



## Welcome to the World of AirBorn Interconnect Solutions

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AirBorn has been manufacturing high reliability interconnect systems for more than 45 years with leading-edge, innovative technology that is more reliable and better-performing than practically all other alternatives.

Our advanced technologies, experienced design support, incomparable lead times and personalized customer service and support provide customers with complete solutions to a vast array of highly specialized design requirements in diverse markets and applications.

You will find in this catalog technical drawings and specification information that will help you solve your interconnection needs from the design stage through production specification.

The products in this catalog are organized by the AirBorn part number assigned to them.

Each connector part number identifies five elements:

- AirBorn Series
- Body
- Size (number of contacts)
- Contact Type
- Hardware Type

Each catalog page shows the choices available for each of these elements. By selecting one option from any category on the page, you can build a set of connectors to meet your requirements.

If you do not find a particular connector size or option, please contact AirBorn for further assistance. AirBorn can manufacture special configurations for your exact specifications.

***When everything matters, go AirBorn.***

[www.AirBorn.com](http://www.AirBorn.com)

### **AirBorn International LTD**

Mercury House, Station Road  
Edenbridge. Kent. TN8 6HL  
United Kingdom

Phone: +44 (0)1732 864930  
E-mail: [cs@airbornint.com](mailto:cs@airbornint.com)

### **AirBorn**

4321 AirBorn Drive  
Addison, TX 75001-0519  
United States

Phone: (972) 931-3200  
Fax: (972) 931-9305  
E-mail: [info@airborn.com](mailto:info@airborn.com)

### **AirBorn**

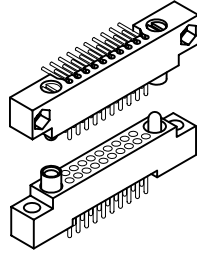
3500 AirBorn Circle  
Georgetown, TX 78626  
United States

Phone: (512) 863-5585  
Fax: (512) 863-8259  
E-mail: [info@airborn.com](mailto:info@airborn.com)

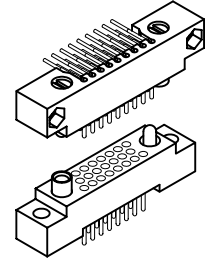
**"R" SERIES - .075"**  
**MIL-C-55302**

## Daughterboard to Motherboard or Chassis

Right angle plug mating to  
straight receptacle.

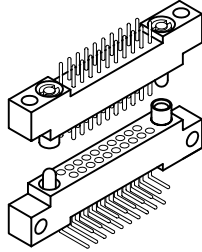


**2 Row**  
Sizes: 10 thru 100  
Page: R-9

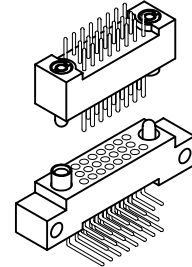


**3 Row**  
Sizes: 11 thru 206  
Page: R-21

Right angle receptacle mating to  
straight plug.

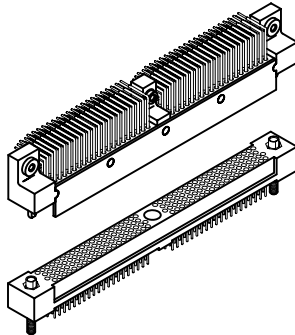


**2 Row**  
Sizes: 10 thru 100  
Page: R-11

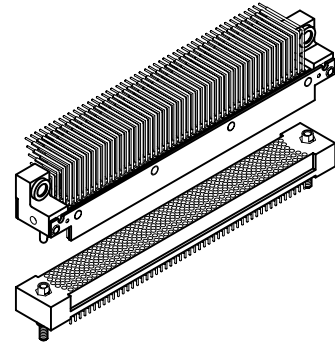


**3 Row**  
Sizes: 11 thru 206  
Page: R-23

Right angle plug mating to  
straight receptacle.

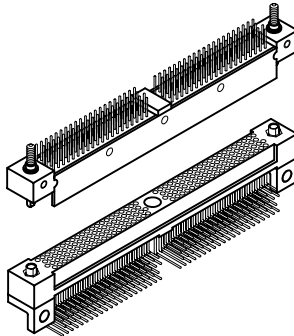


**4 Row**  
Sizes: 86 thru 404  
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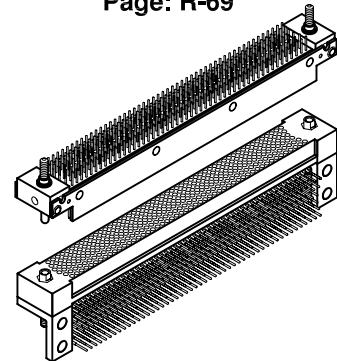


**6 Row**  
Sizes: 162 thru 402  
Page: R-59  
Sizes: 448 & 604  
Page: R-69

Right angle receptacle  
mating to straight plug.



**4 Row**  
Sizes: 86 thru 404  
Page: R-45

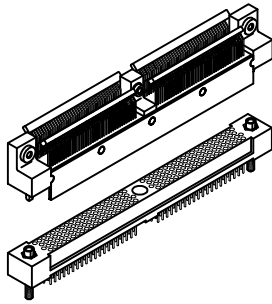


**6 Row**  
Sizes: 162 thru 402  
Page: R-61  
Sizes: 448 & 604  
Page: R-71

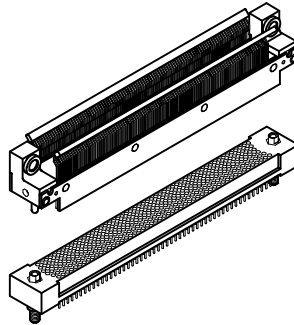


## Daughterboard to Motherboard or Chassis

Surface mount plug  
mating to straight receptacle.



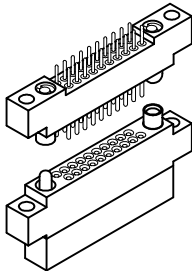
**4 Row**  
Sizes: 86 thru 404  
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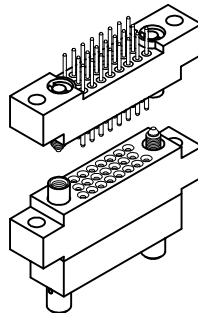
**6 Row**  
Sizes: 162 thru 402  
Page: R-63  
Sizes: 448 & 604  
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## Cable or Board mating to Crimp Removable

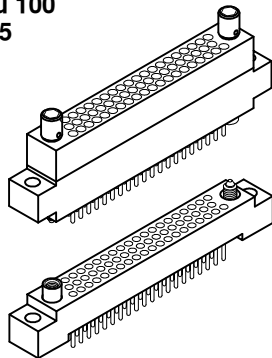
Straight plug mating to  
crimp removable receptacle.



**2 Row**  
Sizes: 10 thru 100  
Page: R-15

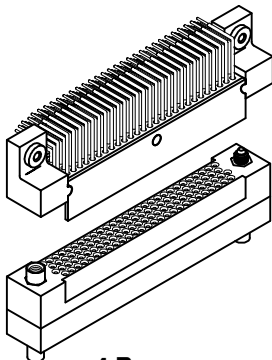


**3 Row**  
Sizes: 11 thru 80  
Page: R-27



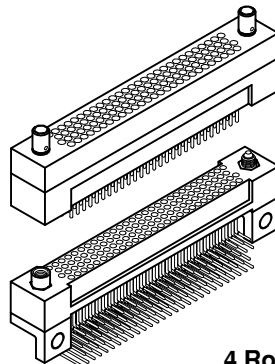
**3 Row**  
Sizes: 11 thru 80  
Page: R-31

Crimp removable plug mating to  
straight receptacle



**4 Row**  
Sizes: 86 & 110  
Page: R-49

Straight plug mating to  
crimp removable receptacle.

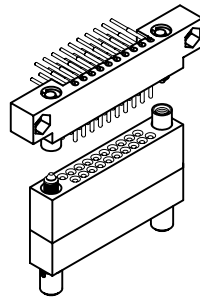


Crimp removable plug mating  
to right angle receptacle.

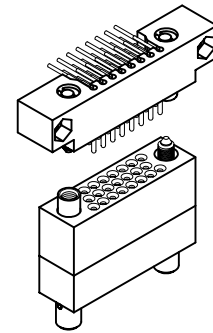
**4 Row**  
Sizes: 86 & 110  
Page: R-51



Right angle plug mating to crimp removable receptacle.

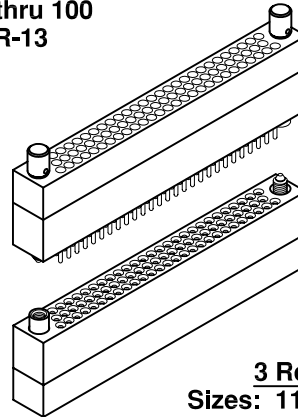


**2 Row**  
Sizes: 10 thru 100  
Page: R-13



**3 Row**  
Sizes: 11 thru 80  
Page: R-25

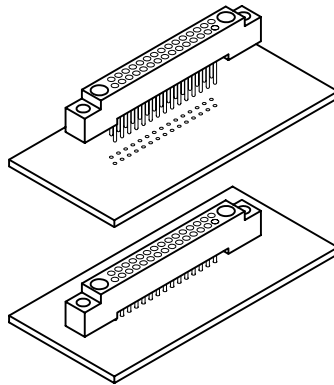
Crimp removable plug mating to crimp removable receptacle.



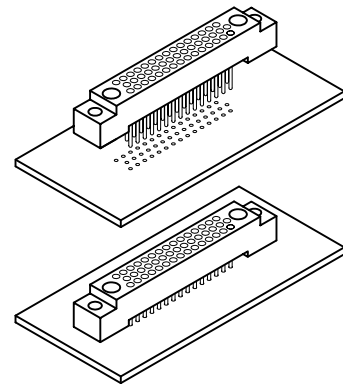
**3 Row**  
Sizes: 11 thru 80  
Page: R-29

### PC Board Stackable

Plated thru hole stackable or connector saver.

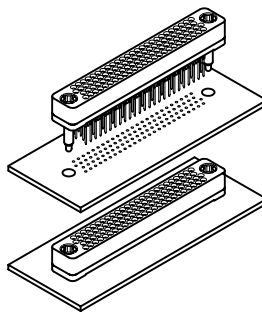


**2 Row**  
Sizes: 10 thru 100  
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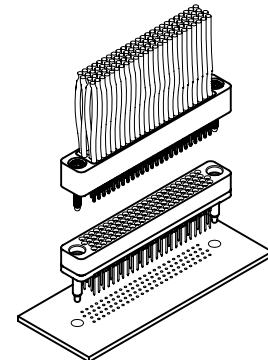


**3 Row**  
Sizes: 11 thru 206  
Page: R-34

Compliant pin (press fit) stackable.



**4 Row**  
Sizes: 28 thru 300  
Page: R-82



**4 Row**  
Sizes: 28 thru 152  
Page: R-85

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## "R" Series

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RM222, RM242 Receptacle, straight, with or without mounting ears
- R-11 RM212, RM232 Plug, straight, with or without mounting ears  
RM262, RM282 Receptacle, right angle, with or without mounting ears
- R-13 RM252, RM272 Plug, right angle, with or without mounting ears  
RM222, RM242 Receptacle, straight, crimp removable, with or without mounting ears
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RM222, RM242 Receptacle, straight, crimp removable, with or without mounting ears
- R-18 RM222, RM242 Receptacle, straight, stackable or connector saver
- R-18.1 RA2 Receptacle, straight with or without potting well or mounting ears
- R-19 RM252, RM272 Board layout - plug, right angle  
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- R-21 RM352, RM372 Plug, right angle with or without mounting ears  
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- R-23 RM312, RM332 Plug, straight, with or without mounting ears  
RM362, RM382 Receptacle, right angle, with or without mounting ears
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RM322, RM342 Receptacle, straight, crimp removable, with or without mounting ears
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RM322, RM342 Receptacle, straight, crimp removable, with or without mounting ears
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RM322, RM342 Receptacle, straight, crimp removable, with or without mounting ears
- R-31 RM312, RM332 Plug, straight, crimp removable, with or without mounting ears  
RM322, RM342 Receptacle, straight, with or without mounting ears
- R-33 RA3 Plug, straight, with or without potting well or mounting ears
- R-33.2 RA3 Receptacle, straight, with or without potting well or mounting ears
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RM462 Receptacle, right angle, with mounting brackets
- R-47 RM412 Plug, surface mount, with mounting ears  
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- R-49 RM412 Plug, right angle, with mounting ears  
RM422 Receptacle, straight, crimp removable, without mounting ears

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	RM462	Receptacle, right angle, with mounting ears
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R-55	RM412	Board layout - plug, straddle mount SMT, with mounting ears
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R-57	RM4	Polarization chart - guide hardware
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R-61	RM632	Plug, straight, with mounting ears
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R-63	RM632	Plug, surface mount, with mounting ears
	RM642	Receptacle, straight, with mounting ears
R-65	RM672	Board layout - plug, right angle
	RM632	Board layout - plug, straight
R-66	RM682	Board layout - receptacle, right angle
	RM642	Board layout - receptacle, straight
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R-80	RC422, RC442	Performance, Stackable Compliant Pin Connectors
R-81	RC422, RC442	Receptacle, standard and low profile
R-82	RC422, RC442	Part number build-up
R-82.1	RC4C2	Plug, with potting well, stranded wire
R-82.2	RC4C2	Part number build-up
R-83	RC422, RC442	Typical applications
R-83.1	RC4C2	Press fit stackable with cable mate
R-84	RC422, RC442	Board layout

## Specifications

### Materials and Finishes \*

<b>Pin Contacts:</b>	BeCu, per ASTM-B196, ASTM B 197/B 197M-, or brass alloy per ASTM B 16/B 16M or ASTM-B134
<b>Socket Contacts:</b>	BeCu per ASTM-B194 and/or ASTM-B196, ASTM B 197/B 197M-, or brass per ASTM B 16/B 16M or ASTM-B134
<b>Contact Finish:</b>	Gold plate per ASTM B 488-, SAE AMS 2422, or localized finish per MIL-C-55302
<b>Solder:</b>	Sn/Pb Alloy - 63% Tin, 37% Lead composition (☒). SAC305 - 96.5% Tin, 3.0% Silver, 0.5% Copper composition.
<b>Molded Insulators:</b>	Glass filled polyphenylene sulfide per MIL-M-24519, Type GST-40F
<b>Jackscrews:</b>	Stainless steel per ASTM A 582/A582M-, Passivated per ASTM-A967, SAE AMS-QQ-P-35
<b>Jacksockets:</b>	Stainless steel per ASTM A 582/A582M-, Passivated per ASTM-A967, SAE AMS-QQ-P-35
<b>Jackscrew Knobs:</b>	Stainless steel per ASTM A 582/A582M-, Passivated per ASTM-A967, SAE AMS-QQ-P-35
<b>Guide Pins, Guide Sockets:</b>	Stainless steel per ASTM A 582/A582M-, Passivated per ASTM-A967, SAE AMS-QQ-P-35
<b>Guide Sockets, Polarized "D" type:</b>	BeCu per ASTM-B196, ASTM B 197/B 197M-, Nickel plated per SAE AMS-QQ-N-290
<b>Connector Markings:</b>	Contact numbers are stamped on the side of the connector. Numbers are stamped on the low-numbered side only on 2-row and 3-row right angle connectors
<b>Tolerances:</b>	Unless otherwise specified: Fractions = $\pm 1/64$ " Decimals = $\pm .010$ " Angles = $\pm 5^\circ$

Note: AirBorn can manufacture special configurations for your exact specifications.

\* = Reference the above listed specifications or an equivalent industry standard when applicable

☒ Symbolizes options that are not ROHS compliant.





## Performance Reference MIL-C-55302

<b>Contact Rating:</b>	3-amperes (2 amperes for .016 diameter)
<b>Solderability:</b>	Terminals (except wire wrap <sup>®</sup> , crimp and stackables) tested in accordance with MIL-STD-202, Method 208
<b>Wire Size:</b>	Stranded #26 AWG
<b>Operating Temperature:</b>	-65° to +125° C or -85° to +257° F

<u>Category:</u>	<u>Requirements:</u>	<u>Test Method Per:</u> <u>SAE AS 13441</u>
<b>Test Voltage:</b>	750 V, RMS, 60 Hz @ sea level 250 V, RMS, 60 Hz @ 70,000 feet	#3001
<b>Insulation Resistance:</b>	5,000 megohms minimum @ 500 VDC	#3003
<b>Durability:</b>	500 connector mating cycles	
<b>Vibration:</b>	Mated connectors, Test condition III	#2005
<b>Salt Spray:</b>	Mated connectors, Test condition B	#1001
<b>Shock:</b>	Mated connectors, Test condition G	#2004
<b>Humidity:</b>	Test Type II, except steps 7A and 7B not required	#1002
<b>Temperature Cycling:</b>	Mated connectors, Test condition A	#1003
<b>Contact Resistance:</b>	.015 ohms max (interface measurement) @ 3 amperes	#3004
<b>Connector Mating Force:</b>	2.50 oz. x number of contacts average	
<b>Outgassing:</b>	The entire connector assembly shall have maximum total mass loss (TML) of 1.0 percent of the original specimen mass and shall have a maximum volatile condensable material (VCM) content of 0.1 percent of the original specimen mass.	
<b>Sizes 50 and larger:</b>	Upon engagement, center area of mating faces may remain open .010" to .025" due to slight flexing of molding. Vibration or shock should provide complete closure.	
<b>Guides and Jacks:</b>	If location of pin or socket contacts is reversed, location of male and female guides or jacks is also reversed; except when using "D" shaped polarized guides.  When polarized positions are changed, apply Loctite <sup>®</sup> 242-12 or equivalent to threads.	

## Part Number Description

Each part number consists of at least five elements: series, body description, size (number of contacts), type of contacts, and type of hardware. A sixth element is added whenever special modifications or options are available.

Each catalog page shows the choices available for each of these elements. By selecting one option from each category on the page, you can build a set of connectors to meet your requirements.

Each element is identified by a combination of letters and/or numbers in fixed field lengths, and separated by a hyphen (-). Each space must be filled in to complete the number. When the size, for example, is less than 100, indicate as 010, 080, etc.

### **Series:**

This will always be a two letter designator, and will identify the connector series. All .075" connectors begin with the letter "R". The second letter designates the various styles of .075" connectors.

### **Body:**

Each digit of the Body Designator will normally identify (1) the number of rows, (2) the style of body, and (3) the body materials. The three digit number to identify the body consists of one digit from each group.

### **Size:**

The size is determined by the number of contacts in the connector, and is an integral part of the part number. Order only sizes shown on the catalog page unless otherwise noted.

### **Contacts:**

Each page also identifies all contact options for a given connector. The first two digits designate the type of contacts and terminations; the third digit designates the plating option.

### **Hardware:**

The hardware designator is four digits; two for style of hardware and two for polarization or wiring instruction. Follow the choices for each connector.

### **Special Instructions (Options):**

Special instructions are referenced by a three digit number added to the end of the part number. The last three digits are included only when applicable. AirBorn, Inc. will provide individual code numbers as needed.

### **Note:**

Each page is as comprehensive as possible. However, if you do not find a particular connector size or option, please contact the factory for further assistance.

Symbolizes options that are not RoHS compliant.

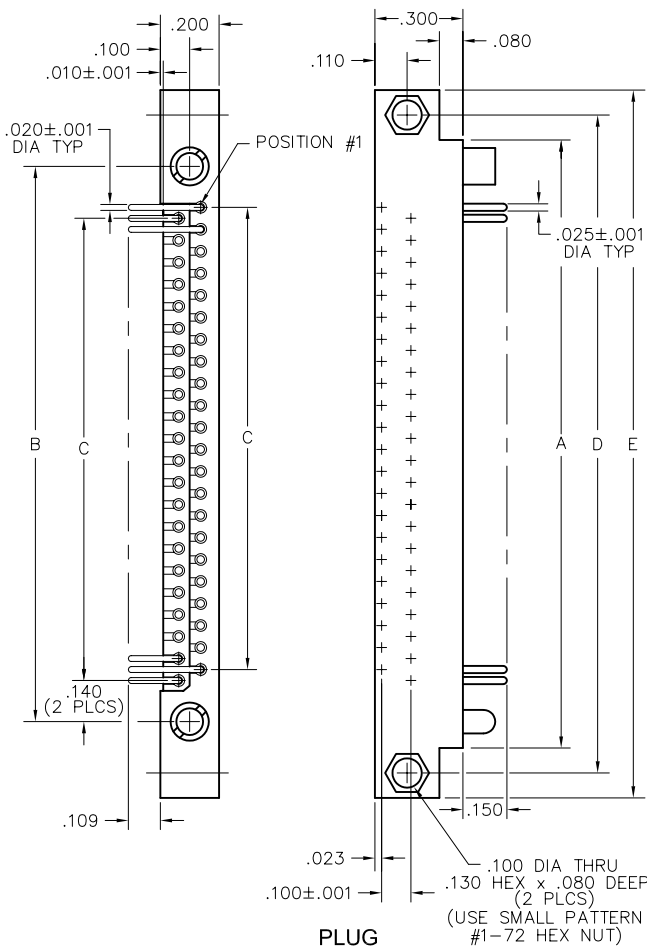
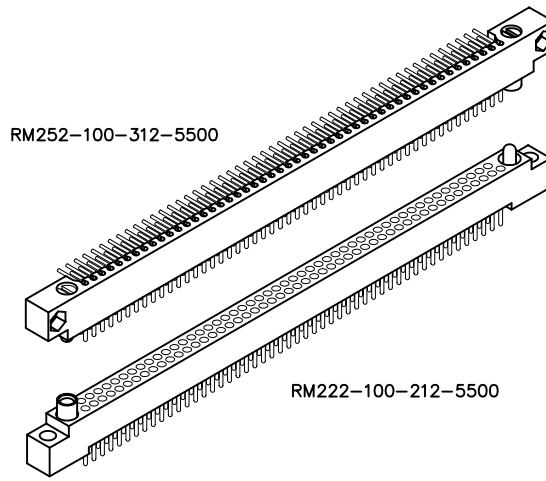


# 2 · ROW Daughterboard to Motherboard or Chassis

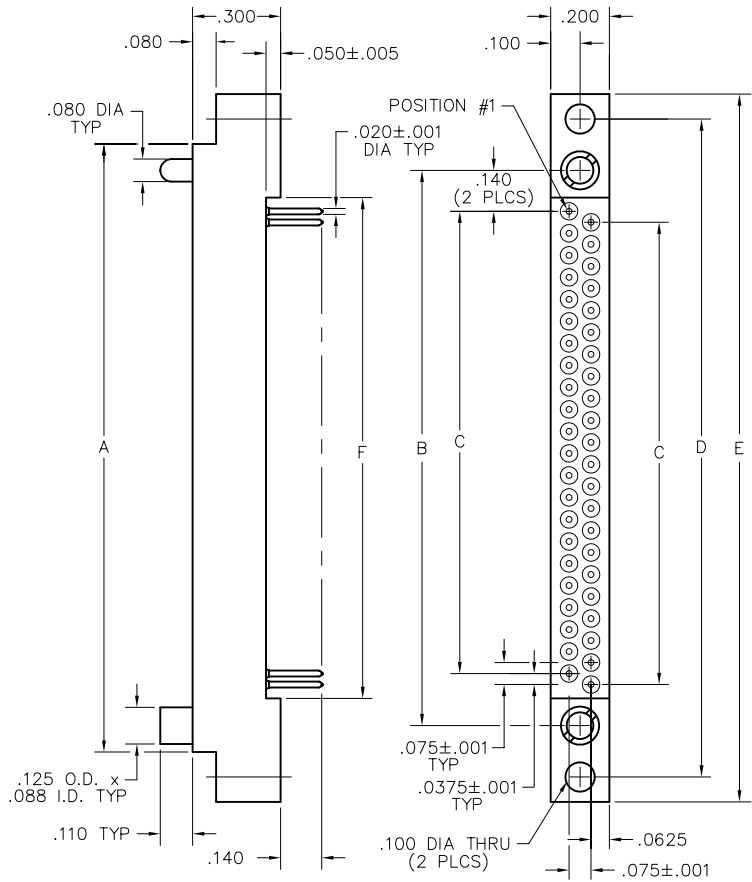
.075"

**RM2**

10 thru 100 Contacts



PLUG



RECEPTACLE

DIMENSIONS						
SIZE	A	B	C	D	E	F
10	.797	.617	.300	.967	1.137	.432
20	1.172	.992	.675	1.342	1.512	.807
30	1.547	1.367	1.050	1.717	1.887	1.182
40	1.922	1.742	1.425	2.092	2.262	1.557
50	2.297	2.117	1.800	2.467	2.637	1.932
60	2.672	2.492	2.175	2.842	3.012	2.307
70	3.047	2.867	2.550	3.217	3.387	2.682
80	3.422	3.242	2.925	3.592	3.762	3.057
90	3.797	3.617	3.300	3.967	4.137	3.432
100	4.172	3.992	3.675	4.342	4.512	3.807

**PLUG:** RM252-100-312-5500  
**RECEPTACLE:** RM222-100-212-5500  
 XXXXX-XXX-XXX-XXXXXX

**PLUG**

**RECEPTACLE**

SERIES	
RM .075" Screw Machine PC Connector	RM .075" Screw Machine PC Connector

BODY	
2 2-Row	2 2-Row

BODY STYLE: 5 Plug, right angle, with mounting ears 7 Plug, right angle, without mounting ears	BODY STYLE: 2 Receptacle, straight with mounting ears 4 Receptacle, straight without mounting ears
--	--

BODY MATERIAL: 2 Polyphenylene sulfide (PPS)	BODY MATERIAL: 2 Polyphenylene sulfide (PPS)
---	---

SIZE	
010, 020, 030, 040, 050, 060, 070, 080, 090, 100	010, 020, 030, 040, 050, 060, 070, 080, 090, 100

**CONTACTS**

<b>TYPE CONTACTS/TERMINATIONS:</b> 31 Pin, right angle, dip solder, .109" x .020" dia 32 Pin, right angle, dip solder, .140" x .020" dia 33 Pin, right angle, dip solder, .172" x .020" dia 34 Pin, right angle, dip solder, .109" x .016" dia 35 Pin, right angle, dip solder, .140" x .016" dia 36 Pin, right angle, dip solder, .172" x .016" dia 37 Pin, right angle, dip solder, .250" x .020" dia	<b>TYPE CONTACTS/TERMINATIONS:</b> 20 Socket, straight, dip solder, .109" x .020 dia 21 Socket, straight, dip solder, .140" x .020 dia 22 Socket, straight, dip solder, .172" x .020 dia 23 Socket, straight, dip solder, .250" x .020 dia 24 Socket, straight, solder cup 25 Socket, straight, flex circuit, .093" x .017 dia 26 Socket, straight, wire wrap®, .500" x .018 square 27 Socket, straight, wire wrap®, .375" x .018 square 28 Socket, straight, wire wrap®, .625" x .018 square 29 Socket, connector saver, .150" x .025" dia 50 Socket, straight, dip solder, .140" x .016" dia 51 Socket, straight, dip solder, .172" x .016" dia 53 Socket, straight, stackable, .212" x .025" dia 54 Socket, straight, stackable, .244" x .025" dia 55 Socket, straight, stackable, .275" x .025" dia 64 Socket, straight, press fit, .203" (Board .093"-.125" thk) 65 Socket, straight, press fit, .323" (Board .156"-.200" thk) 66 Socket, straight, press fit, .403" (Board .250"+ thk)
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<b>PLATING OPTIONS:</b> 1 Gold plated termination 2 Pre-tinned termination, SnPb alloy <input checked="" type="checkbox"/> 3 Pre-tinned termination, SAC305 alloy	<b>PLATING OPTIONS:</b> 1 Gold plated termination 2 Pre-tinned termination, SnPb alloy (dip solder options only) <input checked="" type="checkbox"/> 3 Pre-tinned termination, SAC305 alloy (dip solder options only)
--	--

**HARDWARE**

<b>STYLE OF HARDWARE:</b> (See R-41 & R-42 for all options) 0256 None 55 Guide set 57 Two guide pins 58 Two guide sockets 29 Fixed jackset 30 Fixed jackset, reversed 19 Two fixed jackscrews 20 Two fixed jacksockets 59 Hex turning jackset, .200" 60 Hex turning jackset, reversed, .200" 61 Two hex turning jackscrews, .200" 62 Two hex turning jacksockets, .200" 64 Turning jackset, .490" 65 Turning jackset, reversed, .490" 66 Two turning jackscrews, .490" 67 Two turning jacksockets, .490"	<b>STYLE OF HARDWARE:</b> (See R-41 & R-42 for all options) 0256 None 55 Guide set 57 Two guide pins 58 Two guide sockets 29 Fixed jackset 30 Fixed jackset, reversed 19 Two fixed jackscrews 20 Two fixed jacksockets 59 Hex turning jackset, .200" 60 Hex turning jackset, reversed, .200" 61 Two hex turning jackscrews, .200" 62 Two hex turning jacksockets, .200" 64 Turning jackset, .490" 65 Turning jackset, reversed, .490" 66 Two turning jackscrews, .490" 67 Two turning jacksockets, .490"
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<b>POLARIZATION:</b> 00 None 01 thru 68 are special identifiers, see R-38 70 Same configuration as 01 without Loctite® (To be keyed by customer)	<b>POLARIZATION:</b> 00 None 01 thru 68 are special identifiers, see R-38 70 Same configuration as 01 without Loctite® (To be keyed by customer)
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**OPTIONS**

BN Bond #1-72 small pattern hex nuts into mounting ears

= Option not RoHS compliant

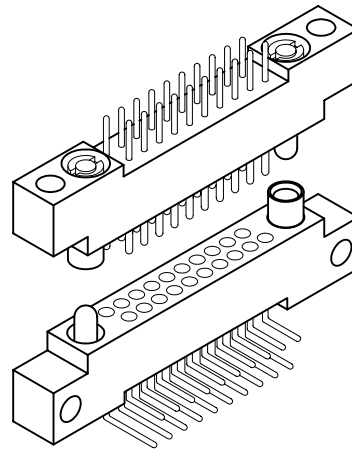
# 2 • ROW Motherboard or Chassis to Daughterboard

.075"

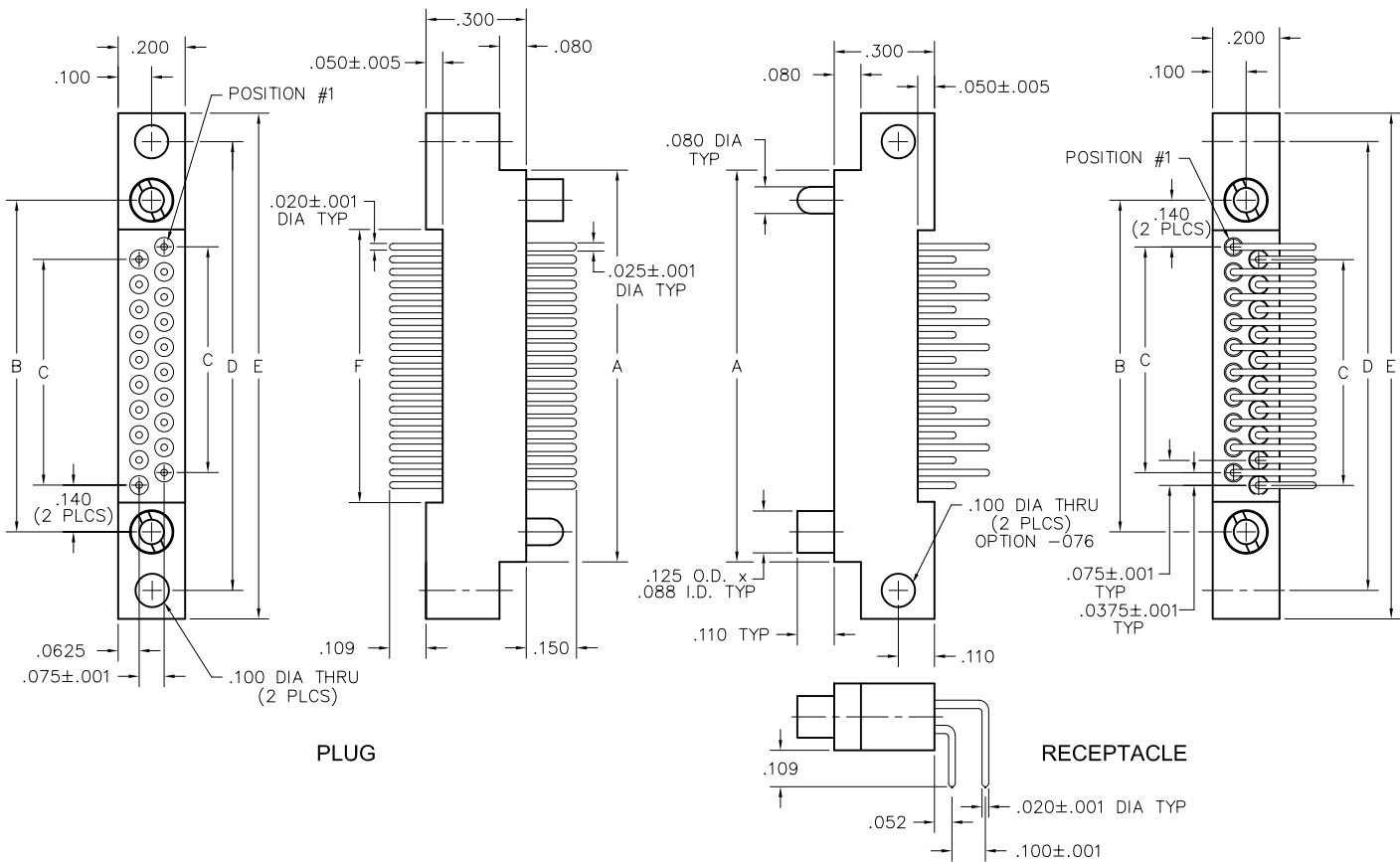
**RM2**

10 thru 100 Contacts

RM212-020-102-5500



RM262-020-442-5500-076



SIZE	DIMENSIONS					
	A	B	C	D	E	F
10	.797	.617	.300	.967	1.137	.442
20	1.172	.992	.675	1.342	1.512	.817
30	1.547	1.367	1.050	1.717	1.887	1.192
40	1.922	1.742	1.425	2.092	2.262	1.567
50	2.297	2.117	1.800	2.467	2.637	1.942
60	2.672	2.492	2.175	2.842	3.012	2.317
70	3.047	2.867	2.550	3.217	3.387	2.692
80	3.422	3.242	2.925	3.592	3.762	3.067
90	3.797	3.617	3.300	3.967	4.137	3.442
100	4.172	3.992	3.675	4.342	4.512	3.817

**PLUG:** RM212-020-102-5500  
**RECEPTACLE:** RM262-020-442-5500-076  
 XXXXX-XXX-XXX-XXXX-XXX

**PLUG**

**RECEPTACLE**

**SERIES**

RM .075" Screw Machine PC Connector | RM .075" Screw Machine PC Connector

**BODY**

2 2-Row | 2 2-Row

**BODY STYLE:**  
 1 Plug, straight, with mounting ears | 6 Receptacle, right angle, with mounting ears  
 3 Plug, straight, without mounting ears | 8 Receptacle, right angle, without mounting ears

**BODY MATERIAL:**  
 2 Polyphenylene sulfide (PPS) | 2 Polyphenylene sulfide (PPS)

**SIZE**

010, 020, 030, 040, 050, 060, 070, 080, 090, 100 | 010, 020, 030, 040, 050, 060, 070, 080, 090, 100

**CONTACTS**

**TYPE CONTACTS/TERMINATIONS:**  
 10 Pin, straight, dip solder, .109" x .020" dia | 44 Socket, right angle, dip solder, .109" x .020" dia  
 11 Pin, straight, solder cup | 45 Socket, right angle, dip solder, .140" x .020" dia  
 12 Pin, straight, dip solder, .140" x .020" dia | 46 Socket, right angle, dip solder, .172" x .020" dia  
 13 Pin, straight, dip solder, .172" x .020" dia | 47 Socket, right angle, dip solder, .250" x .020" dia  
 14 Pin, straight, dip solder, .250" x .020" dia  
 15 Pin, straight, flex, .093" x .017" dia

**PLATING OPTIONS:**  
 1 Gold plated termination | 1 Gold plated termination  
 2 Pre-tinned termination, SnPb alloy (dip solder options only)  | 2 Pre-tinned termination, SnPb alloy   
 3 Pre-tinned termination, SAC305 alloy (dip solder options only) | 3 Pre-tinned termination, SAC305 alloy

**HARDWARE**

**STYLE OF HARDWARE:**  
 (See R-41 & R-42 for all options)  
 0256 None | 0256 None  
 55 Guide set | 55 Guide set  
 57 Two guide pins | 57 Two guide pins  
 58 Two guide sockets | 58 Two guide sockets  
 29 Fixed jackset | 29 Fixed jackset  
 30 Fixed jackset, reversed | 30 Fixed jackset, reversed  
 19 Two fixed jackscrews | 19 Two fixed jackscrews  
 20 Two fixed jacksockets | 20 Two fixed jacksockets  
 59 Hex turning jackset, .200" | 59 Hex turning jackset, .200"  
 60 Hex turning jackset, reversed, .200" | 60 Hex turning jackset, reversed, .200"  
 61 Two hex turning jackscrews, .200" | 61 Two hex turning jackscrews, .200"  
 62 Two hex turning jacksockets, .200" | 62 Two hex turning jacksockets, .200"  
 64 Turning jackset, .490" | 64 Turning jackset, .490"  
 65 Turning jackset, reversed, .490" | 65 Turning jackset, reversed, .490"  
 66 Two turning jackscrews, .490" | 66 Two turning jackscrews, .490"  
 67 Two turning jacksockets, .490" | 67 Two turning jacksockets, .490"

**POLARIZATION:**  
 00 None | 00 None  
 01 thru 68 are special identifiers, see R-38 | 01 thru 68 are special identifiers, see R-38  
 70 Same configuration as 01 without Loctite® (To be keyed by customer) | 70 Same configuration as 01 without Loctite® (To be keyed by customer)

**OPTIONS**

| 076 PWB mounting holes, .100" dia (cross drilled)

= Option not RoHS compliant

**Ask About AirBorn's Accelerated Delivery Service**

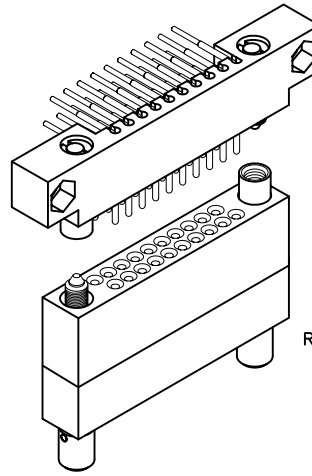
# 2 · ROW Board to Crimp Removable

.075"

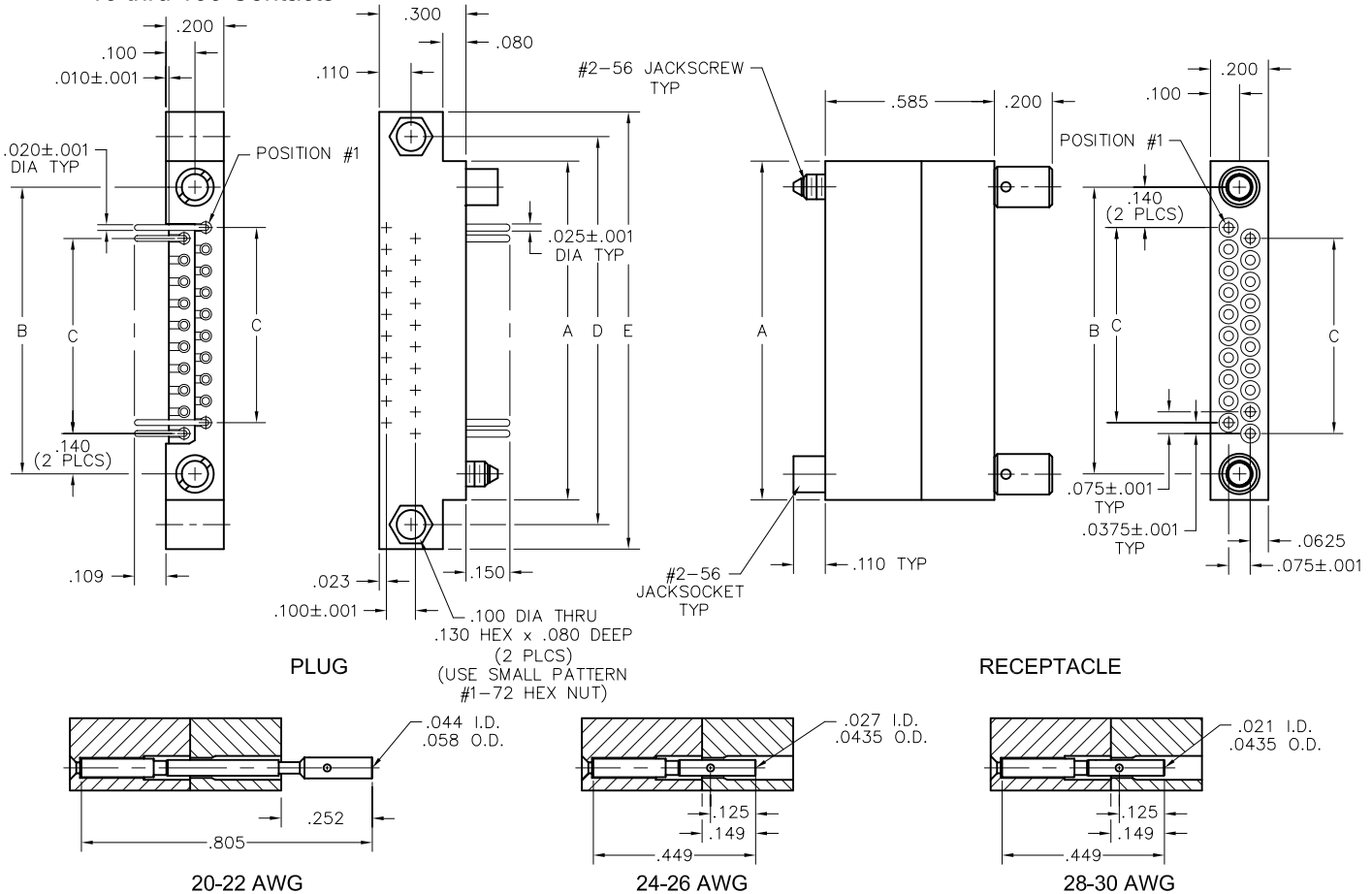
**RM2**

10 thru 100 Contacts

RM252-020-311-2900



RM242-020-581-5900



CRIMP REMOVABLE CONTACTS	
SIZE	PART NUMBER
20-22 AWG	RM200-000-571-0000
24-26 AWG	RM200-000-581-0000
28-30 AWG	RM200-000-591-0000

DIMENSIONS					
SIZE	A	B	C	D	E
10	.797	.617	.300	.967	1.137
20	1.172	.992	.675	1.342	1.512
30	1.547	1.367	1.050	1.717	1.887
40	1.922	1.742	1.425	2.092	2.262
50	2.297	2.117	1.800	2.467	2.637
60	2.672	2.492	2.175	2.842	3.012
70	3.047	2.867	2.550	3.217	3.387
80	3.422	3.242	2.925	3.592	3.762
90	3.797	3.617	3.300	3.967	4.137
100	4.172	3.992	3.675	4.342	4.512

**PLUG:** RM252-020-311-2900  
**RECEPTACLE:** RM242-020-581-5900  
 XXXXX-XXX-XXX-XXXXXX

**PLUG**

**RECEPTACLE**

SERIES	
RM .075" Screw Machine PC Connector	RM .075" Screw Machine PC Connector
BODY	
2 2-Row	2 2-Row
<b>BODY STYLE:</b>	<b>BODY STYLE:</b>
5 Plug, right angle, with mounting ears	2 Receptacle, straight, with mounting ears
7 Plug, right angle, without mounting ears	4 Receptacle, straight, without mounting ears
<b>BODY MATERIAL:</b>	<b>BODY MATERIAL:</b>
2 Polyphenylene sulfide (PPS)	2 Polyphenylene sulfide (PPS)
SIZE	
010, 020, 030, 040, 050, 060, 070, 080, 090, 100	010, 020, 030, 040, 050, 060, 070, 080, 090, 100

CONTACTS	
<b>TYPE CONTACTS/TERMINATIONS:</b>	<b>TYPE CONTACTS/TERMINATIONS:</b>
31 Pin, right angle, dip solder, .109" x .020" dia	00 Contacts not supplied
32 Pin, right angle, dip solder, .140" x .020" dia	57 Socket, straight, crimp removable (20-22 AWG)*
33 Pin, right angle, dip solder, .172" x .020" dia	58 Socket, straight, crimp removable (24-26 AWG)*
34 Pin, right angle, dip solder, .109" x .016" dia	59 Socket, straight, crimp removable (28-30 AWG)*
35 Pin, right angle, dip solder, .140" x .016" dia	
36 Pin, right angle, dip solder, .172" x .016" dia	
37 Pin, right angle, dip solder, .250" x .020" dia	
<b>PLATING OPTIONS:</b>	<b>PLATING OPTIONS:</b>
1 Gold plated termination	0 No plating (use with Contact Option "00" only)
2 Pre-tinned termination, SnPb alloy <input checked="" type="checkbox"/>	1 Gold plated termination
3 Pre-tinned termination, SAC305 alloy	

HARDWARE	
<b>STYLE OF HARDWARE:</b> (See R-41 & R-42 for all options)	<b>STYLE OF HARDWARE:</b> (See R-41 & R-42 for all options)
0256 None	0256 None
55 Guide set	55 Guide set
57 Two guide pins	57 Two guide pins
58 Two guide sockets	58 Two guide sockets
29 Fixed jackset	29 Fixed jackset
30 Fixed jackset, reversed	30 Fixed jackset, reversed
19 Two fixed jackscrews	19 Two fixed jackscrews
20 Two fixed jacksockets	20 Two fixed jacksockets
59 Hex turning jackset, .200" knob	59 Hex turning jackset, .200" knob
60 Hex turning jackset, reversed, .200" knob	60 Hex turning jackset, reversed, .200" knob
61 Two hex turning jackscrews, .200" knob	61 Two hex turning jackscrews, .200" knob
62 Two hex turning jacksockets, .200" knob	62 Two hex turning jacksockets, .200" knob
64 Turning jackset, .490" knob	64 Turning jackset, .490" knob
65 Turning jackset, reversed, .490" knob	65 Turning jackset, reversed, .490" knob
66 Two turning jackscrews, .490" knob	66 Two turning jackscrews, .490" knob
67 Two turning jacksockets, .490" knob	67 Two turning jacksockets, .490" knob
<b>POLARIZATION:</b>	<b>POLARIZATION</b>
00 None	00 None
01 thru 68 are special identifiers, see R-38	01 thru 68 are special identifiers, see R-38
70 Same configuration as 01 without Loctite® (To be keyed by customer)	70 Same configuration as 01 without Loctite® (To be keyed by customer)

OPTIONS	
BN Bond #1-72, sm. pattern hex nuts into mtg. ears	

\* Full compliment of crimp removable sockets packaged with connectors  
 1. Crimp tool - AirBorn part number: CDG4601, Mil Spec number M22520/2-01  
 2. Crimp positioner - AirBorn part number: CDG4602 (24-26 AWG and 28-30 AWG); CDG4603 (20-22 AWG)  
 3. Crimp removal tool - AirBorn part number: CDG8161 (All AWGs)  
 4. Crimp contact part number on previous page.  
 = Option not RoHS compliant





**PLUG:** RM212-020-101-5500  
**RECEPTACLE:** RM222-020-581-5500  
 XXXXX-XXX-XXX-XXXX

**PLUG**

**RECEPTACLE**

**SERIES**

RM .075" Screw Machine PC Connector | RM .075" Screw Machine PC Connector

**BODY**

2 2-Row | 2 2-Row

<b>BODY STYLE:</b>	<b>BODY STYLE:</b>
1 Plug, straight, with mounting ears	2 Receptacle, straight, with mounting ears
3 Plug, straight, without mounting ears	4 Receptacle, straight, without mounting ears

<b>BODY MATERIAL:</b>	<b>BODY MATERIAL:</b>
2 Polyphenylene sulfide (PPS)	2 Polyphenylene sulfide (PPS)

**SIZE**

010, 020, 030, 040, 050, 060, 070, 080, 090, 100 | 010, 020, 030, 040, 050, 060, 070, 080, 090, 100

**CONTACTS**

<b>TYPE CONTACTS/TERMINATIONS:</b>	<b>TYPE CONTACTS/TERMINATIONS:</b>
10 Pin, straight, dip solder, .109" x .020" dia	00 Contacts not supplied
11 Pin, straight, solder cup	57 Socket, straight, crimp removable (20-22 AWG)*
12 Pin, straight, dip solder, .140" x .020" dia	58 Socket, straight, crimp removable (24-26 AWG)*
13 Pin, straight, dip solder, .172" x .020" dia	59 Socket, straight, crimp removable (28-30 AWG)*
14 Pin, straight, dip solder, .250" x .020" dia	
15 Pin, straight, flex, .093" x .017" dia	

<b>PLATING OPTIONS:</b>	<b>PLATING OPTIONS:</b>
1 Gold plated termination	0 No plating (use with Contact Option "00" only)
2 Pre-tinned termination, SnPb alloy (dip solder options only) <input checked="" type="checkbox"/>	1 Gold plated termination
3 Pre-tinned termination, SAC305 alloy (dip solder options only)	

**HARDWARE**

<b>STYLE OF HARDWARE:</b> (See R-41 & R-42 for all options)	<b>STYLE OF HARDWARE:</b> (See R-41 & R-42 for all options)
0256 None	0256 None
55 Guide set	55 Guide set
57 Two guide pins	57 Two guide pins
58 Two guide sockets	58 Two guide sockets
29 Fixed jackset	29 Fixed jackset
30 Fixed jackset, reversed	30 Fixed jackset, reversed
19 Two fixed jackscrews	19 Two fixed jackscrews
20 Two fixed jacksockets	20 Two fixed jacksockets
59 Hex turning jackset, .200"	59 Hex turning jackset, .200"
60 Hex turning jackset, reversed, .200"	60 Hex turning jackset, reversed, .200"
61 Two hex turning jackscrews, .200"	61 Two hex turning jackscrews, .200"
62 Two hex turning jacksockets, .200"	62 Two hex turning jacksockets, .200"
64 Turning jackset, .490"	64 Turning jackset, .490"
65 Turning jackset, reversed, .490"	65 Turning jackset, reversed, .490"
66 Two turning jackscrews, .490"	66 Two turning jackscrews, .490"
67 Two turning jacksockets, .490"	67 Two turning jacksockets, .490"

<b>POLARIZATION:</b>	<b>POLARIZATION</b>
00 None	00 None
01 thru 68 are special identifiers, see R-38	01 thru 68 are special identifiers, see R-38
70 Same configuration as 01 without Loctite® (To be keyed by customer)	70 Same configuration as 01 without Loctite® (To be keyed by customer)

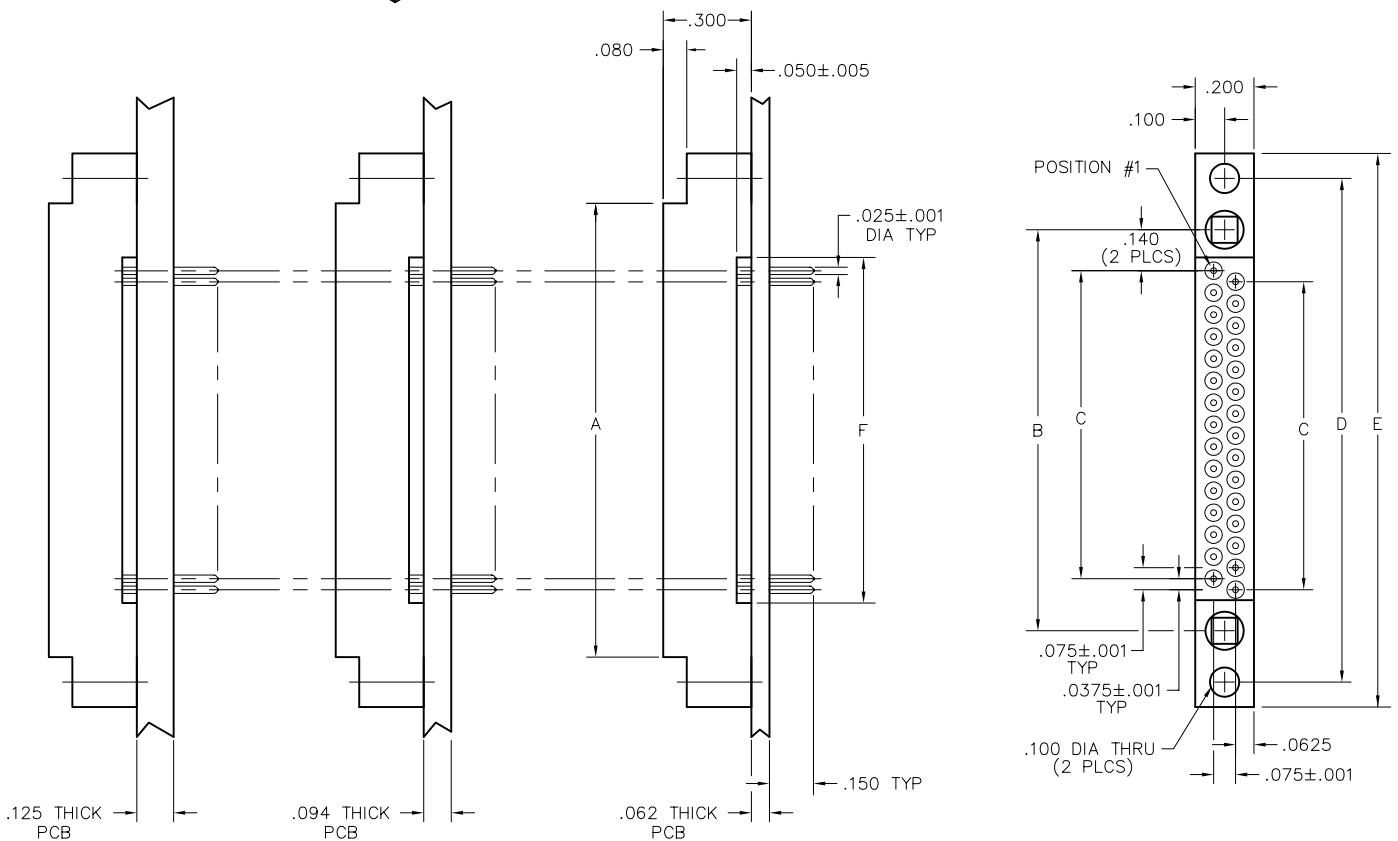
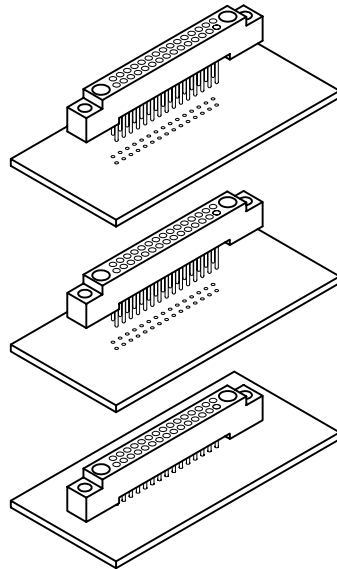
- \* Full compliment of crimp removable sockets packaged with connectors
  - 1. Crimp tool - AirBorn part number: CDG4601, Mil Spec number M22520/2-01
  - 2. Crimp positioner - AirBorn part number: CDG4602 (24-26 AWG and 28-30 AWG)  
CDG4603 (20-22 AWG)
  - 3. Crimp removal tool - AirBorn part number: CDG8161 (All AWGs)
  - 4. Crimp contact part number on previous page.
- = Option not RoHS compliant

# 2 · ROW PC Board Stackable or Connector Saver

.075"

**RM2**

10 thru 100 Contacts



**NOTE:**  
Stacking connectors cannot have mating hardware.  
(-0256 indicates no hardware)

PC BOARD THICKNESS	TERMINATION LENGTH	PART NUMBER EXAMPLES
.062	.212	RM222-030-531-0256
.094	.244	RM222-030-541-0256
.125	.275	RM222-030-551-0256
CONNECTOR SAVER	.150	RM222-030-291-0256

SIZE	DIMENSIONS					
	A	B	C	D	E	F
10	.797	.617	.300	.967	1.137	.442
20	1.172	.992	.675	1.342	1.512	.817
30	1.547	1.367	1.050	1.717	1.887	1.192
40	1.922	1.742	1.425	2.092	2.262	1.567
50	2.297	2.117	1.800	2.467	2.637	1.942
60	2.672	2.492	2.175	2.842	3.012	2.317
70	3.047	2.867	2.550	3.217	3.387	2.692
80	3.422	3.242	2.925	3.592	3.762	3.067
90	3.797	3.617	3.300	3.967	4.137	3.442
100	4.172	3.992	3.675	4.342	4.512	3.817

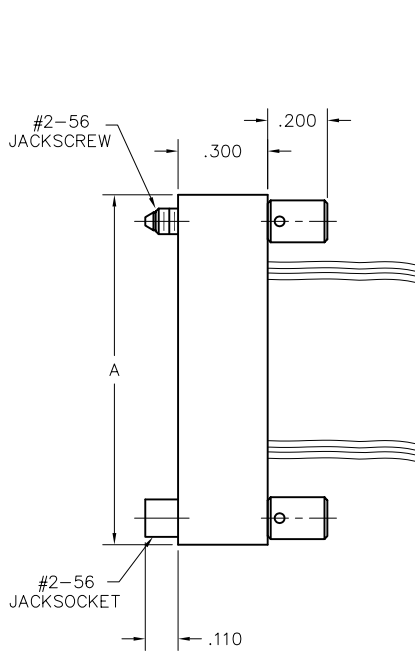
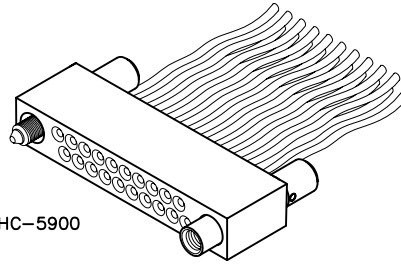
# 2 • ROW Crimped Wire I/O Receptacle

.075"

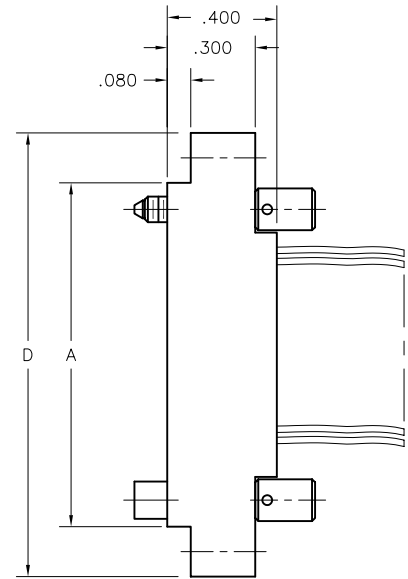
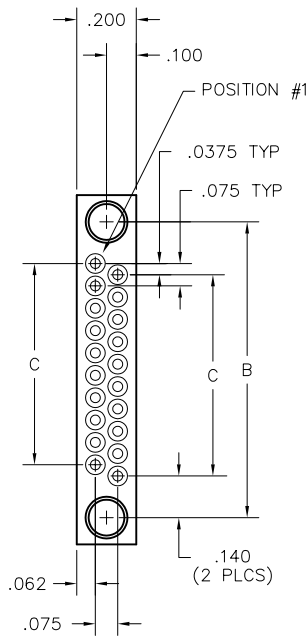
**RA2**

10 thru 100 Contacts

RA2H2-020-2HC-5900



RECEPTACLE WITHOUT  
MOUNTING EARS OR  
POTTING WELL



RECEPTACLE WITH  
MOUNTING EARS AND  
POTTING WELL

DIMENSIONS				
SIZE	A	B	C	D
10	.797	.617	.300	1.137
20	1.172	.992	.675	1.512
30	1.547	1.367	1.050	1.887
40	1.922	1.742	1.425	2.262
50	2.297	2.117	1.800	2.637
60	2.672	2.492	2.175	3.012
70	3.047	2.867	2.550	3.387
80	3.422	3.242	2.925	3.762
90	3.797	3.617	3.300	4.137
100	4.172	3.992	3.675	4.512

RA2 RECEPTACLE CONNECTORS MATE WITH:		
MATE	DESCRIPTION	PAGE
RM212	2 ROW STRAIGHT PLUG WITH EARS	R-11
RM232	2 ROW STRAIGHT PLUG WITHOUT EARS	R-11
RM252	2 ROW RIGHT ANGLE PLUG WITH EARS	R-13
RM272	2 ROW RIGHT ANGLE PLUG WITHOUT EARS	R-13

**REPLACEMENT CONTACTS:**

RA000-001-200-0000  
RA000-001-400-0000

SEE PAGE R-33.4 FOR CRIMP INSTRUCTIONS, CONTACT INSERTION AND CONTACT REMOVAL TOOLS.

RECEPTACLE: RA2H2-020-2HC-5900  
XXXXX-XXX-XXX-XXXX

<b>SERIES</b>	
RA .075" Screw Machine PC Connector	
<b>BODY</b>	
2 2-Row	
BODY STYLE:	
E	Receptacle, straight, w/ potting well, w/ mounting ears
F	Receptacle, straight, w/ potting well, w/out mounting ears
G	Receptacle, straight, w/out potting well, w/ mounting ears
H	Receptacle, straight, w/out potting well, w/out mounting ears
BODY MATERIAL:	
2	Polyphenylene sulfide (PPS)
<b>SIZE</b>	
010, 020, 030, 040, 050, 060, 070, 080, 090, 100	
<b>CONTACTS</b>	
TYPE CONTACTS/TERMINATIONS:	
2	Socket, crimp, 28-30 awg. contacts
4	Socket, crimp, 22-26 awg. contacts
WIRING OPTIONS:	
XX	Crimped terminations, see wiring codes at right
<b>HARDWARE</b>	
GUIDE HARDWARE	
0256	None
5500	Guide set
5501-5568	Guide set, polarized (see page R-38)
5570	Guide set, polarized, same as 5501 without Loctite® (to be keyed by customer)
5700	Two guide pins
5800	Two guide sockets
JACKING HARDWARE	
2900	Fixed jackset
3000	Fixed jackset, reversed
1900	Two fixed jackscrews
2000	Two fixed jacksockets
5900	Hex turning jackset, .200" knob
6000	Hex turning jackset, reversed, .200" knob
6100	Two hex turning jackscrews, .200" knob
6200	Two hex turning jacksockets, .200" knob
6400	Turning jackset, .490" knob
6500	Turning jackset, reversed, .490" knob
6600	Two turning jackscrews, .490" knob
6700	Two turning jacksockets, .490" knob

= Option not RoHS compliant

If potting well is used with a pre-wired connector, it will be potted and not repairable.  
If potting well is not used with a pre-wired connector, it will not be potted.  
Contacts that are not potted in place can be removed and replaced only one time.  
See page R-33.4 for crimp instructions, contact insertion and contact removal tools.

**WIRE CODES**

TYPE and COLOR			LENGTH	
Code	Size	Color	Code	Length (+1"/-0")
<b>Mil-W-16878/4</b>				
A	22 awg	Ten repeating	A	6"
B	22 awg	White	B	12"
C	24 awg	Ten repeating	C	18"
D	24 awg	White	D	24"
E	26 awg	Ten repeating	E	30"
F	26 awg	White	F	36"
G	28 awg	Ten repeating	G	42"
H	28 awg	White	H	48"
J	30 awg	Ten repeating	J	54"
K	30 awg	White	K	60"
			L	66"
			M	72"
<b>Mil-W-22759/33</b>				
L	22 awg	Ten repeating	N	84"
M	22 awg	White	P	96"
N	24 awg	Ten repeating	R	108"
P	24 awg	White	S	120"
R	26 awg	Ten repeating		
S	26 awg	White		
T	28 awg	Ten repeating		
U	28 awg	White		
V	30 awg	Ten repeating		
W	30 awg	White		

**USING WIRE CODES:**

RA2H2-020-2HC-5900

Type and Color  Length

**Color sequence for  
Ten repeating wire colors:**

(Beginning in position #1)

Black  
Brown  
Red  
Orange  
Yellow  
Green  
Blue  
Violet  
Grey  
White

Repeat this sequence until  
connector is fully loaded.

# 2 · ROW

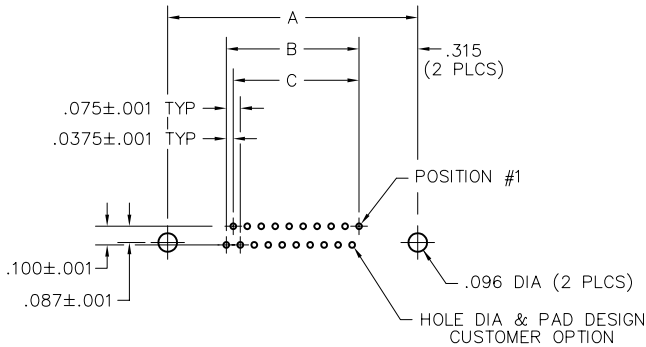
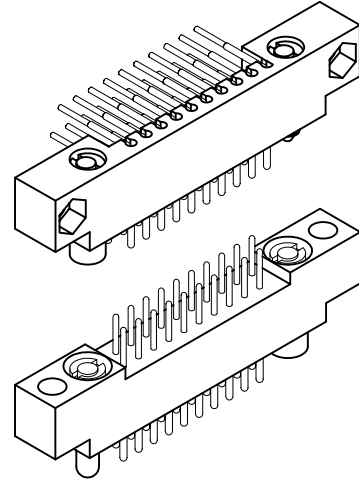
## Right Angle PTH Plug Straight PTH Plug

.075"

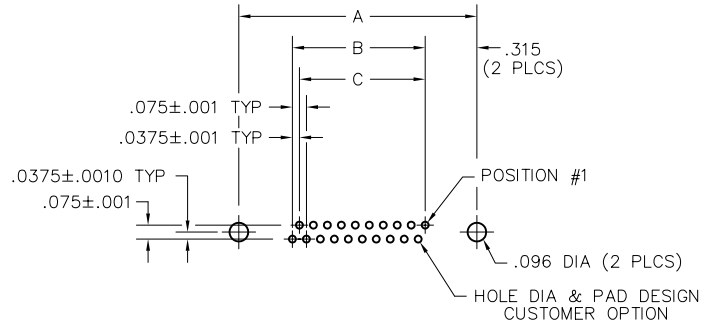
**RM2**

10 thru 100 Contacts  
Recommended  
Board Layout

DIMENSIONS			
SIZE	A	B	C
10	.967	.337	.300
20	1.342	.712	.675
30	1.717	1.087	1.050
40	2.092	1.462	1.425
50	2.467	1.837	1.800
60	2.842	2.212	2.175
70	3.217	2.587	2.550
80	3.592	2.962	2.925
90	3.967	3.337	3.300
100	4.342	3.712	3.675

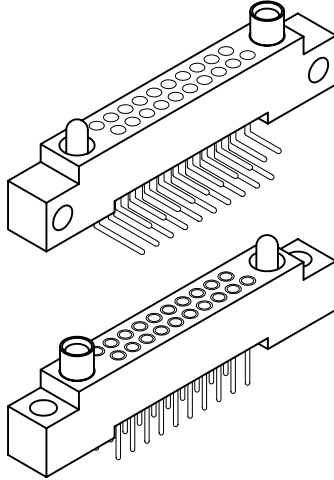


**RIGHT ANGLE PTH PLUG**  
PC BOARD VIEWED FROM COMPONENT SIDE



**STRAIGHT PTH PLUG**  
PC BOARD VIEWED FROM COMPONENT SIDE

SIZE	CONTACT ID	SIZE	CONTACT ID
10		60	
20		70	
30		80	
40		90	
50		100	



DIMENSIONS			
SIZE	A	B	C
10	.967	.337	.300
20	1.342	.712	.675
30	1.717	1.087	1.050
40	2.092	1.462	1.425
50	2.467	1.837	1.800
60	2.842	2.212	2.175
70	3.217	2.587	2.550
80	3.592	2.962	2.925
90	3.967	3.337	3.300
100	4.342	3.712	3.675

## 2 • ROW

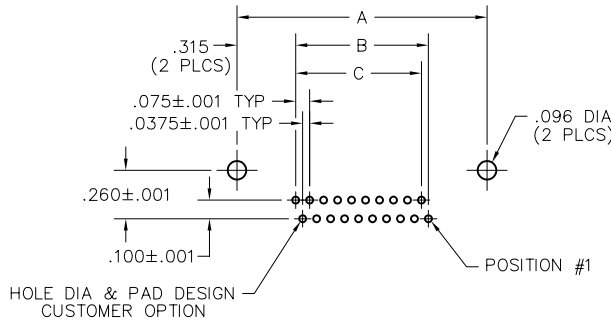
### Right Angle PTH Rcpt

### Straight PTH Rcpt

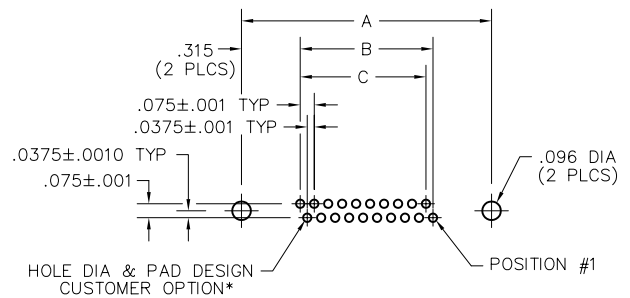
.075"

**RM2**

10 thru 100 Contacts  
Recommended  
Board Layout



**RIGHT ANGLE PTH RECEPTACLE**  
PC BOARD VIEWED FROM COMPONENT SIDE



**STRAIGHT PTH RECEPTACLE**  
PC BOARD VIEWED FROM COMPONENT SIDE

\*COMPLIANT TERMINATION REQUIREMENTS:  
Board Material: FR-4 w/ 1.0 oz. copper  
Minimum nominal board thickness: .062"  
Drilled hole: .0319"-.0339"  
Copper plating thickness: .0010" minimum  
Tin-lead plating thickness: .0006" maximum  
Electroplated tin-lead composition: 63/37 (Sn/Pb)  
Finished hole diameter: .028"±.002"

SIZE	CONTACT ID	SIZE	CONTACT ID
10		60	
20		70	
30		80	
40		90	
50		100	

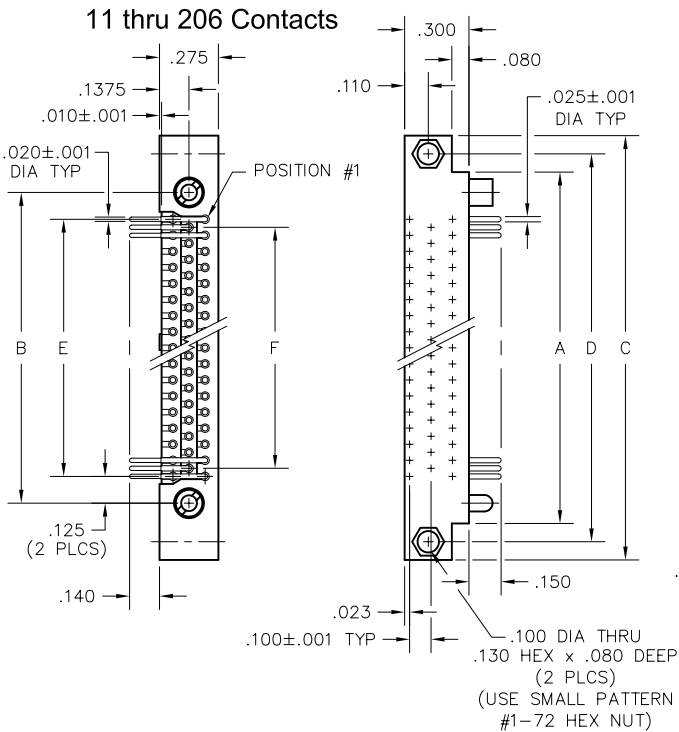
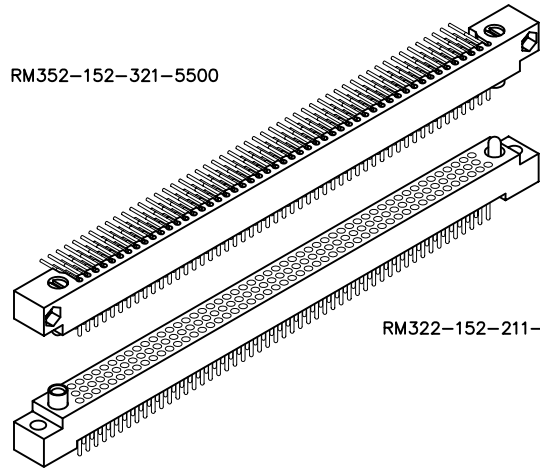
# 3 • ROW Daughterboard to Motherboard or Chassis

.075"

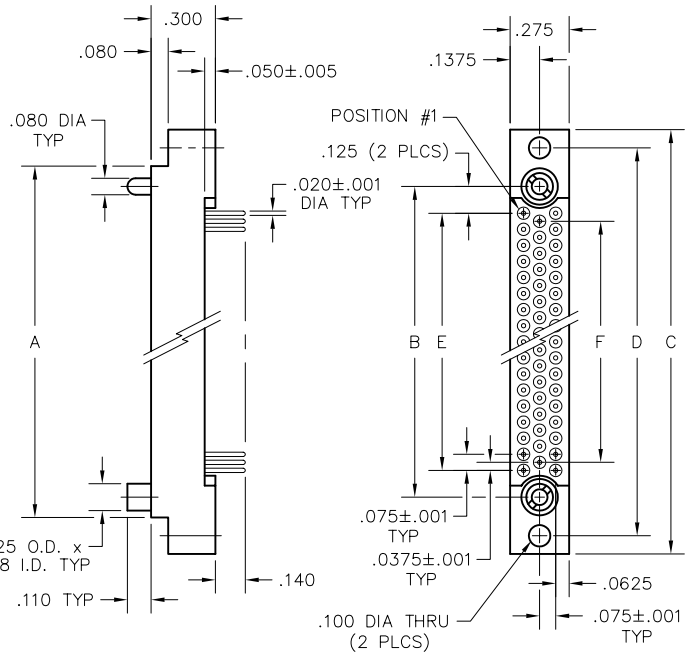
**RM3**

RM352-152-321-5500

RM322-152-211-5500



PLUG



RECEPTACLE

DIMENSIONS						
SIZE	A	B	C	D	E	F
11	.665	.475	1.005	.835	.225	.150
23	.965	.775	1.305	1.135	.525	.450
35	1.265	1.075	1.605	1.435	.825	.750
47	1.565	1.375	1.905	1.735	1.125	1.050
59	1.865	1.675	2.205	2.035	1.425	1.350
71	2.165	1.975	2.505	2.335	1.725	1.650
80	2.390	2.200	2.730	2.560	1.950	1.875
92	2.690	2.500	3.030	2.860	2.250	2.175
104	2.990	2.800	3.330	3.160	2.550	2.475
122	3.440	3.250	3.780	3.610	3.000	2.925
140	3.890	3.700	4.230	4.060	3.450	3.375
152	4.190	4.000	4.530	4.360	3.750	3.675
182	4.940	4.750	5.280	5.110	4.500	4.425
206	5.540	5.350	5.880	5.710	5.100	5.025



**PLUG:** RM352-152-321-5500  
**RECEPTACLE:** RM322-152-211-5500  
 XXXXX-XXX-XXX-XXXXXX

**PLUG**

**RECEPTACLE**

SERIES	
RM .075" Screw Machine PC Connector	RM .075" Screw Machine PC Connector

BODY	
3 3-Row	3 3-Row
<b>BODY STYLE:</b>	<b>BODY STYLE:</b>
5 Plug, right angle, with mounting ears	2 Receptacle, straight, with mounting ears
7 Plug, right angle, without mounting ears	4 Receptacle, straight, without mounting ears

<b>BODY MATERIAL:</b>	<b>BODY MATERIAL:</b>
2 Polyphenylene sulfide (PPS)	2 Polyphenylene sulfide (PPS)

SIZE	
011, 023, 035, 047, 059, 071, 080, 092, 104, 122, 140, 152, 182, 206	011, 023, 035, 047, 059, 071, 080, 092, 104, 122, 140, 152, 182, 206

CONTACTS	
<b>TYPE CONTACTS/TERMINATIONS:</b>	<b>TYPE CONTACTS/TERMINATIONS:</b>
31 Pin, right angle, dip solder, .109" x .020" dia	20 Socket, straight, dip solder, .109" x .020" dia
32 Pin, right angle, dip solder, .140" x .020" dia	21 Socket, straight, dip solder, .140" x .020" dia
33 Pin, right angle, dip solder, .172" x .020" dia	22 Socket, straight, dip solder, .172" x .020" dia
34 Pin, right angle, dip solder, .109" x .016" dia	23 Socket, straight, dip solder, .250" x .020" dia
35 Pin, right angle, dip solder, .140" x .016" dia	24 Socket, straight, solder cup
36 Pin, right angle, dip solder, .172" x .016" dia	25 Socket, straight, flex circuit, 093" x .017" dia
37 Pin, right angle, dip solder, .250" x .020" dia	26 Socket, straight, wire wrap®, .500" x .018 sq
	27 Socket, straight, wire wrap®, .375" x .018 sq
	28 Socket, straight, wire wrap®, .625" x .018 sq
	29 Socket, connector saver, .150" x .025" dia
	50 Socket, straight, dip solder, .140" x .016" dia
	51 Socket, straight, dip solder, .172" x .016" dia
	53 Socket, straight, stacking, .212" x .025" dia
	54 Socket, straight, stacking, .244" x .025" dia
	55 Socket, straight, stacking, .275" x .025" dia
	64 Socket, straight, press-fit, .203" (Board .093"-1.125" thk)
	65 Socket, straight, press-fit, .323" (Board .156"-1.200" thk)
	66 Socket, straight, press-fit, .403" (Board .250"+ thk)

<b>PLATING OPTIONS:</b>	<b>PLATING OPTIONS:</b>
1 Gold plated termination	1 Gold plated termination
2 Pre-tinned termination, SnPb alloy <input checked="" type="checkbox"/>	2 Pre-tinned termination, SnPb alloy (dip solder options only) <input checked="" type="checkbox"/>
3 Pre-tinned termination, SAC305 alloy	3 Pre-tinned termination, SAC305 alloy (dip solder options only)

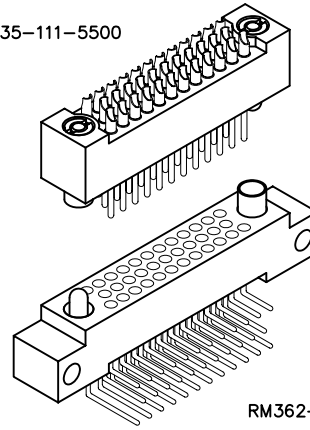
HARDWARE	
<b>STYLE OF HARDWARE:</b> (See R-41 & R-42 for all options)	<b>STYLE OF HARDWARE:</b> (See R-41 & R-42 for all options)
0256 None	0256 None
55 Guide set	55 Guide set
57 Two guide pins	57 Two guide pins
58 Two guide sockets	58 Two guide sockets
29 Fixed jackset	29 Fixed jackset
30 Fixed jackset, reversed	30 Fixed jackset, reversed
19 Two fixed jackscrews	19 Two fixed jackscrews
20 Two fixed jacksockets	20 Two fixed jacksockets
59 Hex turning jackset, .200"	59 Hex turning jackset, .200"
60 Hex turning jackset, reversed, .200"	60 Hex turning jackset, reversed, .200"
61 Two hex turning jackscrews, .200"	61 Two hex turning jackscrews, .200"
62 Two hex turning jacksockets, .200"	62 Two hex turning jacksockets, .200"
64 Turning jackset, .490"	64 Turning jackset, .490"
65 Turning jackset, reversed, .490"	65 Turning jackset, reversed, .490"
66 Two turning jackscrews, .490"	66 Two turning jackscrews, .490"
67 Two turning jacksockets, .490"	67 Two turning jacksockets, .490"

<b>POLARIZATION:</b>	<b>POLARIZATION</b>
00 None	00 None
01 thru 68 are special identifiers, see R-38	01 thru 68 are special identifiers, see R-38
70 Same configuration as 01 without Loctite® (To be keyed by customer)	70 Same configuration as 01 without Loctite® (To be keyed by customer)

OPTIONS	
BN Bond #1-72, sm. pattern hex nuts into mtg. ears	

= Option not RoHS compliant

RM332-035-111-5500

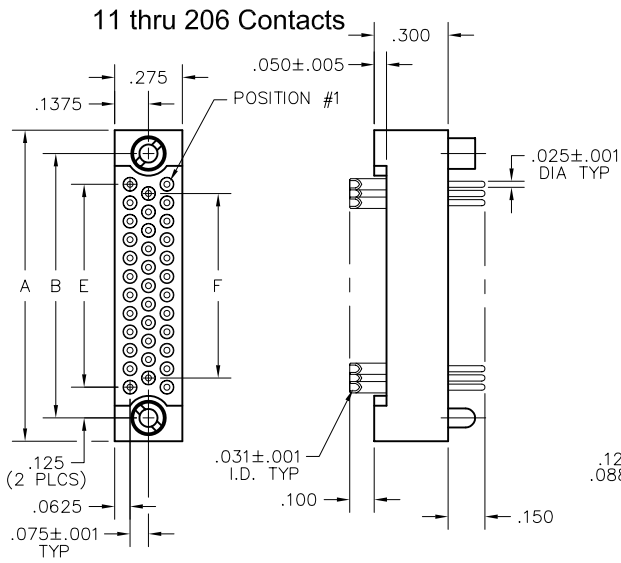


RM362-035-441-5500-076

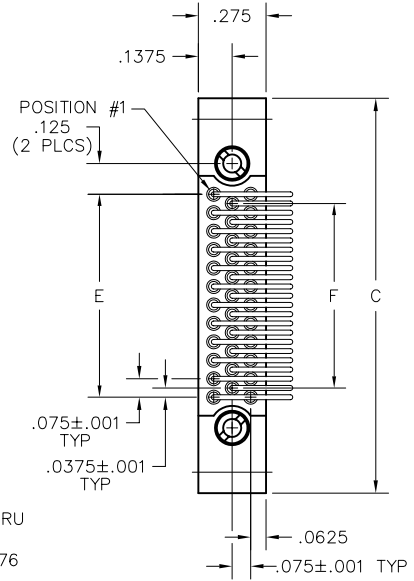
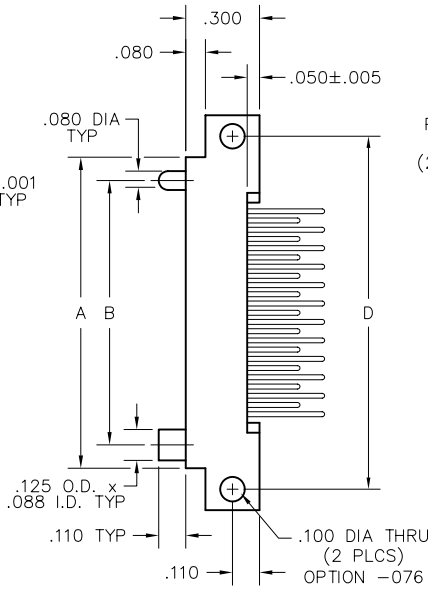
# 3 • ROW Motherboard or Chassis to Daughterboard

.075"

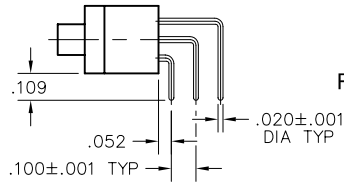
**RM3**



PLUG



RECEPTACLE



DIMENSIONS						
SIZE	A	B	C	D	E	F
11	.665	.475	1.005	.835	.225	.150
23	.965	.775	1.305	1.135	.525	.450
35	1.265	1.075	1.605	1.435	.825	.750
47	1.565	1.375	1.905	1.735	1.125	1.050
59	1.865	1.675	2.205	2.035	1.425	1.350
71	2.165	1.975	2.505	2.335	1.725	1.650
80	2.390	2.200	2.730	2.560	1.950	1.875
92	2.690	2.500	3.030	2.860	2.250	2.175
104	2.990	2.800	3.330	3.160	2.550	2.475
122	3.440	3.250	3.780	3.610	3.000	2.925
140	3.890	3.700	4.230	4.060	3.450	3.375
152	4.190	4.000	4.530	4.360	3.750	3.675
182	4.940	4.750	5.280	5.110	4.500	4.425
206	5.540	5.350	5.880	5.710	5.100	5.025

**PLUG:** RM332-035- 111-5500  
**RECEPTACLE:** RM362-035- 441-5500-076  
 XXXXX-XXX-XXX-XXXX-XXX

**PLUG**

**RECEPTACLE**

**SERIES**

RM .075" Screw Machine PC Connector | RM .075" Screw Machine PC Connector

**BODY**

3 3-Row | 3 3-Row

**BODY STYLE:**

1 Plug, straight, with mounting ears	6 Receptacle, right angle, with mounting ears
3 Plug, straight, without mounting ears	8 Receptacle, right angle, without mounting ears

**BODY MATERIAL:**

2 Polyphenylene sulfide (PPS)	2 Polyphenylene sulfide (PPS)
-------------------------------	-------------------------------

**SIZE**

011, 023, 035, 047, 059, 071, 080, 092, 104, 122, 140, 152, 182, 206	011, 023, 035, 047, 059, 071, 080, 092, 104, 122, 140, 152, 182, 206
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**CONTACTS**

**TYPE CONTACTS/TERMINATIONS:**

10 Pin, straight, dip solder, .109" x .020" dia	44 Socket, right angle, dip solder, .109" x .020" dia
11 Pin, straight, solder cup	45 Socket, right angle, dip solder, .140" x .020" dia
12 Pin, straight, dip solder, .140" x .020" dia	46 Socket, right angle, dip solder, .172" x .020" dia
13 Pin, straight, dip solder, .172" x .020" dia	47 Socket, right angle, dip solder, .250" x .020" dia
14 Pin, straight, dip solder, .250" x .020" dia	
15 Pin, straight, flex, .093" x .017 dia	

**PLATING OPTIONS:**

1 Gold plated termination	1 Gold plated termination
2 Pre-finned termination, SnPb alloy (dip solder options only) <input checked="" type="checkbox"/>	2 Pre-finned termination, SnPb alloy <input checked="" type="checkbox"/>
3 Pre-tinned termination, SAC305 alloy (dip solder options only)	3 Pre-tinned termination, SAC305 alloy

**HARDWARE**

**STYLE OF HARDWARE:**

(See R-41 & R-42 for all options)

0256 None	0256 None
55 Guide set	55 Guide set
57 Two guide pins	57 Two guide pins
58 Two guide sockets	58 Two guide sockets
29 Fixed jackset	29 Fixed jackset
30 Fixed jackset, reversed	30 Fixed jackset, reversed
19 Two fixed jackscrews	19 Two fixed jackscrews
20 Two fixed jacksockets	20 Two fixed jacksockets
59 Hex turning jackset, .200"	59 Hex turning jackset, .200"
60 Hex turning jackset, reversed, .200"	60 Hex turning jackset, reversed, .200"
61 Two hex turning jackscrews, .200"	61 Two hex turning jackscrews, .200"
62 Two hex turning jacksockets, .200"	62 Two hex turning jacksockets, .200"
64 Turning jackset, .490"	64 Turning jackset, .490"
65 Turning jackset, reversed, .490"	65 Turning jackset, reversed, .490"
66 Two turning jackscrews, .490"	66 Two turning jackscrews, .490"
67 Two turning jacksockets, .490"	67 Two turning jacksockets, .490"

**POLARIZATION:**

00 None	00 None
01 thru 68 are special identifiers, see R-38	01 thru 68 are special identifiers, see R-38
70 Same configuration as 01 without Loctite® (To be keyed by customer)	70 Same configuration as 01 without Loctite® (To be keyed by customer)

**OPTIONS**

| 076 PWB mounting holes, .100" dia (cross drilled)

= Option not RoHS compliant

**Ask About AirBorn's Accelerated Delivery Service**



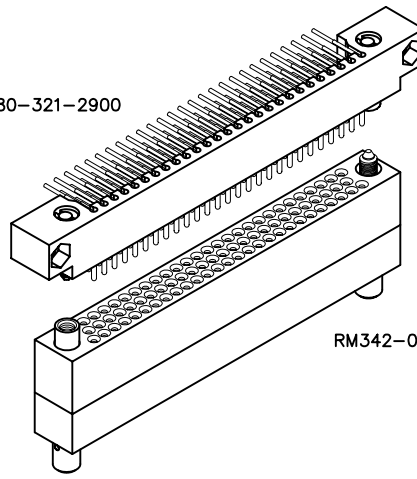
# 3 • ROW Board to Crimp Removable

.075"

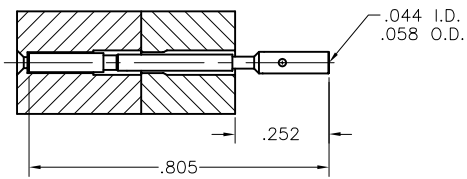
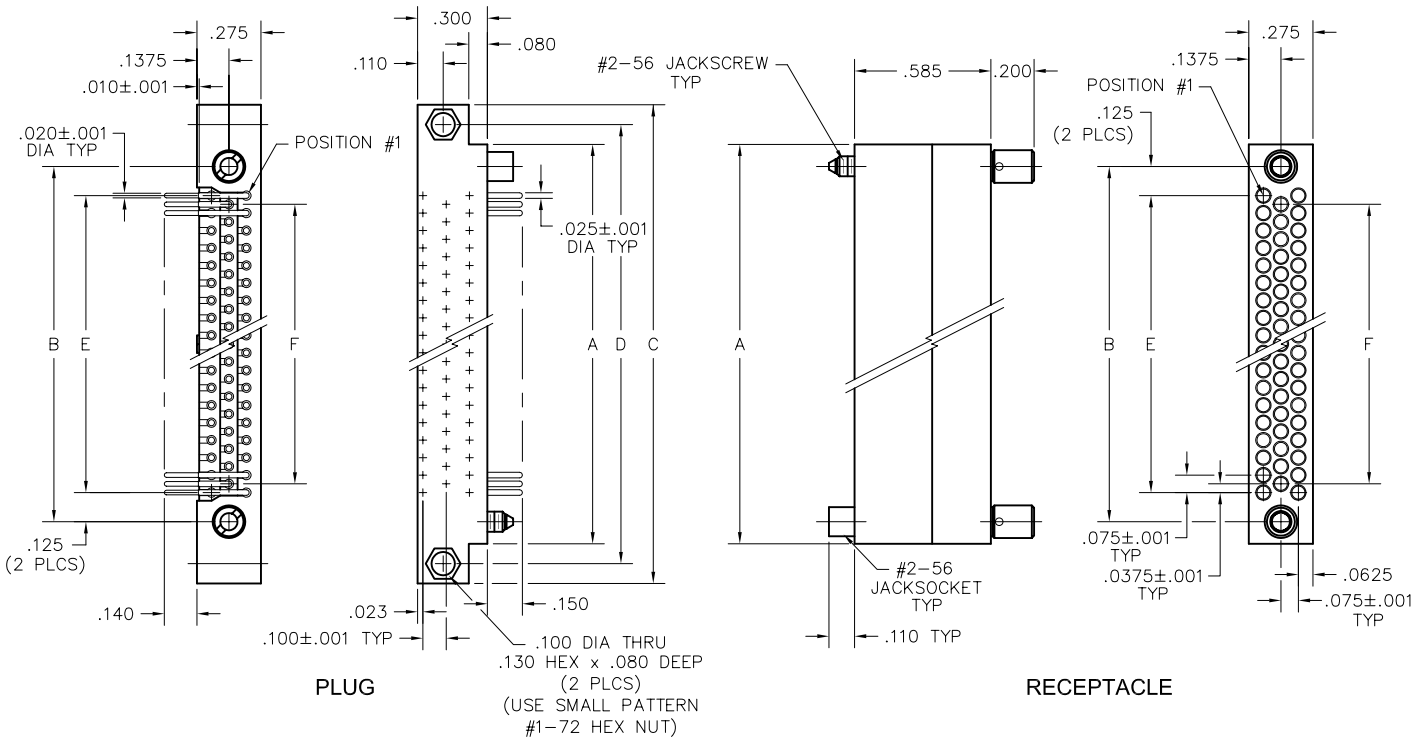
**RM3**

11 thru 80 Contacts

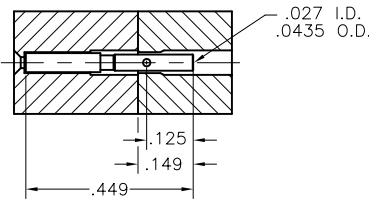
RM352-080-321-2900



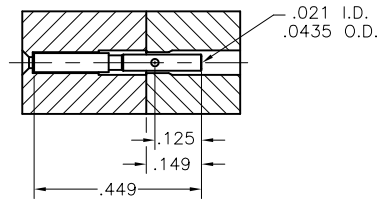
RM342-080-581-5900



20-22 AWG



24-26 AWG



28-30 AWG

**NOTE:**

When using crimp contacts with 20 gage barrel, barrel must be cut off prior to removing contact from connector body.

CRIMP REMOVABLE CONTACTS	
SIZE	PART NUMBER
20-22 AWG	RM300-000-571-0000
24-26 AWG	RM300-000-581-0000
28-30 AWG	RM300-000-591-0000

SIZE	DIMENSIONS					
	A	B	C	D	E	F
11	.665	.475	1.005	.835	.225	.150
23	.965	.775	1.305	1.135	.525	.450
35	1.265	1.075	1.605	1.435	.825	.750
47	1.565	1.375	1.905	1.735	1.125	1.050
59	1.865	1.675	2.205	2.035	1.425	1.350
71	2.165	1.975	2.505	2.335	1.725	1.650
80	2.390	2.200	2.730	2.560	1.950	1.875

**PLUG:** RM352-080-321-2900  
**RECEPTACLE:** RM342-080-581-5900  
 XXXXX-XXX-XXX-XXXXXX

**PLUG**

**RECEPTACLE**

**SERIES**

RM .075" Screw Machine PC Connector | RM .075" Screw Machine PC Connector

**BODY**

3	3-Row	3	3-Row
5	BODY STYLE: Plug, right angle, with mounting ears	2	BODY STYLE: Receptacle, straight, with mounting ears
7	Plug, right angle, without mounting ears	4	Receptacle, straight, without mounting ears
2	BODY MATERIAL: Polyphenylene sulfide (PPS)	2	BODY MATERIAL: Polyphenylene sulfide (PPS)

**SIZE**

011, 023, 035, 047, 059, 071, 080 | 011, 023, 035, 047, 059, 071, 080

**CONTACTS**

<b>TYPE CONTACTS/TERMINATIONS:</b>		<b>TYPE CONTACTS/TERMINATIONS:</b>	
31	Pin, right angle, dip solder, .109" x .020" dia	00	Contacts not supplied
32	Pin, right angle, dip solder, .140" x .020" dia	57	Socket, straight, crimp removable (20-22 AWG)*
33	Pin, right angle, dip solder, .172" x .020" dia	58	Socket, straight, crimp removable (24-26 AWG)*
34	Pin, right angle, dip solder, .109" x .016" dia	59	Socket, straight, crimp removable (28-30 AWG)*
35	Pin, right angle, dip solder, .140" x .016" dia		
36	Pin, right angle, dip solder, .172" x .016" dia		
<b>PLATING OPTIONS:</b>		<b>PLATING OPTIONS:</b>	
1	Gold plated termination	0	No plating (use with Contact Option "00" only)
2	Pre-tinned termination, SnPb alloy <input checked="" type="checkbox"/>	1	Gold plated termination
3	Pre-tinned termination, SAC305 alloy		

**HARDWARE**

<b>STYLE OF HARDWARE:</b> (See R-41 & R-42 for all options)		<b>STYLE OF HARDWARE:</b> (See R-41 & R-42 for all options)	
0256	None	0256	None
55	Guide set	55	Guide set
57	Two guide pins	57	Two guide pins
58	Two guide sockets	58	Two guide sockets
29	Fixed jackset	29	Fixed jackset
30	Fixed jackset, reversed	30	Fixed jackset, reversed
19	Two fixed jackscrews	19	Two fixed jackscrews
20	Two fixed jackscrews	20	Two fixed jackscrews
59	Hex turning jackset, .200" knob	59	Hex turning jackset, .200" knob
60	Hex turning jackset, reversed, .200" knob	60	Hex turning jackset, reversed, .200" knob
61	Two hex turning jackscrews, .200" knob	61	Two hex turning jackscrews, .200" knob
62	Two hex turning jackscrews, .200" knob	62	Two hex turning jackscrews, .200" knob
64	Turning jackset, .490" knob	64	Turning jackset, .490" knob
65	Turning jackset, reversed, .490" knob	65	Turning jackset, reversed, .490" knob
66	Two turning jackscrews, .490" knob	66	Two turning jackscrews, .490" knob
67	Two turning jackscrews, .490" knob	67	Two turning jackscrews, .490" knob
<b>POLARIZATION:</b>		<b>POLARIZATION</b>	
00	None	00	None
01	thru 68 are special identifiers, see R-38	01	thru 68 are special identifiers, see R-38
70	Same configuration as 01 without Loctite® (To be keyed by customer)	70	Same configuration as 01 without Loctite® (To be keyed by customer)

**OPTIONS**

BN Bond #1-72, sm. pattern hex nuts into mtg. ears

- \* Full compliment of crimp removable sockets packaged with connectors
  - 1. Crimp tool - AirBorn part number: CDG4601, Mil Spec number M22520/2-01
  - 2. Crimp positioner - AirBorn part number: CDG4602 (24-26 AWG and 28-30 AWG)  
CDG4603 (20-22 AWG)
  - 3. Crimp removal tool - AirBorn part number: CDG8161 (All AWGs)
  - 4. Crimp contact part number on previous page.
- = Option not RoHS compliant

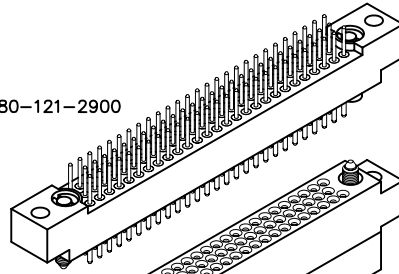
# 3 · ROW Cable or Board to Crimp Removable

.075"

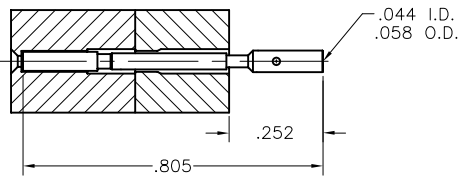
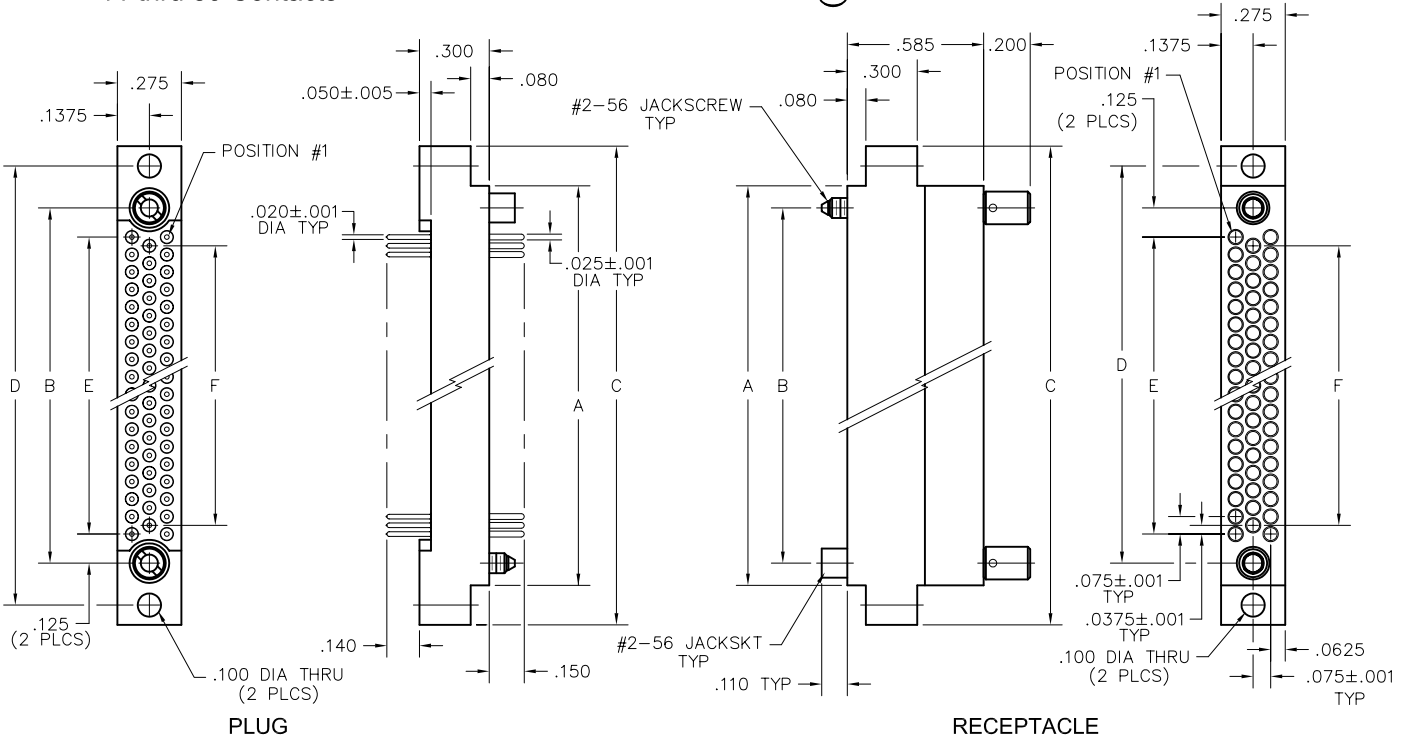
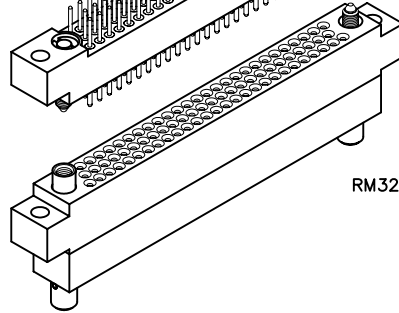
**RM3**

11 thru 80 Contacts

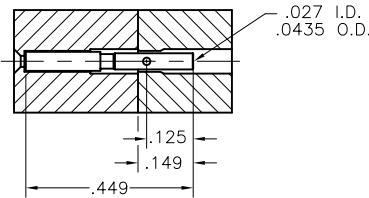
RM312-080-121-2900



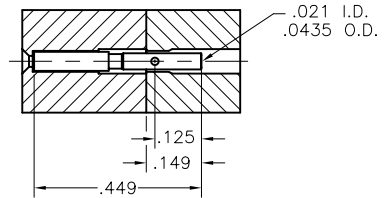
RM322-080-581-5900



20-22 AWG



24-26 AWG



28-30 AWG

**NOTE:**  
When using crimp contacts with 20 gage barrel, barrel must be cut off prior to removing contact from connector body.

CRIMP REMOVABLE CONTACTS	
SIZE	PART NUMBER
20-22 AWG	RM300-000-571-0000
24-26 AWG	RM300-000-581-0000
28-30 AWG	RM300-000-591-0000

DIMENSIONS						
SIZE	A	B	C	D	E	F
11	.665	.475	1.005	.835	.225	.150
23	.965	.775	1.305	1.135	.525	.450
35	1.265	1.075	1.605	1.435	.825	.750
47	1.565	1.375	1.905	1.735	1.125	1.050
59	1.865	1.675	2.205	2.035	1.425	1.350
71	2.165	1.975	2.505	2.335	1.725	1.650
80	2.390	2.200	2.730	2.560	1.950	1.875

**PLUG:** RM312-080-121-2900  
**RECEPTACLE:** RM322-080-581-5900  
 XXXXX-XXX-XXX-XXXX

**PLUG**

**RECEPTACLE**

**SERIES**

RM .075" Screw Machine PC Connector | RM .075" Screw Machine PC Connector

**BODY**

3 3-Row | 3 3-Row

**BODY STYLE:**

1 Plug, straight, with mounting ears	2 Receptacle, straight, with mounting ears
3 Plug, straight, without mounting ears	4 Receptacle, straight, without mounting ears

**BODY MATERIAL:**

2 Polyphenylene sulfide (PPS) | 2 Polyphenylene sulfide (PPS)

**SIZE**

011, 023, 035, 047, 059, 071, 080 | 011, 023, 035, 047, 059, 071, 080

**CONTACTS**

**TYPE CONTACTS/TERMINATIONS:**

10 Pin, straight, dip solder, .109" x .020" dia  
 11 Pin, straight, solder cup  
 12 Pin, straight, dip solder, .140" x .020" dia  
 13 Pin, straight, dip solder, .172" x .020" dia  
 14 Pin, straight, dip solder, .250" x .020" dia  
 15 Pin, straight, flex, .093" x .017" dia

**TYPE CONTACTS/TERMINATIONS:**

00 Contacts not supplied  
 57 Socket, straight, crimp removable (20-22 AWG)\*  
 58 Socket, straight, crimp removable (24-26 AWG)\*  
 59 Socket, straight, crimp removable (28-30 AWG)\*

**PLATING OPTIONS:**

1 Gold plated termination  
 2 Pre-tinned termination, SnPb alloy (dip solder options only)   
 3 Pre-tinned termination, SAC305 alloy (dip solder options only)

**PLATING OPTIONS:**

0 No plating (use with Contact Option "00" only)  
 1 Gold plated termination

**HARDWARE**

**STYLE OF HARDWARE:**

(See R-41 & R-42 for all options)

0256 None  
 55 Guide set  
 57 Two guide pins  
 58 Two guide sockets  
 29 Fixed jackset  
 30 Fixed jackset, reversed  
 19 Two fixed jackscrews  
 20 Two fixed jackscrews  
 59 Hex turning jackset, .200" knob  
 60 Hex turning jackset, reversed, .200" knob  
 61 Two hex turning jackscrews, .200" knob  
 62 Two hex turning jackscrews, .200" knob  
 64 Turning jackset, .490" knob  
 65 Turning jackset, reversed, .490" knob  
 66 Two turning jackscrews, .490" knob  
 67 Two turning jackscrews, .490" knob

**STYLE OF HARDWARE:**

(See R-41 & R-42 for all options)

0256 None  
 55 Guide set  
 57 Two guide pins  
 58 Two guide sockets  
 29 Fixed jackset  
 30 Fixed jackset, reversed  
 19 Two fixed jackscrews  
 20 Two fixed jackscrews  
 59 Hex turning jackset, .200" knob  
 60 Hex turning jackset, reversed, .200" knob  
 61 Two hex turning jackscrews, .200" knob  
 62 Two hex turning jackscrews, .200" knob  
 64 Turning jackset, .490" knob  
 65 Turning jackset, reversed, .490" knob  
 66 Two turning jackscrews, .490" knob  
 67 Two turning jackscrews, .490" knob

**POLARIZATION:**

00 None  
 01 thru 68 are special identifiers, see R-38  
 70 Same configuration as 01 without Loctite®  
 (To be keyed by customer)

**POLARIZATION**

00 None  
 01 thru 68 are special identifiers, see R-38  
 70 Same configuration as 01 without Loctite®  
 (To be keyed by customer)

\* Full complement of crimp removable sockets packaged with connectors

1. Crimp tool - AirBorn part number: CDG4601, Mil Spec number M22520/2-01
2. Crimp positioner - AirBorn part number: CDG4602 (24-26 AWG and 28-30 AWG)  
 CDG4603 (20-22 AWG)
3. Crimp removal tool - AirBorn part number: CDG8161 (All AWGs)
4. Crimp contact part number on previous page.

= Option not RoHS compliant



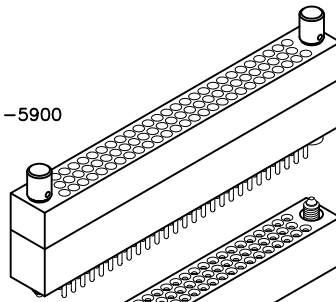
# 3 • ROW Crimp Removable to Crimp Removable

.075"

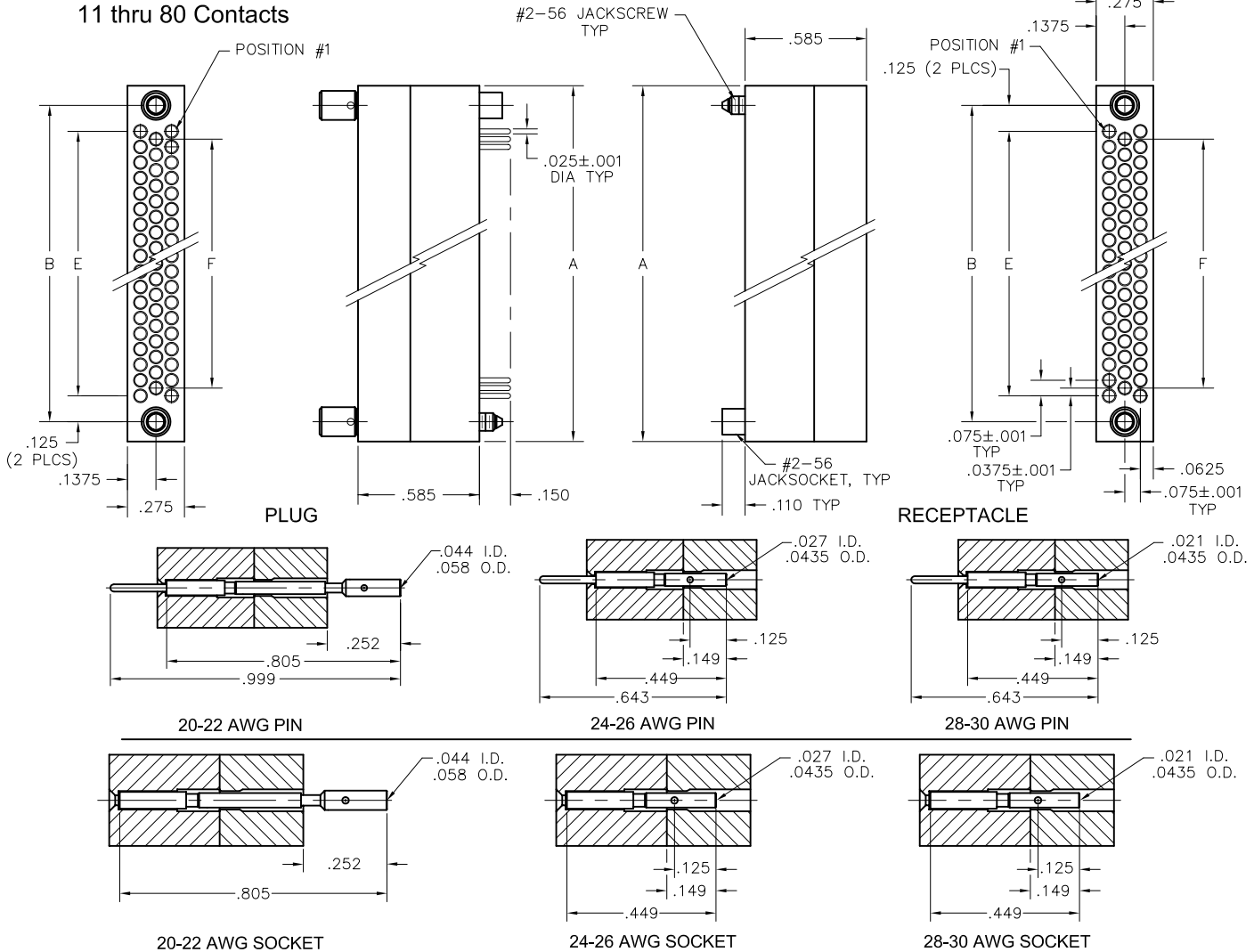
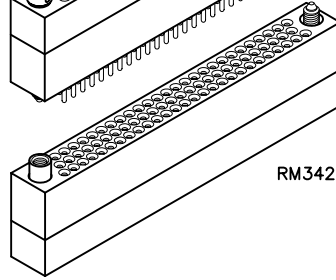
**RM3**

11 thru 80 Contacts

RM332-080-181-5900



RM342-080-581-2900



NOTE: When using crimp contacts with 20 gage barrel, barrel must be cut off prior to removing contact from connector body.

CRIMP REMOVABLE CONTACTS	
SIZE	PART NUMBER
20-22 AWG PIN	RM300-000-171-0000
24-26 AWG PIN	RM300-000-181-0000
28-30 AWG PIN	RM300-000-191-0000
20-22 AWG SKT	RM300-000-571-0000
24-26 AWG SKT	RM300-000-581-0000
28-30 AWG SKT	RM300-000-591-0000

DIMENSIONS				
SIZE	A	B	E	F
11	.665	.475	.225	.150
23	.965	.775	.525	.450
35	1.265	1.075	.825	.750
47	1.565	1.375	1.125	1.050
59	1.865	1.675	1.425	1.350
71	2.165	1.975	1.725	1.650
80	2.390	2.200	1.950	1.875



**PLUG:** RM332-080- 181-5900  
**RECEPTACLE:** RM342-080- 581-2900  
 XXXXX-XXX-XXX-XXXX

**PLUG**

**RECEPTACLE**

SERIES	
RM .075" Screw Machine PC Connector	RM .075" Screw Machine PC Connector

BODY	
3 3-Row	3 3-Row

1 Plug, straight, with mounting ears	2 Receptacle, straight, with mounting ears
3 Plug, straight, without mounting ears	4 Receptacle, straight, without mounting ears

2 Polyphenylene sulfide (PPS)	2 Polyphenylene sulfide (PPS)
-------------------------------	-------------------------------

SIZE	
011, 023, 035, 047, 059, 071, 080	011, 023, 035, 047, 059, 071, 080

CONTACTS	
<b>TYPE CONTACTS/TERMINATIONS:</b>	<b>TYPE CONTACTS/TERMINATIONS:</b>
00 Contacts not supplied	00 Contacts not supplied
17 Pin, straight, crimp removable (20-22 AWG)*	57 Socket, straight, crimp removable (20-22 AWG)*
18 Pin, straight, crimp removable (24-26 AWG)*	58 Socket, straight, crimp removable (24-26 AWG)*
19 Pin, straight, crimp removable (28-30 AWG)*	59 Socket, straight, crimp removable (28-30 AWG)*
<b>PLATING OPTIONS:</b>	<b>PLATING OPTIONS:</b>
0 No plating (use with Contact Option "00" only)	0 No plating (use with Contact Option "00" only)
1 Gold plated termination	1 Gold plated termination

HARDWARE	
<b>STYLE OF HARDWARE:</b> (See R-41 & R-42 for all options)	<b>STYLE OF HARDWARE:</b> (See R-41 & R-42 for all options)
0256 None	0256 None
55 Guide set	55 Guide set
57 Two guide pins	57 Two guide pins
58 Two guide sockets	58 Two guide sockets
29 Fixed jackset	29 Fixed jackset
30 Fixed jackset, reversed	30 Fixed jackset, reversed
19 Two fixed jackscrews	19 Two fixed jackscrews
20 Two fixed jackscrews	20 Two fixed jackscrews
59 Hex turning jackset, .200" knob	59 Hex turning jackset, .200" knob
60 Hex turning jackset, reversed, .200" knob	60 Hex turning jackset, reversed, .200" knob
61 Two hex turning jackscrews, .200" knob	61 Two hex turning jackscrews, .200" knob
62 Two hex turning jackscrews, .200" knob	62 Two hex turning jackscrews, .200" knob
64 Turning jackset, .490" knob	64 Turning jackset, .490" knob
65 Turning jackset, reversed, .490" knob	65 Turning jackset, reversed, .490" knob
66 Two turning jackscrews, .490" knob	66 Two turning jackscrews, .490" knob
67 Two turning jackscrews, .490" knob	67 Two turning jackscrews, .490" knob
<b>POLARIZATION:</b>	<b>POLARIZATION</b>
00 None	00 None
01 thru 68 are special identifiers, see R-38	01 thru 68 are special identifiers, see R-38
70 Same configuration as 01 without Loctite® (To be keyed by customer)	70 Same configuration as 01 without Loctite® (To be keyed by customer)

- \* Full compliment of crimp removable sockets packaged with connectors
1. Crimp tool - AirBorn part number: CDG4601, Mil Spec number M22520/2-01
  2. Crimp positioner - AirBorn part number: CDG4602 (24-26 AWG and 28-30 AWG)  
CDG4603 (20-22 AWG)
  3. Crimp removal tool - AirBorn part number: CDG8161 (All AWGs)
  4. Crimp contact part number on previous page.



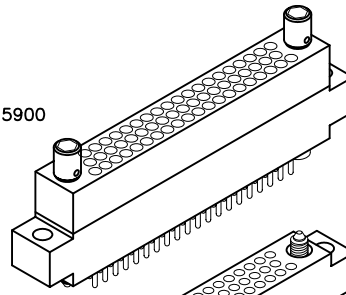
# 3 • ROW Crimp Removable to Cable or Board

.075"

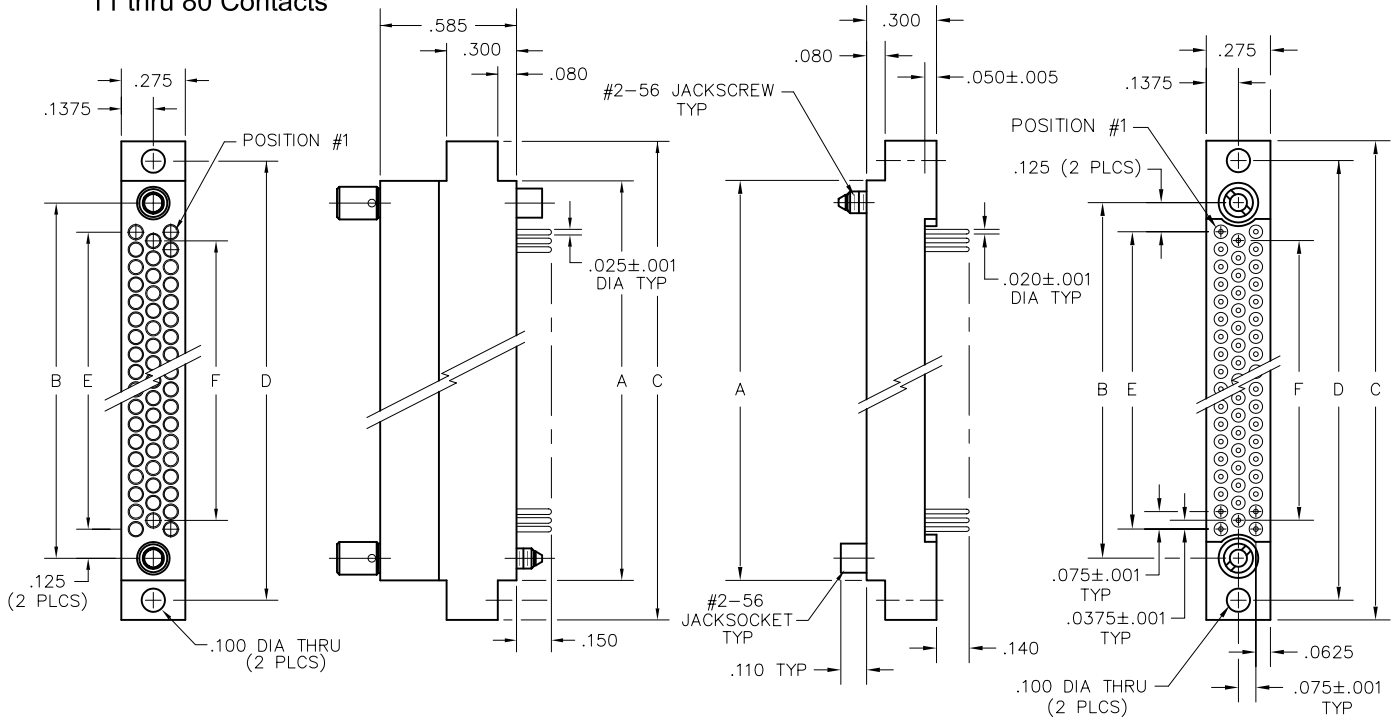
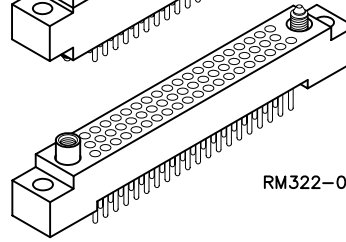
**RM3**

11 thru 80 Contacts

RM312-059-181-5900

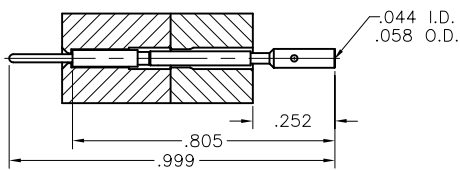


RM322-059-211-2900

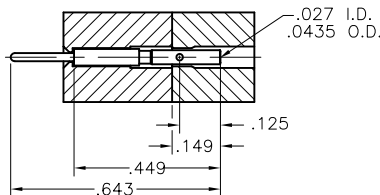


PLUG

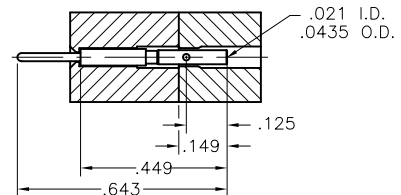
RECEPTACLE



20-22 AWG



24-26 AWG



28-30 AWG

NOTE:

When using crimp contacts with 20 gage barrel, barrel must be cut off prior to removing contact from connector body.

CRIMP REMOVABLE CONTACTS	
SIZE	PART NUMBER
20-22 AWG	RM300-000-171-0000
24-26 AWG	RM300-000-181-0000
28-30 AWG	RM300-000-191-0000

DIMENSIONS						
SIZE	A	B	C	D	E	F
11	.665	.475	1.005	.835	.225	.150
23	.965	.775	1.305	1.135	.525	.450
35	1.265	1.075	1.605	1.435	.825	.750
47	1.565	1.375	1.905	1.735	1.125	1.050
59	1.865	1.675	2.205	2.035	1.425	1.350
71	2.165	1.975	2.505	2.335	1.725	1.650
80	2.390	2.200	2.730	2.560	1.950	1.875

**PLUG:** RM312-059- 181-5900  
**RECEPTACLE:** RM322-059- 211-2900  
 XXXXX-XXX-XXX-XXXX

PLUG		RECEPTACLE	
<b>SERIES</b>			
RM .075" Screw Machine PC Connector		RM .075" Screw Machine PC Connector	
<b>BODY</b>			
3	3-Row	3	3-Row
1	BODY STYLE: Plug, straight, with mounting ears	2	BODY STYLE: Receptacle, straight, with mounting ears
3	Plug, straight, without mounting ears	4	Receptacle, straight, without mounting ears
2	BODY MATERIAL: Polyphenylene sulfide (PPS)	2	BODY MATERIAL: Polyphenylene sulfide (PPS)
<b>SIZE</b>			
011, 023, 035, 047, 059, 071, 080		011, 023, 035, 047, 059, 071, 080	
<b>CONTACTS</b>			
00	TYPE CONTACTS/TERMINATIONS: Contacts not supplied	20	TYPE CONTACTS/TERMINATIONS: Socket, straight, dip solder, .109" x .020" dia
17	Pin, straight, crimp removable (20-22 AWG)*	21	Socket, straight, dip solder, .140" x .020" dia
18	Pin, straight, crimp removable (24-26 AWG)*	22	Socket, straight, dip solder, .172" x .020" dia
19	Pin, straight, crimp removable (28-30 AWG)*	23	Socket, straight, dip solder, .250" x .020" dia
		24	Socket, straight, solder cup
		25	Socket, straight, flex circuit, 093" x .017" dia
		26	Socket, straight, wire wrap <sup>®</sup> , .500" x .018 sq
		27	Socket, straight, wire wrap <sup>®</sup> , .375" x .018 sq
		28	Socket, straight, wire wrap <sup>®</sup> , .625" x .018 sq
		29	Socket, connector saver, .150" x .025" dia
		50	Socket, straight, dip solder, .140" x .016" dia
		51	Socket, straight, dip solder, .172" x .016" dia
		53	Socket, straight, stacking, .212" x .025" dia
		54	Socket, straight, stacking, .244" x .025" dia
		55	Socket, straight, stacking, .275" x .025" dia
		64	Socket, straight, press-fit, .203" (Board .093"-.125" thk)
		65	Socket, straight, press-fit, .323" (Board .156"-.200" thk)
		66	Socket, straight, press-fit, .403" (Board .250"+ thk)
0	PLATING OPTIONS: No plating (use with Contact Option "00" only)	1	PLATING OPTIONS: Gold plated termination
1	Gold plated termination	2	Pre-tinned termination, SnPb alloy (dip solder options only) <input checked="" type="checkbox"/>
		3	Pre-tinned termination, SAC305 alloy (dip solder options only)
<b>HARDWARE</b>			
0256	STYLE OF HARDWARE: (See R-41 & R-42 for all options) None	0256	STYLE OF HARDWARE: (See R-41 & R-42 for all options) None
55	Guide set	55	Guide set
57	Two guide pins	57	Two guide pins
58	Two guide sockets	58	Two guide sockets
29	Fixed jackset	29	Fixed jackset
30	Fixed jackset, reversed	30	Fixed jackset, reversed
19	Two fixed jackscrews	19	Two fixed jackscrews
20	Two fixed jacksockets	20	Two fixed jacksockets
59	Hex turning jackset, .200" knob	59	Hex turning jackset, .200" knob
60	Hex turning jackset, reversed, .200" knob	60	Hex turning jackset, reversed, .200" knob
61	Two hex turning jackscrews, .200" knob	61	Two hex turning jackscrews, .200" knob
62	Two hex turning jacksockets, .200" knob	62	Two hex turning jacksockets, .200" knob
64	Turning jackset, .490" knob	64	Turning jackset, .490" knob
65	Turning jackset, reversed, .490" knob	65	Turning jackset, reversed, .490" knob
66	Two turning jackscrews, .490" knob	66	Two turning jackscrews, .490" knob
67	Two turning jacksockets, .490" knob	67	Two turning jacksockets, .490" knob
00	POLARIZATION: None	00	POLARIZATION None
01	thru 68 are special identifiers, see R-38	01	thru 68 are special identifiers, see R-38
70	Same configuration as 01 without Loctite <sup>®</sup> (To be keyed by customer)	70	Same configuration as 01 without Loctite <sup>®</sup> (To be keyed by customer)

\* Full compliment of crimp removable sockets packaged with connectors

1. Crimp tool - AirBorn part number: CDG4601, Mil Spec number M22520/2-01
2. Crimp positioner - AirBorn part number: CDG4602 (24-26 AWG and 28-30 AWG) / CDG4603 (20-22 AWG)
3. Crimp removal tool - AirBorn part number: CDG8161 (All AWGs)
4. Crimp contact part number on previous page.

= Option not RoHS compliant

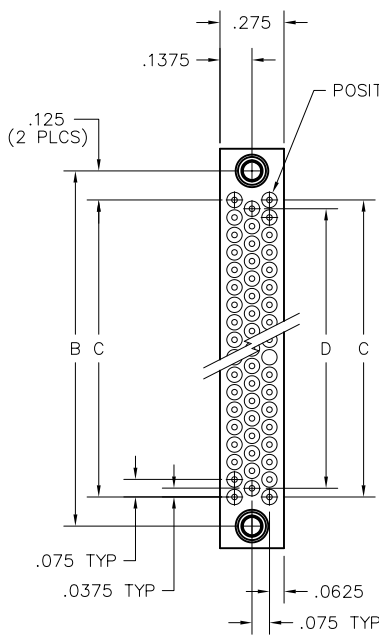
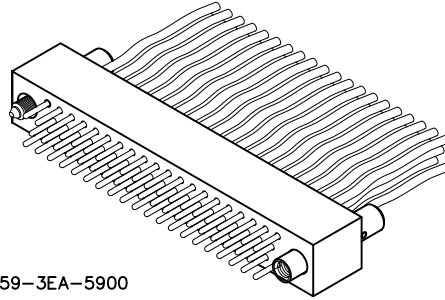
# 3 · ROW Crimped Wire I/O Plug

.075"

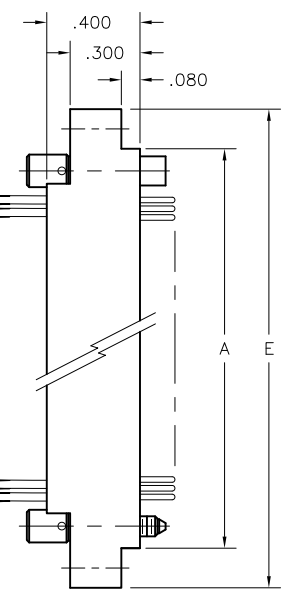
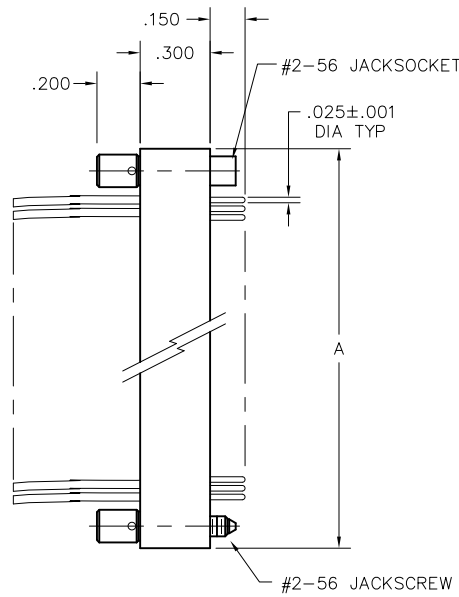
**RA3**

11 thru 104 Contacts

RA3D2-059-3EA-5900



PLUG WITHOUT  
MOUNTING EARS OR  
POTTING WELL



PLUG WITH  
MOUNTING EARS AND  
POTTING WELL

DIMENSIONS					
SIZE	A	B	C	D	E
11	.665	.475	.225	.150	1.005
23	.965	.775	.525	.450	1.305
35	1.265	1.075	.825	.750	1.605
47	1.565	1.375	1.125	1.050	1.905
59	1.865	1.675	1.425	1.350	2.205
71	2.165	1.975	1.725	1.650	2.505
80	2.390	2.200	1.950	1.875	2.730
104	2.990	2.800	2.550	2.475	3.330

RA3 PLUG CONNECTORS MATE WITH:		
MATE	DESCRIPTION	PAGE
RM322	3 ROW STRAIGHT RECEPTACLE WITH EARS	R-21
RM342	3 ROW STRAIGHT RECEPTACLE WITHOUT EARS	R-21
RM362	3 ROW RIGHT ANGLE RECEPTACLE WITH EARS	R-23
RM382	3 ROW RIGHT ANGLE RECEPTACLE WITHOUT EARS	R-23

**REPLACEMENT CONTACTS:**

RA000-001-100-0000  
RA000-001-300-0000

SEE PAGE R-33.4 FOR CRIMP INSTRUCTIONS, CONTACT INSERTION AND CONTACT REMOVAL TOOLS.

PLUG: RA3D2-059-3EA-5900  
XXXXX-XXX-XXX-XXXX

<b>SERIES</b>	
RA .075" Screw Machine PC Connector	
<b>BODY</b>	
3	3-Row
BODY STYLE:	
A	Plug, straight, w/ potting well, w/ mounting ears
B	Plug, straight, w/ potting well, w/out mounting ears
C	Plug, straight, w/out potting well, w/ mounting ears
D	Plug, straight, w/out potting well, w/out mounting ears
BODY MATERIAL:	
2	Polyphenylene sulfide (PPS)
<b>SIZE</b>	
011, 023, 035, 047, 059, 071, 080, 104	
<b>CONTACTS</b>	
TYPE CONTACTS/TERMINATIONS:	
1	Pin, crimp, 28-30 awg. contact
3	Pin, crimp, 22-26 awg. contact
WIRING OPTIONS:	
XX	See wiring codes at right
<b>HARDWARE</b>	
STYLE OF HARDWARE:	
0256	None
Guide Hardware	
5500	Guide set
5501-5568	Guide set, polarized (see page R-38)
5570	Guide set, polarized, same as 5501 without Loctite® (to be keyed by customer)
5700	Two guide pins
5800	Two guide sockets
Jacking Hardware	
2900	Fixed jackset
3000	Fixed jackset, reversed
1900	Two fixed jackscrews
2000	Two fixed jacksockets
5900	Hex turning jackset, .200" knob
6000	Hex turning jackset, reversed, .200" knob
6100	Two hex turning jackscrews, .200" knob
6200	Two hex turning jacksockets, .200" knob
6400	Turning jackset, .490" knob
6500	Turning jackset, reversed, .490" knob
6600	Two turning jackscrews, .490" knob
6700	Two turning jacksockets, .490" knob

= Option not RoHS compliant

If potting well is used with a pre-wired connector, it will be potted and not repairable.  
If potting well is not used with a pre-wired connector, it will not be potted.  
Contacts that are not potted in place can be removed and replaced only one time.  
See page R-33.4 for crimp instructions, contact insertion and contact removal tools.

**WIRE CODES**

TYPE and COLOR			LENGTH	
Code	Size	Color	Code	Length (+1"/-0")
Mil-W-16878/4				
A	22 awg	Ten repeating	A	6"
B	22 awg	White	B	12"
C	24 awg	Ten repeating	C	18"
D	24 awg	White	D	24"
E	26 awg	Ten repeating	E	30"
F	26 awg	White	F	36"
G	28 awg	Ten repeating	G	42"
H	28 awg	White	H	48"
J	30 awg	Ten repeating	J	54"
K	30 awg	White	K	60"
L			L	66"
M			M	72"
N			N	84"
P			P	96"
R			R	108"
S			S	120"
Mil-W-22759/33				
L	22 awg	Ten repeating		
M	22 awg	White		
N	24 awg	Ten repeating		
P	24 awg	White		
R	26 awg	Ten repeating		
S	26 awg	White		
T	28 awg	Ten repeating		
U	28 awg	White		
V	30 awg	Ten repeating		
W	30 awg	White		

**USING WIRE CODES:**

RA3D2-059-3EA-5900

Type and Color  Length

**Color sequence for Ten repeating wire colors:**

(Beginning in position #1)

- Black
- Brown
- Red
- Orange
- Yellow
- Green
- Blue
- Violet
- Grey
- White

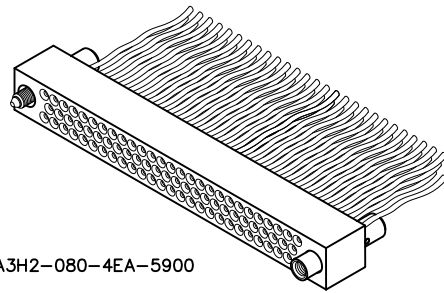
Repeat this sequence until connector is fully loaded.

# 3 · ROW Crimped Wire I/O Receptacle

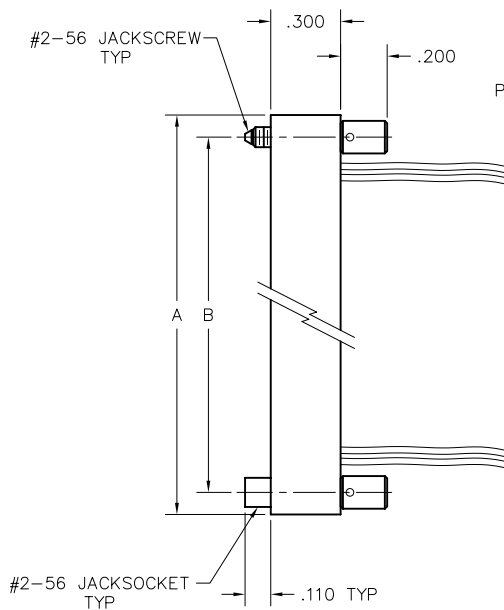
.075"

**RA3**

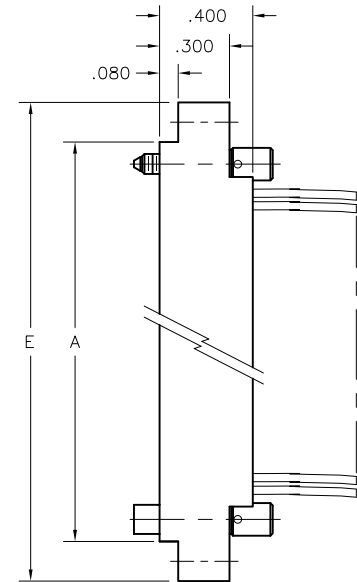
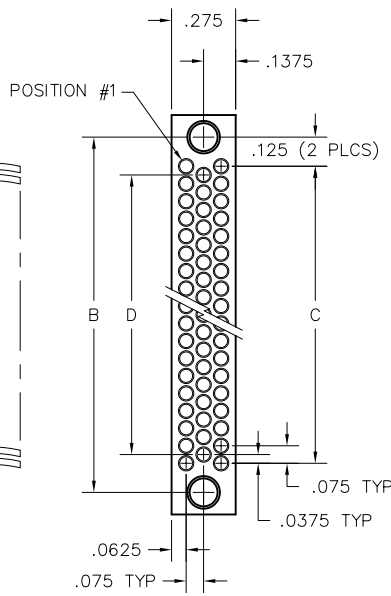
11 thru 104 Contacts



RA3H2-080-4EA-5900



RECEPTACLE WITHOUT  
MOUNTING EARS OR  
POTTING WELL



RECEPTACLE WITH  
MOUNTING EARS AND  
POTTING WELL

DIMENSIONS					
SIZE	A	B	C	D	E
11	.665	.475	.225	.150	1.005
23	.965	.775	.525	.450	1.305
35	1.265	1.075	.825	.750	1.605
47	1.565	1.375	1.125	1.050	1.905
59	1.865	1.675	1.425	1.350	2.205
71	2.165	1.975	1.725	1.650	2.505
80	2.390	2.200	1.950	1.875	2.730
104	2.990	2.800	2.550	2.475	3.330

RA3 RECEPTACLE CONNECTORS MATE WITH:		
MATE	DESCRIPTION	PAGE
RM312	3 ROW STRAIGHT PLUG WITH EARS	R-32
RM332	3 ROW STRAIGHT PLUG WITHOUT EARS	R-32
RM352	3 ROW RIGHT ANGLE PLUG WITH EARS	R-26
RM372	3 ROW RIGHT ANGLE PLUG WITHOUT EARS	R-26

**REPLACEMENT CONTACTS:**

RA000-001-200-0000  
RA000-001-400-0000

SEE PAGE R-33.4 FOR CRIMP INSTRUCTIONS, CONTACT INSERTION AND CONTACT REMOVAL TOOLS.

**PLUG:** RA3H2-080-4EA-5900  
XXXXX-XXX-XXX-XXXX

<b>SERIES</b>	
RA .075" Screw Machine PC Connector	
<b>BODY</b>	
3	3-Row
<b>BODY STYLE:</b>	
E	Receptacle, straight, w/ potting well, w/ mounting ears
F	Receptacle, straight, w/ potting well, w/out mounting ears
G	Receptacle, straight, w/out potting well, w/ mounting ears
H	Receptacle, straight, w/out potting well, w/out mounting ears
<b>BODY MATERIAL:</b>	
2	Polyphenylene sulfide (PPS)
<b>SIZE</b>	
011, 023, 035, 047, 059, 071, 080, 104	
<b>CONTACTS</b>	
<b>TYPE CONTACTS/TERMINATIONS:</b>	
2	Socket, crimp, 28-30 awg. contact
4	Socket, crimp, 22-26 awg. contact
<b>WIRING OPTIONS:</b>	
XX	See wiring codes at right
<b>HARDWARE</b>	
<b>STYLE OF HARDWARE:</b>	
0256	None
Guide Hardware	
5500	Guide set
5501-5568	Guide set, polarized (see page R-38)
5570	Guide set, polarized, same as 5501 without Loctite® (to be keyed by customer)
5700	Two guide pins
5800	Two guide sockets
Jacking Hardware	
2900	Fixed jackset
3000	Fixed jackset, reversed
1900	Two fixed jackscrews
2000	Two fixed jacksockets
5900	Hex turning jackset, .200" knob
6000	Hex turning jackset, reversed, .200" knob
6100	Two hex turning jackscrews, .200" knob
6200	Two hex turning jacksockets, .200" knob
6400	Turning jackset, .490" knob
6500	Turning jackset, reversed, .490" knob
6600	Two turning jackscrews, .490" knob
6700	Two turning jacksockets, .490" knob

= Option not RoHS compliant

If potting well is used with a pre-wired connector, it will be potted and not repairable.  
If potting well is not used with a pre-wired connector, it will not be potted.  
Contacts that are not potted in place can be removed and replaced only one time.  
See page R-33.4 for crimp instructions, contact insertion and contact removal tools.

**WIRE CODES**

TYPE and COLOR			LENGTH	
Code	Size	Color	Code	Length (+1"/-0")
<b>Mil-W-16878/4</b>				
A	22 awg	Ten repeating	A	6"
B	22 awg	White	B	12"
C	24 awg	Ten repeating	C	18"
D	24 awg	White	D	24"
E	26 awg	Ten repeating	E	30"
F	26 awg	White	F	36"
G	28 awg	Ten repeating	G	42"
H	28 awg	White	H	48"
J	30 awg	Ten repeating	J	54"
K	30 awg	White	K	60"
L			L	66"
M			M	72"
N			N	84"
P			P	96"
R			R	108"
S			S	120"
<b>Mil-W-22759/33</b>				
L	22 awg	Ten repeating		
M	22 awg	White		
N	24 awg	Ten repeating		
P	24 awg	White		
R	26 awg	Ten repeating		
S	26 awg	White		
T	28 awg	Ten repeating		
U	28 awg	White		
V	30 awg	Ten repeating		
W	30 awg	White		

**USING WIRE CODES:**

RA3H2-080-4EA-5900

Type and Color  Length

**Color sequence for Ten repeating wire colors:**

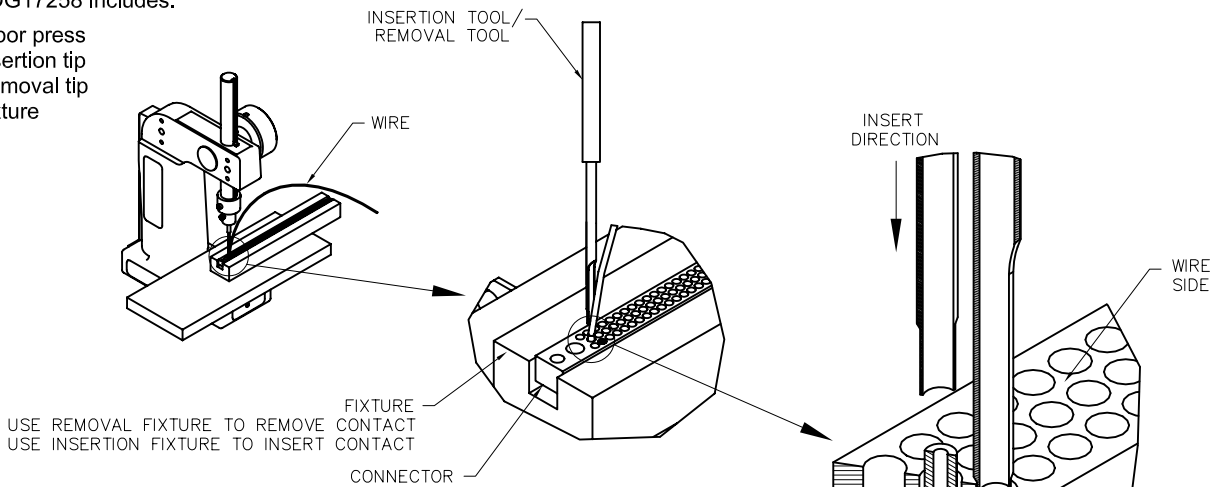
(Beginning in position #1)  
Black  
Brown  
Red  
Orange  
Yellow  
Green  
Blue  
Violet  
Grey  
White

Repeat this sequence until connector is fully loaded.

# RA Assembly Instructions

CDG17258 includes:

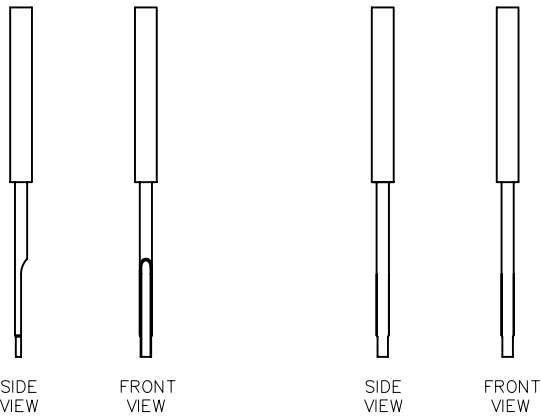
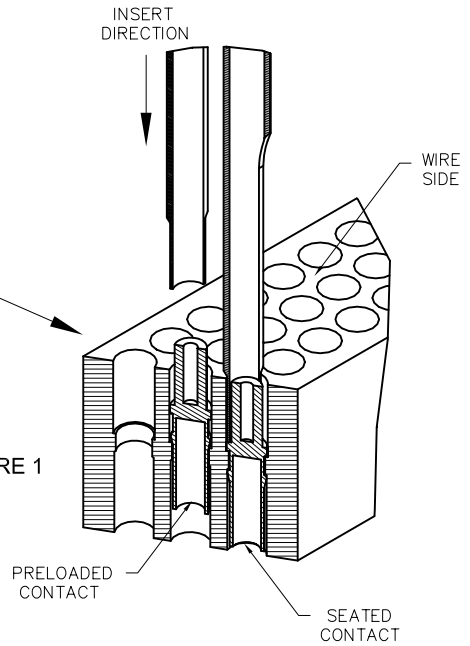
- Arbor press
- Insertion tip
- Removal tip
- Fixture



## CONTACT INSERTION INSTRUCTIONS:

1. Load connector with crimped contacts.
2. Place preloaded connector on insertion fixture with wire side facing up.
3. Position fixture so insertion tool is over contact.
4. Place wire against insertion tool cutout trench.
5. Crank handle on press to seat contact.

FIGURE 1



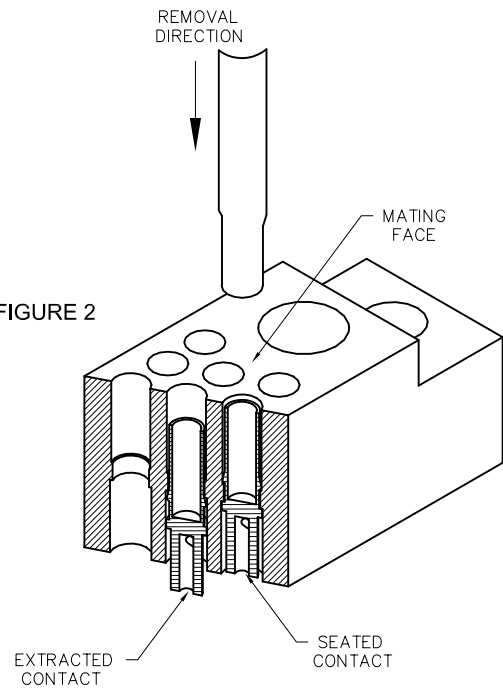
INSERTION TOOL:  
AIRBORN P/N: CDG17256

REMOVAL TOOL:  
AIRBORN P/N: CDG17257

## CONTACT REMOVAL INSTRUCTIONS:

1. Place connector on removal fixture with mating side facing up.
2. Position fixture so removal tool is over contact.
3. Crank handle on press to remove contact.

FIGURE 2

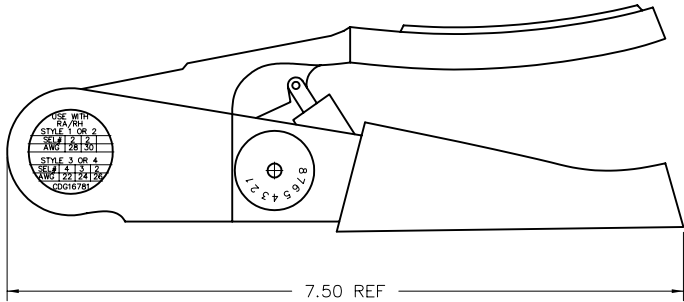




# RA Crimp Instructions

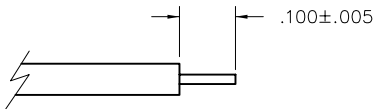
## 1. SET UP CRIMP TOOL

Install proper positioner into the crimp tool. Crimp settings are shown on the positioner for various wire gauge sizes. Adjust the wheel to the proper setting.



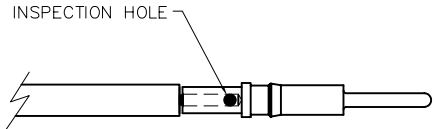
## 2. STRIP WIRE

Remove insulation from wire as shown.



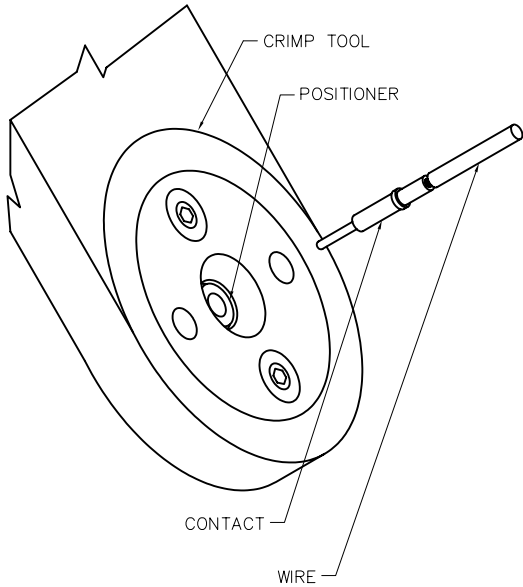
## 3. INSERT WIRE

Insert wire into the contact. Wire should be visible in the inspection hole.



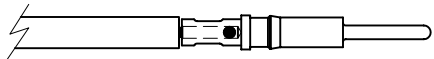
## 4. INSERT CONTACT INTO CRIMP TOOL

Make sure the contact is fully seated in the positioner. Squeeze the handles fully. The ratcheting mechanism of the tool will not allow a partial crimp. The handles will not return to the open position until fully compressed. Release the handles and remove the contact.



## 5. INSPECT CRIMPED CONTACT

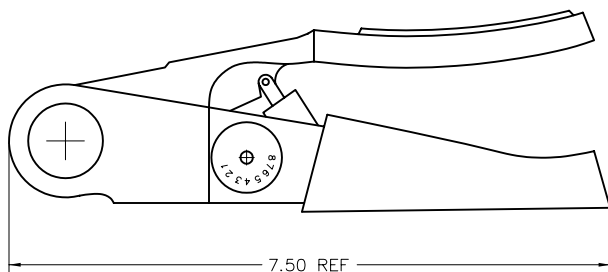
Crimp indentions should be uniform in depth and location.



# RA Crimp Accessories

Crimp Tool

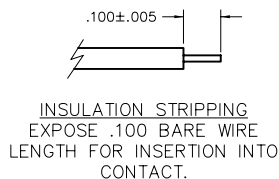
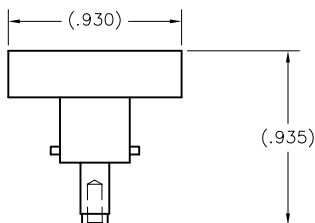
TC2963 - CRIMP TOOL  
REF M22520/2-01



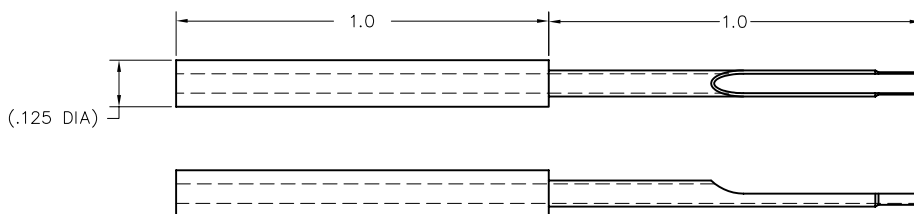
Crimp Positioner

USE WITH RA/RH			
STYLE 1 OR 2			
SEL#	2	2	
AWG	28	30	
STYLE 3 OR 4			
SEL#	4	3	2
AWG	22	24	26
CDG16781			

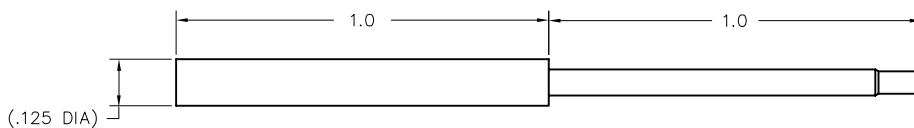
TOOL SELECTION TABLE	
CONTACT	POSITIONER
RA000-001-100-0000	CDG16781
RA000-001-200-0000	
RA000-001-300-0000	
RA000-001-400-0000	



Insertion Tool - CDG17256



Removal Tool - CDG17257

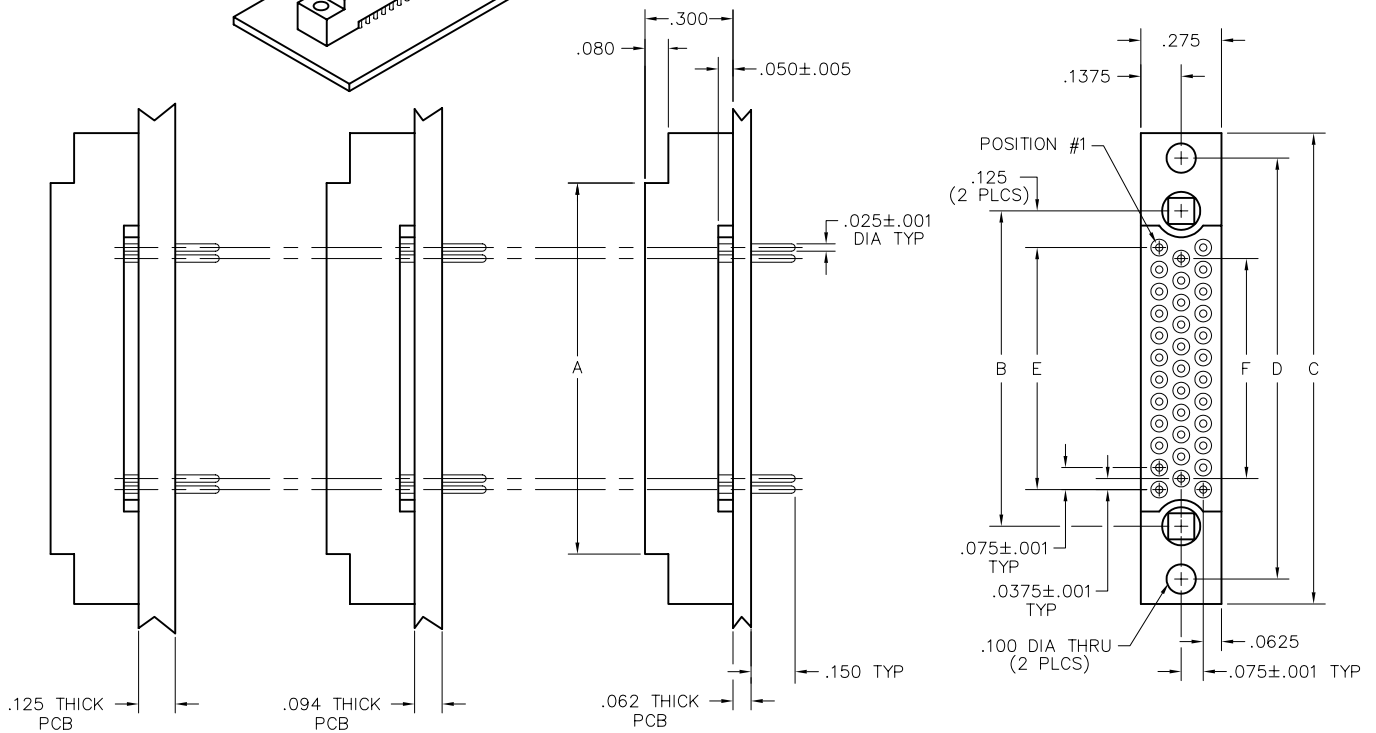


# 3 • ROW PC Board Stackable or Connector Saver

.075"

**RM3**

11 thru 206 Contacts



**NOTE:**  
Stacking connectors cannot have mating hardware.  
(-0256 indicates no hardware)

PC BOARD THICKNESS	TERMINATION LENGTH	PART NUMBER
.062	.212	RM322-035-531-0256
.094	.244	RM322-035-541-0256
.125	.275	RM322-035-551-0256
CONNECTOR SAVER	.150	RM322-035-291-0256

DIMENSIONS						
SIZE	A	B	C	D	E	F
11	.665	.475	1.005	.835	.225	.150
23	.965	.775	1.305	1.135	.525	.450
35	1.265	1.075	1.605	1.435	.825	.750
47	1.565	1.375	1.905	1.735	1.125	1.050
59	1.865	1.675	2.205	2.035	1.425	1.350
71	2.165	1.975	2.505	2.335	1.725	1.650
80	2.390	2.200	2.730	2.560	1.950	1.875
92	2.690	2.500	3.030	2.860	2.250	2.175
104	2.990	2.800	3.330	3.160	2.550	2.475
122	3.440	3.250	3.780	3.610	3.000	2.925
140	3.890	3.700	4.230	4.060	3.450	3.375
152	4.190	4.000	4.530	4.360	3.750	3.675
182	4.940	4.750	5.280	5.110	4.500	4.425
206	5.540	5.350	5.880	5.710	5.100	5.025



# 3 • ROW

## Right Angle PTH Plug

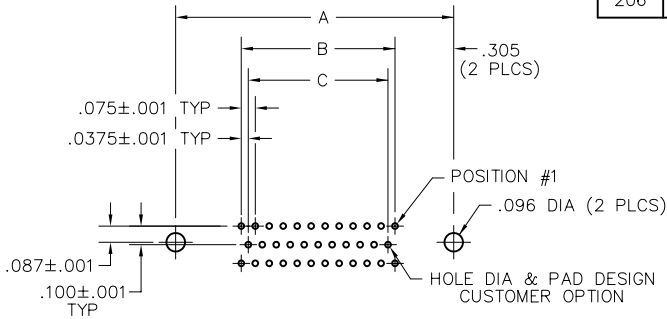
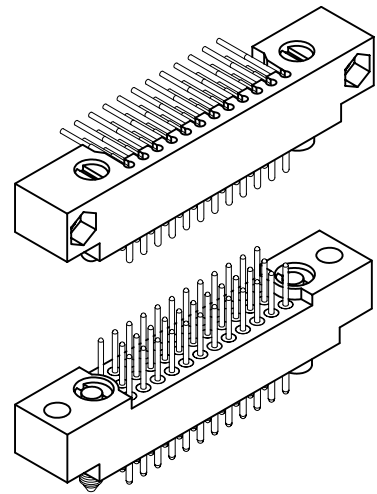
## Straight PTH Plug

.075"

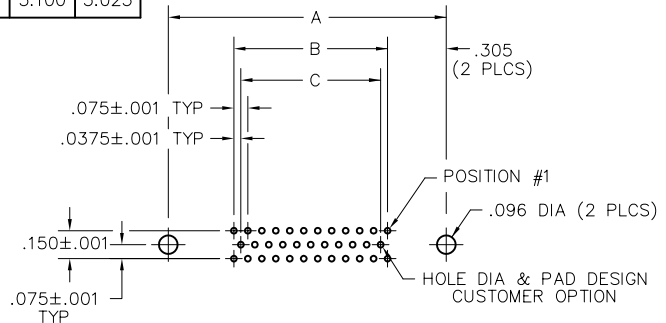
**RM3**

11 thru 206 Contacts  
Recommended  
Board Layout

DIMENSIONS			
SIZE	A	B	C
11	.835	.225	.150
23	1.135	.525	.450
35	1.435	.825	.750
47	1.735	1.125	1.050
59	2.035	1.425	1.350
71	2.335	1.725	1.650
80	2.560	1.950	1.875
92	2.860	2.250	2.175
104	3.160	2.550	2.475
122	3.610	3.000	2.925
140	4.060	3.450	3.375
152	4.360	3.750	3.675
182	5.110	4.500	4.425
206	5.710	5.100	5.025

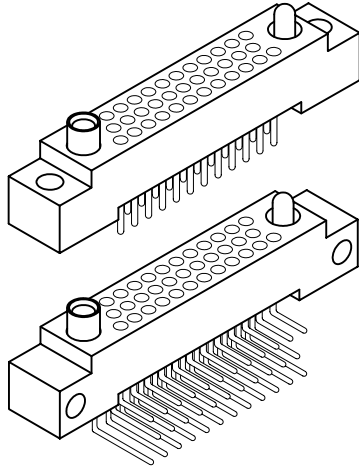


**RIGHT ANGLE PTH PLUG**  
PC BOARD VIEWED FROM COMPONENT SIDE



**STRAIGHT PTH PLUG**  
PC BOARD VIEWED FROM COMPONENT SIDE

SIZE	CONTACT ID	SIZE	CONTACT ID																																										
11	<table border="0"> <tr><td>4</td><td>3</td><td>2</td><td>1</td></tr> <tr><td>7</td><td>6</td><td>5</td><td></td></tr> <tr><td>11</td><td>10</td><td>9</td><td>8</td></tr> </table>	4	3	2	1	7	6	5		11	10	9	8	92	<table border="0"> <tr><td>31</td><td>30</td><td>29</td><td>3</td><td>2</td><td>1</td></tr> <tr><td>61</td><td>60</td><td>59</td><td>34</td><td>33</td><td>32</td></tr> <tr><td>92</td><td>91</td><td>90</td><td>64</td><td>63</td><td>62</td></tr> </table>	31	30	29	3	2	1	61	60	59	34	33	32	92	91	90	64	63	62												
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23	<table border="0"> <tr><td>8</td><td>7</td><td>6</td><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td></tr> <tr><td>15</td><td>14</td><td>13</td><td>12</td><td>11</td><td>10</td><td>9</td><td></td></tr> <tr><td>23</td><td>22</td><td>21</td><td>20</td><td>19</td><td>18</td><td>17</td><td>16</td></tr> </table>	8	7	6	5	4	3	2	1	15	14	13	12	11	10	9		23	22	21	20	19	18	17	16	104	<table border="0"> <tr><td>35</td><td>34</td><td>33</td><td>3</td><td>2</td><td>1</td></tr> <tr><td>69</td><td>68</td><td>67</td><td>38</td><td>37</td><td>36</td></tr> <tr><td>104</td><td>103</td><td>102</td><td>72</td><td>71</td><td>70</td></tr> </table>	35	34	33	3	2	1	69	68	67	38	37	36	104	103	102	72	71	70
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35	<table border="0"> <tr><td>12</td><td>11</td><td>10</td><td>3</td><td>2</td><td>1</td></tr> <tr><td>23</td><td>22</td><td>21</td><td>15</td><td>14</td><td>13</td></tr> <tr><td>35</td><td>34</td><td>33</td><td>26</td><td>25</td><td>24</td></tr> </table>	12	11	10	3	2	1	23	22	21	15	14	13	35	34	33	26	25	24	122	<table border="0"> <tr><td>41</td><td>40</td><td>39</td><td>3</td><td>2</td><td>1</td></tr> <tr><td>81</td><td>80</td><td>79</td><td>44</td><td>43</td><td>42</td></tr> <tr><td>122</td><td>121</td><td>120</td><td>84</td><td>83</td><td>82</td></tr> </table>	41	40	39	3	2	1	81	80	79	44	43	42	122	121	120	84	83	82						
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47	<table border="0"> <tr><td>16</td><td>15</td><td>14</td><td>3</td><td>2</td><td>1</td></tr> <tr><td>31</td><td>30</td><td>29</td><td>19</td><td>18</td><td>17</td></tr> <tr><td>47</td><td>46</td><td>45</td><td>34</td><td>33</td><td>32</td></tr> </table>	16	15	14	3	2	1	31	30	29	19	18	17	47	46	45	34	33	32	140	<table border="0"> <tr><td>47</td><td>46</td><td>45</td><td>3</td><td>2</td><td>1</td></tr> <tr><td>93</td><td>92</td><td>91</td><td>50</td><td>49</td><td>48</td></tr> <tr><td>140</td><td>139</td><td>138</td><td>96</td><td>95</td><td>94</td></tr> </table>	47	46	45	3	2	1	93	92	91	50	49	48	140	139	138	96	95	94						
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152	151	150	104	103	102																																								
71	<table border="0"> <tr><td>24</td><td>23</td><td>22</td><td>3</td><td>2</td><td>1</td></tr> <tr><td>47</td><td>46</td><td>45</td><td>27</td><td>26</td><td>25</td></tr> <tr><td>71</td><td>70</td><td>69</td><td>50</td><td>49</td><td>48</td></tr> </table>	24	23	22	3	2	1	47	46	45	27	26	25	71	70	69	50	49	48	182	<table border="0"> <tr><td>61</td><td>60</td><td>59</td><td>3</td><td>2</td><td>1</td></tr> <tr><td>121</td><td>120</td><td>119</td><td>64</td><td>63</td><td>62</td></tr> <tr><td>182</td><td>181</td><td>180</td><td>124</td><td>123</td><td>122</td></tr> </table>	61	60	59	3	2	1	121	120	119	64	63	62	182	181	180	124	123	122						
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47	46	45	27	26	25																																								
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182	181	180	124	123	122																																								
80	<table border="0"> <tr><td>27</td><td>26</td><td>25</td><td>3</td><td>2</td><td>1</td></tr> <tr><td>53</td><td>52</td><td>51</td><td>30</td><td>29</td><td>28</td></tr> <tr><td>80</td><td>79</td><td>78</td><td>56</td><td>55</td><td>54</td></tr> </table>	27	26	25	3	2	1	53	52	51	30	29	28	80	79	78	56	55	54	206	<table border="0"> <tr><td>69</td><td>68</td><td>67</td><td>3</td><td>2</td><td>1</td></tr> <tr><td>137</td><td>136</td><td>135</td><td>72</td><td>71</td><td>70</td></tr> <tr><td>206</td><td>205</td><td>204</td><td>140</td><td>139</td><td>138</td></tr> </table>	69	68	67	3	2	1	137	136	135	72	71	70	206	205	204	140	139	138						
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80	79	78	56	55	54																																								
69	68	67	3	2	1																																								
137	136	135	72	71	70																																								
206	205	204	140	139	138																																								



DIMENSIONS			
SIZE	A	B	C
11	.835	.225	.150
23	1.135	.525	.450
35	1.435	.825	.750
47	1.735	1.125	1.050
59	2.035	1.425	1.350
71	2.335	1.725	1.650
80	2.560	1.950	1.875
92	2.860	2.250	2.175
104	3.160	2.550	2.475
122	3.610	3.000	2.925
140	4.060	3.450	3.375
152	4.360	3.750	3.675
182	5.110	4.500	4.425
206	5.710	5.100	5.025

# 3 • ROW

## Right Angle PTH Rcpt

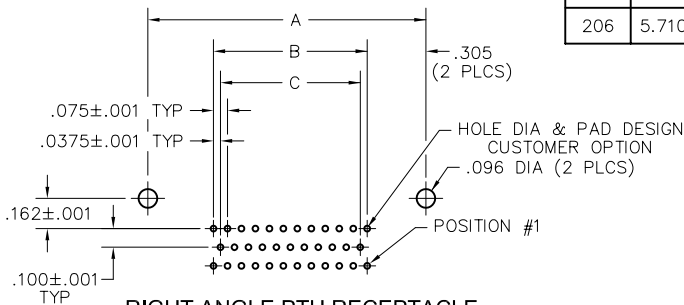
## Straight PTH Rcpt

.075"

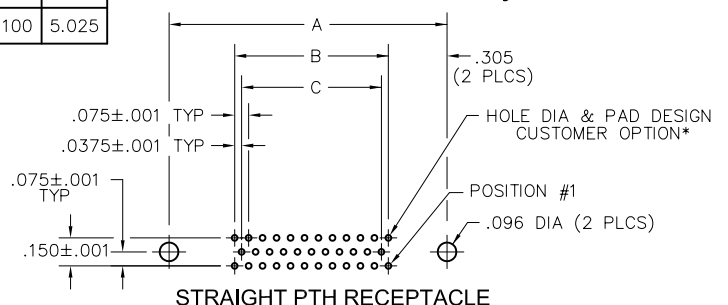
**RM3**

11 thru 206 Contacts

Recommended Board Layout



**RIGHT ANGLE PTH RECEPTACLE**  
PC BOARD VIEWED FROM COMPONENT SIDE



**STRAIGHT PTH RECEPTACLE**  
PC BOARD VIEWED FROM COMPONENT SIDE

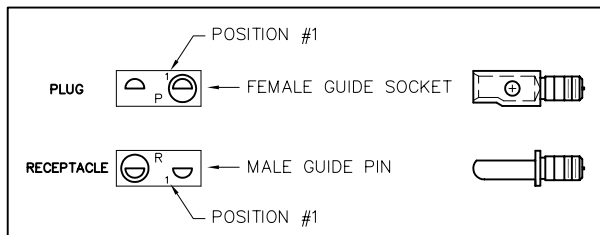
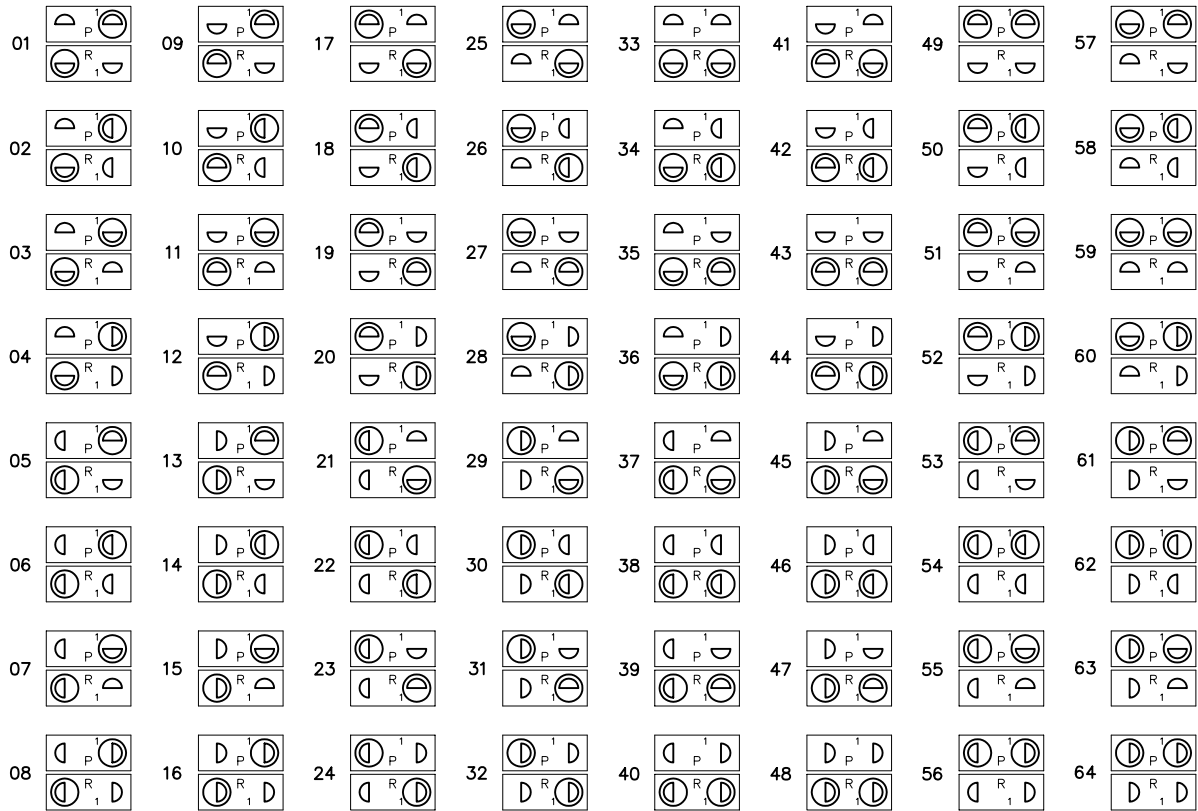
\*COMPLIANT TERMINATION REQUIREMENTS:  
Board Material: FR-4 w/ 1.0 oz. copper  
Minimum nominal board thickness: .062"  
Drilled hole: .0319"-.0339"  
Copper plating thickness: .0010" minimum

Tin-lead plating thickness: .0006" maximum  
Electroplated tin-lead composition: 63/37 (Sn/Pb)  
Finished hole diameter: .028"±.002"

SIZE	CONTACT ID	SIZE	CONTACT ID
11		92	
23		104	
35		122	
47		140	
59		152	
71		182	
80		206	

# Polarization 2 & 3 Row

## D-Shaped Guide Sets



For optimum safety, use polarization number 01-06-11-16-17-22-27 or 32 when possible. These positions will exclude entry or guide pins at both ends of connectors when an attempt is made to mate incorrectly.

Select the appropriate two digit number above and include as the last two digits of the hardware code in the part number.

Example:

Plug RM252-100-311-5501  
Receptacle RM222-100-211-5501

To order polarization guide set only, see catalog page R-42. This set consists of one "D-shaped" guide pin, one "D-shaped" guide socket and two spanner nuts (#2-56 UNC thread).

To change polarization position of guide sets, order spanner nut wrench, part number TN-1680.

### UNIVERSAL TEST CONNECTORS

The following test guide sets are designed to mate with any of several connectors having different polarization positions. Note that the square guide pin in test connector will enter the D-shaped socket in any of the four positions in which it may be installed. Likewise, the round guide socket in test connector will fit the D-shaped pin in any position.

5565 CD8783 For positions 5501 thru 5516

5566 CD8783 For positions 5517 thru 5532

5567P CD8784 For positions 5533 thru 5548

5567R CD7743 For positions 5533 thru 5548

5568P CD7743 For positions 5549 thru 5564

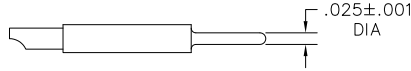
5568R CD8784 For positions 5549 thru 5564

Hardware type shown above catalog order number.

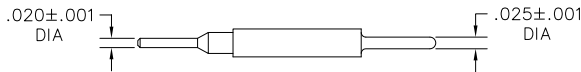
# Contacts 2 & 3 Row

Pins and Sockets

## PINS



11 Pin, straight, solder cup

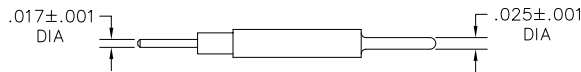


10 Pin, straight, dip solder, .109"

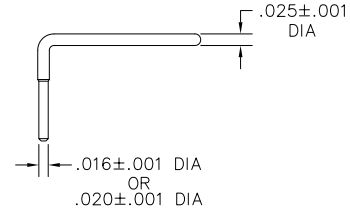
12 Pin, straight, dip solder, .140"

13 Pin, straight, dip solder, .172"

14 Pin, straight, dip solder, .250"



15 Pin, straight, flex circuit, .093"



31 Pin, right angle, dip solder, .109" x .020" dia

32 Pin, right angle, dip solder, .140" x .020" dia

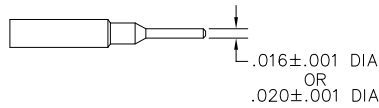
33 Pin, right angle, dip solder, .172" x .020" dia

34 Pin, right angle, dip solder, .109" x .016" dia

35 Pin, right angle, dip solder, .140" x .016" dia

36 Pin, right angle, dip solder, .172" x .016" dia

## SOCKETS



20 Socket, straight, dip solder, .109" x .020" dia

21 Socket, straight, dip solder, .140" x .020" dia

22 Socket, straight, dip solder, .172" x .020" dia

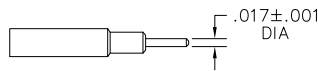
23 Socket, straight, dip solder, .250" x .020" dia

50 Socket, straight, dip solder, .140" x .016" dia

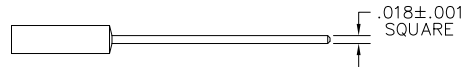
51 Socket, straight, dip solder, .172" x .016" dia



24 Socket, straight, solder cup



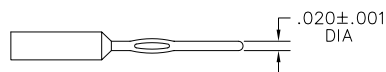
25 Socket, straight, flex circuit, .093"



26 Socket, straight, wire-wrap®, .500"

27 Socket, straight, wire-wrap®, .375"

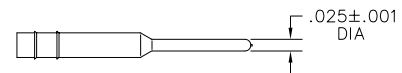
28 Socket, straight, wire-wrap®, .625"



64 Socket, straight, press-fit, .203" (Board: .093"-.125")

65 Socket, straight, press-fit, .323" (Board: .156"-.200")

66 Socket, straight, press-fit, .403" (Board: .250" or <)



53 Socket, straight, stackable, .212" (Board: .062")

54 Socket, straight, stackable, .244" (Board: .094")

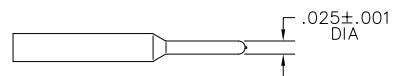
55 Socket, straight, stackable, .275" (Board: .125")



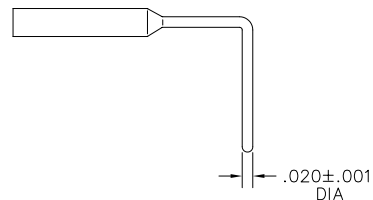
57 Socket, straight, crimp removable (20-22 awg)

58 Socket, straight, crimp removable (24-26 awg)

59 Socket, straight, crimp removable (28-30 awg)



29 Socket, connector saver, .150"



44 Socket, right angle, dip solder, .109"

45 Socket, right angle, dip solder, .140"

46 Socket, right angle, dip solder, .172"

47 Socket, right angle, dip solder, .250"

# Military Cross Reference Chart

## M55302/190, 191, 192, 193

Rows	Series & Body Type	Number of Contacts	Type of Terminal	Hardware
2	M55302/190L RM222	10, 20, 30, 40, 50, 60, 70, 80, 90, 100	Sockets	X = 5500
			A = 241	Y = 5501
			B = 201	F = 2900
3	M55302/192L RM322	122 152	Sockets	S = 5900
			D = 221	N = 7600
			E = 251	L = 5100
			F = 271	M = 6400
			G = 261	
2	M55302/191 RM252	10, 20, 30, 40, 50, 60, 70, 80, 90, 100	Pins	X = 5500
			A = 311	Y = 5501
			B = 321	F = 2900
3	M55302/193 RM352	122 152	Pins	S = 5900
			A = 311	N = 7600
			B = 321	L = 5100
			C = 331	M = 6400

### Terminal Description Refer 190L, 192L

A = Solder cup  
 B = Dip terminal, .109" long  
 C = Dip terminal, .140" long  
 D = Dip terminal, .172" long  
 E = Flex circuit, .093" long  
 F = Wire wrap®, .375" long  
 G = Wire wrap®, .500 long

### Hardware Description Refer 190L, 192L, 191, 193

Type X = Full round  
 Type Y = "D-shaped"  
 Type F = Fixed jackset  
 Type S = Short turning hex jackset  
 Type N = Turning hex jackset  
 Type L = Turning slotted jackset  
 Type M = Short turning slotted jackset

### Refer 191, 193

A = Dip terminal, .109" long  
 B = Dip terminal, .140" long  
 C = Dip terminal, .172" long

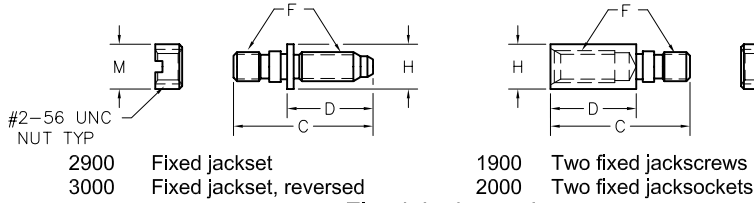
### Examples: Mating Pair

Military AirBorn	M55302/190LC100X RM222-100-211-5500	Two row receptacle, .100 socket contacts with dip terminal, .140" long in a straight thru housing with mounting ears and full round guide set.
Military AirBorn	M55302/191A100X RM252-100-311-5500	Two row plug, 100 pin contacts with dip terminals, .109" long in a right angle housing with mounting ears and full round guide set.



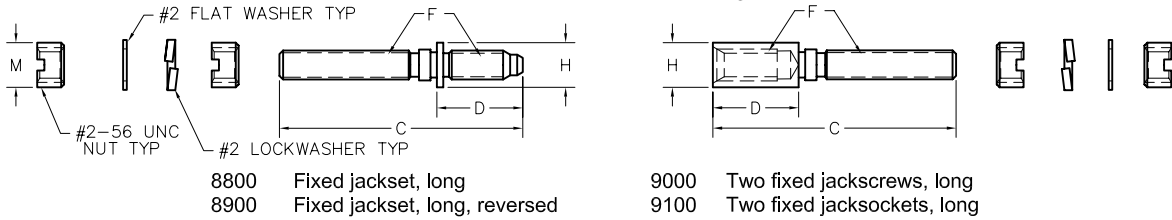
## #2-56 Jacksets

### Fixed Jacksets



2900 Fixed jackset  
3000 Fixed jackset, reversed  
1900 Two fixed jackscrews  
2000 Two fixed jacksockets

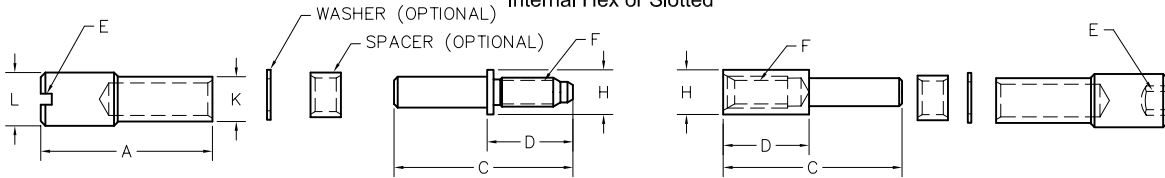
### Fixed Jacksets, Long



8800 Fixed jackset, long  
8900 Fixed jackset, long, reversed  
9000 Two fixed jackscrews, long  
9100 Two fixed jacksockets, long

### Turning Jacksets

Internal Hex or Slotted



#### SLOTTED

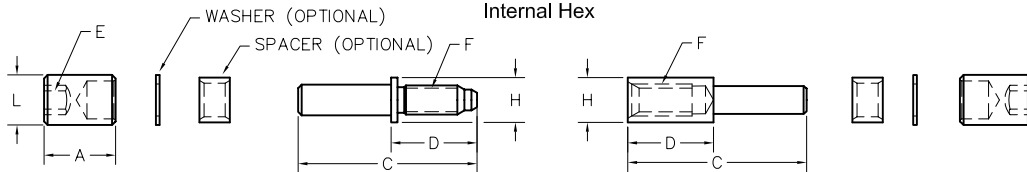
5100 Turning jackset, .700"  
5200 Turning jackset, .700", reversed  
5300 Two turning jackscrews, .700"  
5400 Two turning jacksockets, .700"  
6400 Turning jackset, .490"  
6500 Turning jackset, .490", reversed  
6600 Two turning jackscrews, .490"  
6700 Two turning jacksockets, .490"  
6800 Turning jackset, .545"  
6900 Turning jackset, .545", reversed  
7000 Two turning jackscrews, .545"  
7100 Two turning jacksockets, .545"

#### HEX

7200 Hex turning jackset, .490"  
7300 Hex turning jackset, .490", reversed  
7400 Two hex turning jackscrews, .490"  
7500 Two hex turning jacksockets, .490"  
7600 Hex turning jackset, .545"  
7700 Hex turning jackset, .545", reversed  
7800 Two hex turning jackscrews, .545"  
7900 Two hex turning jacksockets, .545"  
8000 Hex turning jackset, .700"  
8100 Hex turning jackset, .700", reversed  
8200 Two hex turning jackscrews, .700"  
8300 Two hex turning jacksockets, .700"

### Low Profile Jacksets

Internal Hex



5900 Hex turning jackset, .200"  
6000 Hex turning jackset, .200", reversed  
6100 Two hex turning jackscrews, .200"  
6200 Two hex turning jacksockets, .200"

### Hardware Only

HARDWARE TYPE	PART NUMBER
1900	RM000-000-000-1900
2000	RM000-000-000-2000
2900 or 3000	RM000-000-000-2900 (or -3000)
5100 or 5200	RM000-000-000-5100 (or -5200)
5300	RM000-000-000-5300
5400	RM000-000-000-5400
5900 or 6000	RM000-000-000-5900 (or -6000)
6100	RM000-000-000-6100
6200	RM000-000-000-6200
6400 or 6500	RM000-000-000-6400 (or -6500)
6600	RM000-000-000-6600
6700	RM000-000-000-6700

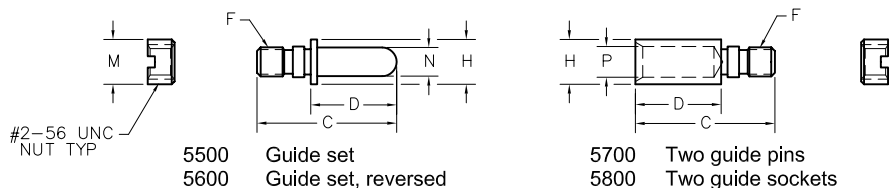
HARDWARE TYPE	PART NUMBER
6800 or 6900	RM000-000-000-6800 (or -6900)
7000	RM000-000-000-7000
7100	RM000-000-000-7100
7200 or 7300	RM000-000-000-7200 (or -7300)
7400	RM000-000-000-7400
7500	RM000-000-000-7500
7600 or 7700	RM000-000-000-7600 (or -7700)
7800	RM000-000-000-7800
7900	RM000-000-000-7900
8000 or 8100	RM000-000-000-8000 (or -8100)
8200	RM000-000-000-8200
8300	RM000-000-000-8300

#### Notes:

- For spanner nut wrench, order part number TN1680 (refer to page WA-9 in W-Series Catalog).
- When installing fixed jacksets, apply Loctite® to threads.

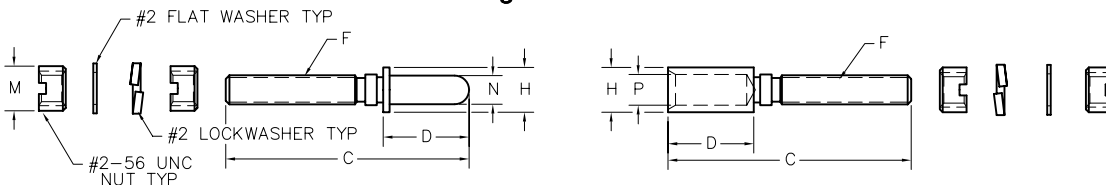
# Guide Sets

## Guide Sets



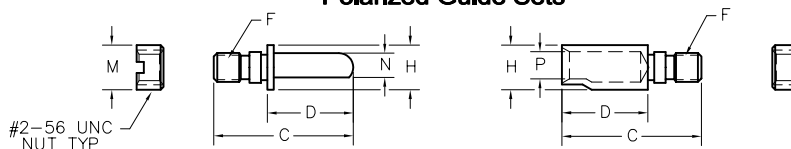
5500 Guide set  
5600 Guide set, reversed  
5700 Two guide pins  
5800 Two guide sockets

## Long Guide Sets



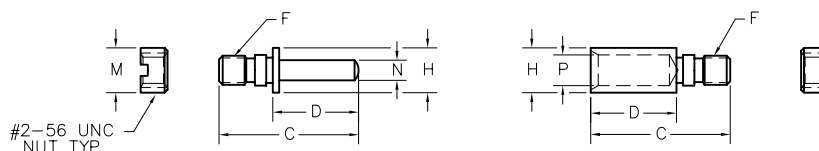
8400 Guide set, long  
8500 Guide set, long, reversed  
8600 Two guide pins, long  
8700 Two guide sockets, long

## Polarized Guide Sets



5501 thru 5564, & 5570  
Note: For polarization options, see page R-38.

## Universal Test Guide Sets



5565 thru 5568  
Note: For polarization options, see page R-38.

DIMENSIONS													
HARDWARE TYPE	A	C	D	E	F	H	K	L	M	N	P		
1900/2000/2900/3000	—	.390	.240	—	#2-56 UNC TH'D	.125 DIA	—	—	.125 DIA	—	—		
5100 THRU 5400	.700	.750		.031 x .031 SLOT			—	.125 DIA	.156 DIA	—	—	—	—
5500 THRU 5800	—	—		—			—	—	—	—	.080 DIA	.088 DIA	—
5501 THRU 5564	—	.390		—			—	—	—	—	.125 DIA	.068	.076
5565 THRU 5568	—	—		—			—	—	—	—	.056 SQ	.088 DIA	—
5900 THRU 6200	.200	.500		5/64 INT HEX			—	—	.140 DIA	—	—	—	—
6400 THRU 6700	.490	—		.031 x .031 SLOT			—	—	—	—	—	—	—
6800 THRU 7100	.545	—		—			—	—	—	—	—	—	—
7200 THRU 7500	.490	.750		5/64 INTERNAL HEX			—	—	.125 DIA	.156 DIA	—	—	—
7600 THRU 7900	.545	—		—			—	—	—	—	—	—	—
8000 THRU 8300	.700	—		—			—	—	—	—	—	—	—
8400 THRU 8700	—	—		—			—	—	—	—	.125 DIA	.080 DIA	.088 DIA
8800 THRU 9100	—	.680		—			—	—	—	—	—	—	—

## Hardware Only

HARDWARE TYPE	PART NUMBER
5500 or 5600	RM000-000-000-5500 (or -5600)
5501 - 5532	RM000-000-000-5501 (thru -5532)
5533 - 5548	RM000-000-000-5533 (thru -5548)
5549 - 5564	RM000-000-000-5549 (thru -5564)
5565 or 5566	RM000-000-000-5565 (or -5566)
5568	RM000-000-000-5568
5567	RM000-000-000-5567

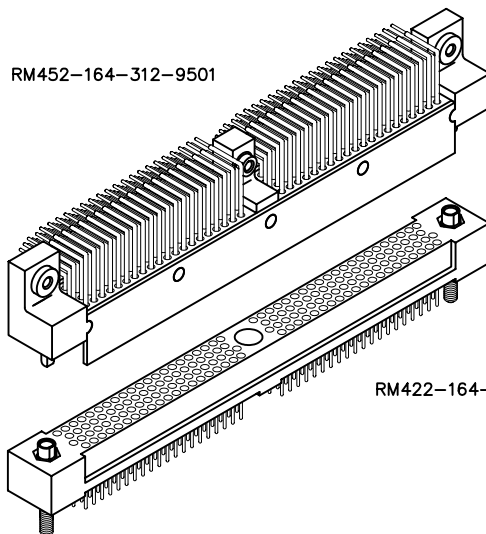
HARDWARE TYPE	PART NUMBER
5570	RM000-000-000-5570
5700	RM000-000-000-5700
5800	RM000-000-000-5800
8400 or 8500	RM000-000-000-8400 (or -8500)
8600	RM000-000-000-8600
8700	RM000-000-000-8700

To order connector without hardware, place "-0256" in hardware designation area of catalog number

Example: RM322-152-221-0256



RM452-164-312-9501



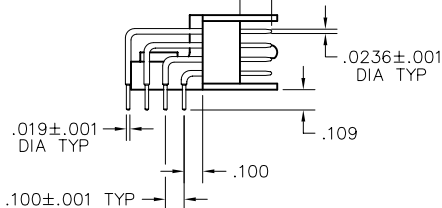
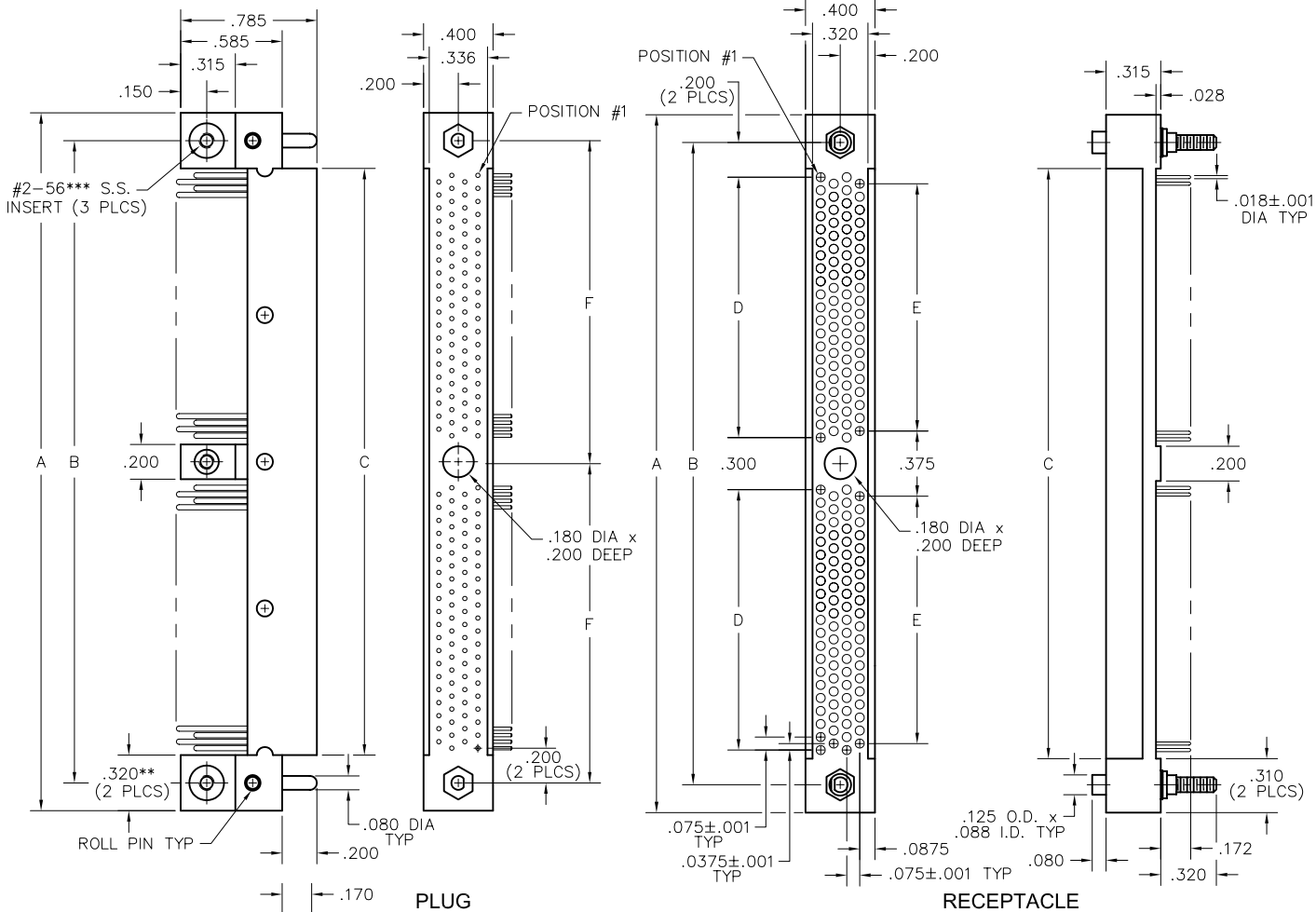
RM422-164-832-9601

# 4 · ROW Daughterboard to Motherboard or Chassis

.075"

**RM4**

86 thru 404 Contacts



SIZE	DIMENSIONS							
	A		B	C		D	E	F
	PLUG	RCPT		PLUG	RCPT			
86*	2.255	2.295	1.975	1.655	1.675	1.575	1.500	—
110*	2.745	2.745	2.425	2.105	2.125	2.025	1.950	—
164	4.020	4.020	3.700	3.380	3.400	1.500	1.425	1.850
196	4.620	4.620	4.300	3.980	4.000	1.800	1.725	2.150
204	4.770	4.770	4.450	4.130	4.150	1.875	1.800	2.225
220	5.070	5.070	4.750	4.430	4.450	2.025	1.950	2.375
250*	5.370	5.370	5.050	4.730	4.750	4.650	4.575	—
276	6.120	6.120	5.800	5.480	5.500	2.550	2.475	2.900
300	6.570	6.570	6.250	5.930	5.950	2.775	2.700	3.125
404	8.520	8.520	8.200	7.880	7.900	3.750	3.675	4.100

- NOTES:**  
 \* = Single section, no center mounting hole  
 \*\* = .280" for 86 position  
 \*\*\* = #4-40 for 404 position

**PLUG:** RM452-164-312-9501  
**RECEPTACLE:** RM422-164-832-9601  
 XXXXX-XXX-XXX-XXXX

PLUG		RECEPTACLE	
<b>SERIES</b>			
RM .075" Screw Machine PC Connector		RM .075" Screw Machine PC Connector	
<b>BODY</b>			
4	4-Row	4	4-Row
<b>BODY STYLE:</b>		<b>BODY STYLE:</b>	
5	Plug, right angle, with mounting ears	2	Receptacle, straight, without mounting ears
<b>BODY MATERIAL:</b>		<b>BODY MATERIAL:</b>	
2	Polyphenylene sulfide (PPS)	2	Polyphenylene sulfide (PPS)
<b>SIZE</b>			
086, 110, 164, 196, 204, 220, 250, 276, 300, 404		086, 110, 164, 196, 204, 220, 250, 276, 300, 404	
<b>CONTACTS</b>			
<b>TYPE CONTACTS/TERMINATIONS:</b>		<b>TYPE CONTACTS/TERMINATIONS:</b>	
31	Pin, right angle, dip solder, .109" x .019" dia	75	Socket, straight, dip solder, .250" x .018" dia
32	Pin, right angle, dip solder, .140" x .019" dia	76	Socket, straight, solder cup
33	Pin, right angle, dip solder, .172" x .019" dia	77	Socket, straight, flex, .093" x .017" dia
34	Pin, right angle, dip solder, .250" x .019" dia	78	Socket, straight, wire wrap®, .500" x .018" sq
		79	Socket, straight, wire wrap®, .375" x .018" sq
		81	Socket, straight, dip solder, .109" x .018" dia
		82	Socket, straight, dip solder, .140" x .018" dia
		83	Socket, straight, dip solder, .172" x .018" dia
		87	Socket, straight, press-fit, .188" (Board: .093" - .125" thk)
		88	Socket, straight, press-fit, .308" (Board: .156" - .200" thk)
		89	Socket, straight, press-fit, .388" (Board: .250"+ thk)
<b>PLATING OPTIONS:</b>		<b>PLATING OPTIONS:</b>	
1	Gold plated termination	1	Gold plated termination
2	Pre-tinned termination, SnPb alloy <input checked="" type="checkbox"/>	2	Pre-tinned termination, SnPb alloy (dip solder options only) <input checked="" type="checkbox"/>
3	Pre-tinned termination, SAC305 alloy	3	Pre-tinned termination, SAC305 alloy (dip solder options only)
<b>HARDWARE</b>			
<b>STYLE OF HARDWARE:</b>		<b>STYLE OF HARDWARE:</b>	
0256	None	0256	None
83	Fixed jackset, reversed, installed	82	Hex turning jackset, reversed, installed, .200 knob
90	Guide pins, full round, installed	83	Fixed jackset, reversed, installed, #2-56 x .247" thd ext
93	Fixed jackset, installed	84	Fixed jackset, reversed, installed, #2-56 x .320" thd ext
95	Guide pins, polarized, unassembled	91	Guide sockets, full round, installed, #2-56 x .247" thd ext
9501 - 9536	Guide pins, polarized, installed	92	Hex turning jackset, installed, .200 knob
99	Guide pins, universal, installed	93	Fixed jackset, installed, #2-56 x .247" thd ext
		94	Fixed jackset, installed, #2-56 x .320" thd ext
		96	Guide sockets, polarized, unassembled, #2-56 x .320" thd ext
		9601 - 9636	Guide sockets, polarized, installed, #2-56 x .320" thd ext
		97	Guide sockets, polarized, unassembled, #2-56 x .247" thd ext
		9701 - 9736	Guide sockets, polarized, installed, #2-56 x .247" thd ext
		98	Guide sockets, universal, installed, #2-56 x .247" thd ext
<b>POLARIZATION:</b>		<b>POLARIZATION</b>	
00	None	00	None
01	thru 36 are special identifiers, see page R-57	01	thru 36 are special identifiers, see page R-57

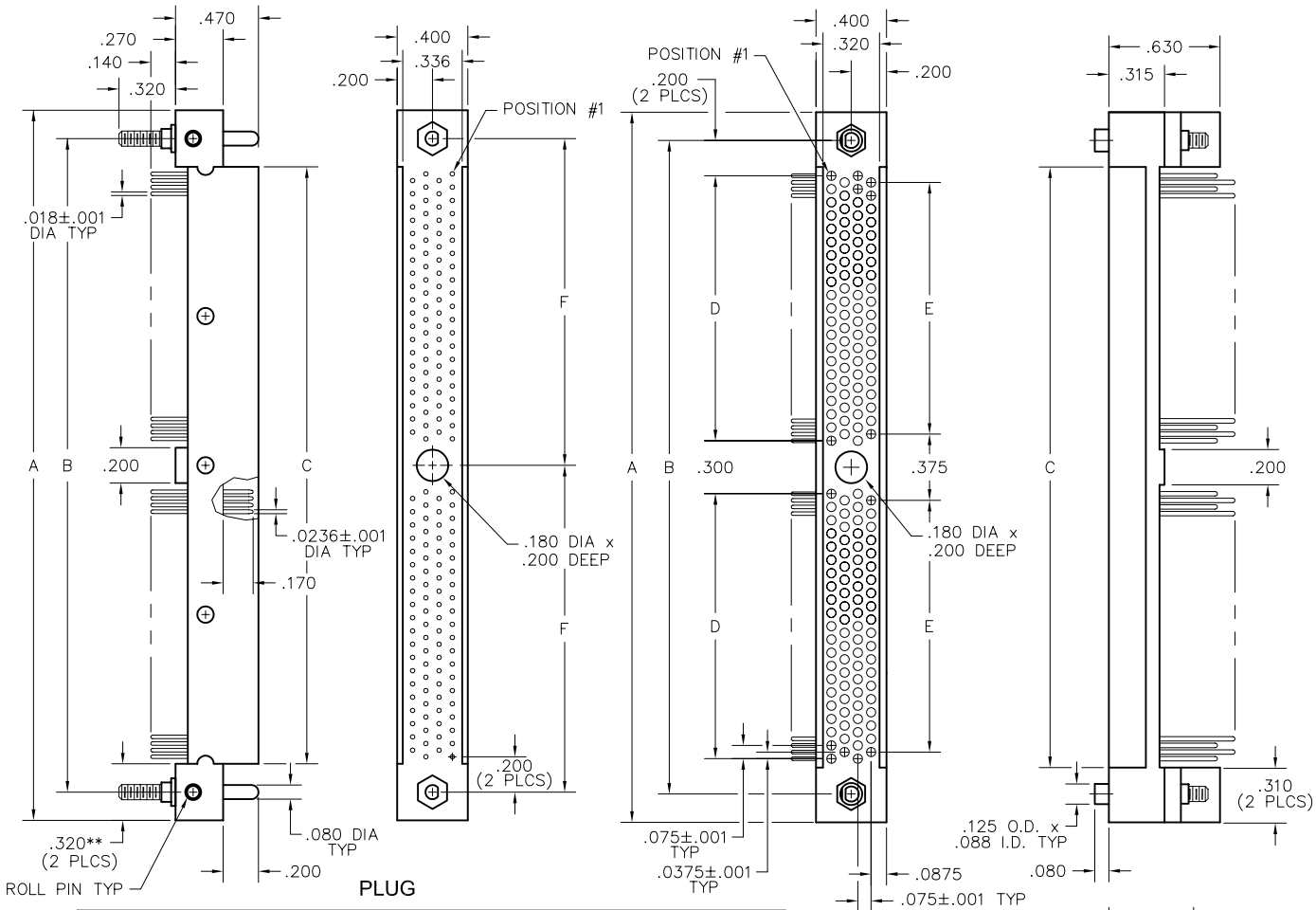
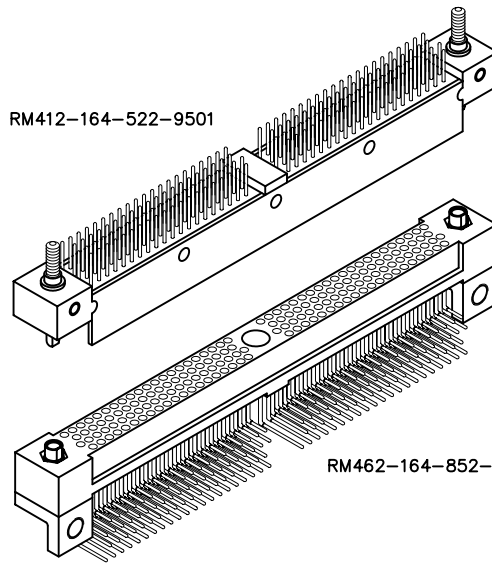
= Option not RoHS compliant

# 4 • ROW Motherboard or Chassis to Daughterboard

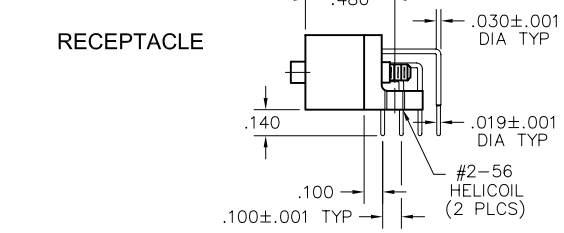
.075"

**RM4**

86 thru 404 Contacts



SIZE	DIMENSIONS							
	A		B	C		D	E	F
PLUG	RCPT	PLUG		RCPT				
86*	2.255	2.295	1.975	1.655	1.675	1.575	1.500	-
110*	2.745	2.745	2.425	2.105	2.125	2.025	1.950	-
164	4.020	4.020	3.700	3.380	3.400	1.500	1.425	1.850
196	4.620	4.620	4.300	3.980	4.000	1.800	1.725	2.150
204	4.770	4.770	4.450	4.130	4.150	1.875	1.800	2.225
220	5.070	5.070	4.750	4.430	4.450	2.025	1.950	2.375
250*	5.370	5.370	5.050	4.730	4.750	4.650	4.575	-
276	6.120	6.120	5.800	5.480	5.500	2.550	2.475	2.900
300	6.570	6.570	6.250	5.930	5.950	2.775	2.700	3.125
404	8.520	8.520	8.200	7.880	7.900	3.750	3.675	4.100



**NOTES:**  
 \* = Single section, no center mounting hole  
 \*\* = .280" for 86 position

**PLUG:** RM412-164-522-9501  
**RECEPTACLE:** RM462-164-852-9601  
 XXXXX-XXX-XXX-XXXX

**PLUG**

**RECEPTACLE**

**SERIES**

RM .075" Screw Machine PC Connector | RM .075" Screw Machine PC Connector

**BODY**

4 4-Row | 4 4-Row

**BODY STYLE:**  
 1 Plug, straight, without mounting ears | **BODY STYLE:**  
 6 Receptacle, right angle, with mounting brackets

**BODY MATERIAL:**  
 2 Polyphenylene sulfide (PPS) | **BODY MATERIAL:**  
 2 Polyphenylene sulfide (PPS)

**SIZE**

086, 110, 164, 196, 204, 220, 250, 276, 300, 404 | 086, 110, 164, 196, 204, 220, 250, 276, 300, 404

**CONTACTS**

<p><b>TYPE CONTACTS/TERMINATIONS:</b></p> <p>17 Pin, straight, solder cup          40 Pin, straight, flex .093" x .017" dia          51 Pin, straight, dip solder, .109" x .018" dia          52 Pin, straight, dip solder, .140" x .018" dia          53 Pin, straight, dip solder, .172" x .018" dia          54 Pin, straight, dip solder, .250" x .018" dia</p>	<p><b>TYPE CONTACTS/TERMINATIONS:</b></p> <p>84 Socket, right angle, dip solder, .109" x .019" dia          85 Socket, right angle, dip solder, .140" x .019" dia          86 Socket, right angle, dip solder, .172" x .019" dia</p>
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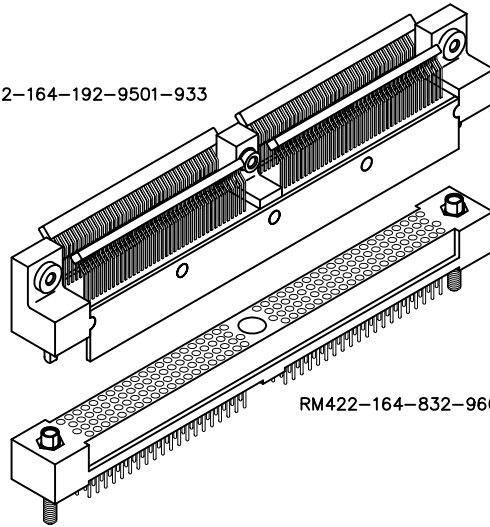
<p><b>PLATING OPTIONS:</b></p> <p>1 Gold plated termination          2 Pre-tinned termination, SnPb alloy (dip solder options only) <input checked="" type="checkbox"/>          3 Pre-tinned termination, SAC305 alloy (dip solder options only)</p>	<p><b>PLATING OPTIONS:</b></p> <p>1 Gold plated termination          2 Pre-tinned termination, SnPb alloy <input checked="" type="checkbox"/>          3 Pre-tinned termination, SAC305 alloy</p>
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**HARDWARE**

<p><b>STYLE OF HARDWARE:</b></p> <p>0256 None          82 Hex turning jackset, reversed, installed, .200 knob          83 Fixed jackset, reversed, installed, #2-56 x .247" thd ext          84 Fixed jackset, reversed, installed, #2-56 x .320" thd ext          90 Guide pins, full round, installed, #2-56 x .320" thd ext          92 Hex turning jackset, installed, .200 knob          93 Fixed jackset, installed, #2-56 x .247" thd ext          94 Fixed jackset, installed, #2-56 x .320" thd ext          95 Guide pins, polarized, unassembled, #2-56 x .320" thd ext          9501 - 9536 Guide pins, polarized, installed, #2-56 x .320" thd ext          99 Guide pins, universal, installed #2-56 x .320" thd ext</p>	<p><b>STYLE OF HARDWARE:</b></p> <p>0256 None          82 Hex turning jackset, reversed, installed, .200 knob          83 Fixed jackset, reversed, installed          91 Guide sockets, full round, installed          92 Hex turning jackset, installed, .200 knob          93 Fixed jackset, installed          96 Guide sockets, polarized, unassembled          9601 - 9636 Guide sockets, polarized, installed          97 Guide sockets, polarized, unassembled          9701 - 9736 Guide sockets, polarized, installed          98 Guide sockets, universal, installed</p> <p>Note: Includes mounting bracket when right angle contacts are supplied</p>
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<p><b>POLARIZATION:</b></p> <p>00 None          01 thru 36 are special identifiers, see page R-57</p>	<p><b>POLARIZATION</b></p> <p>00 None          01 thru 36 are special identifiers, see page R-57</p>
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= Option not RoHS compliant



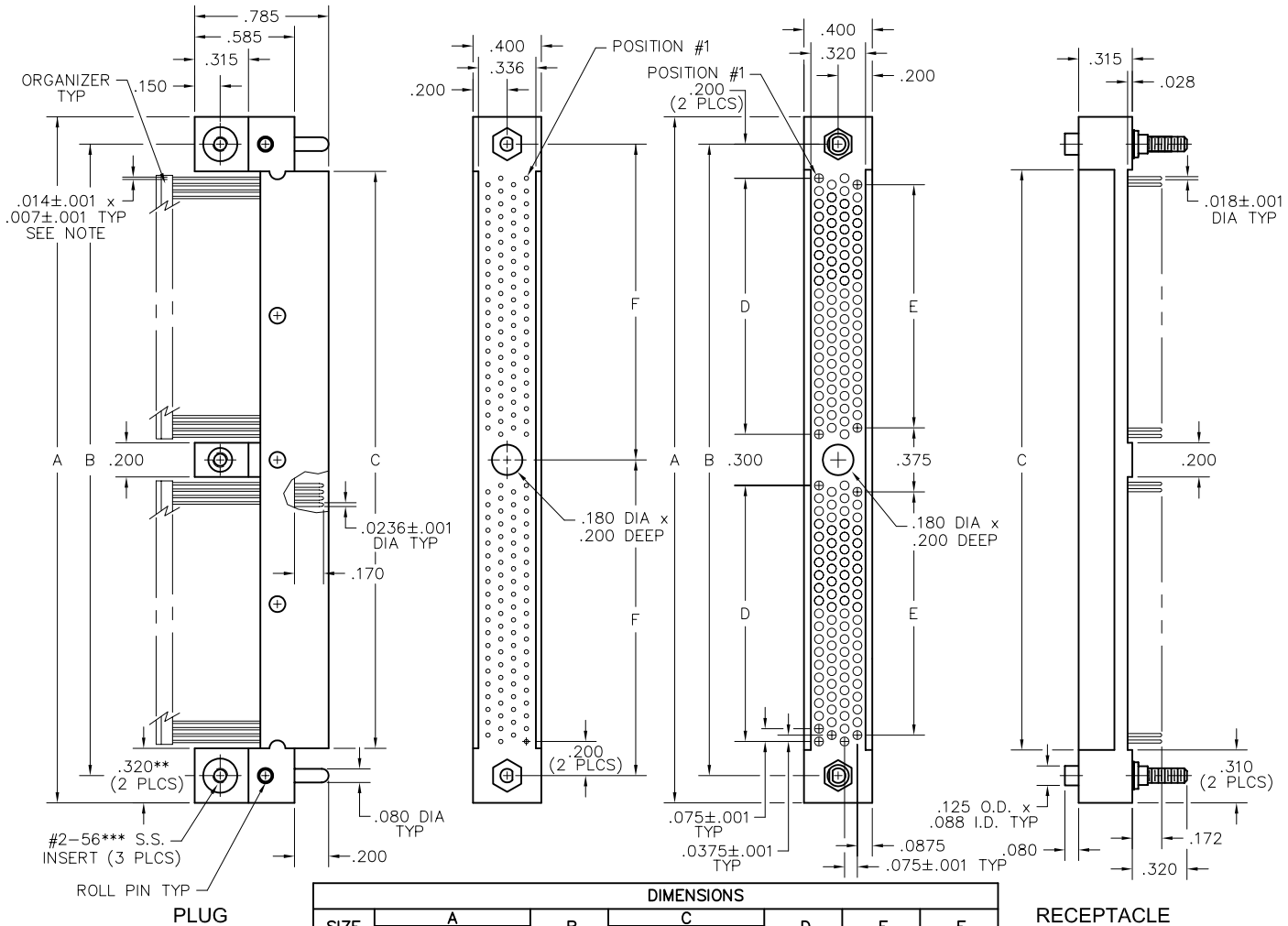
RM422-164-832-9601

# 4 • ROW Daughterboard to Motherboard or Chassis

.075"

**RM4**

86 thru 404 Contacts



SIZE	DIMENSIONS							
	A		B	C		D	E	F
	PLUG	RCPT		PLUG	RCPT			
86*	2.255	2.295	1.975	1.655	1.675	1.575	1.500	-
110*	2.745	2.745	2.425	2.105	2.125	2.025	1.950	-
164	4.020	4.020	3.700	3.380	3.400	1.500	1.425	1.850
196	4.620	4.620	4.300	3.980	4.000	1.800	1.725	2.150
204	4.770	4.770	4.450	4.130	4.150	1.875	1.800	2.225
220	5.070	5.070	4.750	4.430	4.450	2.025	1.950	2.375
250*	5.370	5.370	5.050	4.730	4.750	4.650	4.575	-
276	6.120	6.120	5.800	5.480	5.500	2.550	2.475	2.900
300	6.570	6.570	6.250	5.930	5.950	2.775	2.700	3.125
404	8.520	8.520	8.200	7.880	7.900	3.750	3.675	4.100

RECEPTACLE

NOTES:

- \* = Single section, no center mounting hole.
- \*\* = .280" for 86 position
- \*\*\* = Insert is #4-40 for size 404.

Refer to SMT Configuration Chart (R-56) for available options.

**PLUG:** RM412-164-192-9501-933  
**RECEPTACLE:** RM422-164-832-9601  
 XXXXX-XXX-XXX-XXXX-XXX

**PLUG**

**RECEPTACLE**

**SERIES**

RM .075" Screw Machine PC Connector | RM .075" Screw Machine PC Connector

**BODY**

4	4-Row	4	4-Row
1	BODY STYLE: Plug, straight, with mounting ears	2	BODY STYLE: Receptacle, straight, without mounting ears
2	BODY MATERIAL: Polyphenylene sulfide (PPS)	2	BODY MATERIAL: Polyphenylene sulfide (PPS)

**SIZE**

086, 110, 164, 196, 204, 220, 250, 276, 300, 404 | 086, 110, 164, 196, 204, 220, 250, 276, 300, 404

**CONTACTS**

TYPE CONTACTS/TERMINATIONS:		TYPE CONTACTS/TERMINATIONS:	
19	Pin, SMT, .014" x .007" tail, scored for organizer removal (see R-56)	75	Socket, straight, dip solder, .250" x .018" dia
39	Pin, SMT, .014" x .007" tail, unscored	76	Socket, straight, solder cup
		77	Socket, straight, flex, .093" x .017" dia
		78	Socket, straight, wire wrap®, .500" x .018" sq
		79	Socket, straight, wire wrap®, .375" x .018" sq
		81	Socket, straight, dip solder, .109" x .018" dia
		82	Socket, straight, dip solder, .140" x .018" dia
		83	Socket, straight, dip solder, .172" x .018" dia
		87	Socket, straight, press-fit, .188" (Board: .093" - .125" thk)
		88	Socket, straight, press-fit, .308" (Board: .156" - .200" thk)
		89	Socket, straight, press-fit, .388" (Board: .250"+ thk)

PLATING OPTIONS:		PLATING OPTIONS:	
2	Pre-tinned termination, SnPb alloy <input checked="" type="checkbox"/>	1	Gold plated termination
3	Pre-tinned termination, SAC305 alloy	2	Pre-tinned termination, SnPb alloy (dip solder options only) <input checked="" type="checkbox"/>
		3	Pre-tinned termination, SAC305 alloy (dip solder options only)

**HARDWARE**

STYLE OF HARDWARE:		STYLE OF HARDWARE:	
0256	None	0256	None
83	Fixed jackset, reversed, installed	82	Hex turning jackset, reversed, installed, .200 knob
90	Guide pins, full round, installed	83	Fixed jackset, reversed, installed, #2-56 x .247" thd ext
93	Fixed jackset, installed	84	Fixed jackset, reversed, installed, #2-56 x .320" thd ext
95	Guide pins, polarized, unassembled	91	Guide sockets, full round, installed, #2-56 x .247" thd ext
9501 - 9536	Guide pins, polarized, installed	92	Hex turning jackset, installed, .200 knob
99	Guide pins, universal, installed	93	Fixed jackset, installed, #2-56 x .247" thd ext
		94	Fixed jackset, installed, #2-56 x .320" thd ext
		96	Guide sockets, polarized, unassembled, #2-56 x .320" thd ext
		9601 - 9636	Guide sockets, polarized, installed, #2-56 x .320" thd ext
		97	Guide sockets, polarized, unassembled, #2-56 x .247" thd ext
		9701 - 9736	Guide sockets, polarized, installed, #2-56 x .247" thd ext
		98	Guide sockets, universal, installed, #2-56 x .247" thd ext

POLARIZATION:		POLARIZATION	
00	None	00	None
01	thru 36 are special identifiers, see page R-57	01	thru 36 are special identifiers, see page R-57

**OPTIONS**

9XX SMT configuration code, see page R-56

= Option not RoHS compliant





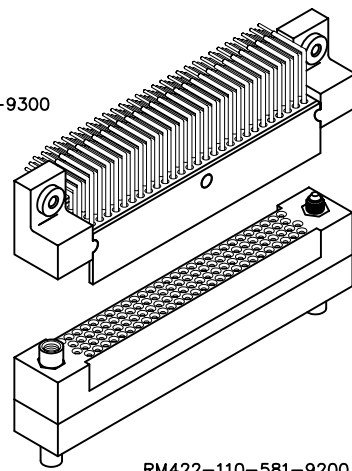
# 4 • ROW Cable or Board to Crimp Removable

.075"

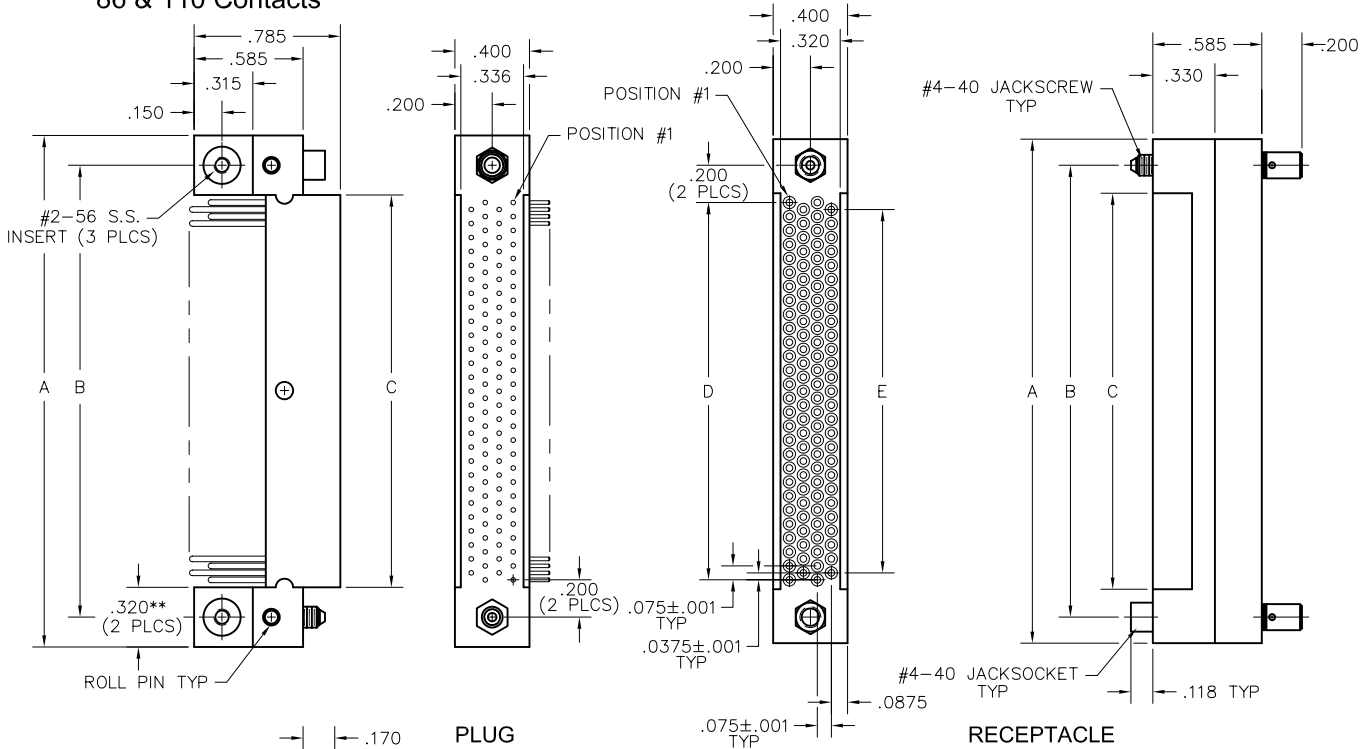
**RM4**

86 & 110 Contacts

RM452-110-312-9300



RM422-110-581-9200

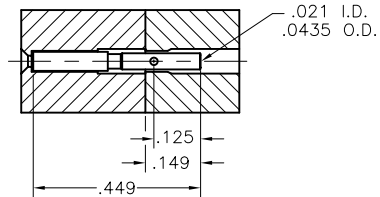
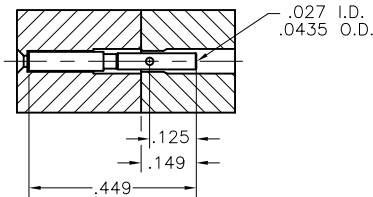
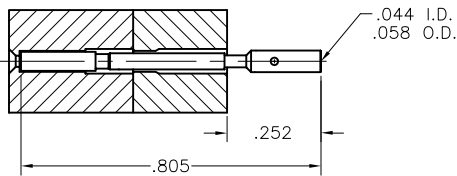


**NOTES:**

\* = Single section, no center mounting hole.

\*\* = .280" for 86 position

When using crimp contacts with 20 gage barrel, barrel must be cut off prior to removing contact from connector body.



CRIMP REMOVABLE CONTACTS	
SIZE	PART NUMBER
20-22 AWG	RM400-000-571-0000
24-26 AWG	RM400-000-581-0000
28-30 AWG	RM400-000-591-0000

SIZE	DIMENSIONS					
	A	B	C		D	E
			PLUG	RCPT		
86*	2.255	1.975	1.655	1.675	1.575	1.500
110*	2.745	2.425	2.105	2.125	2.025	1.950

**PLUG:** RM452-110-312-9300  
**RECEPTACLE:** RM422-110-581-9200  
 XXXXX-XXX-XXX-XXXX

PLUG		RECEPTACLE	
<b>SERIES</b>			
RM .075" Screw Machine PC Connector		RM .075" Screw Machine PC Connector	
<b>BODY</b>			
4	4-Row	4	4-Row
5	BODY STYLE: Plug, right angle, with mounting ears	2	BODY STYLE: Receptacle, straight, without mounting ears
2	BODY MATERIAL: Polyphenylene sulfide (PPS)	2	BODY MATERIAL: Polyphenylene sulfide (PPS)
<b>SIZE</b>			
086, 110		086, 110	
<b>CONTACTS</b>			
TYPE CONTACTS/TERMINATIONS:		TYPE CONTACTS/TERMINATIONS:	
31	Pin, right angle, dip solder, .109" x .019" dia	00	Contacts not supplied
32	Pin, right angle, dip solder, .140" x .019" dia	57	Socket, straight, crimp removable (20-22 AWG)*
33	Pin, right angle, dip solder, .172" x .019" dia	58	Socket, straight, crimp removable (24-26 AWG)*
34	Pin, right angle, dip solder, .250" x .019" dia	59	Socket, straight, crimp removable (28-30 AWG)*
PLATING OPTIONS:		PLATING OPTIONS:	
1	Gold plated termination	0	No plating (use with Contact Option "00" only)
2	Pre-tinned termination, SnPb alloy <input checked="" type="checkbox"/>	1	Gold plated termination
3	Pre-tinned termination, SAC305 alloy		
<b>HARDWARE</b>			
STYLE OF HARDWARE:		STYLE OF HARDWARE:	
0256	None	0256	None
83	Fixed jackset, reversed, installed	82	Hex turning jackset, reversed, installed, .200 knob
90	Guide pins, full round, installed	91	Guide sockets, full round, installed
93	Fixed jackset, installed	92	Hex turning jackset, installed, .200" knob
95	Guide pins, polarized, unassembled	96	Guide sockets, polarized, unassembled
9501 - 9536	Guide pins, polarized, installed	9601 - 9636	Guide sockets, polarized, installed
99	Guide pins, universal, installed	98	Guide sockets, universal, installed
POLARIZATION:		POLARIZATION	
00	None	00	None
01	thru 36 are special identifiers, see page R-57	01	thru 36 are special identifiers, see page R-57

- \* Full compliment of crimp removable sockets packaged with connectors
1. Crimp tool - AirBorn part number: CDG4601, Mil Spec number M22520/2-01
  2. Crimp positioner - AirBorn part number: CDG4602 (24-26 AWG and 28-30 AWG)  
CDG4603 (20-22 AWG)
  3. Crimp removal tool - AirBorn part number: CDG8161 (All AWGs)
  4. Crimp contact part number on previous page.

= Option not RoHS compliant



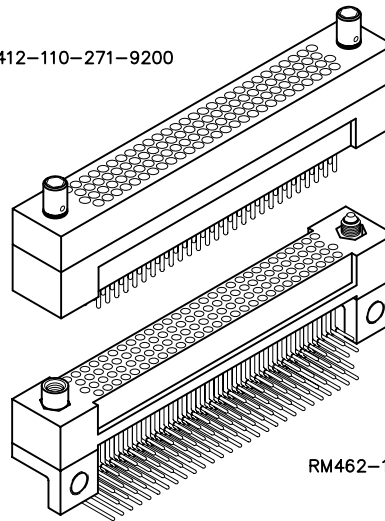
# 4 • ROW Crimp Removable to Board

.075"

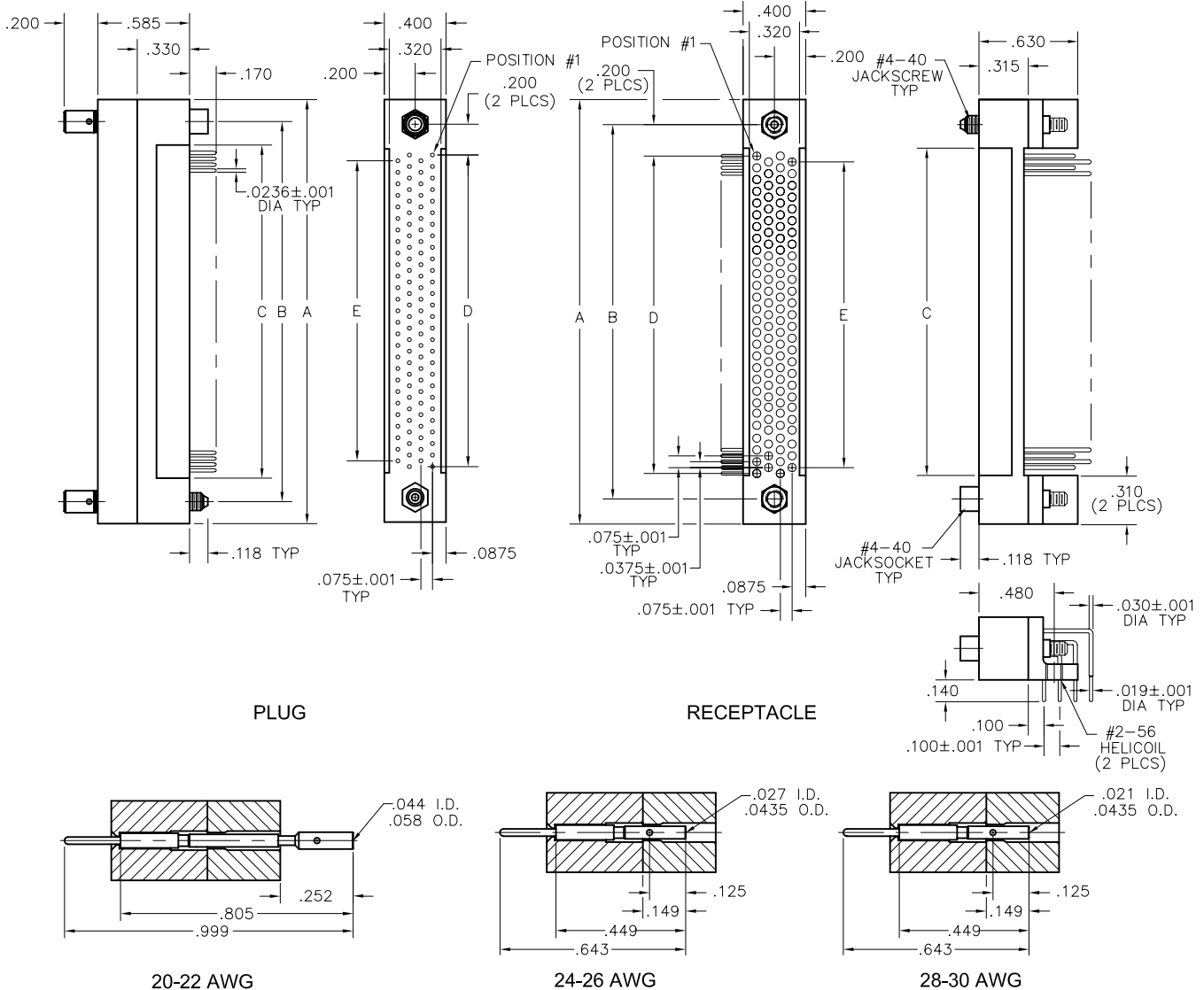
**RM4**

86 & 110 Contacts

RM412-110-271-9200



RM462-110-852-9300



CRIMP REMOVABLE CONTACTS	
SIZE	PART NUMBER
20-22 AWG	RM400-000-261-0000
24-26 AWG	RM400-000-271-0000
28-30 AWG	RM400-000-281-0000

SIZE	DIMENSIONS		C		D	E
	A	B	PLUG	RCPT		
86	2.255	1.975	1.655	1.675	1.575	1.500
110	2.745	2.425	2.105	2.125	2.025	1.950

**PLUG:** RM412-110-271-9200  
**RECEPTACLE:** RM462-110-852-9300  
 XXXXX-XXX-XXX-XXXX

**PLUG**

**RECEPTACLE**

**SERIES**

RM .075" Screw Machine PC Connector | RM .075" Screw Machine PC Connector

**BODY**

4 4-Row | 4 4-Row

**BODY STYLE:**  
 1 Plug, straight, without mounting ears | 6 Receptacle, right angle, with mounting ears

**BODY MATERIAL:**  
 2 Polyphenylene sulfide (PPS) | 2 Polyphenylene sulfide (PPS)

**SIZE**

086, 110 | 086, 110

**CONTACTS**

<p><b>TYPE CONTACTS/TERMINATIONS:</b></p> <p>00 Contacts not supplied</p> <p>26 Pin, straight, crimp removable (20-22 AWG)*</p> <p>27 Pin, straight, crimp removable (24-26 AWG)*</p> <p>28 Pin, straight, crimp removable (28-30 AWG)*</p>	<p><b>TYPE CONTACTS/TERMINATIONS:</b></p> <p>84 Socket, right angle, dip solder, .109" x .019" dia</p> <p>85 Socket, right angle, dip solder, .140" x .019" dia</p> <p>86 Socket, right angle, dip solder, .172" x .019" dia</p>
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<p><b>PLATING OPTIONS:</b></p> <p>0 No plating (use with Contact Option "00" only)</p> <p>1 Gold plated termination</p>	<p><b>PLATING OPTIONS:</b></p> <p>1 Gold plated termination</p> <p>2 Pre-tinned termination, SnPb alloy <input checked="" type="checkbox"/></p> <p>3 Pre-tinned termination, SAC305 alloy</p>
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**HARDWARE**

<p><b>STYLE OF HARDWARE:</b></p> <p>0256 None</p> <p>82 Hex turning jackset, reversed, installed, .200" knob</p> <p>83 Fixed jackset, reversed, installed,</p> <p>90 Guide pins, full round, installed</p> <p>92 Hex turning jackset, installed, .200" knob</p> <p>93 Fixed jackset, installed</p> <p>95 Guide pins, polarized, unassembled</p> <p>9501 - 9536 Guide pins, polarized, installed</p> <p>99 Guide pins, universal, installed</p>	<p><b>STYLE OF HARDWARE:</b></p> <p>0256 None</p> <p>82 Hex turning jackset, reversed, installed, .200 knob</p> <p>83 Fixed jackset, reversed, installed, #2-56 x .247 thd ext</p> <p>84 Fixed jackset, reversed, installed, #2-56 x .320 thd ext</p> <p>91 Guide sockets, full round, installed, #2-56 x .247" thd ext</p> <p>92 Hex turning jackset, installed, .200 knob</p> <p>93 Fixed jackset, installed, #2-56 x .247" thd ext</p> <p>94 Fixed jackset, installed, #2-56 x .320" thd ext</p> <p>96 Guide sockets, polarized, unassembled, #2-56 x .320" thd ext</p> <p>9601 - 9636 Guide sockets, polarized, installed, #2-56 x .320" thd ext</p> <p>97 Guide sockets, polarized, unassembled, #2-56 x .247" thd ext</p> <p>9701 - 9736 Guide sockets, polarized, installed, #2-56 x .247" thd ext</p> <p>98 Guide sockets, universal, installed, #2-56 x .247" thd ext</p> <p>Note: Includes mounting bracket when right angle contacts are supplied</p>
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<p><b>POLARIZATION:</b></p> <p>00 None</p> <p>01 thru 36 are special identifiers, see page R-57</p>	<p><b>POLARIZATION</b></p> <p>00 None</p> <p>01 thru 36 are special identifiers, see page R-57</p>
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- \* Full compliment of crimp removable sockets packaged with connectors
1. Crimp tool - AirBorn part number: CDG4601, Mil Spec number M22520/2-01
  2. Crimp positioner - AirBorn part number: CDG4602 (24-26 AWG and 28-30 AWG) CDG4603 (20-22 AWG)
  3. Crimp removal tool - AirBorn part number: CDG8161 (All AWGs)
  4. Crimp contact part number on previous page.

= Option not RoHS compliant

# 4 • ROW

## Right Angle PTH Plug

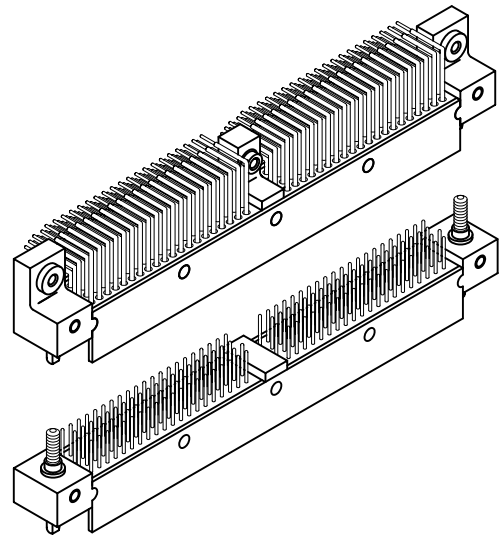
## Straight PTH Plug

.075"

**RM4**

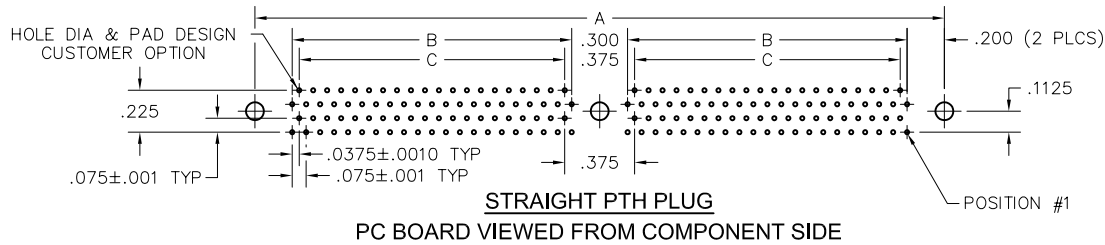
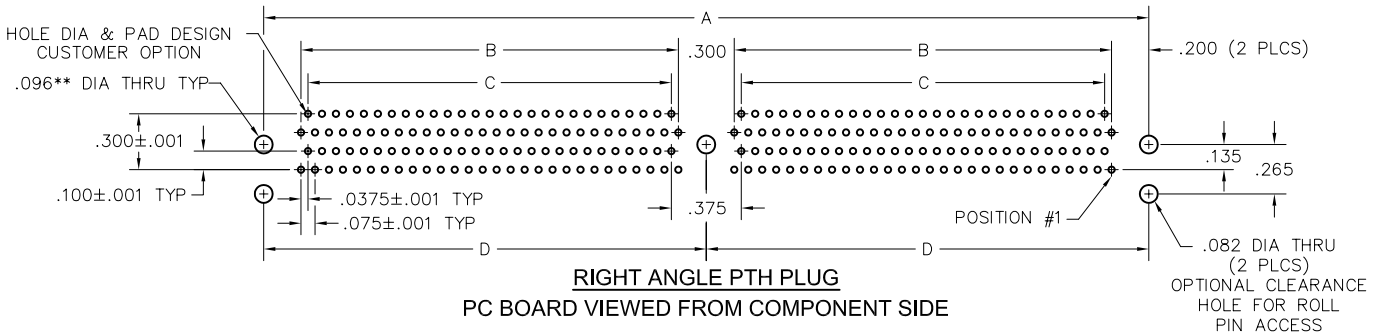
86 thru 404 Contacts  
Recommended  
Board Layout

DIMENSIONS				
SIZE	A	B	C	D
86*	1.975	1.575	1.500	—
110*	2.425	2.025	1.950	—
164	3.700	1.500	1.425	1.850
196	4.300	1.800	1.725	2.150
204	4.450	1.875	1.800	2.225
220	4.750	2.025	1.950	2.375
250*	5.050	4.650	4.575	—
276	5.800	2.550	2.475	2.900
300	6.250	2.775	2.700	3.125
404	8.200	3.750	3.675	4.100

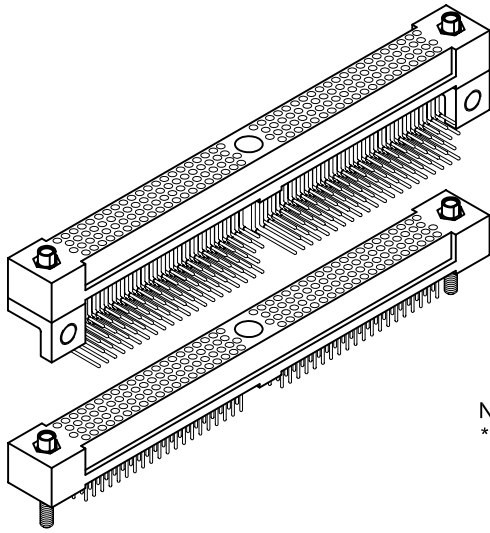


**NOTES:**

- \* = Single section, no center mounting hole
- \*\* = .125 dia thru holes, size 404



SIZE	CONTACT ID	SIZE	CONTACT ID
86*	86 85 84 65 64 63 43 42 41 22 21 20	220	220 219 218 166 165 164 110 109 108 56 55 54
	68 67 66 46 45 44 25 24 23 3 2 1		196 195 194 141 140 139 86 85 84 31 30 29
	83 82 81 55 54 53 28 27 26		193 192 191 138 137 136 83 82 81 28 27 26
110*	110 109 108 86 85 84 58 57 56 31 30 29 3 2 1	250*	250 249 248 188 187 186 125 124 123 63 62 61
	164 163 162 124 123 122 82 81 80 42 41 40		191 190 189 128 127 126 66 65 64 3 2 1
	147 146 145 106 105 104 65 64 63 24 23 22		242 241 240 173 172 171 104 103 102 35 34 33
164	144 143 142 103 102 101 62 61 60 21 20 19	276	276 275 274 208 207 206 138 137 136 70 69 68
	127 126 125 85 84 83 45 44 43 3 2 1		245 244 243 176 175 174 107 106 105 38 37 36
	179 178 177 123 122 121 74 73 72 25 24 23		242 241 240 211 210 209 141 140 139 73 72 71 3 2 1
196	196 195 194 148 147 146 98 97 96 50 49 48	300	300 299 298 226 225 224 150 149 148 76 75 74
	175 174 173 126 125 124 77 76 75 28 27 26		266 265 264 191 190 189 116 115 114 41 40 39
	172 171 170 151 150 149 101 100 99 53 52 51 3 2 1		263 262 261 229 228 227 153 152 151 79 78 77 3 2 1
204	204 203 202 154 153 152 102 101 100 52 51 50	404	404 403 402 201 199 197 202 200 198
	182 181 180 131 130 129 80 79 78 29 28 27		509 507 505 508 506 504 107 105 103 106 104 102
	179 178 177 128 127 126 77 76 75 26 25 24		502 500 298 208 206 204 503 501 299 100 98 96 101 99 97



DIMENSIONS			
SIZE	A	B	C
86*	1.975	1.575	1.500
110*	2.425	2.025	1.950
164	3.700	1.500	1.425
196	4.300	1.800	1.725
204	4.450	1.875	1.800
220	4.750	2.025	1.950
250*	5.050	4.650	4.575
276	5.800	2.550	2.475
300	6.250	2.775	2.700
404	8.200	3.750	3.675

# 4 • ROW

## Right Angle PTH Rcpt

## Straight PTH Rcpt

.075"

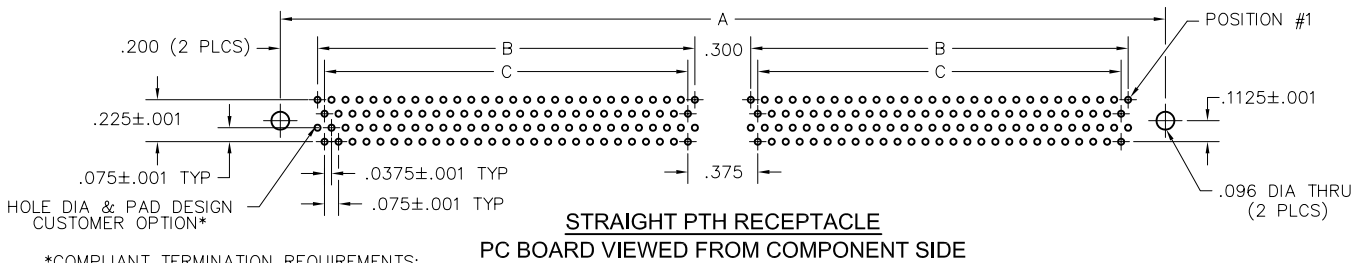
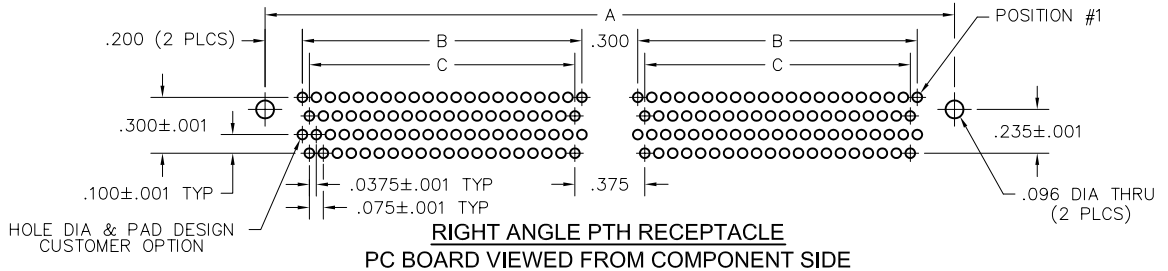
**RM4**

86 thru 404 Contacts

Recommended Board Layout

**NOTES:**

\* = Single section, no center mounting hole



\*COMPLIANT TERMINATION REQUIREMENTS:  
Board Material: FR-4 w/ 1.0 oz. copper  
Minimum nominal board thickness: .062"  
Drilled hole: .0319"-.0339"  
Copper plating thickness: .0010" minimum  
Tin-lead plating thickness: .0006" maximum  
Electroplated tin-lead composition: 63/37 (Sn/Pb)  
Finished hole diameter: .028"±.002"

SIZE	CONTACT ID	SIZE	CONTACT ID																																																																																																
86*	<table border="0"> <tr><td>22</td><td>21</td><td>20</td><td>3</td><td>2</td><td>1</td></tr> <tr><td>43</td><td>42</td><td>41</td><td>25</td><td>24</td><td>23</td></tr> <tr><td>65</td><td>64</td><td>63</td><td>46</td><td>45</td><td>44</td></tr> <tr><td>86</td><td>85</td><td>84</td><td>68</td><td>67</td><td>66</td></tr> </table>	22	21	20	3	2	1	43	42	41	25	24	23	65	64	63	46	45	44	86	85	84	68	67	66	220	<table border="0"> <tr><td>56</td><td>55</td><td>54</td><td>31</td><td>30</td><td>29</td><td>28</td><td>27</td><td>26</td><td>3</td><td>2</td><td>1</td></tr> <tr><td>110</td><td>109</td><td>108</td><td>86</td><td>85</td><td>84</td><td>83</td><td>82</td><td>81</td><td>59</td><td>58</td><td>57</td></tr> <tr><td>166</td><td>165</td><td>164</td><td>141</td><td>140</td><td>139</td><td>138</td><td>137</td><td>136</td><td>113</td><td>112</td><td>111</td></tr> <tr><td>220</td><td>219</td><td>218</td><td>196</td><td>195</td><td>194</td><td>193</td><td>192</td><td>191</td><td>169</td><td>168</td><td>167</td></tr> </table>	56	55	54	31	30	29	28	27	26	3	2	1	110	109	108	86	85	84	83	82	81	59	58	57	166	165	164	141	140	139	138	137	136	113	112	111	220	219	218	196	195	194	193	192	191	169	168	167																								
	22	21	20	3	2	1																																																																																													
43	42	41	25	24	23																																																																																														
65	64	63	46	45	44																																																																																														
86	85	84	68	67	66																																																																																														
56	55	54	31	30	29	28	27	26	3	2	1																																																																																								
110	109	108	86	85	84	83	82	81	59	58	57																																																																																								
166	165	164	141	140	139	138	137	136	113	112	111																																																																																								
220	219	218	196	195	194	193	192	191	169	168	167																																																																																								
110*	<table border="0"> <tr><td>28</td><td>27</td><td>26</td><td>3</td><td>2</td><td>1</td></tr> <tr><td>55</td><td>54</td><td>53</td><td>31</td><td>30</td><td>29</td></tr> <tr><td>83</td><td>82</td><td>81</td><td>58</td><td>57</td><td>56</td></tr> <tr><td>110</td><td>109</td><td>108</td><td>86</td><td>85</td><td>84</td></tr> </table>	28	27	26	3	2	1	55	54	53	31	30	29	83	82	81	58	57	56	110	109	108	86	85	84	250*	<table border="0"> <tr><td>63</td><td>62</td><td>61</td><td>3</td><td>2</td><td>1</td></tr> <tr><td>125</td><td>124</td><td>123</td><td>66</td><td>65</td><td>64</td></tr> <tr><td>188</td><td>187</td><td>186</td><td>128</td><td>127</td><td>126</td></tr> <tr><td>250</td><td>249</td><td>248</td><td>191</td><td>190</td><td>189</td></tr> </table>	63	62	61	3	2	1	125	124	123	66	65	64	188	187	186	128	127	126	250	249	248	191	190	189																																																
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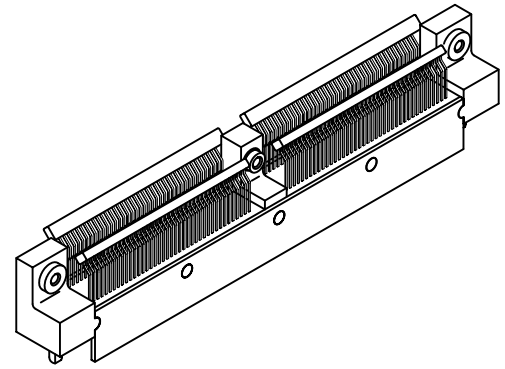
# 4 ROW

## Straight SMT Plug

.075"

**RM4**

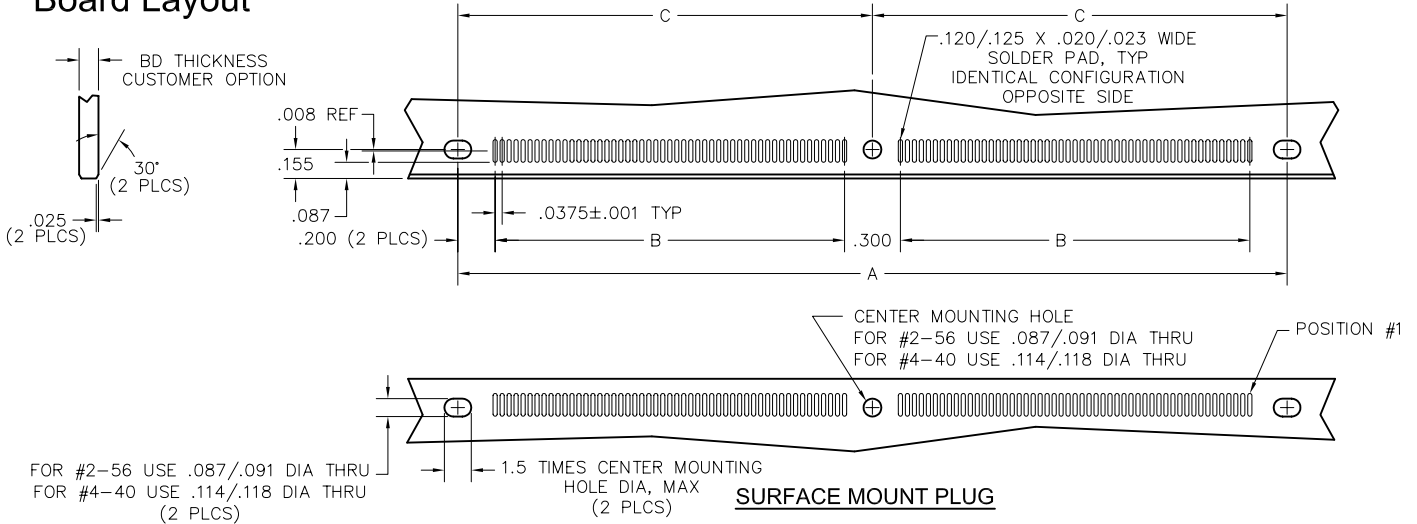
DIMENSIONS			
SIZE	A	B	C
86*	1.975	1.575	-
110*	2.425	2.025	-
164	3.700	1.500	1.850
196	4.300	1.800	2.150
204	4.450	1.875	2.225
220	4.750	2.025	2.375
250*	5.050	4.650	-
276	5.800	2.550	2.475
300	6.250	2.775	3.125
404	8.200	3.750	4.100



86 thru 404 Contacts

### Recommended Board Layout

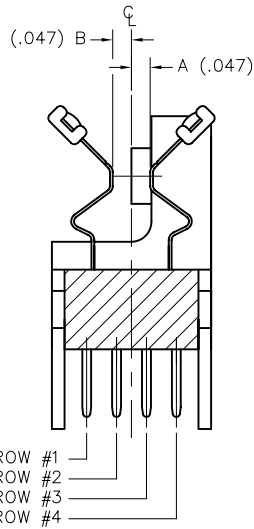
NOTES:  
\* = Single section, no center mounting hole



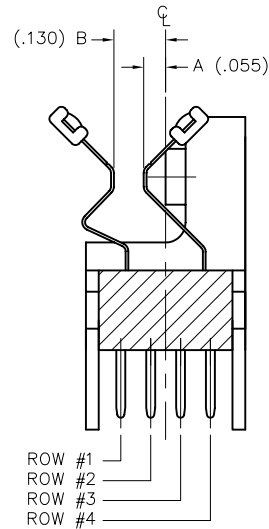
FOR #2-56 USE .087/.091 DIA THRU  
FOR #4-40 USE .114/.118 DIA THRU  
(2 PLCS)

SIZE	CONTACT ID	SIZE	CONTACT ID
86*	C 65	220	C 166
	C 43		C 220
	C 21		C 163
	C 42		C 109
	C 20		C 54
110*	C 83	250*	C 188
	C 110		C 250
	C 27		C 187
	C 54		C 49
	C 26		C 61
164	C 42	276	C 208
	C 82		C 276
	C 41		C 207
	C 81		C 275
	C 40		C 206
196	C 50	300	C 226
	C 98		C 300
	C 49		C 225
	C 97		C 299
	C 48		C 224
204	C 154	404	C 404
	C 204		C 403
	C 51		C 402
	C 101		C 401
	C 50		C 400

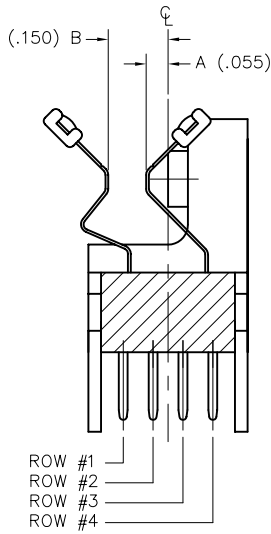
# SMT Configuration Options



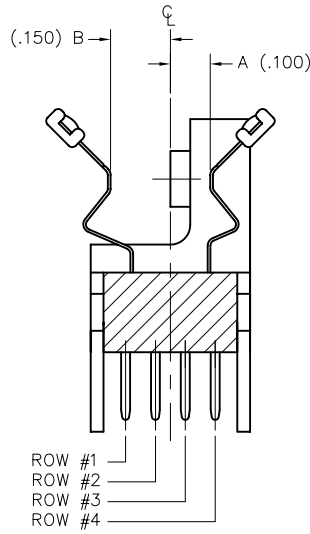
STYLE 933



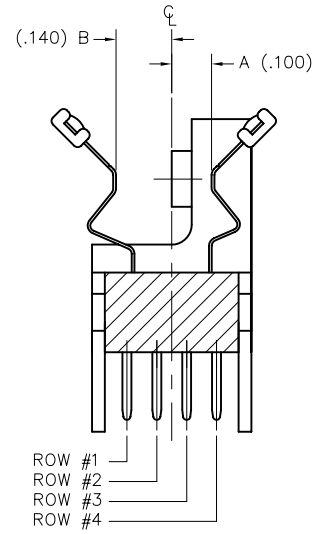
STYLE 925



STYLE 927



STYLE 947



STYLE 946

DISTANCE FROM  $\zeta$  (A)

- 1 .005
- 2 .055

DISTANCE FROM  $\zeta$  (A OR B)

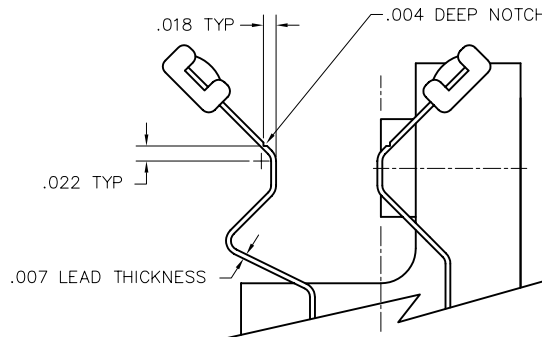
- 3 .047
- 4 .100
- 5 .130
- 6 .140
- 7 .150
- 8 .070
- 9 .080

DISTANCE FROM  $\zeta$  (B)

- 0 .090

**NOTES:**

1. Various board thicknesses can be accommodated by specifying A and B designators. For example: 9 (A)(B)
2. Consult factory for other available options.



CONTACT NOTCH DETAIL

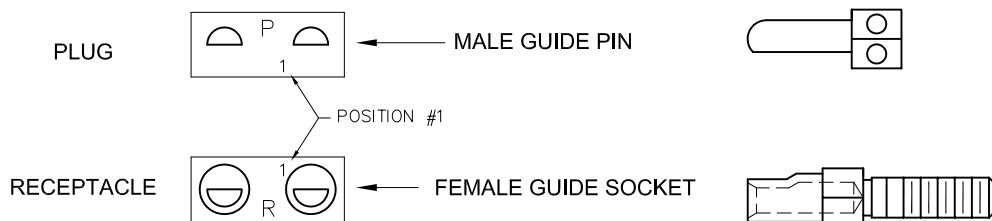


# Polarization

## 4 Row and 6 Row

D-Shaped Guide Hardware

01		07		13		19		25		31	
02		08		14		20		26		32	
03		09		15		21		27		33	
04		10		16		22		28		34	
05		11		17		23		29		35	
06		12		18		24		30		36	



Select the appropriate two digit number above and include as the last two digits of the hardware code in the part number.

Example:

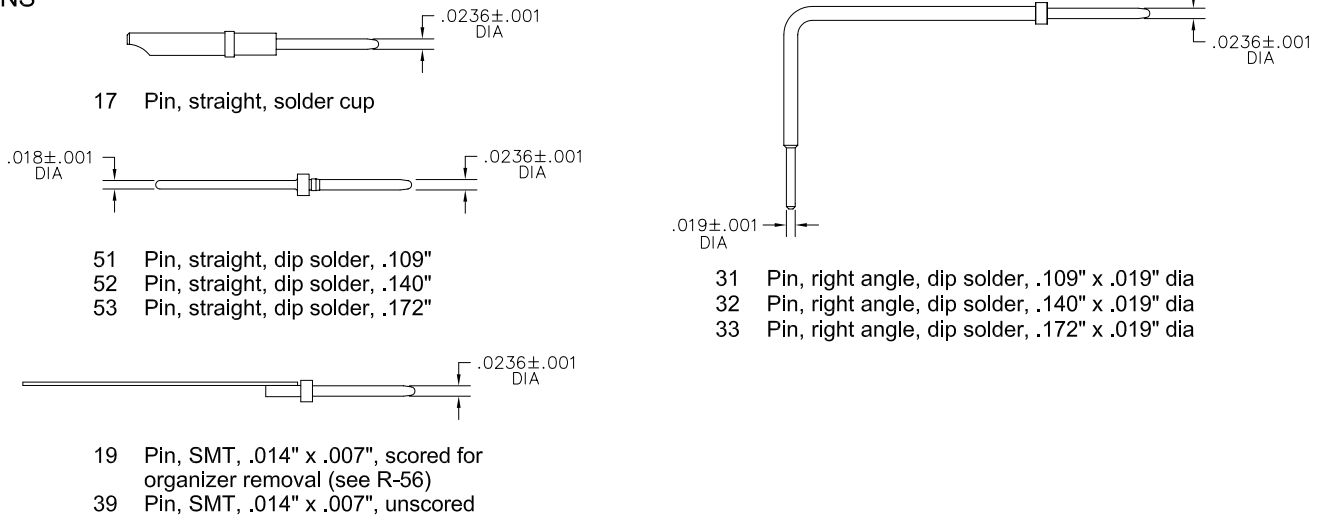
Plug RM452-220-311-9501

Receptacle RM462-220-811-9601

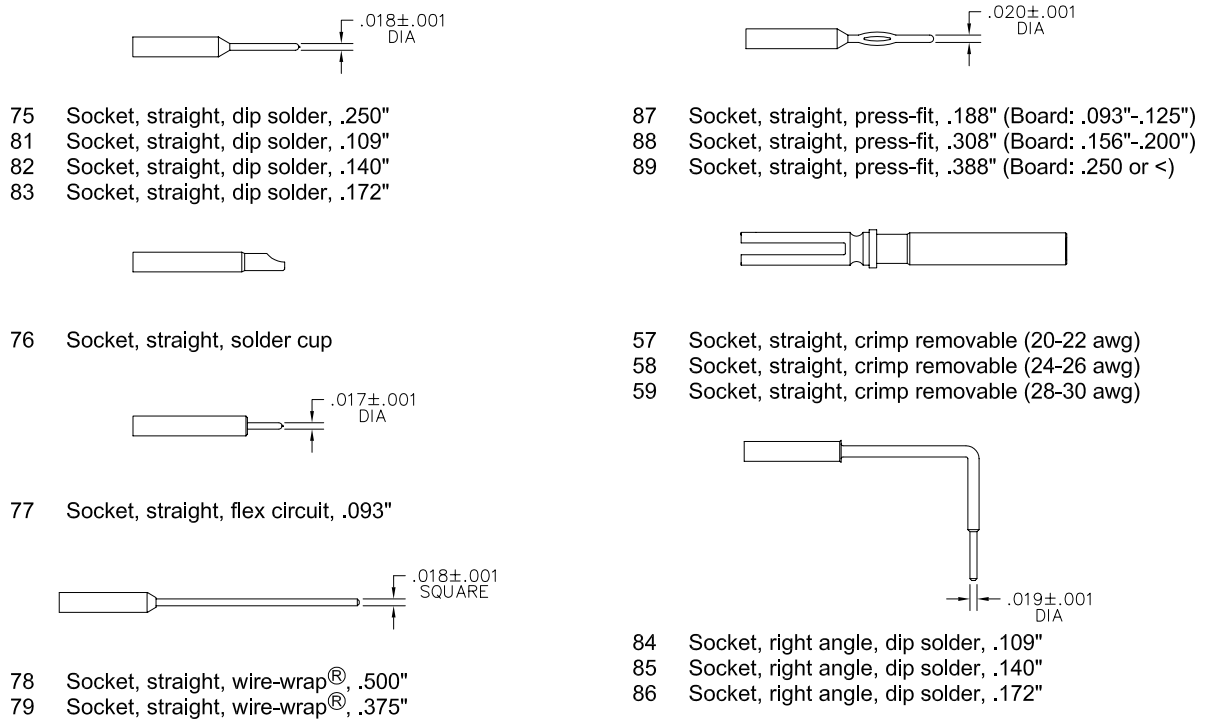
# Contacts 4 Row

## Pins and Sockets

### PINS



### SOCKETS





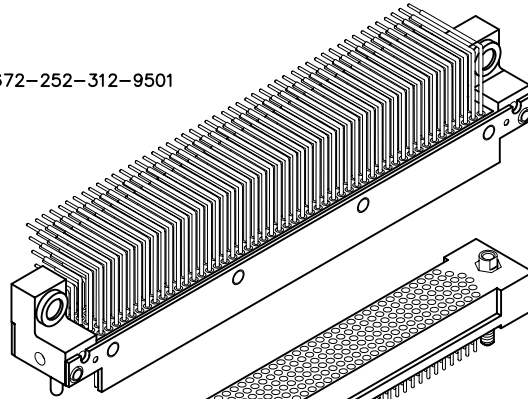
# 6 · ROW Daughterboard to Motherboard or Chassis

.075"

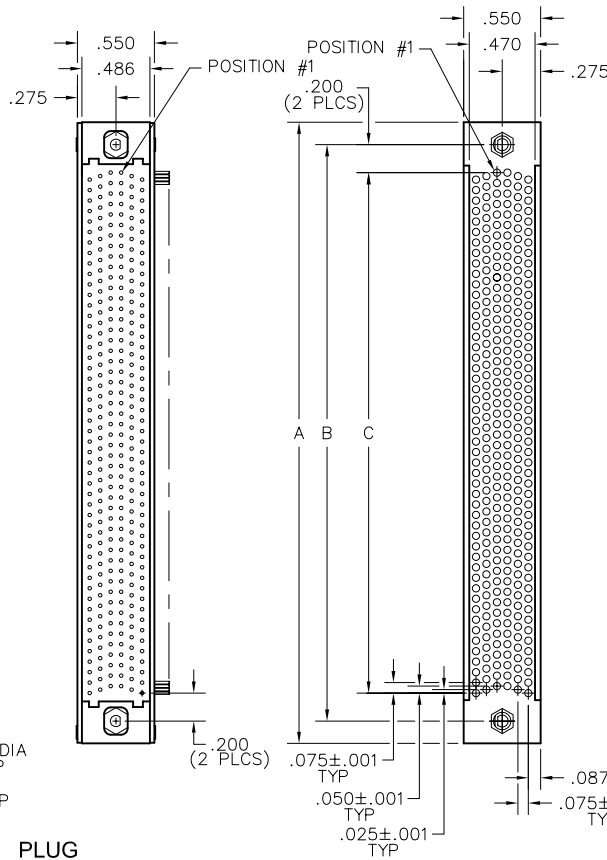
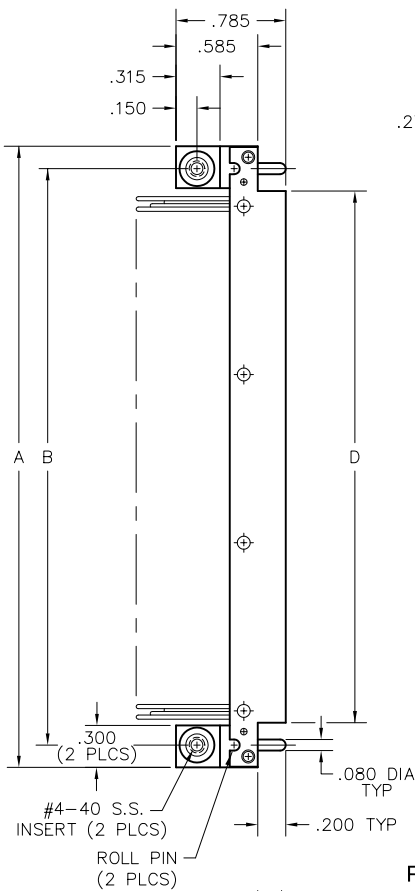
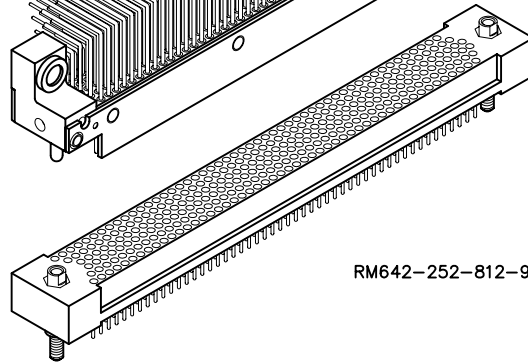
**RM6**

162 thru 402 Contacts

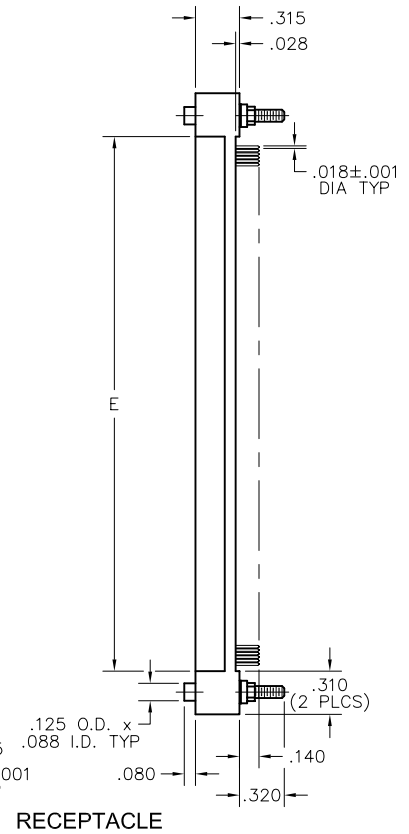
RM672-252-312-9501



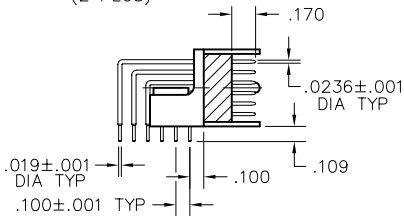
RM642-252-812-9601



PLUG



RECEPTACLE



DIMENSIONS					
SIZE	A	B	C	D	E
162	2.720	2.400	2.000	2.080	2.100
204	3.245	2.925	2.525	2.605	2.625
252	3.845	3.525	3.125	3.205	3.225
300	4.445	4.125	3.725	3.805	3.825
360	5.195	4.875	4.475	4.550	4.575
402	5.720	5.400	5.000	5.080	5.100

**PLUG:** RM672-252-312-9501  
**RECEPTACLE:** RM642-252-812-9601  
 XXXXX-XXX-XXX-XXXX

**PLUG**

**RECEPTACLE**

SERIES	
RM .075" Screw Machine PC Connector	RM .075" Screw Machine PC Connector

BODY	
6 6-Row	6 6-Row
BODY STYLE: 7 Plug, right angle, with mounting ears	BODY STYLE: 4 Receptacle, straight, with mounting ears
BODY MATERIAL: 2 Polyphenylene sulfide (PPS)	BODY MATERIAL: 2 Polyphenylene sulfide (PPS)

SIZE	
162, 204, 252, 300, 360, 402	162, 204, 252, 300, 360, 402

CONTACTS	
TYPE CONTACTS/TERMINATIONS: 31 Pin, right angle, dip solder, .109" x .019" dia 32 Pin, right angle, dip solder, .140" x .019" dia 33 Pin, right angle, dip solder, .172" x .019" dia 34 Pin, right angle, dip solder, .250" x .019" dia	TYPE CONTACTS/TERMINATIONS: 75 Socket, straight, dip solder, .250" x .018" dia 76 Socket, straight, solder cup 77 Socket, straight, flex, .093" x .017" dia 81 Socket, straight, dip solder, .109" x .018" dia 82 Socket, straight, dip solder, .140" x .018" dia 83 Socket, straight, dip solder, .172" x .018" dia 87 Socket, straight, press-fit, .188" (Board: .093" - .125" thk) 88 Socket, straight, press-fit, .308" (Board: .156" - .200" thk) 89 Socket, straight, press-fit, .388" (Board: .250"+ thk)
PLATING OPTIONS: 1 Gold plated termination 2 Pre-tinned termination, SnPb alloy <input checked="" type="checkbox"/> 3 Pre-tinned termination, SAC305 alloy	PLATING OPTIONS: 1 Gold plated termination 2 Pre-tinned termination, SnPb alloy (dip solder options only) <input checked="" type="checkbox"/> 3 Pre-tinned termination, SAC305 alloy (dip solder options only)

HARDWARE	
STYLE OF HARDWARE: 0256 None 83 Fixed jackset, reversed, installed 90 Guide pins, full round, installed 93 Fixed jackset, installed 95 Guide pins, polarized, unassembled 9501 - 9536 Guide pins, polarized, installed 99 Guide pins, universal, installed	STYLE OF HARDWARE: 0256 None 82 Hex turning jackset, reversed, installed, .200 knob 83 Fixed jackset, reversed, installed, #2-56 x .247" thd ext 84 Fixed jackset, reversed, installed, #2-56 x .320" thd ext 91 Guide sockets, full round, installed, #2-56 x .247" thd ext 92 Hex turning jackset, installed, .200 knob 93 Fixed jackset, installed, #2-56 x .247" thd ext 94 Fixed jackset, installed, #2-56 x .320" thd ext 96 Guide sockets, polarized, unassembled, #2-56 x .320" thd ext 9601 - 9636 Guide sockets, polarized, installed, #2-56 x .320" thd ext 97 Guide sockets, polarized, unassembled, #2-56 x .247" thd ext 9701 - 9736 Guide sockets, polarized, installed, #2-56 x .247" thd ext 98 Guide sockets, universal, installed, #2-56 x .247" thd ext
POLARIZATION: 00 None 01 thru 36 are special identifiers, see page R-57	POLARIZATION: 00 None 01 thru 36 are special identifiers, see page R-57

= Option not RoHS compliant



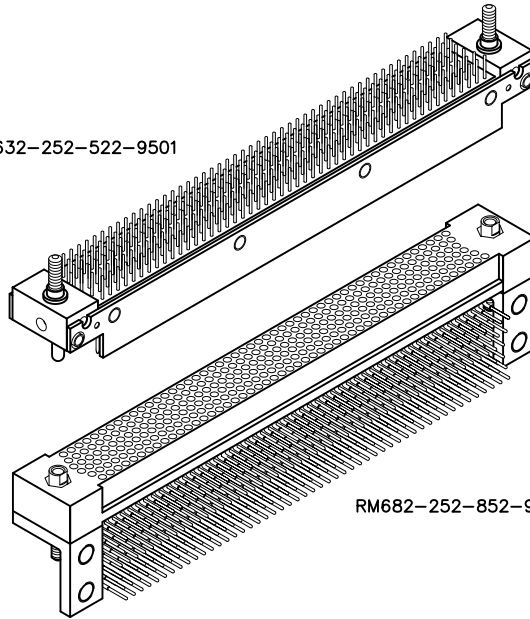
# 6 · ROW Motherboard or Chassis to Daughterboard

.075"

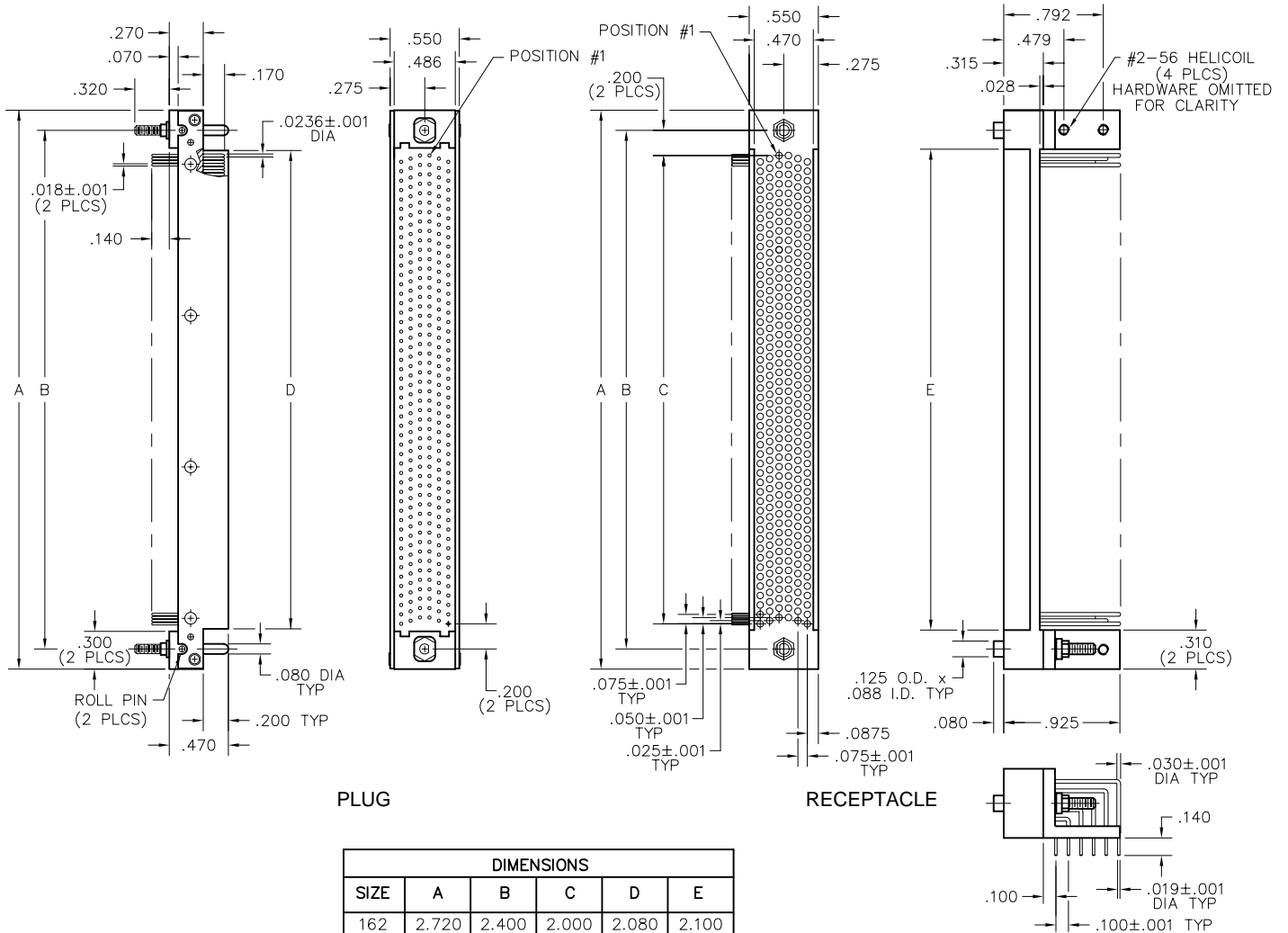
**RM6**

162 thru 402 Contacts

RM632-252-522-9501



RM682-252-852-9601



PLUG

RECEPTACLE

DIMENSIONS					
SIZE	A	B	C	D	E
162	2.720	2.400	2.000	2.080	2.100
204	3.245	2.925	2.525	2.605	2.625
252	3.845	3.525	3.125	3.205	3.225
300	4.445	4.125	3.725	3.805	3.825
360	5.195	4.875	4.475	4.550	4.575
402	5.720	5.400	5.000	5.080	5.100

Call (972) 931-3200 Fax (972) 931-9305 [www.AirBorn.com](http://www.AirBorn.com)

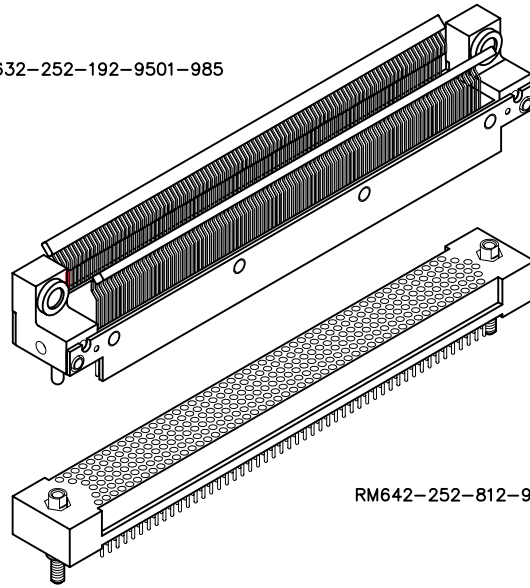
**PLUG:** RM632-252-522-9501  
**RECEPTACLE:** RM682-252-852-9601  
 XXXXX-XXX-XXX-XXXX

PLUG		RECEPTACLE	
<b>SERIES</b>			
RM .075" Screw Machine PC Connector		RM .075" Screw Machine PC Connector	
<b>BODY</b>			
6	6-Row	6	6-Row
BODY STYLE: 3 Plug, straight, without mounting ears		BODY STYLE: 8 Receptacle, right angle, with mounting brackets	
BODY MATERIAL: 2 Polyphenylene sulfide (PPS)		BODY MATERIAL: 2 Polyphenylene sulfide (PPS)	
<b>SIZE</b>			
162, 204, 252, 300, 360, 402		162, 204, 252, 300, 360, 402	
<b>CONTACTS</b>			
TYPE CONTACTS/TERMINATIONS: 17 Pin, straight, solder cup 40 Pin, straight, flex .093" x .017" dia 51 Pin, straight, dip solder, .109" x .018" dia 52 Pin, straight, dip solder, .140" x .018" dia 53 Pin, straight, dip solder, .172" x .018" dia 54 Pin, straight, dip solder, .250" x .018" dia		TYPE CONTACTS/TERMINATIONS: 84 Socket, right angle, dip solder, .109" x .019" dia 85 Socket, right angle, dip solder, .140" x .019" dia 86 Socket, right angle, dip solder, .172" x .019" dia	
PLATING OPTIONS: 1 Gold plated termination 2 Pre-tinned termination, SnPb alloy (dip solder options only) <input checked="" type="checkbox"/> 3 Pre-tinned termination, SAC305 alloy (dip solder options only)		PLATING OPTIONS: 1 Gold plated termination 2 Pre-tinned termination, SnPb alloy <input checked="" type="checkbox"/> 3 Pre-tinned termination, SAC305 alloy	
<b>HARDWARE</b>			
STYLE OF HARDWARE: 0256 None 82 Hex turning jackset, reversed, installed, .200 knob 83 Fixed jackset, reversed, installed #2-56 x .247" thd ext 84 Fixed jackset, reversed, installed #2-56 x .320" thd ext 90 Guide pins, full round, installed #2-56 x .320" thd ext 92 Hex turning jackset, installed, .200 knob 93 Fixed jackset, installed, #2-56 x .247" thd ext 94 Fixed jackset, installed, #2-56 x .320" thd ext 95 Guide pins, polarized, unassembled, #2-56 x .320" thd ext 9501 - 9536 Guide pins, polarized, installed, #2-56 x .320" thd ext 99 Guide pins, universal, installed #2-56 x .320" thd ext		STYLE OF HARDWARE: 0256 None 82 Hex turning jackset, reversed, installed, .200 knob 83 Fixed jackset, reversed, installed 91 Guide sockets, full round, installed 92 Hex turning jackset, installed, .200 knob 93 Fixed jackset, installed 96 Guide sockets, polarized, unassembled 9601 - 9636 Guide sockets, polarized, installed 97 Guide sockets, polarized, unassembled 9701 - 9736 Guide sockets, polarized, installed 98 Guide sockets, universal, installed  Note: Includes mounting bracket when right angle contacts are supplied	
POLARIZATION: 00 None 01 thru 36 are special identifiers, see page R-57		POLARIZATION: 00 None 01 thru 36 are special identifiers, see page R-57	

= Option not RoHS compliant



RM632-252-192-9501-985



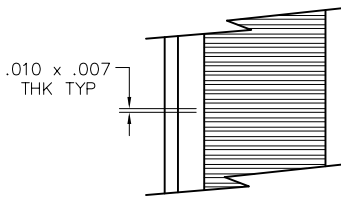
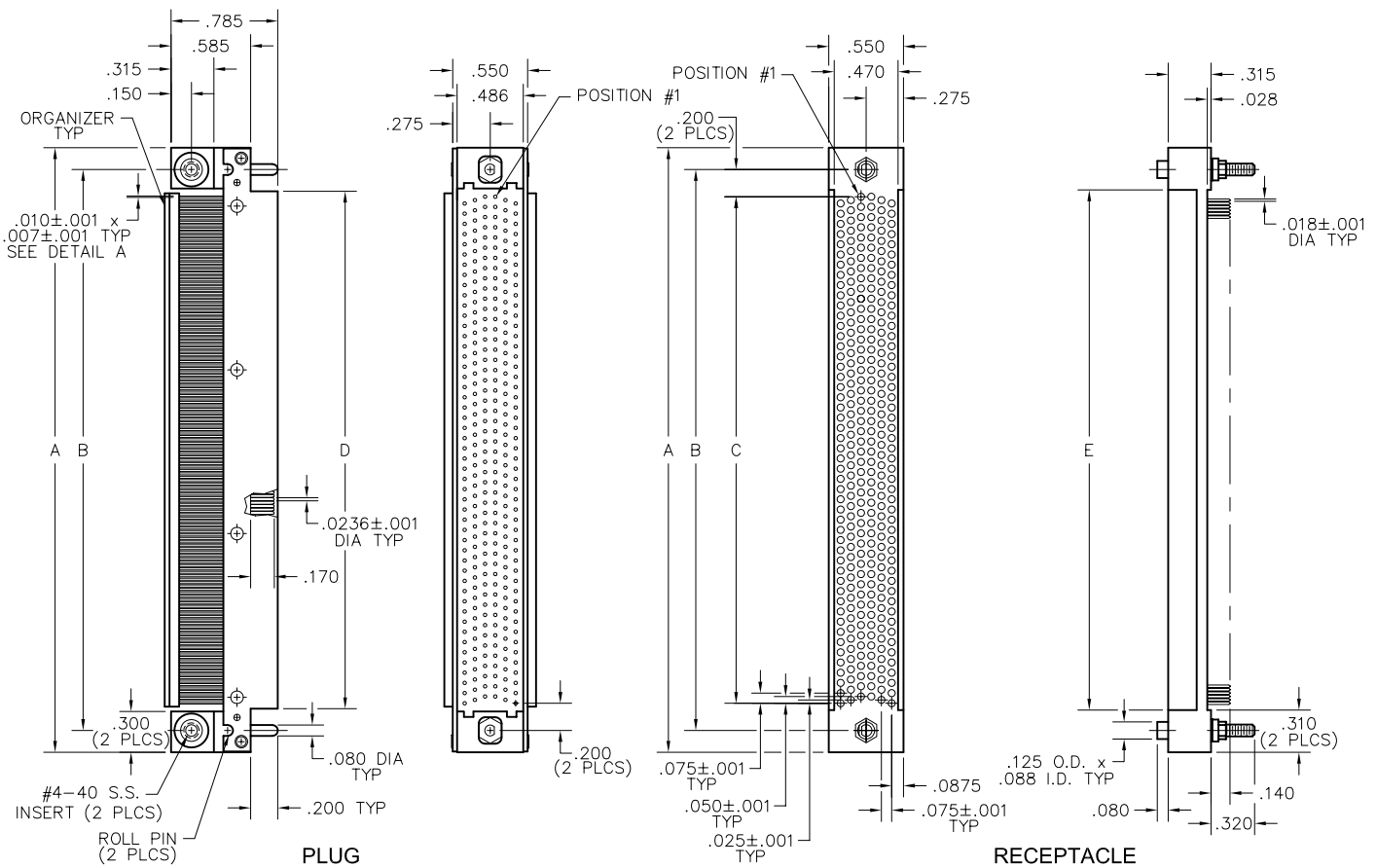
RM642-252-812-9601

# 6 • ROW Daughterboard to Motherboard or Chassis

.075"

**RM6**

162 thru 402 Contacts



DETAIL A

DIMENSIONS					
SIZE	A	B	C	D	E
162	2.720	2.400	2.000	2.080	2.100
204	3.245	2.925	2.525	2.605	2.625
252	3.845	3.525	3.125	3.205	3.225
300	4.445	4.125	3.725	3.805	3.825
360	5.195	4.875	4.475	4.550	4.575
402	5.720	5.400	5.000	5.080	5.100

**PLUG:** RM632-252-192-9501-985  
**RECEPTACLE:** RM642-252-812-9601  
 XXXXX-XXX-XXX-XXXX-XXX

**PLUG**

**RECEPTACLE**

SERIES	
RM .075" Screw Machine PC Connector	RM .075" Screw Machine PC Connector

BODY	
6 6-Row	6 6-Row
BODY STYLE: 3 Plug, straight, with mounting ears	BODY STYLE: 4 Receptacle, straight, with mounting ears
BODY MATERIAL: 2 Polyphenylene sulfide (PPS)	BODY MATERIAL: 2 Polyphenylene sulfide (PPS)

SIZE	
162, 204, 252, 300, 360, 402	162, 204, 252, 300, 360, 402

CONTACTS	
TYPE CONTACTS/TERMINATIONS: 19 Pin, SMT, .014" x .007" tail, scored for organizer removal (see R-56) 39 Pin, SMT, .014" x .007" tail, unscored	TYPE CONTACTS/TERMINATIONS: 75 Socket, straight, dip solder, .250" x .018" dia 76 Socket, straight, solder cup 77 Socket, straight, flex, .093" x .017" dia 81 Socket, straight, dip solder, .109" x .018" dia 82 Socket, straight, dip solder, .140" x .018" dia 83 Socket, straight, dip solder, .172" x .018" dia 87 Socket, straight, press-fit, .188" (Board: .093" - .125" thk) 88 Socket, straight, press-fit, .308" (Board: .156" - .200" thk) 89 Socket, straight, press-fit, .388" (Board: .250"+ thk)
PLATING OPTIONS: 2 Pre-tinned termination, SnPb alloy <input checked="" type="checkbox"/> 3 Pre-tinned termination, SAC305 alloy	PLATING OPTIONS: 1 Gold plated termination 2 Pre-tinned termination, SnPb alloy (dip solder options only) <input checked="" type="checkbox"/> 3 Pre-tinned termination, SAC305 alloy (dip solder options only)

HARDWARE	
STYLE OF HARDWARE: 0256 None 83 Fixed jackset, reversed, installed 90 Guide pins, full round, installed 93 Fixed jackset, installed 95 Guide pins, polarized, unassembled 9501 - 9536 Guide pins, polarized, installed 99 Guide pins, universal, installed	STYLE OF HARDWARE: 0256 None 82 Hex turning jackset, reversed, installed, .200 knob 83 Fixed jackset, reversed, installed, #2-56 x .247" thd ext 84 Fixed jackset, reversed, installed, #2-56 x .320" thd ext 91 Guide sockets, full round, installed, #2-56 x .247" thd ext 92 Hex turning jackset, installed, .200 knob 93 Fixed jackset, installed, #2-56 x .247" thd ext 94 Fixed jackset, installed, #2-56 x .320" thd ext 96 Guide sockets, polarized, unassembled, #2-56 x .320" thd ext 9601 - 9636 Guide sockets, polarized, installed, #2-56 x .320" thd ext 97 Guide sockets, polarized, unassembled, #2-56 x .247" thd ext 9701 - 9736 Guide sockets, polarized, installed, #2-56 x .247" thd ext 98 Guide sockets, universal, installed, #2-56 x .247" thd ext
POLARIZATION: 00 None 01 thru 36 are special identifiers, see page R-57	POLARIZATION: 00 None 01 thru 36 are special identifiers, see page R-57

OPTIONS	
9XX SMT configuration code, see page R-56	

= Option not RoHS compliant



# 6 • ROW

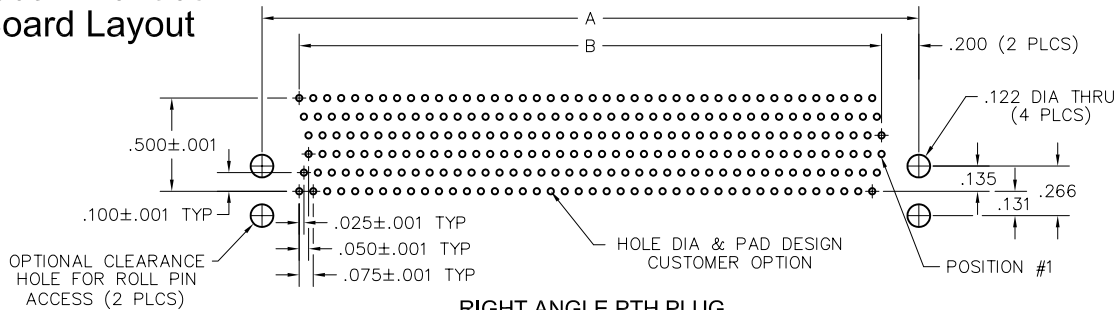
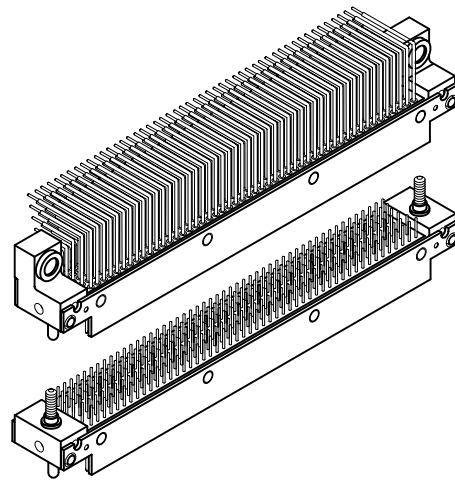
## Right Angle PTH Plug Straight PTH Plug

.075"

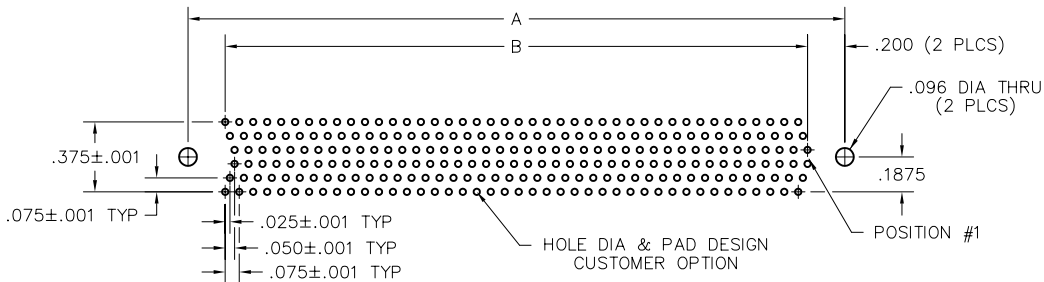
**RM6**

162 thru 402 Contacts  
Recommended  
Board Layout

DIMENSIONS		
SIZE	A	B
162	2.400	2.000
204	2.925	2.525
252	3.525	3.125
300	4.125	3.725
360	4.875	4.475
402	5.400	5.000



**RIGHT ANGLE PTH PLUG**  
PC BOARD VIEWED FROM COMPONENT SIDE



**STRAIGHT PTH PLUG**  
PC BOARD VIEWED FROM COMPONENT SIDE

SIZE	CONTACT ID	SIZE	CONTACT ID
162	162 159 156	300	500 297 294
	161 158 155		159 156 153
	160 157 154		293 296 293
	79 76 73		158 153 152
	80 77 74		157 154 151
	81 78 75		7 4 1
204	204 201 198	360	560 357 354
	203 200 197		189 186 183
	202 199 196		359 356 353
	100 97 94		188 185 182
	101 98 95		358 353 352
	102 99 96		187 184 181
252	252 249 246	402	402 399 396
	251 248 245		210 207 204
	250 247 244		401 398 395
	124 121 118		209 206 203
	125 122 119		400 397 394
	126 123 120		208 205 202

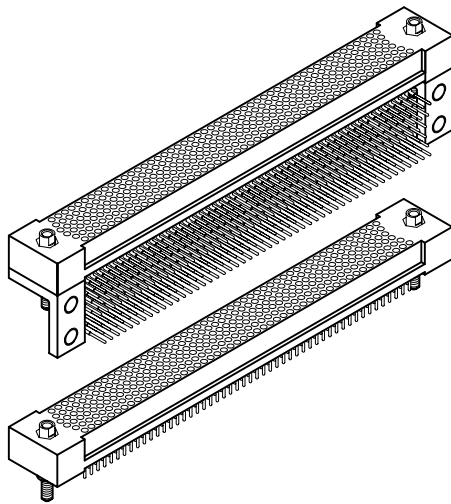
# 6 · ROW

## Right Angle PTH Rcpt Straight PTH Rcpt

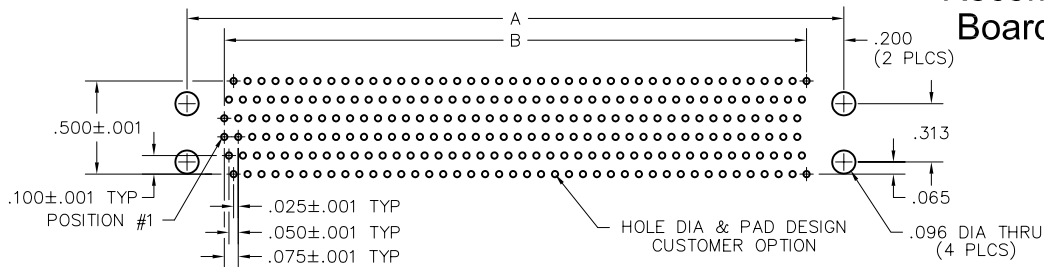
.075"

**RM6**

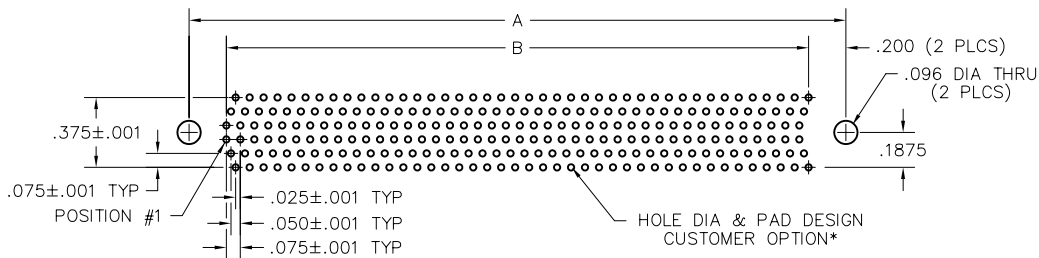
162 thru 402 Contacts  
Recommended  
Board Layout



DIMENSIONS		
SIZE	A	B
162	2.400	2.000
204	2.925	2.525
252	3.525	3.125
300	4.125	3.725
360	4.875	4.475
402	5.400	5.000



**RIGHT ANGLE PTH RECEPTACLE**  
PC BOARD VIEWED FROM COMPONENT SIDE



**STRAIGHT PTH RECEPTACLE**  
PC BOARD VIEWED FROM COMPONENT SIDE

\*COMPLIANT TERMINATION REQUIREMENTS:

Board Material: FR-4 w/ 1.0 oz. copper  
Minimum nominal board thickness: .062"  
Drilled hole: .0319"-.0339"  
Copper plating thickness: .0010" minimum

Tin-lead plating thickness: .0006" maximum  
Electroplated tin-lead composition: .63/37 (Sn/Pb)  
Finished hole diameter: .028"±.002"

SIZE	CONTACT ID	SIZE	CONTACT ID																																																																										
162	<table border="0"> <tr><td>84</td><td>87</td><td>90</td></tr> <tr><td>83</td><td>86</td><td>89</td></tr> <tr><td>82</td><td>85</td><td>88</td></tr> <tr><td>1</td><td>4</td><td>7</td></tr> <tr><td>2</td><td>5</td><td>8</td></tr> <tr><td>3</td><td>6</td><td>9</td></tr> </table>	84	87	90	83	86	89	82	85	88	1	4	7	2	5	8	3	6	9	<table border="0"> <tr><td>156</td><td>159</td><td>162</td></tr> <tr><td>155</td><td>158</td><td>161</td></tr> <tr><td>154</td><td>157</td><td>160</td></tr> <tr><td>73</td><td>76</td><td>79</td></tr> <tr><td>74</td><td>77</td><td>80</td></tr> <tr><td>75</td><td>78</td><td>81</td></tr> </table>	156	159	162	155	158	161	154	157	160	73	76	79	74	77	80	75	78	81	300	<table border="0"> <tr><td>153</td><td>156</td><td>159</td></tr> <tr><td>152</td><td>155</td><td>158</td></tr> <tr><td>151</td><td>154</td><td>157</td></tr> <tr><td>1</td><td>4</td><td>7</td></tr> <tr><td>2</td><td>5</td><td>8</td></tr> <tr><td>3</td><td>6</td><td>9</td></tr> </table>	153	156	159	152	155	158	151	154	157	1	4	7	2	5	8	3	6	9	<table border="0"> <tr><td>294</td><td>297</td><td>300</td></tr> <tr><td>293</td><td>296</td><td>299</td></tr> <tr><td>292</td><td>295</td><td>298</td></tr> <tr><td>142</td><td>145</td><td>148</td></tr> <tr><td>143</td><td>146</td><td>149</td></tr> <tr><td>144</td><td>147</td><td>150</td></tr> </table>	294	297	300	293	296	299	292	295	298	142	145	148	143	146	149	144	147	150
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# 6 • ROW

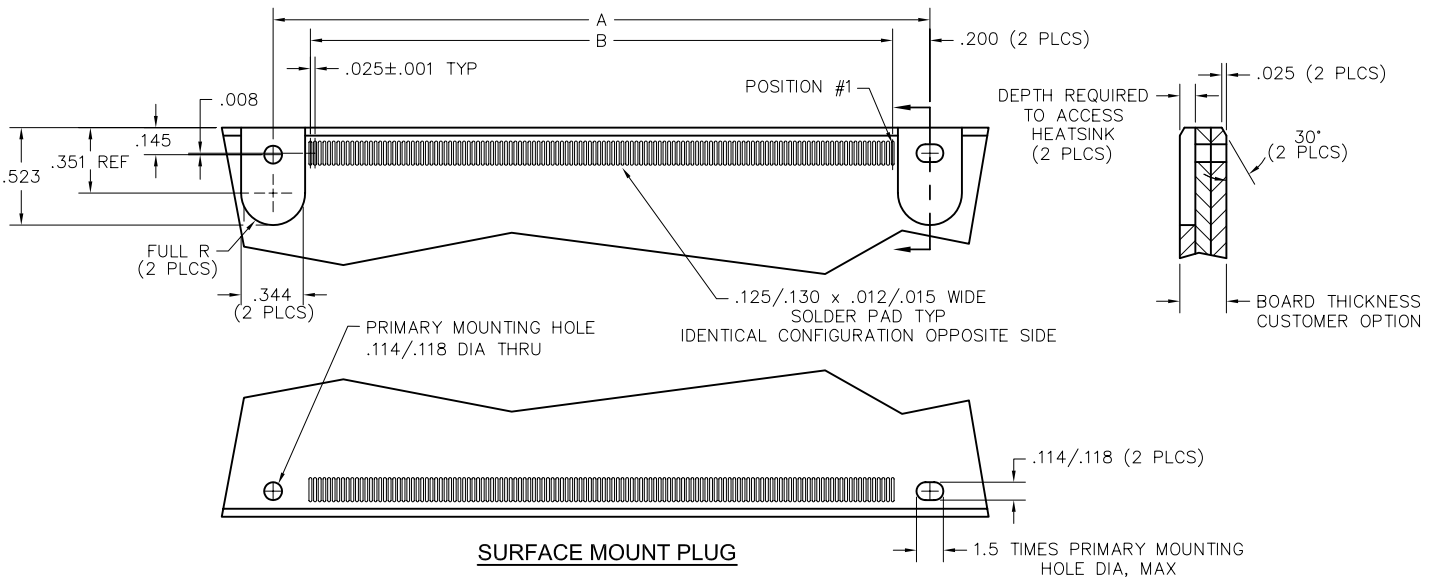
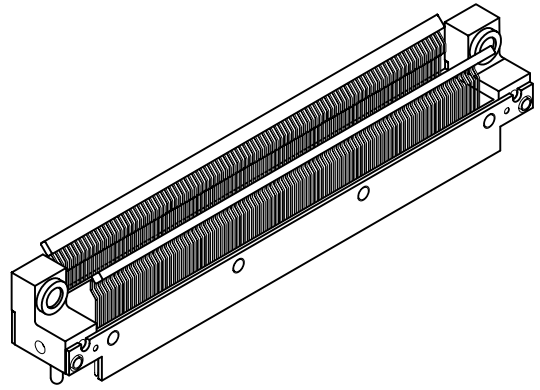
## Straight SMT Plug

.075"

**RM6**

162 thru 402 Contacts  
Recommended Board Layout

DIMENSIONS		
SIZE	A	B
162	2.400	2.000
204	2.925	2.525
252	3.525	3.125
300	4.125	3.725
360	4.875	4.475
402	5.400	5.000



SIZE	CONTACT ID	SIZE	CONTACT ID
162	C162	300	C300
	C161		C299
	C160		C149
	C159		C148
C78	C77	C147	C297
C86	C85	C146	C296
C84	C83	C5	C155
C82	C81	C4	C154
204	C204	360	C360
	C203		C359
	C202		C185
	C201		C184
C99	C98	C183	C182
C107	C106	C181	C180
C105	C104	C5	C179
C103	C102	C4	C178
252	C252	402	C402
	C251		C401
	C250		C206
	C249		C205
C248	C131	C4	C204
C5	C4	C3	C203
C128	C127	C2	C202
C126	C125	C1	C201
C124	C123	C199	C198
C122	C121	C197	C196
C197	C196	C195	C194
C193	C192	C191	C190
C189	C188	C187	C186
C187	C186	C185	C184
C183	C182	C181	C180
C179	C178	C177	C176
C175	C174	C173	C172
C171	C170	C169	C168
C167	C166	C165	C164
C163	C162	C161	C160



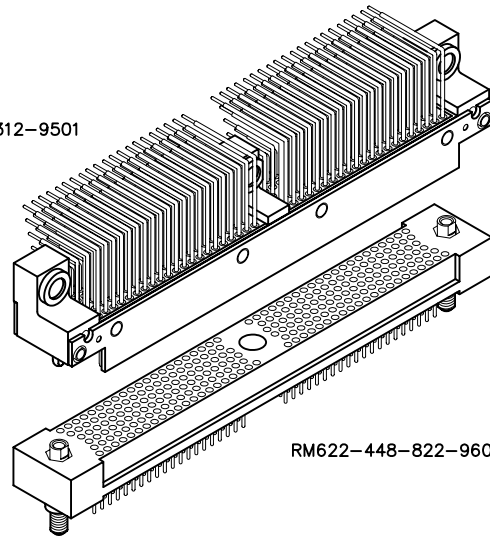
# 6 • ROW Daughterboard to Motherboard or Chassis

.075"

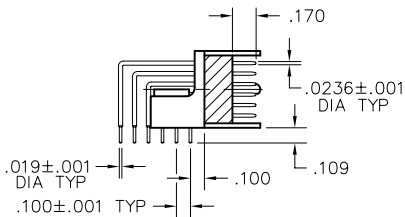
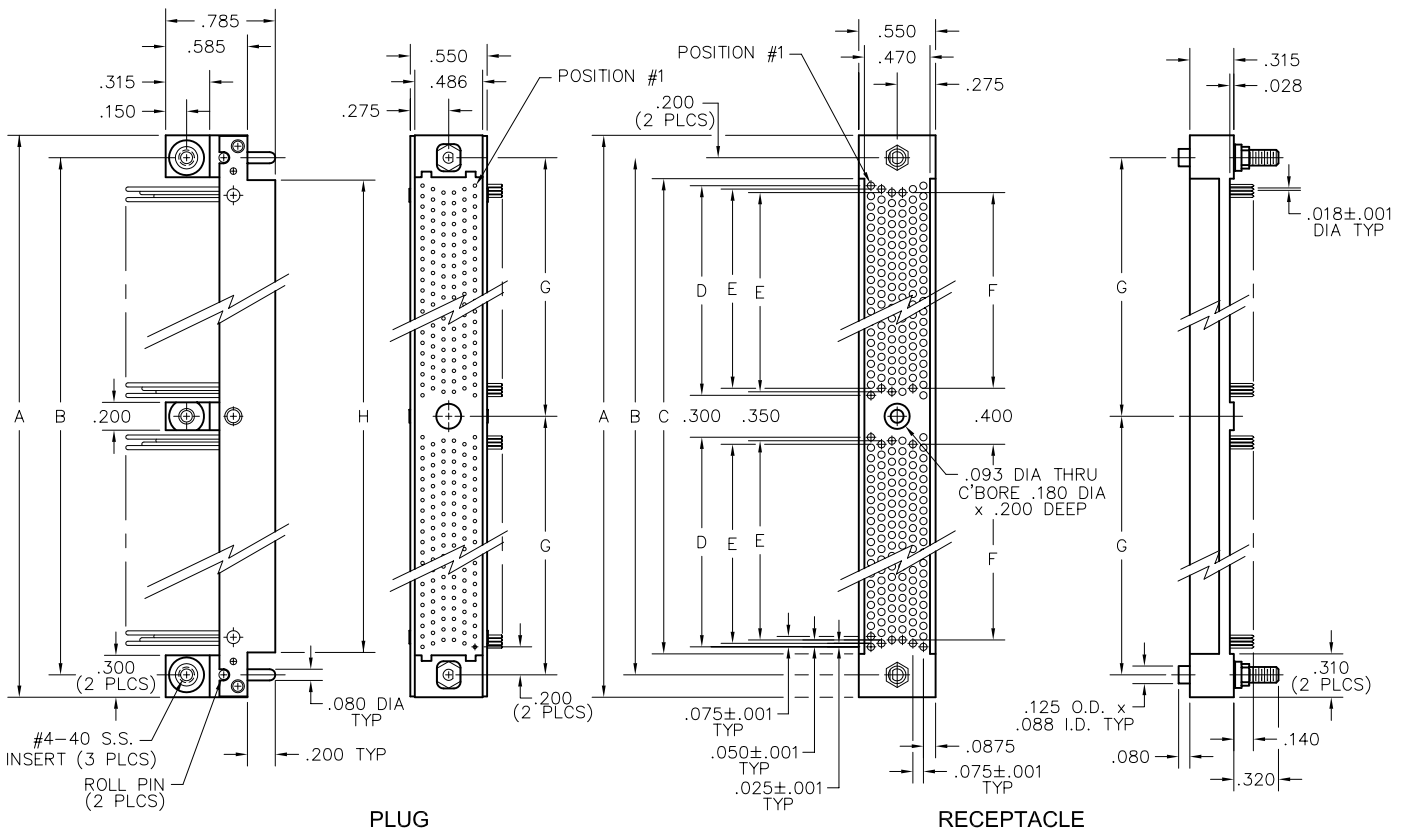
**RM6**

448 & 604 Contacts

RM652-448-312-9501



RM622-448-822-9601



DIMENSIONS								
SIZE	A	B	C	D	E	F	G	H
448	6.570	6.250	5.950	2.775	2.700	2.675	3.125	5.930
604	8.520	8.200	7.900	3.750	3.675	3.650	4.100	7.880

**PLUG:** RM652-448-312-9501  
**RECEPTACLE:** RM622-448-822-9601  
 XXXXX-XXX-XXX-XXXX

**PLUG**

**RECEPTACLE**

SERIES	
RM .075" Screw Machine PC Connector	RM .075" Screw Machine PC Connector

BODY	
6 6-Row	6 6-Row
BODY STYLE: 5 Plug, right angle, with mounting ears	BODY STYLE: 2 Receptacle, straight, with mounting ears
BODY MATERIAL: 2 Polyphenylene sulfide (PPS)	BODY MATERIAL: 2 Polyphenylene sulfide (PPS)

SIZE	
448, 604	448, 604

**CONTACTS**

PLUG CONTACTS/TERMINATIONS:	RECEPTACLE CONTACTS/TERMINATIONS:
31 Pin, right angle, dip solder, .109" x .019" dia	75 Socket, straight, dip solder, .250" x .018" dia
32 Pin, right angle, dip solder, .140" x .019" dia	76 Socket, straight, solder cup
33 Pin, right angle, dip solder, .172" x .019" dia	77 Socket, straight, flex, .093" x .017" dia
34 Pin, right angle, dip solder, .250" x .019" dia	81 Socket, straight, dip solder, .109" x .018" dia
	82 Socket, straight, dip solder, .140" x .018" dia
	83 Socket, straight, dip solder, .172" x .018" dia
	87 Socket, straight, press-fit, .188" (Board: .093" - .125" thk)
	88 Socket, straight, press-fit, .308" (Board: .156" - .200" thk)
	89 Socket, straight, press-fit, .388" (Board: .250"+ thk)

PLATING OPTIONS:	PLATING OPTIONS:
1 Gold plated termination	1 Gold plated termination
2 Pre-tinned termination, SnPb alloy <input checked="" type="checkbox"/>	2 Pre-tinned termination, SnPb alloy (dip solder options only) <input checked="" type="checkbox"/>
3 Pre-tinned termination, SAC305 alloy	3 Pre-tinned termination, SAC305 alloy (dip solder options only)

**HARDWARE**

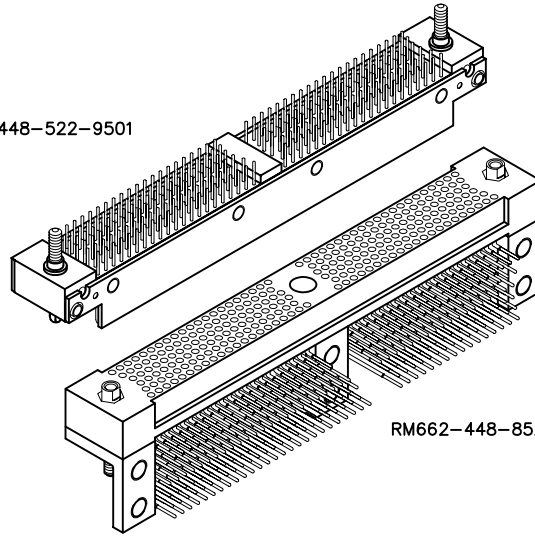
STYLE OF HARDWARE:	STYLE OF HARDWARE:
0256 None	0256 None
83 Fixed jackset, reversed, installed	82 Hex turning jackset, reversed, installed, .200 knob
90 Guide pins, full round, installed	83 Fixed jackset, reversed, installed, #4-40 x .247" thd ext
93 Fixed jackset, installed	84 Fixed jackset, reversed, installed, #4-40 x .320" thd ext
95 Guide pins, polarized, unassembled	91 Guide sockets, full round, installed, #4-40 x .247" thd ext
9501 - 9536 Guide pins, polarized, installed	92 Hex turning jackset, installed, .200 knob
99 Guide pins, universal, installed	93 Fixed jackset, installed, #4-40 x .247" thd ext
	94 Fixed jackset, installed, #4-40 x .320" thd ext
	96 Guide sockets, polarized, unassembled, #4-40 x .320" thd ext
	9601 - 9636 Guide sockets, polarized, installed, #4-40 x .320" thd ext
	97 Guide sockets, polarized, unassembled, #4-40 x .247" thd ext
	9701 - 9736 Guide sockets, polarized, installed, #4-40 x .247" thd ext
	98 Guide sockets, universal, installed, #4-40 x .247" thd ext

POLARIZATION:	POLARIZATION:
00 None	00 None
01 thru 36 are special identifiers, see page R-57	01 thru 36 are special identifiers, see page R-57

= Option not RoHS compliant



RM612-448-522-9501



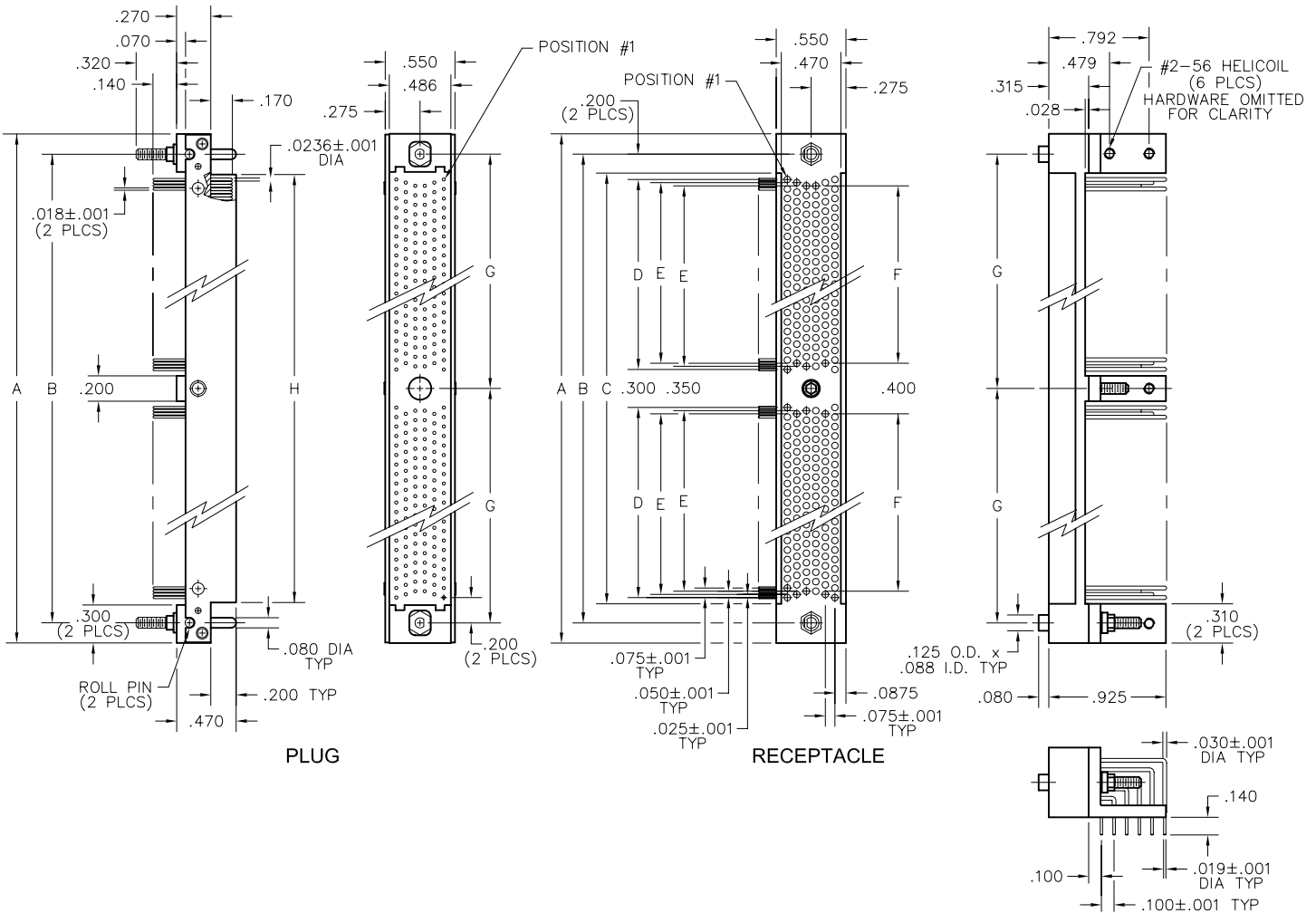
RM662-448-852-9601

# 6 • ROW Motherboard or Chassis to Daughterboard

.075"

**RM6**

448 & 604 Contacts



DIMENSIONS								
SIZE	A	B	C	D	E	F	G	H
448	6.570	6.250	5.950	2.775	2.700	2.675	3.125	5.930
604	8.520	8.200	7.900	3.750	3.675	3.650	4.100	7.880

**PLUG:** RM612-448-522-9501  
**RECEPTACLE:** RM662-448-852-9601  
 XXXXX-XXX-XXX-XXXX

**PLUG**

**RECEPTACLE**

SERIES	
RM .075" Screw Machine PC Connector	RM .075" Screw Machine PC Connector

BODY	
6 6-Row	6 6-Row
<b>BODY STYLE:</b> 1 Plug, straight, without mounting ears	<b>BODY STYLE:</b> 6 Receptacle, right angle, with mounting brackets
<b>BODY MATERIAL:</b> 2 Polyphenylene sulfide (PPS)	<b>BODY MATERIAL:</b> 2 Polyphenylene sulfide (PPS)

SIZE	
448, 604	448, 604

CONTACTS	
<b>TYPE CONTACTS/TERMINATIONS:</b> 17 Pin, straight, solder cup 40 Pin, straight, flex .093" x .017" dia 51 Pin, straight, dip solder, .109" x .018" dia 52 Pin, straight, dip solder, .140" x .018" dia 53 Pin, straight, dip solder, .172" x .018" dia 54 Pin, straight, dip solder, .250" x .018" dia	<b>TYPE CONTACTS/TERMINATIONS:</b> 84 Socket, right angle, dip solder, .109" x .019" dia 85 Socket, right angle, dip solder, .140" x .019" dia 86 Socket, right angle, dip solder, .172" x .019" dia
<b>PLATING OPTIONS:</b> 1 Gold plated termination 2 Pre-tinned termination, SnPb alloy (dip solder options only) <input checked="" type="checkbox"/> 3 Pre-tinned termination, SAC305 alloy (dip solder options only)	<b>PLATING OPTIONS:</b> 1 Gold plated termination 2 Pre-tinned termination, SnPb alloy <input checked="" type="checkbox"/> 3 Pre-tinned termination, SAC305 alloy

HARDWARE	
<b>STYLE OF HARDWARE:</b> 0256 None 82 Hex turning jackset, reversed, installed, .200 knob 83 Fixed jackset, reversed, installed #4-40 x .247" thd ext 84 Fixed jackset, reversed, installed #4-40 x .320" thd ext 90 Guide pins, full round, installed #4-40 x .320" thd ext 92 Hex turning jackset, installed, .200 knob 93 Fixed jackset, installed, #4-40 x .247" thd ext 94 Fixed jackset, installed, #4-40 x .320" thd ext 95 Guide pins, polarized, unassembled, #4-40 x .320" thd ext 9501 - 9536 Guide pins, polarized, installed, #4-40 x .320" thd ext 99 Guide pins, universal, installed #4-40 x .320" thd ext	<b>STYLE OF HARDWARE:</b> 0256 None 82 Hex turning jackset, reversed, installed, .200 knob 83 Fixed jackset, reversed, installed 91 Guide sockets, full round, installed 92 Hex turning jackset, installed, .200 knob 93 Fixed jackset, installed 96 Guide sockets, polarized, unassembled 9601 - 9636 Guide sockets, polarized, installed 97 Guide sockets, polarized, unassembled 9701 - 9736 Guide sockets, polarized, installed 98 Guide sockets, universal, installed  Note: Includes mounting bracket when right angle contacts are supplied
<b>POLARIZATION:</b> 00 None 01 thru 36 are special identifiers, see page R-57	<b>POLARIZATION:</b> 00 None 01 thru 36 are special identifiers, see page R-57

= Option not RoHS compliant

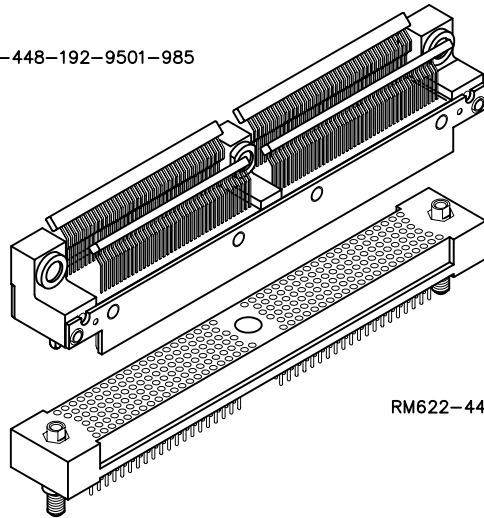
# 6 • ROW Daughterboard to Motherboard or Chassis

.075"

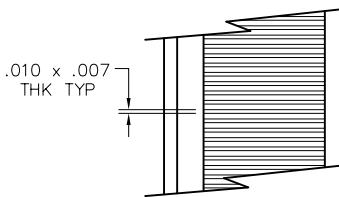
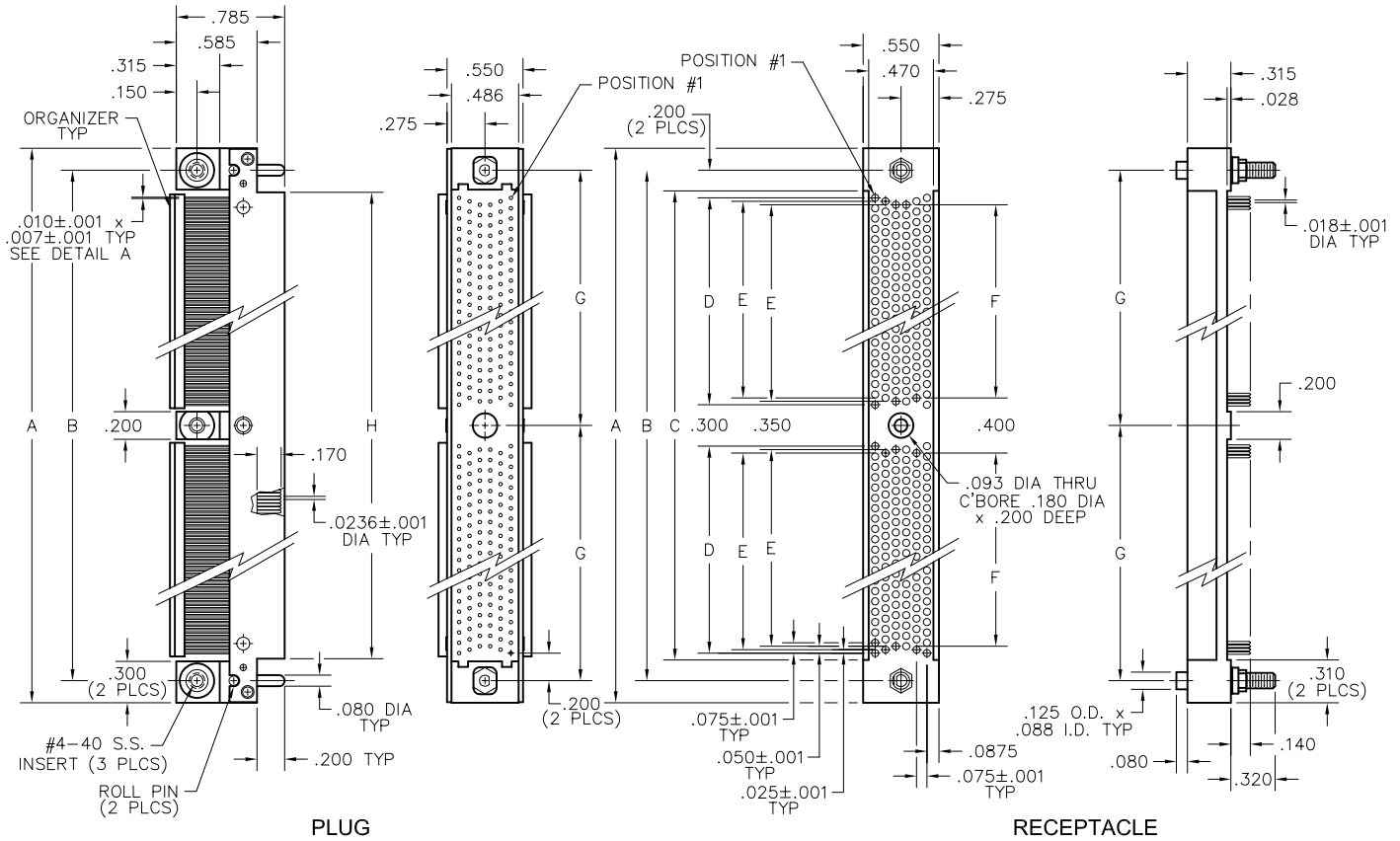
**RM6**

448 & 604 Contacts

RM612-448-192-9501-985



RM622-448-822-9601



DETAIL A

DIMENSIONS								
SIZE	A	B	C	D	E	F	G	H
448	6.570	6.250	5.950	2.775	2.700	2.675	3.125	5.930
604	8.520	8.200	7.900	3.750	3.675	3.650	4.100	7.880



**PLUG:** RM612-448-192-9501-985  
**RECEPTACLE:** RM622-448-822-9601  
 XXXXX-XXX-XXX-XXXX-XXX

**PLUG**

**RECEPTACLE**

**SERIES**

RM .075" Screw Machine PC Connector | RM .075" Screw Machine PC Connector

**BODY**

6 6-Row | 6 6-Row

**BODY STYLE:**  
 1 Plug, straight, with mounting ears | 2 Receptacle, straight, with mounting ears

**BODY MATERIAL:**  
 2 Black anodized side shield (PPS) | 2 Black anodized side shield (PPS)  
 5 Nickel plated side shield (PPS) | 5 Nickel plated side shield (PPS)

**SIZE**

448, 604 | 448, 604

**CONTACTS**

**TYPE CONTACTS/TERMINATIONS:**  
 19 Pin, SMT, .014" x .007" tail, scored for organizer removal (see R-56)  
 39 Pin, SMT, .014" x .007" tail, unscored

**TYPE CONTACTS/TERMINATIONS:**  
 75 Socket, straight, dip solder, .250" x .018" dia  
 76 Socket, straight, solder cup  
 77 Socket, straight, flex, .093" x .017" dia  
 81 Socket, straight, dip solder, .109" x .018" dia  
 82 Socket, straight, dip solder, .140" x .018" dia  
 83 Socket, straight, dip solder, .172" x .018" dia  
 87 Socket, straight, press-fit, .188" (Board: .093" - .125" thk)  
 88 Socket, straight, press-fit, .308" (Board: .156" - .200" thk)  
 89 Socket, straight, press-fit, .388" (Board: .250"+ thk)

**PLATING OPTIONS:**  
 2 Pre-tinned termination, SnPb alloy   
 3 Pre-tinned termination, SAC305 alloy

**PLATING OPTIONS:**  
 1 Gold plated termination  
 2 Pre-tinned termination, SnPb alloy (dip solder options only)   
 3 Pre-tinned termination, SAC305 alloy (dip solder options only)

**HARDWARE**

**STYLE OF HARDWARE:**  
 0256 None  
 83 Fixed jackset, reversed, installed  
 90 Guide pins, full round, installed  
 93 Fixed jackset, installed  
 95 Guide pins, polarized, unassembled  
 9501 - 9536 Guide pins, polarized, installed  
 99 Guide pins, universal, installed

**STYLE OF HARDWARE:**  
 0256 None  
 82 Hex turning jackset, reversed, installed, .200 knob  
 83 Fixed jackset, reversed, installed, #4-40 x .247 thd ext  
 84 Fixed jackset, reversed, installed, #4-40 x .320 thd ext  
 91 Guide sockets, full round, installed, #4-40 x .247" thd ext  
 92 Hex turning jackset, installed, .200 knob  
 93 Fixed jackset, installed, #4-40 x .247 thd ext  
 94 Fixed jackset, installed, #4-40 x .320 thd ext  
 96 Guide sockets, polarized, unassembled, #4-40 x .320" thd ext  
 9601 - 9636 Guide sockets, polarized, installed, #4-40 x .320" thd ext  
 97 Guide sockets, polarized, unassembled, #4-40 x .247" thd ext  
 9701 - 9736 Guide sockets, polarized, installed, #4-40 x .247" thd ext  
 98 Guide sockets, universal, installed, #4-40 x .247" thd ext

**POLARIZATION:**  
 00 None  
 01 thru 36 are special identifiers, see page R-57

**POLARIZATION:**  
 00 None  
 01 thru 36 are special identifiers, see page R-57

**OPTIONS**

9XX SMT configuration code, see page R-56

= Option not RoHS compliant



# 6 • ROW

## Right Angle PTH Plug

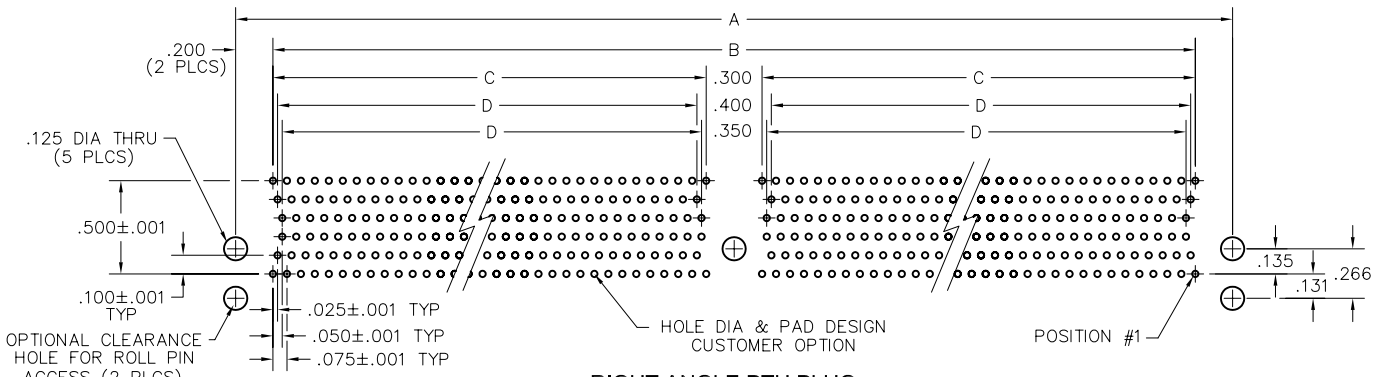
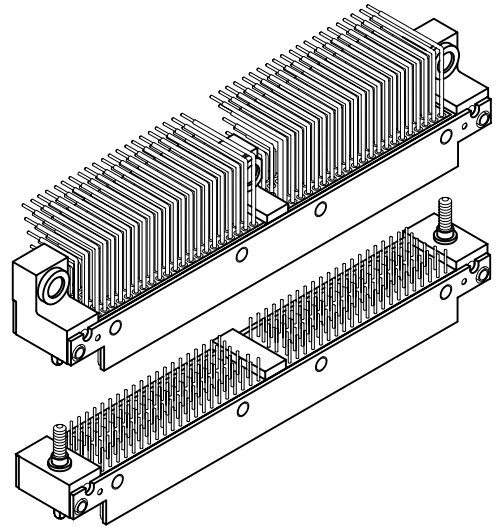
## Straight PTH Plug

.075"

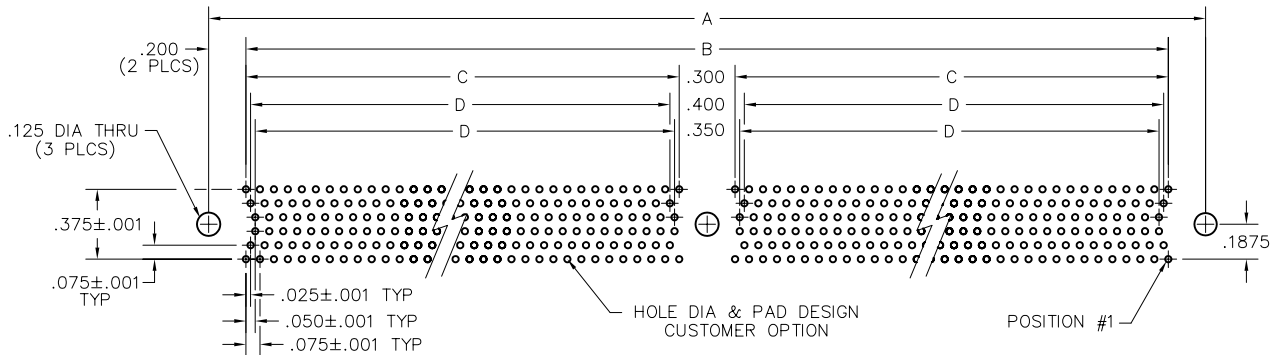
**RM6**

448 & 604 Contacts  
Recommended  
Board Layout

DIMENSIONS				
SIZE	A	B	C	D
448	6.250	5.850	2.775	2.700
604	8.200	7.800	3.750	3.675



**RIGHT ANGLE PTH PLUG**  
PC BOARD VIEWED FROM COMPONENT SIDE



**STRAIGHT PTH PLUG**  
PC BOARD VIEWED FROM COMPONENT SIDE

SIZE	CONTACT ID				SIZE	CONTACT ID																			
448	448	445	442	343	340	337	536	533	530	231	228	225	604	604	601	598	460	457	454	453	450	447	509	506	503
	447	444	441	345	342	339	534	531	528	232	229	226		603	600	597	462	459	456	451	448	445	310	307	304
	446	443	440	344	341	338	535	532	529	233	230	227		602	599	596	461	458	455	452	449	446	311	308	305
	222	219	216	120	117	114	111	108	105	9	6	3		500	297	294	159	156	153	150	147	144	9	6	3
	223	220	217	121	118	115	110	107	104	8	5	2		301	298	295	160	157	154	149	146	143	8	5	2
	224	221	218	119	116	113	112	109	106	7	4	1		502	299	296	158	155	152	151	148	145	7	4	1

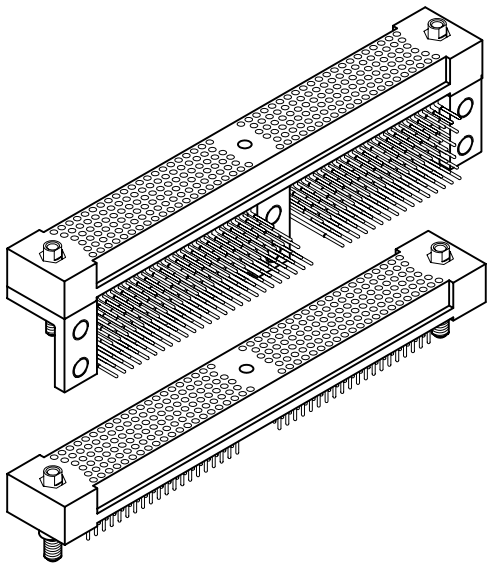
# 6 • ROW

## Right Angle PTH Rcpt Straight PTH Rcpt

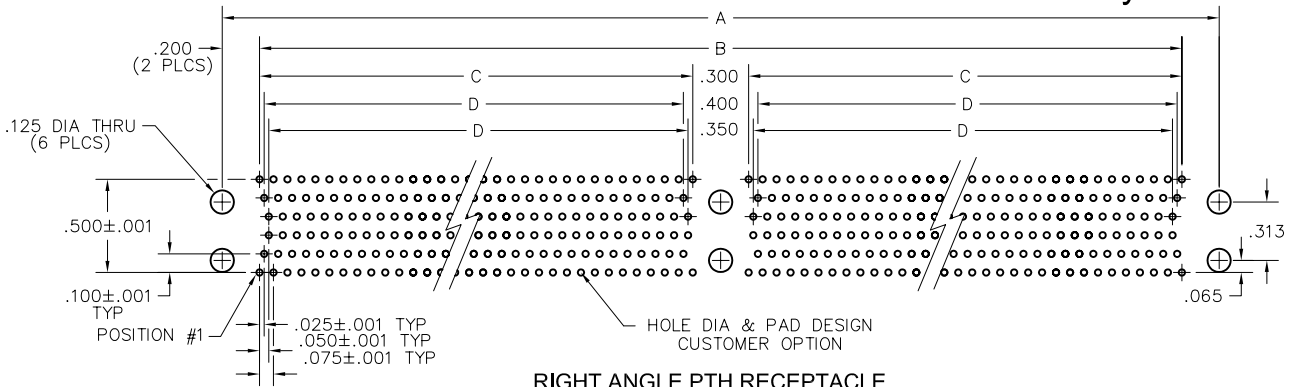
.075"

**RM6**

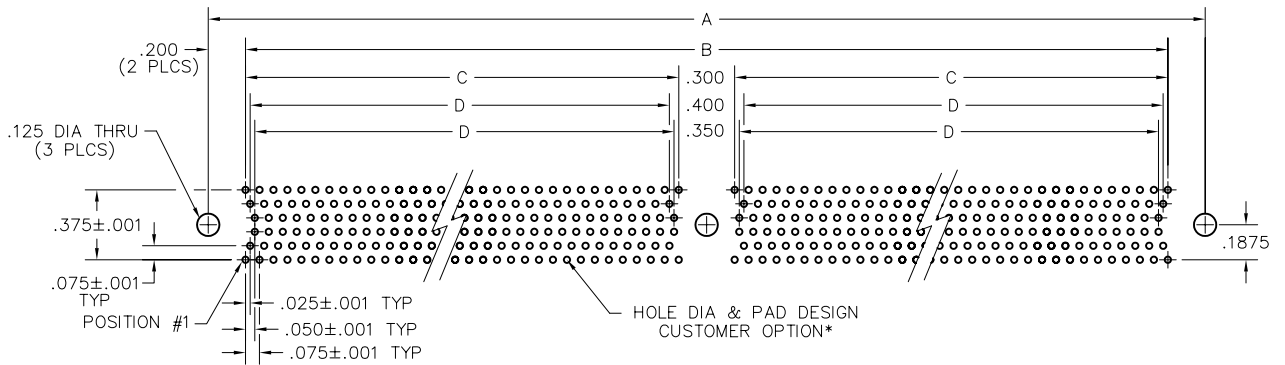
448 & 604 Contacts  
Recommended  
Board Layout



DIMENSIONS				
SIZE	A	B	C	D
448	6.250	5.850	2.775	2.700
604	8.200	7.800	3.750	3.675



**RIGHT ANGLE PTH RECEPTACLE**  
PC BOARD VIEWED FROM COMPONENT SIDE



**STRAIGHT PTH RECEPTACLE**  
PC BOARD VIEWED FROM COMPONENT SIDE

\*COMPLIANT TERMINATION REQUIREMENTS:  
Board Material: FR-4 w/ 1.0 oz. copper  
Minimum nominal board thickness: .062"  
Drilled hole: .0319"-.0339"  
Copper plating thickness: .0010" minimum  
Tin-lead plating thickness: .0006" maximum  
Electroplated tin-lead composition: 63/37 (Sn/Pb)  
Finished hole diameter: .028"±.002"

SIZE	CONTACT ID				SIZE	CONTACT ID			
448	225(228(231	330(333(336	337(340(343	442(445(448	604	303(306(309	447(450(453	454(457(460	598(601(604
	226(229(232	328(331(334	339(342(345	441(444(447		304(307(310	445(448(451	456(459(462	597(600(603
	227(230(233	329(332(335	338(341(344	440(443(446		305(308(311	446(449(452	455(458(461	596(599(602
	3 6 9	103(108(111	114(117(120	216(219(222		3 6 9	144(147(150	153(156(159	294(297(300
	2 5 8	104(107(110	113(118(121	217(220(223		2 5 8	143(146(149	154(157(160	295(298(301
1 4 7	106(109(112	113(116(119	218(221(224	1 4 7	145(148(151	152(155(158	296(299(302		

# 6 • ROW

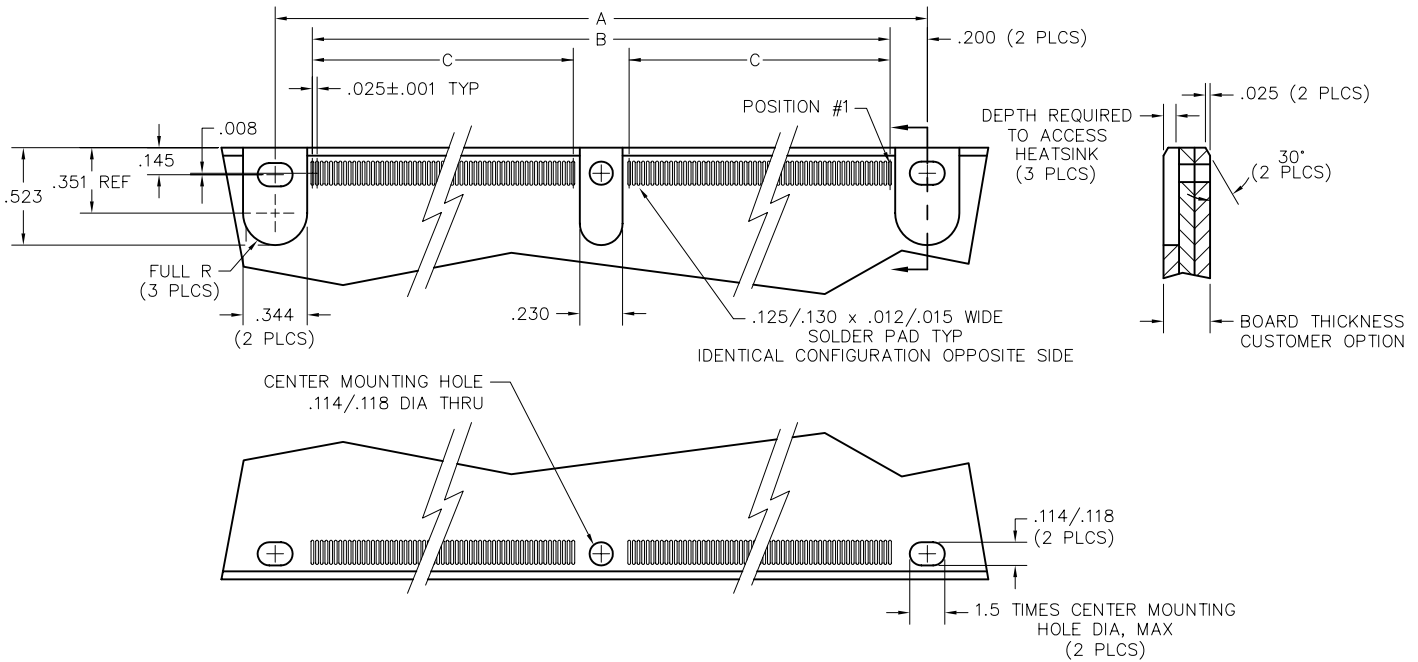
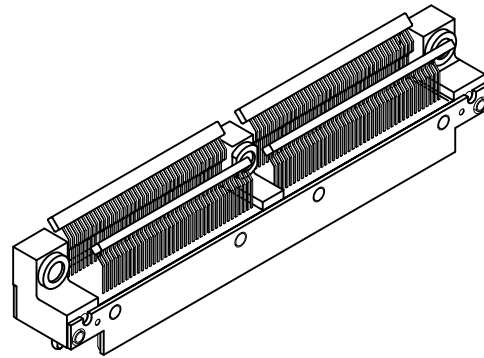
## Straight SMT Plug

.075"

**RM6**

448 & 604 Contacts  
Recommended Board Layout

DIMENSIONS			
SIZE	A	B	C
448	6.250	5.850	2.775
604	8.200	7.800	3.750



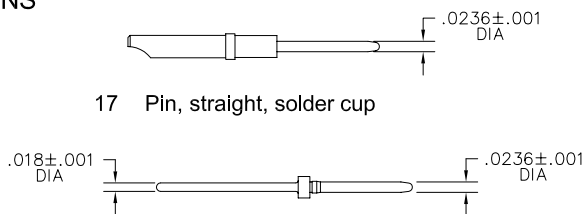
**SURFACE MOUNT PLUG**

SIZE	CONTACT ID												SIZE	CONTACT ID																											
448	C448D	C447D	C446D	C445D	C444D	C341D	C340D	C339D	C338D	C337D	C336D	C335D	C334D	C333D	C332D	C229D	C228D	C227D	C226D	C225D	604	C604D	C603D	C602D	C601D	C600D	C458D	C457D	C456D	C455D	C454D	C453D	C452D	C451D	C450D	C449D	C307D	C306D	C305D	C304D	C303D
	C224D	C223D	C222D	C221D	C220D	C117D	C116D	C115D	C114D	C113D	C112D	C111D	C110D	C109D	C108D	C5D	C4D	C3D	C2D	C1D		C302D	C301D	C300D	C299D	C298D	C156D	C155D	C154D	C153D	C152D	C151D	C150D	C149D	C148D	C147D	C5D	C4D	C3D	C2D	C1D

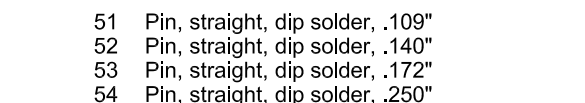
# Contacts 6 Row

Pins and Sockets

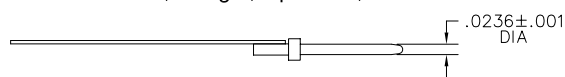
## PINS



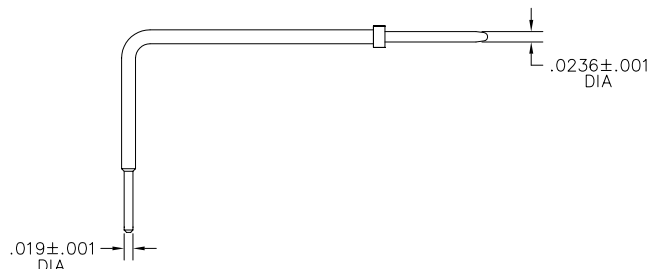
17 Pin, straight, solder cup



51 Pin, straight, dip solder, .109"  
52 Pin, straight, dip solder, .140"  
53 Pin, straight, dip solder, .172"  
54 Pin, straight, dip solder, .250"

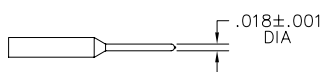


19 Pin, SMT, .014" x .007"

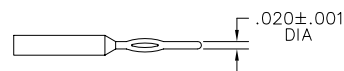


31 Pin, right angle, dip solder, .109" x .019" dia  
32 Pin, right angle, dip solder, .140" x .019" dia  
33 Pin, right angle, dip solder, .172" x .019" dia  
34 Pin, right angle, dip solder, .250" x .019" dia

## SOCKETS



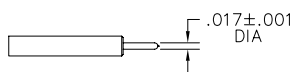
81 Socket, straight, dip solder, .109"  
82 Socket, straight, dip solder, .140"  
83 Socket, straight, dip solder, .172"



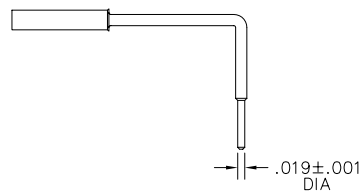
87 Socket, straight, press-fit, .203" (Board: .093"-.125")  
88 Socket, straight, press-fit, .308" (Board: .156"-.200")  
89 Socket, straight, press-fit, .403" (Board: .250 or <)"



76 Socket, straight, solder cup



77 Socket, straight, flex circuit, .093"



84 Socket, right angle, dip solder, .109"  
85 Socket, right angle, dip solder, .140"  
86 Socket, right angle, dip solder, .172"

## Specifications - Stackable Compliant Pin Connectors (075)

### Materials and Finishes \*

<b>Contacts:</b>	BeCu, per ASTM-B768 (BeCu C17410 Brush Alloy 174).
<b>Contact Finish:</b>	Gold plate per MIL-G-45204 over Nickel plating per IAW QQ-N-290.
<b>Molded Insulators:</b>	Glass filled polyphenylene sulfide (PPS) per MIL-M-24519.
<b>Screws:</b>	Stainless steel per ASTM-A-582, passivated per ASTM-A-967.
<b>Guide Pins, Guide Sockets:</b>	BeCu per ASTM-B-196, ASTM-B-197, Nickel plated per QQ-N-290.
<b>Connector Markings:</b>	Per MIL-C-55302. Additionally, end row contact numbers are identified on the mating face of the connector and the pin #1 locator identified on the side of the connector base.
<b>Tolerances:</b>	Unless otherwise specified: Fractions = $\pm 1/64$ " Decimals = $\pm .010$ " Angles = $\pm 5^\circ$

Note: AirBorn can manufacture special configurations for your exact specifications.

\* = Reference the above listed specifications or an equivalent industry standard when applicable

## Performance - Stackable Compliant Pin Connectors (075)

### Reference Modified MIL-C-55302, MIL-C-28859, MIL-STD-2166 and ANSI/EIA-616.

<b>Contact Current Rating:</b>	3 Amperes
<b>Operating Temperature:</b>	-65° to +125° C or -85° to +257° F
<b>DWV Test Voltage:</b>	750 V, RMS, 60 Hz @ sea level
<b>Insulation Resistance:</b>	5,000 megohms minimum @ 500 VDC
<b>Durability:</b>	500 connector mating cycles
<b>Contact Resistance:</b>	3 to 5 milliohms (contact length dependent)
<b>Contact Engagement Force:</b>	4.0 oz. (113 g.) maximum w/.0246" dia. test pin
<b>Contact Separation Force:</b>	0.5 oz. (14 g.) minimum w/.0226" dia. test pin.
<b>Total Mating Force:</b>	Maximum, 4.0 oz. (113 g.) X number of contacts Average 2.5 oz. (70 g.) X number of contacts
<b>Compliant Insertion and Removal Forces:</b>	Maximum insertion force ... 22.5 pounds (10.22 Kg.) Minimum retention force after conditioning ... 4.5 pounds (2.04 Kg.)
<b>Suggested Board and Plated Through Hole Requirements:</b>	Board material ... FR-4 with 1.0 oz. copper. Minimum board thickness ... .058". Drilled Hole ... .0319" - .0339". Copper plating thickness ... .0010" minimum Tin-lead plating thickness ... .0003" minimum. Electroplated tin-lead composition ... 63/37 (Sn/Pb) Finished hole diameter ... .028" ±.002

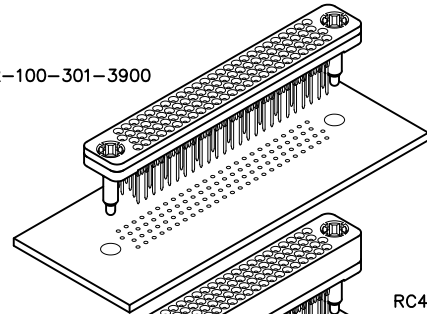
# 4 · ROW Press Fit Stackable

.075"

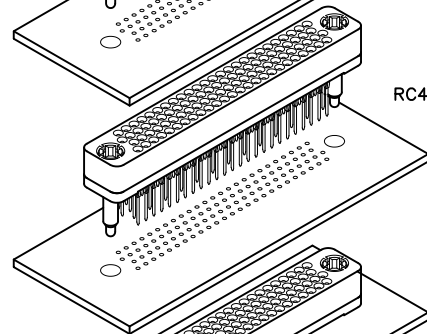
**RC4**

28 thru 300 Contacts

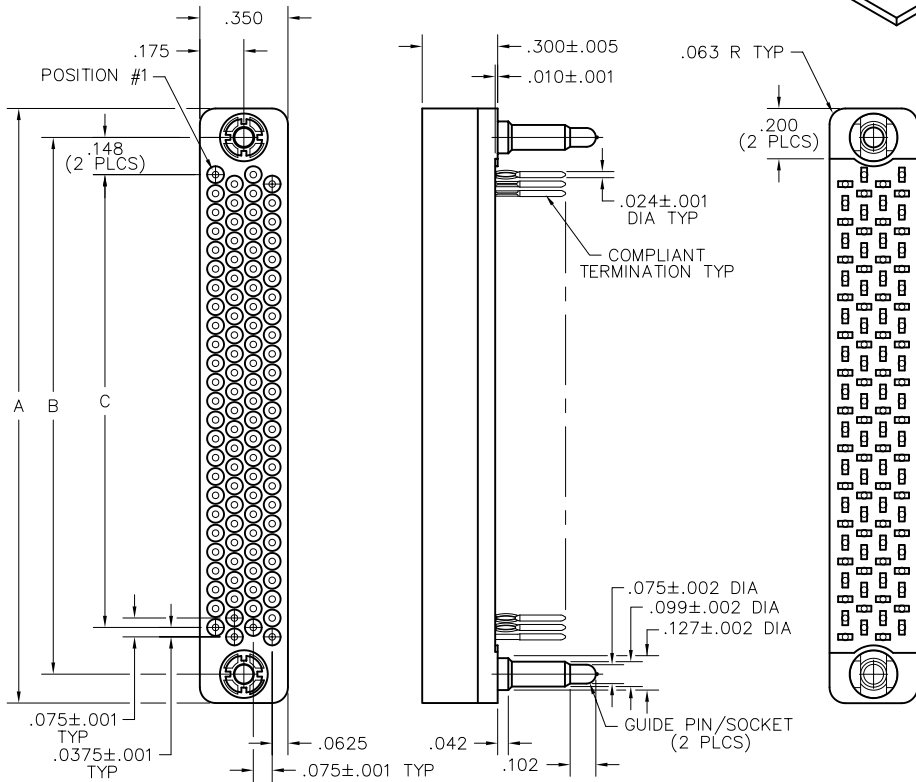
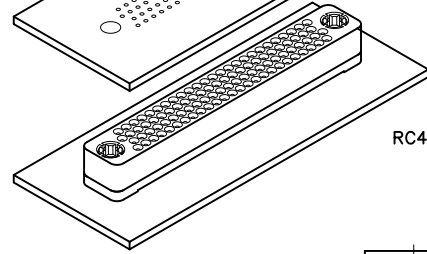
RC442-100-301-3900



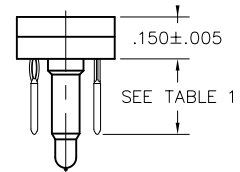
RC422-100-201-3900



RC422-100-101-3000

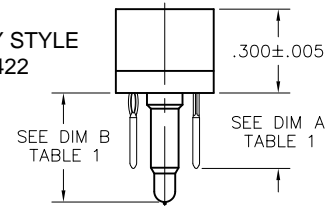


BODY STYLE  
442

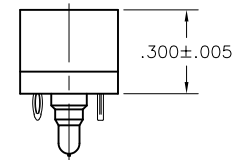


OPTIONAL INSULATOR FOR TOP  
CONNECTOR TERMINATION  
OPTIONS: 301, 311, 321, 331,  
341, 351, 361, 371 AND 381  
(W/CIRCUIT TEST POINT)

BODY STYLE  
422



BODY STYLE  
422



CONTACT/HARDWARE  
OPTION 101  
(TERMINATES CIRCUIT)

DIMENSIONS			
SIZE	A	B	C
28	1.014	.784	.450
52	1.464	1.234	.900
76	1.914	1.684	1.350
100	2.364	2.134	1.800
128	2.889	2.659	2.325
152	3.339	3.109	2.775
200	4.239	4.009	3.675
252	5.214	4.984	4.650
300	6.114	5.884	5.550

TABLE 1		
CONTACT TERMINATION	CONTACT	HARDWARE
	A	B
201, 301	.270	.370
211, 311	.300	.400
221, 321	.400	.500
231, 331	.500	.600
241, 341	.700	.800
251, 351	.800	.900
261, 361	.900	1.000
271, 371	.600	.700
281, 381	1.000	1.100
101	.095	.195



RC422-100- 211-4000  
XXXXX-XXX-XXX-XXXX

**SERIES**

RC Press fit stackable PC connector

**BODY**

**BODY STYLE:**

- 422 4 Row receptacle
- 442 4 Row low profile receptacle (Requires 3XX contact)

**SIZE**

028, 052, 076, 100, 128, 152, 200, 252, 300

**CONTACTS**

**TYPE CONTACTS/TERMINATIONS:**

- 101 Socket contact, press fit tail .095" (Use with body style 422 only)
- 201 Socket contact, press fit tail .270" (Use with body style 422 only)
- 211 Socket contact, press fit tail .300" (Use with body style 422 only)
- 221 Socket contact, press fit tail .400" (Use with body style 422 only)
- 231 Socket contact, press fit tail .500" (Use with body style 422 only)
- 241 Socket contact, press fit tail .700" (Use with body style 422 only)
- 251 Socket contact, press fit tail .800" (Use with body style 422 only)
- 261 Socket contact, press fit tail .900" (Use with body style 422 only)
- 271 Socket contact, press fit tail .600" (Use with body style 422 only)
- 281 Socket contact, press fit tail 1.000" (Use with body style 422 only)
- 301 Press fit tail .270" (Use with body style 442 or 422)
- 311 Press fit tail .300" (Use with body style 442 or 422)
- 321 Press fit tail .400" (Use with body style 442 or 422)
- 331 Press fit tail .500" (Use with body style 442 or 422)
- 341 Press fit tail .700" (Use with body style 442 or 422)
- 351 Press fit tail .800" (Use with body style 442 or 422)
- 361 Press fit tail .900" (Use with body style 442 or 422)
- 371 Press fit tail .600" (Use with body style 442 or 422)
- 381 Press fit tail 1.000" (Use with body style 442 or 422)

**HARDWARE**

**GUIDE HARDWARE**

- 3000 Use with -101 contact
- 3900 Use with -201 or -301 contact
- 4000 Use with -211 or -311 contact
- 4100 Use with -221 or -321 contact
- 4200 Use with -231 or -331 contact
- 4300 Use with -241 or -341 contact
- 4400 Use with -251 or -351 contact
- 4500 Use with -261 or -361 contact
- 4600 Use with -271 or -371 contact
- 4700 Use with -281 or -381 contact

**FIXED JACKSOCKET (to mate with RC cable only)**

- 30FT Use with -101 contact
- 39FT Use with -201 or -301 contact
- 40FT Use with -211 or -311 contact
- 41FT Use with -221 or -321 contact
- 42FT Use with -231 or -331 contact
- 43FT Use with -241 or -341 contact
- 44FT Use with -251 or -351 contact
- 45FT Use with -261 or -361 contact
- 46FT Use with -271 or -371 contact
- 47FT Use with -281 or -381 contact

**CONTACT/  
TERMINATION  
TYPES**



101



201 251  
211 261  
221 271  
231 281  
241



301 351  
311 361  
321 371  
331 381  
341

Minimum contact engagement from mating face (.305" insulator height) ..... .114"  
Maximum contact engagement from mating face (.295" insulator height) ..... .214"  
Minimum PWB thickness ..... .058"

4 Row Press Fit Stackable Tools Available:

Cap Removal Tool - AirBorn part number CDG10056

Contact Removal Tool - AirBorn part number CDG10057

**Ask About AirBorn's Accelerated Delivery Service**

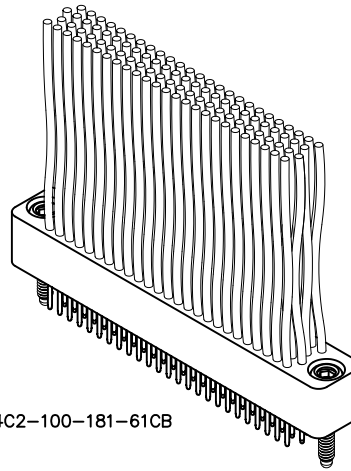


# 4 · ROW Press Fit Stackable Cable Mate

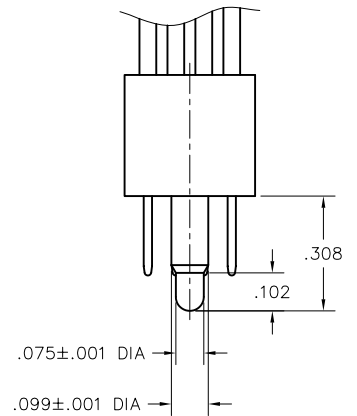
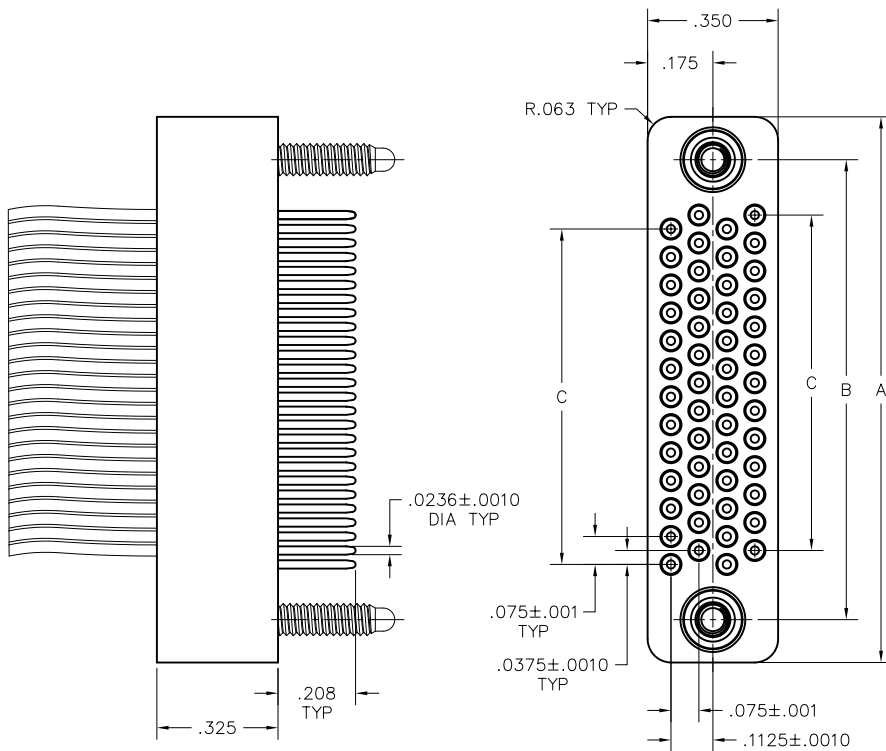
.075"

**RC4**

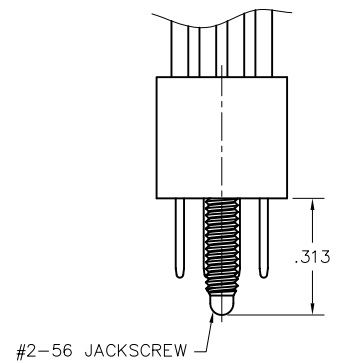
28 thru 152 Contacts



RC4C2-100-181-61CB



HARDWARE STYLE  
57



HARDWARE STYLE  
61

DIMENSIONS			
SIZE	A	B	C
28	1.014	.784	.450
52	1.464	1.234	.900
76	1.914	1.684	1.350
100	2.364	2.134	1.800
128	2.889	2.659	2.325
152	3.339	3.109	2.775

Call (972) 931-3200 Fax (972) 931-9305 [www.AirBorn.com](http://www.AirBorn.com)

RC4C2-100-181-61CB  
XXXXX-XXX-XXX-XXXX

<b>SERIES</b>	
RC	Press fit stackable PC connector
<b>BODY</b>	
BODY STYLE:	
4C2	4 Row plug with potting well
<b>SIZE</b>	
028, 052, 076, 100, 128, 152	
<b>CONTACTS</b>	
TYPE CONTACTS/TERMINATIONS:	
111	Pin, straight, solder cup
151	Pin, straight, flex circuit
181	Pin, straight, stranded wire (24-26 awg)
191	Pin, straight, stranded wire (28-30 awg)
<b>HARDWARE</b>	
STYLE OF HARDWARE:	
00	None
57	Guide pins, non-polarized
61	Hex turning jackscrews (must have fixed jacksocket hardware on board connector)
<b>WIRE</b>	
00	None (solder cup or flex)
XX	See Wire Codes at right

**WIRE CODES**

TYPE and COLOR			LENGTH	
Code	Size	Color	Code	Length (+1"/-0")
Mil-W-16878/4				
C	24 awg	Ten repeating	A	6"
D	24 awg	White	B	12"
E	26 awg	Ten repeating	C	18"
F	26 awg	White	D	24"
G	28 awg	Ten repeating	E	30"
H	28 awg	White	F	36"
J	30 awg	Ten repeating	G	42"
K	30 awg	White	H	48"
			J	54"
Mil-W-22759/33				
N	24 awg	Ten repeating	K	60"
P	24 awg	White	L	66"
R	26 awg	Ten repeating	M	72"
S	26 awg	White	N	84"
T	28 awg	Ten repeating	P	96"
U	28 awg	White	R	108"
V	30 awg	Ten repeating	S	120"
W	30 awg	White		

**Part number example:**

RC4C2-100-181-61CB



**Ten repeating colors:**

- Black
- Brown
- Red
- Orange
- Yellow
- Green
- Blue
- Violet
- Grey
- White

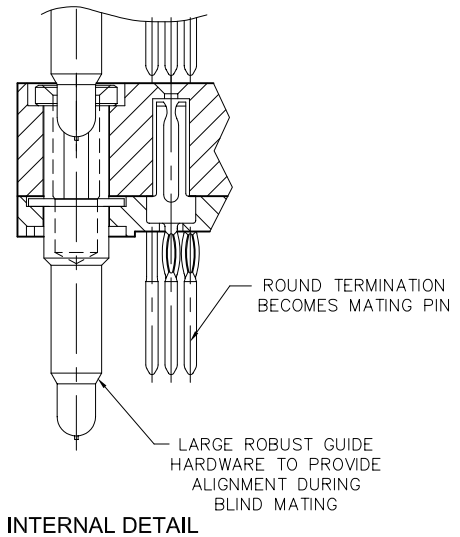
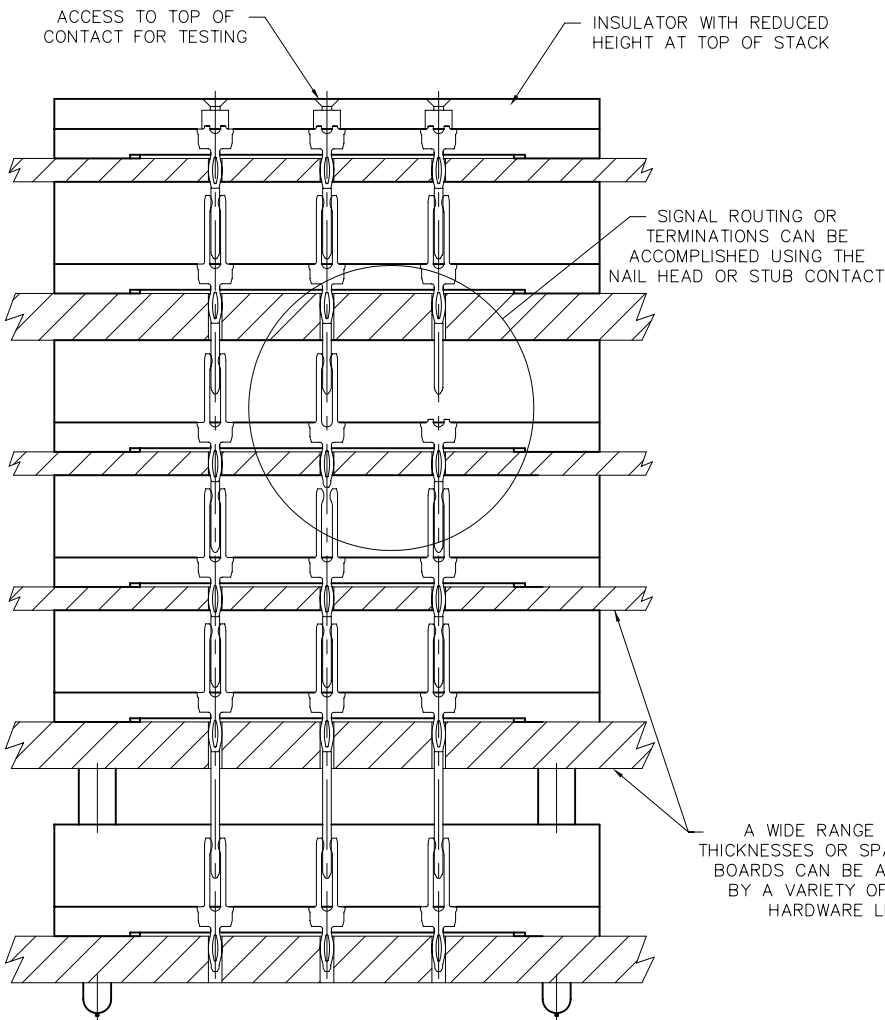
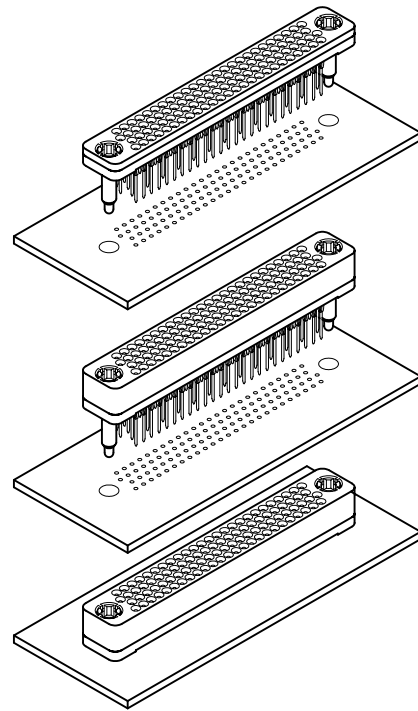
**4 • ROW**  
**Press Fit**  
**Stackable**

.075"

**RC4**

28 thru 300 Contacts

Typical  
 Applications



# ROW · 4

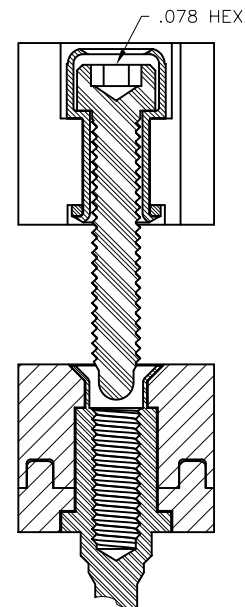
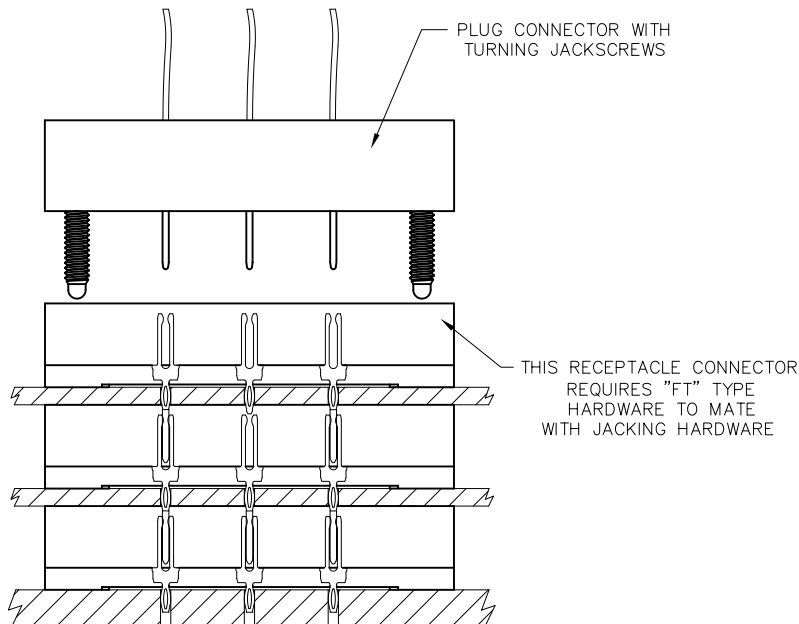
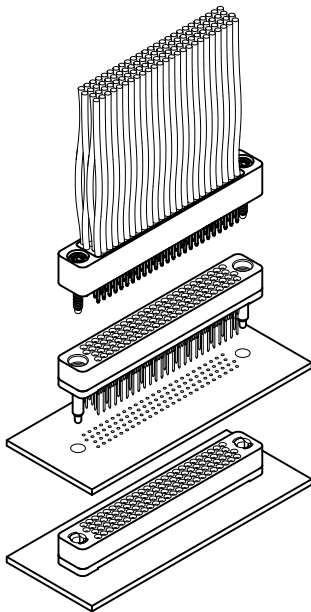
## Press Fit Stackable with Cable Mate

.075"

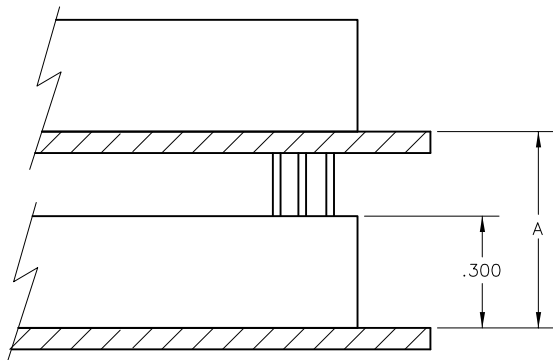
**RC4**

28 thru 152 Contacts

Typical  
Applications



INTERNAL DETAIL



Determine Required Termination Lead Length:

To calculate required termination lead length, use the example below. Measurements listed are in inches.

Dimension A = .720

.720 - .300 (insulator height) = .420

.420 + .114 (minimum pin engagement) = .534

.420 + .214 (maximum pin engagement) = .634

In this example, the termination option to choose is .600 lead length.

The contact termination option will be a length between the minimum and maximum pin engagement measurement. Contact lengths can be found on page R-82.