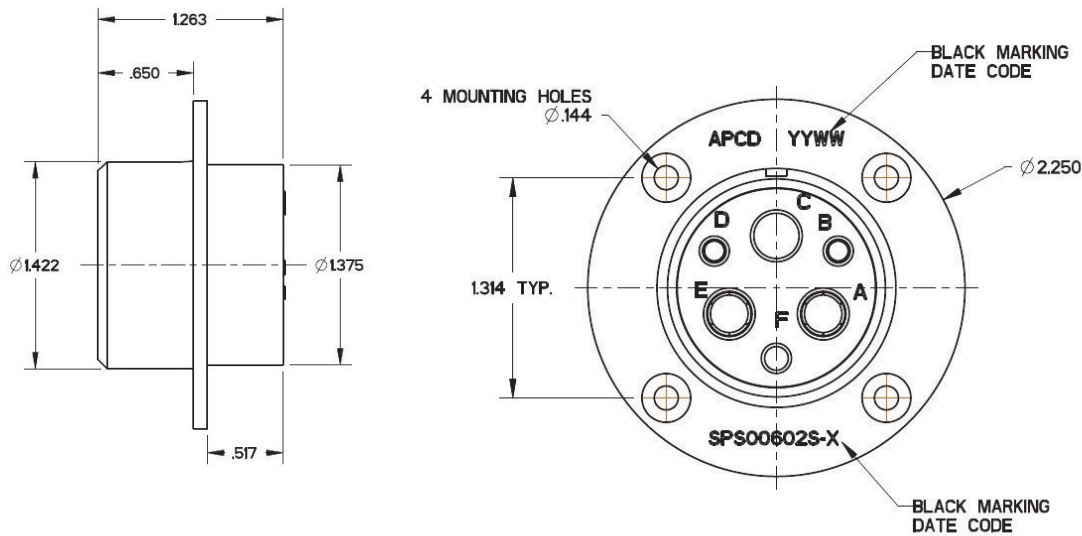
Part Number	Contact Qty	Contact Gauge	Crimp Well Wire Awg	Contact Part No.
SPS00602P-1	1	10	10	CNP910100-SZ
	2	10	14/16	CNP910100-SZ
	3	4	14/16	CNP904100-SZ
SPS00602P-2	2	10	10	CNP910100-SZ
	1	10	14/16	CNP910200-SZ
	3	4	14/16	CNP904100-SZ
SPS00602P-3	3	10	10	CNP910100-SZ
	3	4	14/16	CNP904100-SZ
SPS00602P-4	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



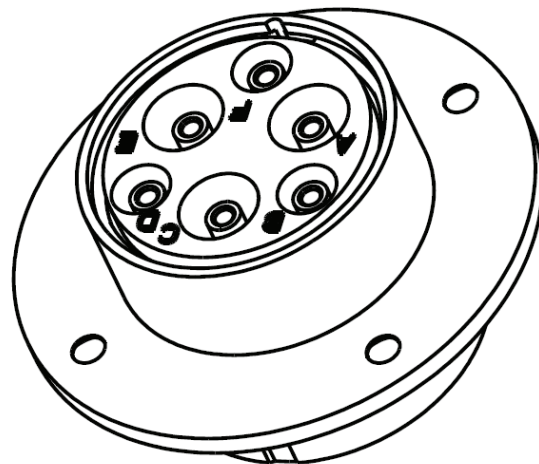
# APeX Galley Connector, Circular

Panel Mount, Receptacle-6 Position, Crimp Termination



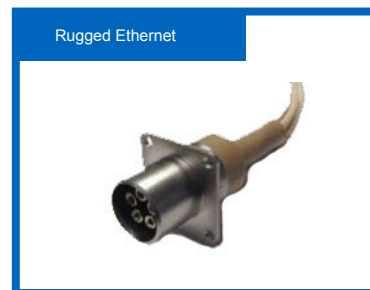
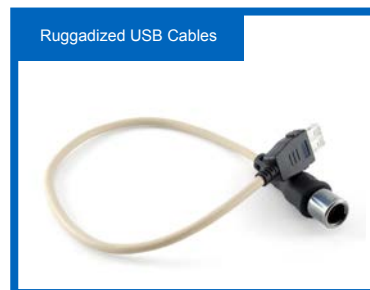
Part Number	Contact Qty	Contact Gauge	Crimp Well Wire Awg	Contact Part No.
SPS00602S-1	1	10	10	CNS910100-SZ
	2	10	14/16	CNS910100-SZ
	3	4	14/16	CNS904100-SZ
SPS00602S-2	2	10	10	CNS910100-SZ
	1	10	14/16	CNS910200-SZ
	3	4	14/16	CNS904100-SZ
SPS00602S-3	3	10	10	CNS910100-SZ
	3	4	14/16	CNS904100-SZ
SPS00602S-4	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

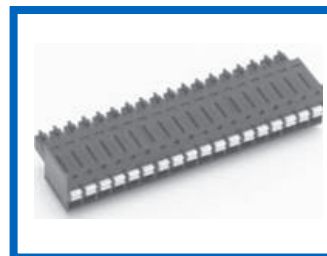
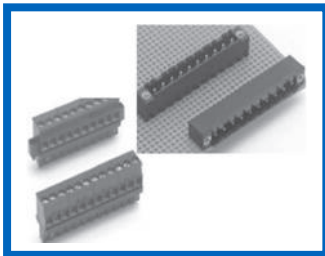
## Industrial Terminal Blocks

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

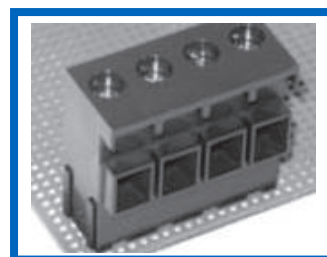
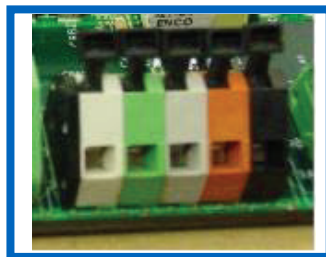
- Wide selection of variations, configurations, and options
- Plugs are available in Cage Clamp and Spring Clamp with spacing's from 2.5mm to 10.16mm and multiple wire entry options
- Vertical, Horizontal, Multi-Tiered, Open/Closed, SMT options for Headers 125°C standard temperature range, but high temperature 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

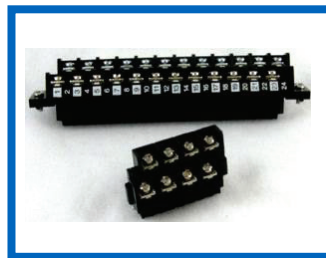
Tel +86 755-81738000

[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



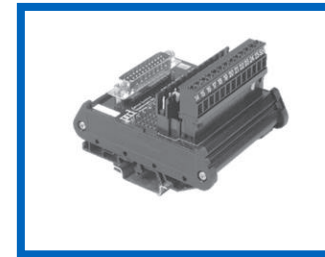
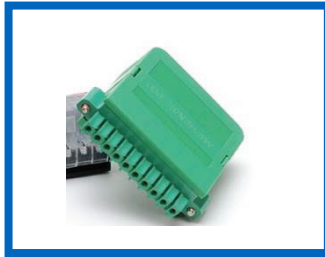


# Amphenol Pcd Shenzhen

## 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

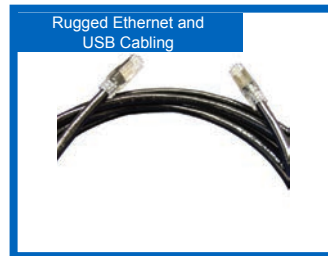
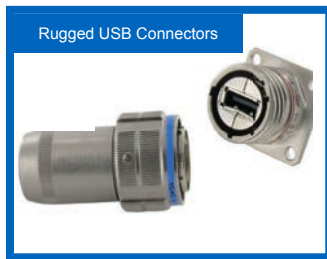
Tel. +33 (0)4 50 89 2800

[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

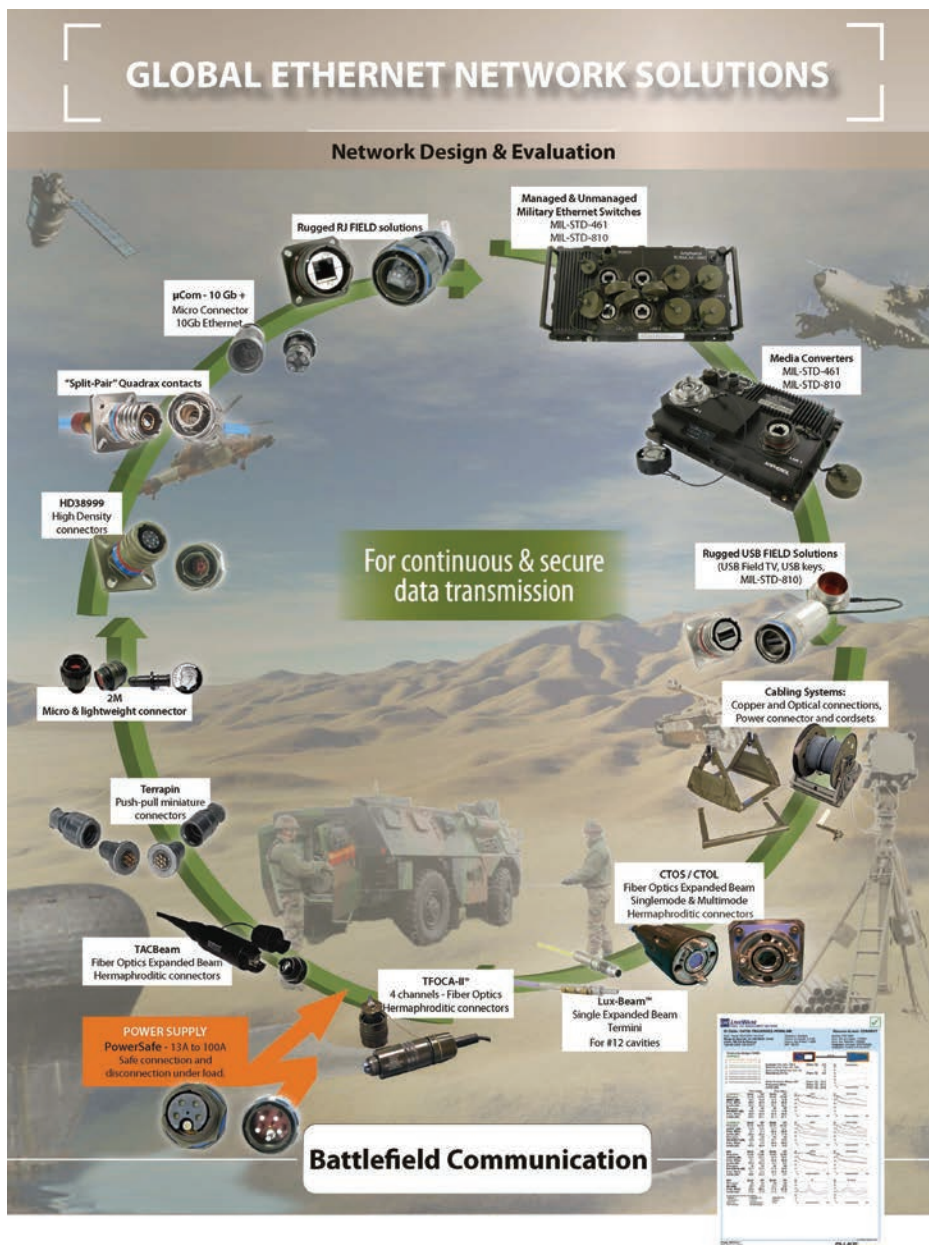
## Amphenol Socapex Global Network Solutions For Harsh Environments

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

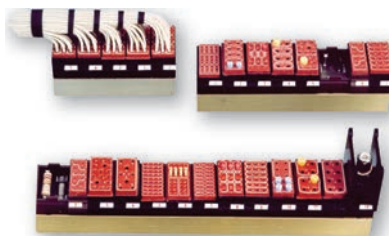
The SIM (Modular Interconnect System), is a modular, multi-contact, multifunctional rectangular connector.

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.

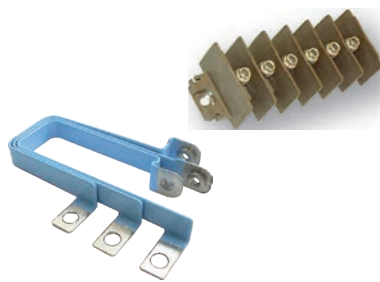
### European Specification Junction Modules



### 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

In-Line Junctions for Copper Cable Contacts



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

Industrial In-Line Junctions



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

Nuclear In-Line Junction (Current Generation)



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

In-Line Junctions for Nuclear Environment (New Generation)



- 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

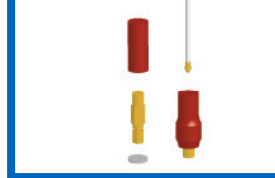
#### Nuclear Module (Pending)



- 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

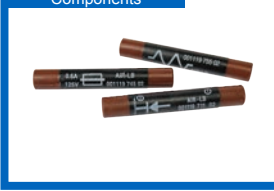
PCB 1100 Modules



- 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

## Military, Aerospace & Industrial Connectors

### Amphenol Limited

Thanet Way, Whitstable Kent CT

3JF, United Kingdom

Tel. +1 (44) 1227-773-200

[www.amphenol.co.uk](http://www.amphenol.co.uk)

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

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**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.

