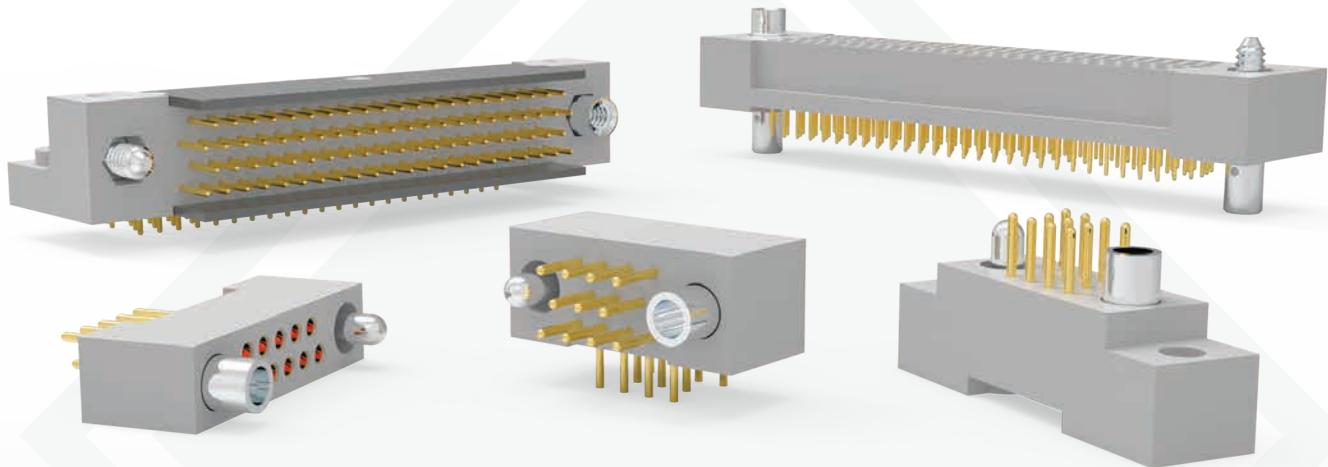


**molex**



# AirBorn R Series

Rectangular Connectors — 0.075" (1.91mm)

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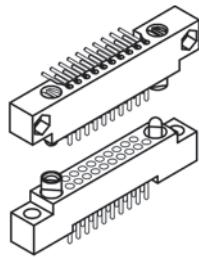
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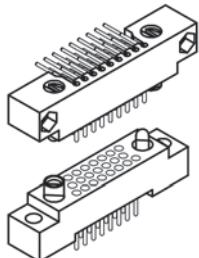
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# DAUGHTERBOARD-TO-MOTHERBOARD OR CHASSIS

## RIGHT-ANGLE PLUG MATING TO STRAIGHT RECEPTACLE

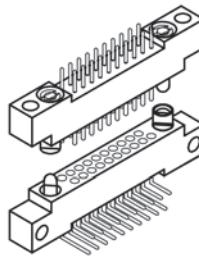


Sizes: 2 Row  
10 thru 100  
Page: R-7

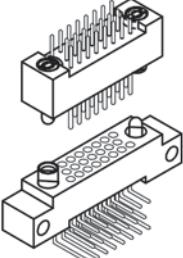


Sizes: 3 Row  
11 thru 206  
Page: R-20

## RIGHT-ANGLE RECEPTACLE MATING TO STRAIGHT PLUG

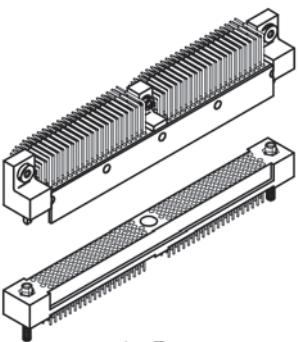


Sizes: 2 Row  
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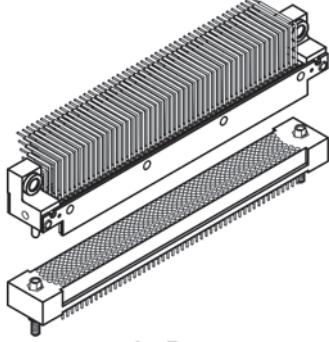


Sizes: 3 Row  
11 thru 206  
Page: R-22

## RIGHT-ANGLE PLUG MATING TO STRAIGHT RECEPTACLE

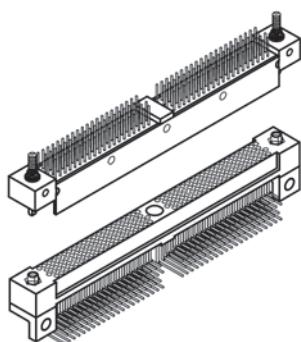


Sizes: 4 Row  
86 thru 404  
Page: R-47

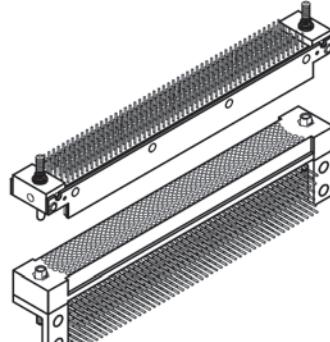


Sizes: 6 Row  
162 thru 402  
Page: R-63  
Sizes: 448 & 604  
Page: R-72

## RIGHT-ANGLE RECEPTACLE MATING TO STRAIGHT PLUG

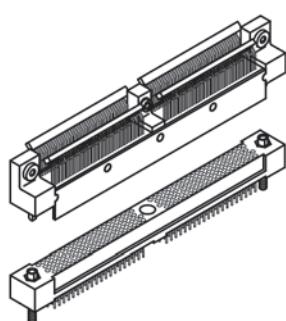


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Page: R-49

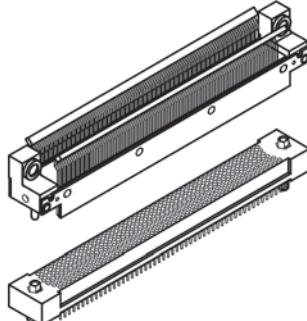


Sizes: 6 Row  
162 thru 402  
Page: R-65  
Sizes: 448 & 604  
Page: R-74

## SURFACE-MOUNT PLUG MATING TO STRAIGHT RECEPTACLE



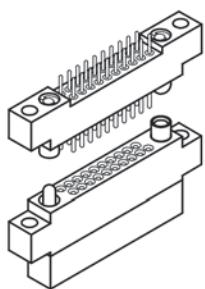
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86 thru 404  
Page: R-51



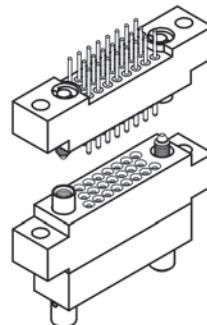
Sizes: 6 Row  
162 thru 402  
Page: R-67  
Sizes: 448 & 604  
Page: R-76

# CABLE- OR BOARD MATING-TO-CRIMP REMOVABLE

## STRAIGHT PLUG MATING TO CRIMP REMOVABLE RECEPTACLE

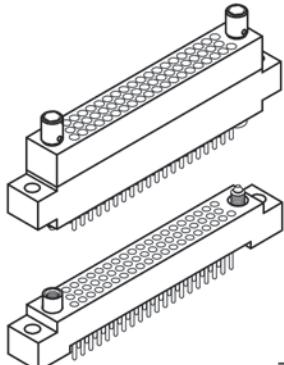


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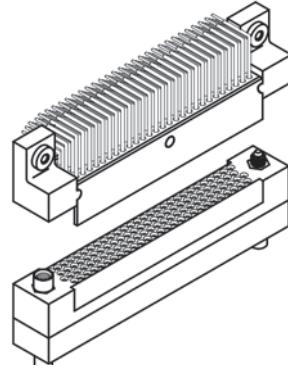
3 Row  
Sizes: 11 thru 80  
Page: R-26

## CRIMP-REMOVABLE PLUG MATING TO STRAIGHT RECEPTACLE



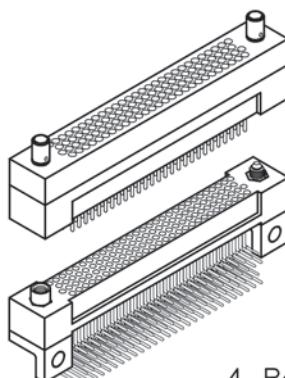
3 Row  
Sizes: 11 thru 80  
Page: R-30

## STRAIGHT PLUG MATING TO CRIMP REMOVABLE RECEPTACLE



4 Row  
Sizes: 86 & 110  
Page: R-53

## CRIMP-REMOVABLE PLUG MATING TO RIGHT-ANGLE RECEPTACLE

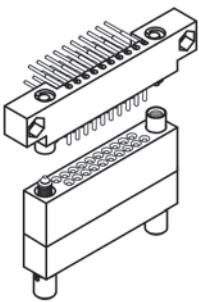


4 Row  
Sizes: 86 & 110  
Page: R-55

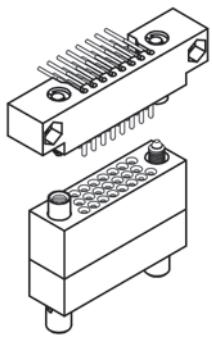
**molex**

## CABLE OR BOARD MATING TO CRIMP REMOVABLE

### RIGHT-ANGLE PLUG MATING TO CRIMP-REMOVABLE RECEPTACLE

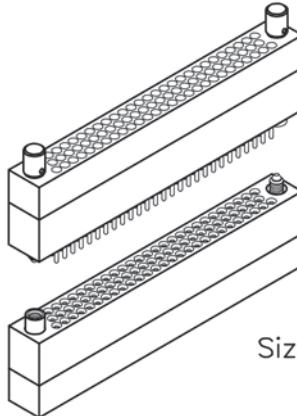


2 Row  
Sizes: 10 thru 100  
Page: R-11



3 Row  
Sizes: 11 thru 80  
Page: R-24

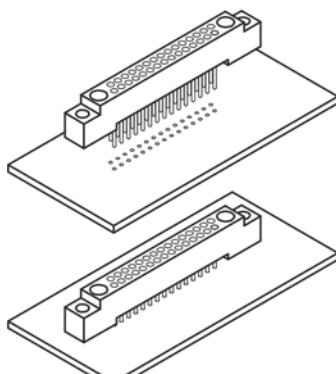
### CRIMP-REMOVABLE PLUG MATING TO CRIMP-REMOVABLE RECEPTACLE



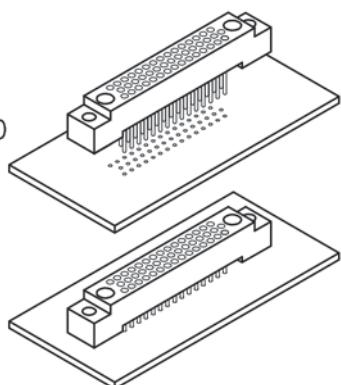
3 Row  
Sizes: 11 thru 80  
Page: R-28

## PC BOARD STACKABLE

### PLATED THROUGH-HOLE STACKABLE OR CONNECTOR SAVER

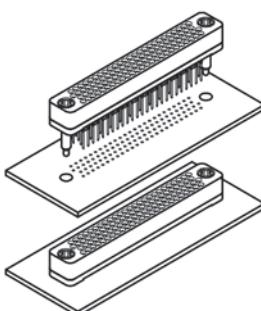


2 Row  
Sizes: 10 thru 100  
Page: R-15

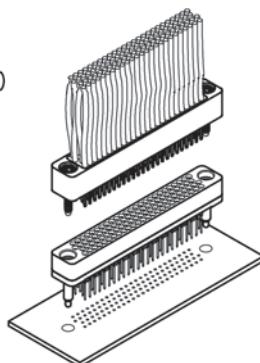


3 Row  
Sizes: 11 thru 206  
Page: R-39

### COMPLAINT PIN (PRESS-FIT) STACKABLE



4 Row  
Sizes: 28 thru 300  
Page: R-84



4 Row  
Sizes: 28 thru 152  
Page: R-86

# 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-B 196, ASTM B 197/B 197M-, or brass per ASTM B 16/B 16M or ASTM-B134
<b>CONTACT FINISHES:</b>	Gold plate per ASTM B 488-, SAE AMS 2422, or localized finish per MIL-DTL-55302 and associated slash sheet
<b>SOLDER:</b>	Sn/Pb alloy - 63% tin, 37% lead composition <b>[x]</b> 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> <i>(Unless otherwise specified)</i>	Angles: $\pm 5^\circ$ Decimals: $\pm 0.010"$ Fractions: $\pm 1/64"$

## NOTES

Molex can manufacture special configurations for your exact specifications.

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

**[x]** Symbolizes options that are not RoHS compliant.

# PERFORMANCE REFERENCE MIL-C-55302

<b>CONTACT RATING:</b>	3 amperes (2 amperes for 0.016" diameter)
<b>SOLDERABILITY:</b>	Terminals ( <i>except wire wrap, crimp and stackables</i> ) 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

CATEGORY	REQUIREMENTS	TEST METHOD PER: SAE AS 13441
TEST VOLTAGE	750V, RMS, 60 Hz at sea level 250V, RMS, 60 Hz at 70,000 feet	#3001
INSULATION RESISTANCE	5,000 megohms minimum at 500 VDC	#3003
DURABILITY	500 connector mating cycles	
VIBRATION	Mated connectors, test condition III	#2005
SHOCK	Mated connectors, test condition G	#2004
SALT SPRAY	Mated connectors, tested condition B	#1001
HUMIDITY	Test type II, (except steps 7a and 7b not required)	#1002
TEMPERATURE CYCLING	Mated connectors, test condition A	#1003
CONTACT RESISTANCE	0.015 Ohms max (interface measurement) at 3 amperes	#3004
CONTACT MATING FORCE	2.50 oz. x number of contacts average	
OUTGASSING	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.	
SIZES 50 AND LARGER	Upon engagement, center area of mating faces may remain open 0.010" to 0.025" due to slight flexing of molding. Vibration or shock should provide complete closure.	
GUIDES AND JACKS	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® 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. For example: an order for size 9 will be 009; an order for size 51 will be 051 and so on.

## **SERIES:**

This will always be a two letter designator and will identify the connector series. All 0.075" connectors begin with the letter R. The second letter designates the various styles of 0.075" 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. If you are unable to locate the size you are looking for, contact Molex for further assistance.

## **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. Molex will provide individual code numbers as needed.

## **NOTES:**

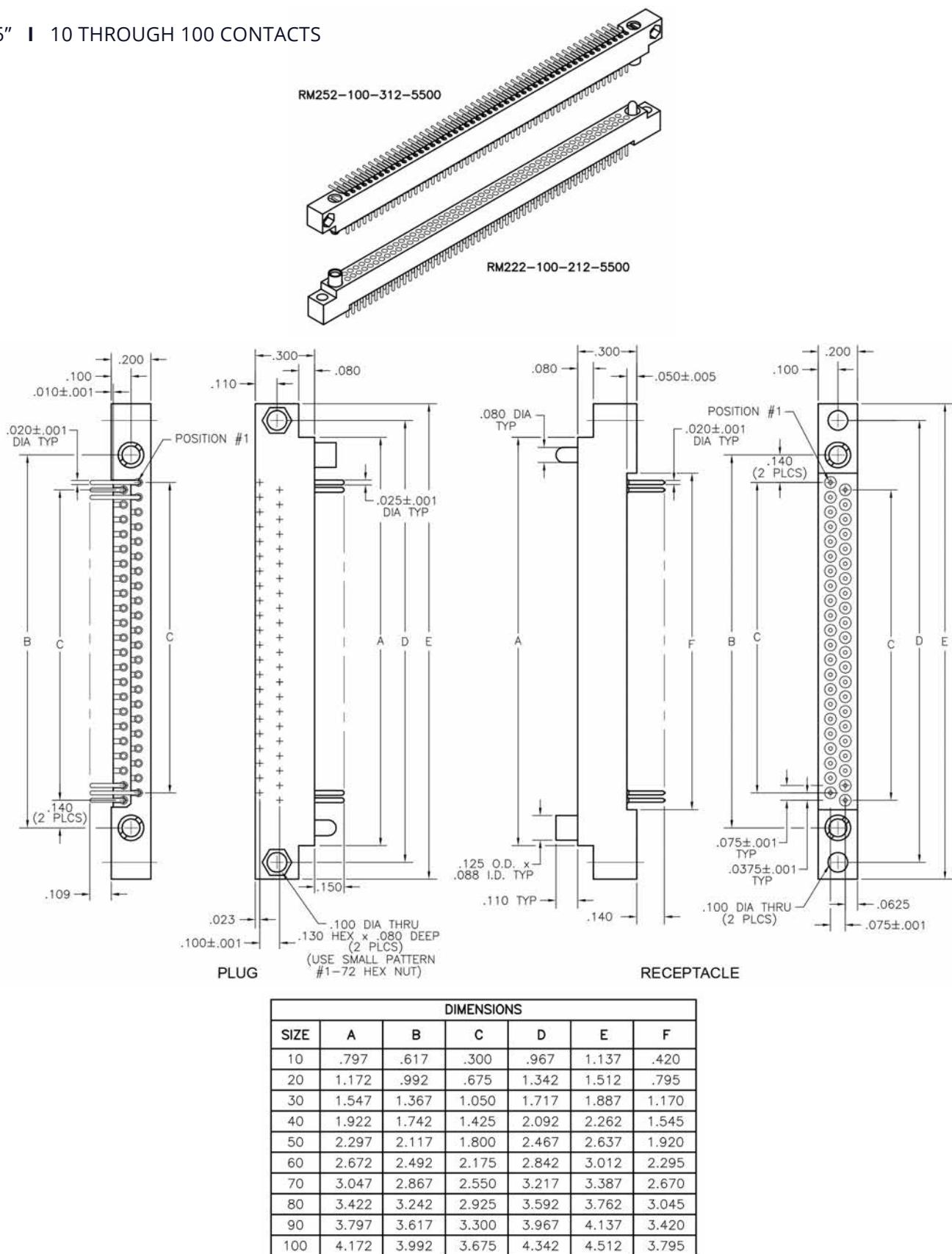
Each page is as comprehensive as possible. However, if you do not find a particular connector size or option, please contact Molex for further assistance.

**[x]** Symbolizes options that are not RoHS compliant.

## TWO ROW - DAUGHTERBOARD-TO-MOTHERBOARD OR CHASSIS

RM2

0.075" | 10 THROUGH 100 CONTACTS



## LEAD CONFIGURATION OPTIONS

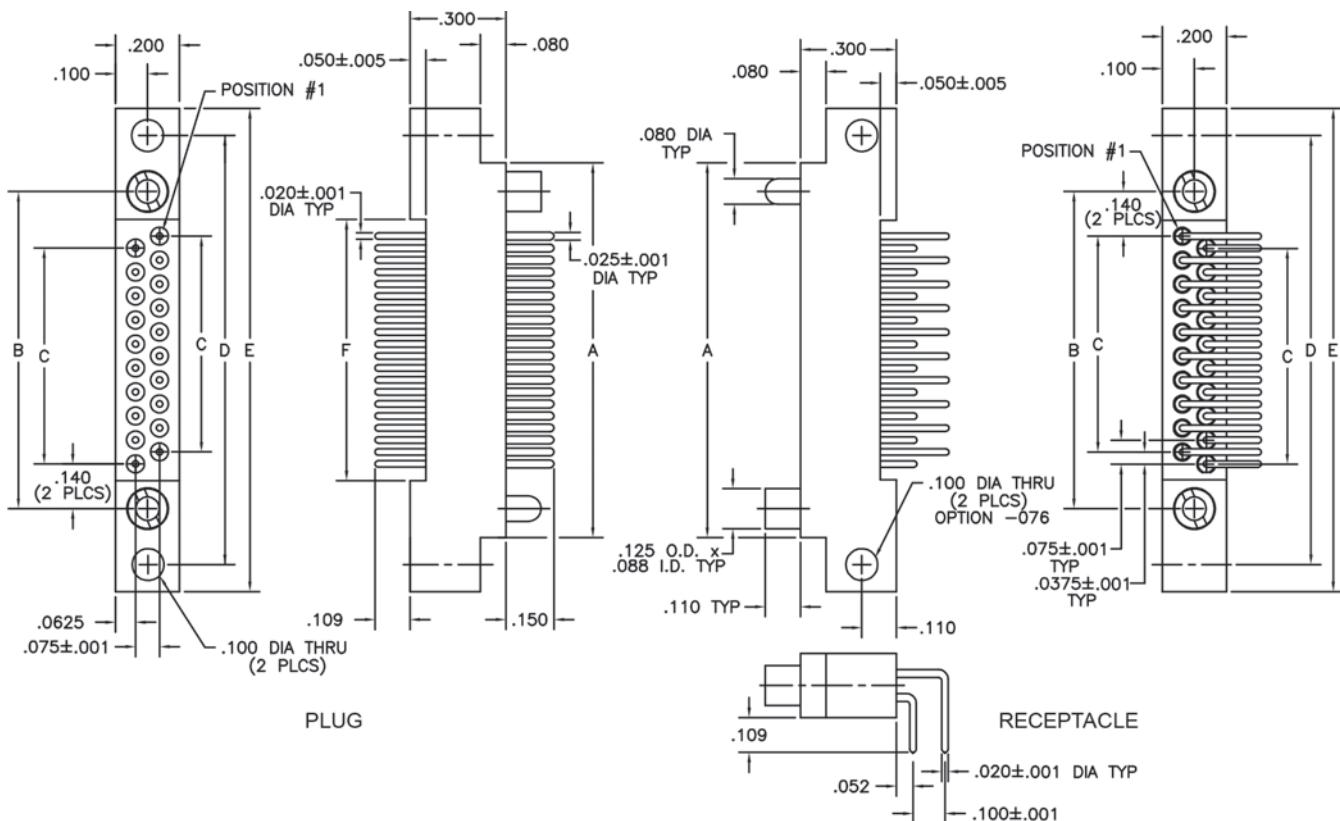
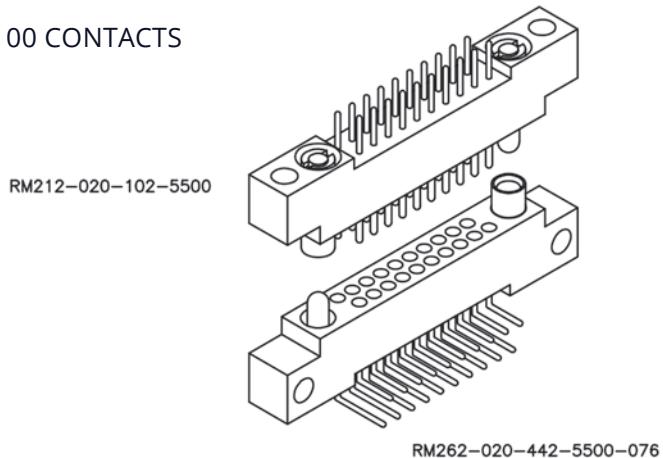
PLUG: RM252-100-312-5500  
 RECEPTACLE: RM222-100-212-5500  
 XXXXX-XXX-XXX-XXXXXX

PLUG		RECEPTACLE	
SERIES			
RM .075" Screw Machine PC Connector		RM .075" Screw Machine PC Connector	
BODY			
2 2-Row		2 2-Row	
BODY STYLE:		BODY STYLE:	
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	
BODY MATERIAL:		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:		TYPE CONTACTS/TERMINATIONS:	
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 square	
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: (See R-41 & R-42 for all options)		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:		POLARIZATION	
00 None		00 None	
01 thru 68 are special identifiers, see R-43		01 thru 68 are special identifiers, see R-43	
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 small pattern hex nuts into mounting ears			
☒ = Option not RoHS compliant			

## TWO ROW - MOTHERBOARD- OR CHASSIS-TO-DAUGHTERBOARD

**RM2**

0.075" | 10 THROUGH 100 CONTACTS



DIMENSIONS						
SIZE	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

## LEAD CONFIGURATION OPTIONS

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

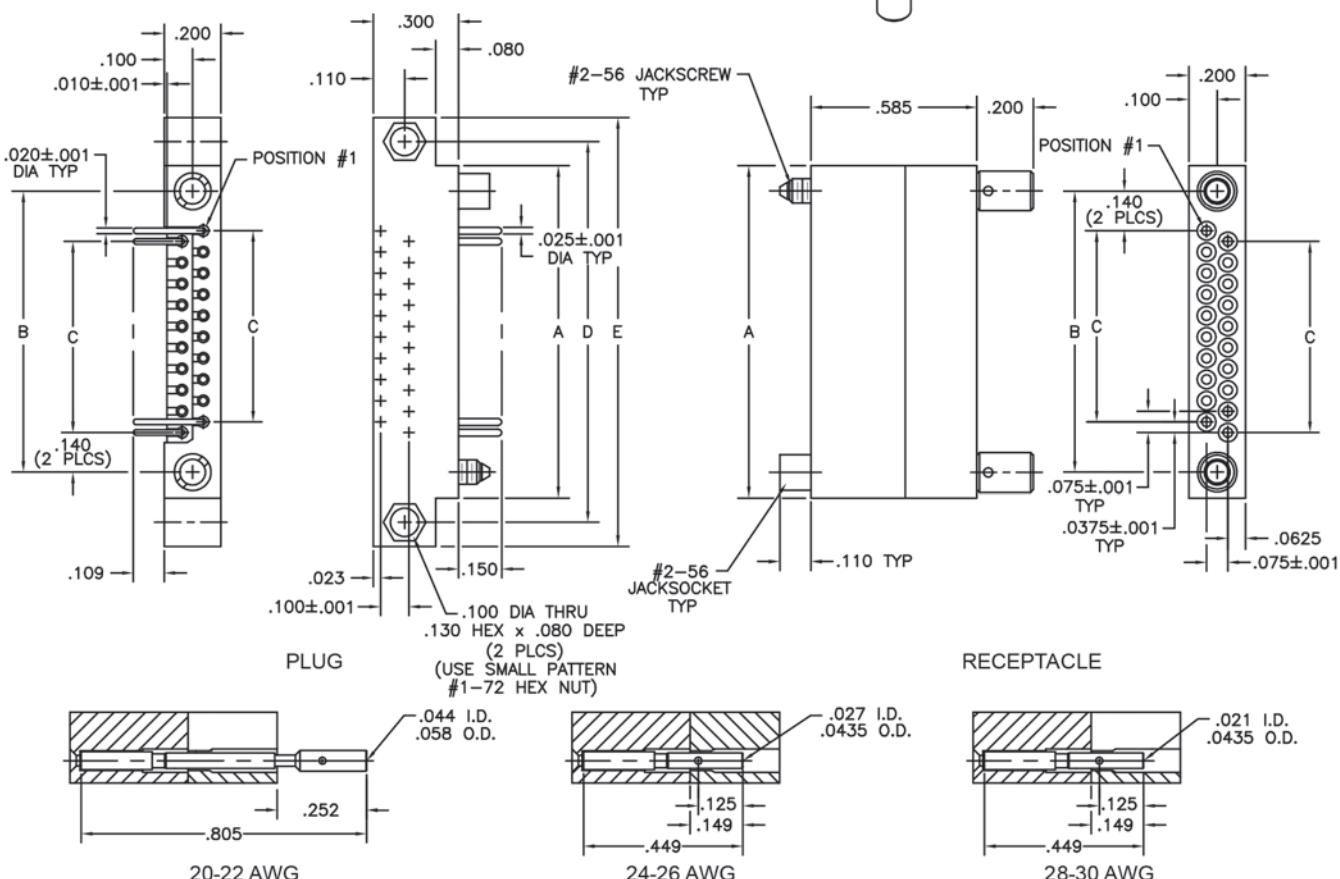
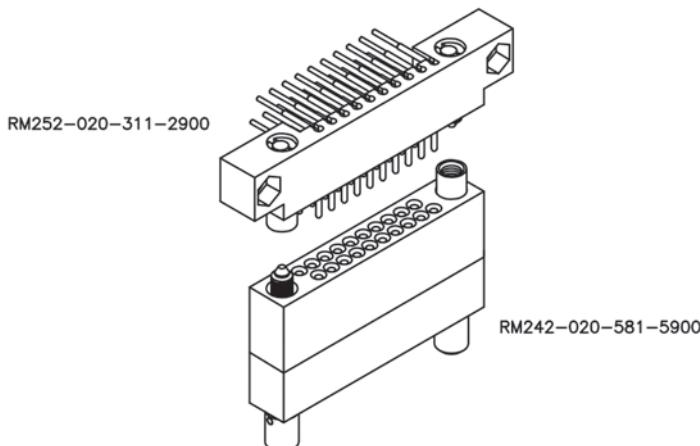
PLUG	RECEPTACLE											
<b>SERIES</b>												
RM .075" Screw Machine PC Connector		RM .075" Screw Machine PC Connector										
<b>BODY</b>												
2 2-Row		2 2-Row										
BODY STYLE:		BODY STYLE:										
1 Plug, straight, with mounting ears		6 Receptacle, right angle, with mounting ears										
3 Plug, straight, without mounting ears		8 Receptacle, right angle, without mounting ears										
BODY MATERIAL:		BODY MATERIAL:										
2 Polyphenylene sulfide (PPS)		2 Polyphenylene sulfide (PPS)										
<b>SIZE</b>												
010, 020, 030, 040, 050, 060, 070, 080, 090, 100		010, 020, 030, 040, 050, 060, 070, 080, 090, 100										
<b>CONTACTS</b>												
TYPE CONTACTS/TERMINATIONS:		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:		PLATING OPTIONS:										
1 Gold plated termination		1 Gold plated termination										
2 Pre-tinned termination, SnPb alloy (dip solder options only) <input checked="" type="checkbox"/>		2 Pre-tinned termination, SnPb alloy <input checked="" type="checkbox"/>										
3 Pre-tinned termination, SAC305 alloy (dip solder options only)		3 Pre-tinned termination, SAC305 alloy										
<b>HARDWARE</b>												
STYLE OF HARDWARE: (See R-41 & R-42 for all options)		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:		POLARIZATION										
00 None		00 None										
01 thru 68 are special identifiers, see R-43		01 thru 68 are special identifiers, see R-43										
70 Same configuration as 01 without Loctite® (To be keyed by customer)		70 Same configuration as 01 without Loctite® (To be keyed by customer)										
<b>OPTIONS</b>												
		076 PWB mounting holes, .100" dia (cross drilled)										

= Option not RoHS compliant

## TWO ROW - BOARD-TO-CRIMP REMOVABLE

RM2

0.075" | 10 THROUGH 100 CONTACTS



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	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

## LEAD CONFIGURATION OPTIONS

		PLUG: RM252-020-311-2900 RECEPTACLE: RM242-020-581-5900 XXXXX-XXX-XXX-XXXXXX
<b>PLUG</b>		<b>RECEPTACLE</b>
<b>SERIES</b>		
RM .075" Screw Machine PC Connector		RM .075" Screw Machine PC Connector
<b>BODY</b>		
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)	
<b>SIZE</b>		
010, 020, 030, 040, 050, 060, 070, 080, 090, 100	010, 020, 030, 040, 050, 060, 070, 080, 090, 100	
<b>CONTACTS</b>		
TYPE CONTACTS/TERMINATIONS: 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	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 <input checked="" type="checkbox"/> 3 Pre-tinned termination, SAC305 alloy	PLATING OPTIONS: 0 No plating (use with Contact Option "00" only) 1 Gold plated termination	
<b>HARDWARE</b>		
STYLE OF HARDWARE: (See R-41 & R-42 for all options)	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 jacksockets 59 Hex turning jackset, .200" knob 60 Hex turning jackset, reversed, .200" knob 61 Two hex turning jackscrews, .200" knob 62 Two hex turning jacksockets, .200" knob 64 Turning jackset, .490" knob 65 Turning jackset, reversed, .490" knob 66 Two turning jackscrews, .490" knob 67 Two turning jacksockets, .490" knob	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" knob 60 Hex turning jackset, reversed, .200" knob 61 Two hex turning jackscrews, .200" knob 62 Two hex turning jacksockets, .200" knob 64 Turning jackset, .490" knob 65 Turning jackset, reversed, .490" knob 66 Two turning jackscrews, .490" knob 67 Two turning jacksockets, .490" knob	
POLARIZATION: 00 None 01 thru 68 are special identifiers, see R-43 70 Same configuration as 01 without Loctite® (To be keyed by customer)	POLARIZATION 00 None 01 thru 68 are special identifiers, see R-43 70 Same configuration as 01 without Loctite® (To be keyed by customer)	
<b>OPTIONS</b>		
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.

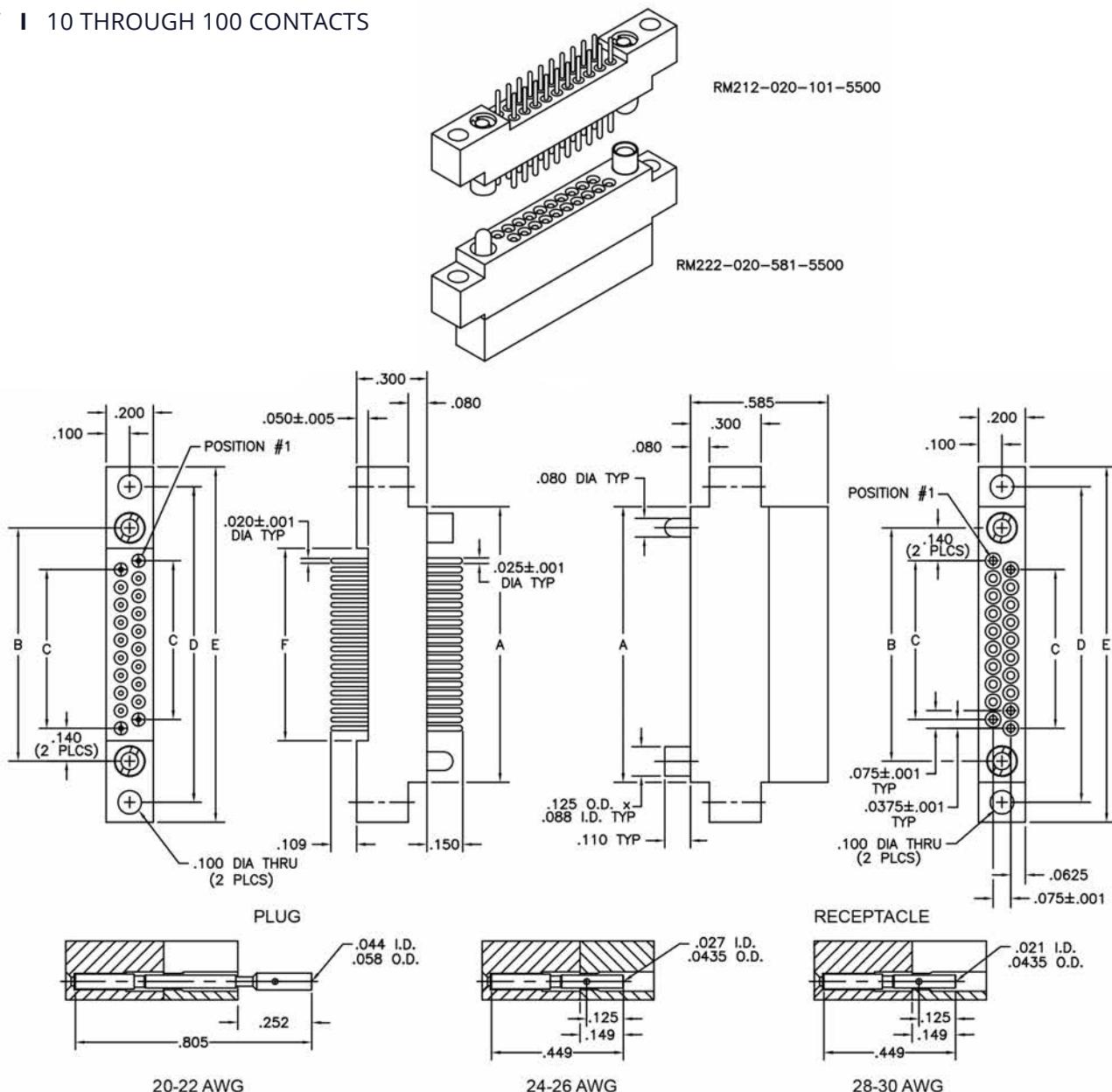
= Option not RoHS compliant

**molex**

## TWO ROW - CABLE- OR BOARD-TO-CRIMP REMOVABLE

RM2

0.075" | 10 THROUGH 100 CONTACTS



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	RM200-000-571-0000
24-26 AWG	RM200-000-581-0000
28-30 AWG	RM200-000-591-0000

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

## LEAD CONFIGURATION OPTIONS

		PLUG: RM212-020-101-5500
		RECEPTACLE: RM222-020-581-5500
		XXXXX-XXX-XXX-XXXX
<b>PLUG</b>	<b>RECEPTACLE</b>	
<b>SERIES</b>		
RM .075" Screw Machine PC Connector	RM .075" Screw Machine PC Connector	
<b>BODY</b>		
2 2-Row	2 2-Row	
BODY STYLE:	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:	BODY MATERIAL:	
2 Polyphenylene sulfide (PPS)	2 Polyphenylene sulfide (PPS)	
<b>SIZE</b>		
010, 020, 030, 040, 050, 060, 070, 080, 090, 100	010, 020, 030, 040, 050, 060, 070, 080, 090, 100	
<b>CONTACTS</b>		
TYPE CONTACTS/TERMINATIONS:	TYPE CONTACTS/TERMINATIONS:	
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		
PLATING OPTIONS:	PLATING OPTIONS:	
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)		
<b>HARDWARE</b>		
STYLE OF HARDWARE: (See R-41 & R-42 for all options)	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:	POLARIZATION	
00 None	00 None	
01 thru 68 are special identifiers, see R-43	01 thru 68 are special identifiers, see R-43	
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.

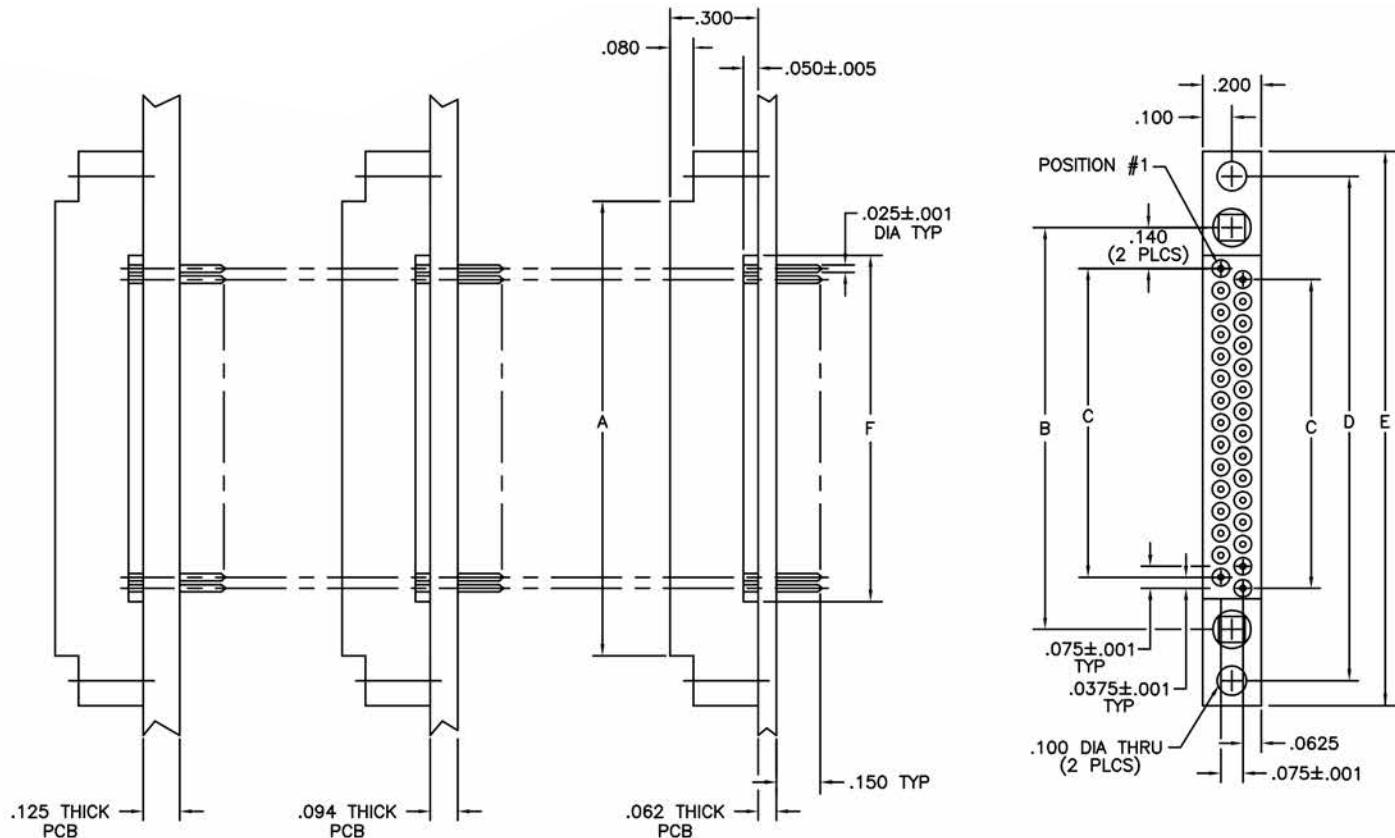
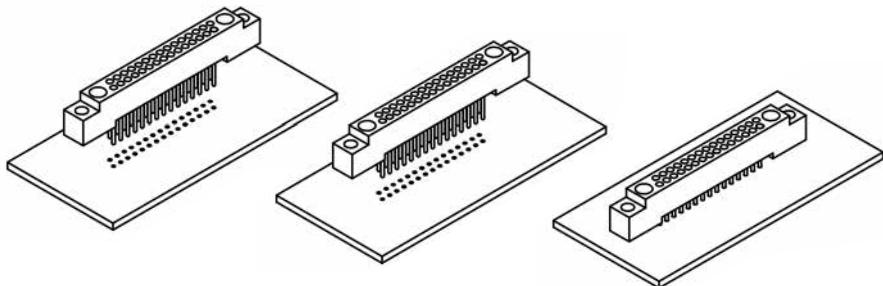
= Option not RoHS compliant

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## TWO ROW - PC BOARD STACKABLE OR CONNECTOR SAVER

RM2

0.075" | 10 THROUGH 100 CONTACTS



NOTE:

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

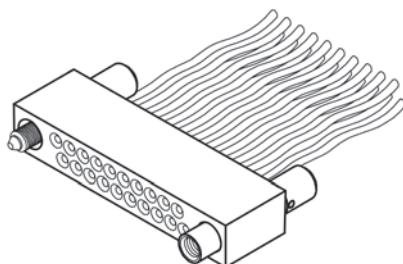
PC BOARD THICKNESS	TERMINATION LENGTH	PART NUMBER EXAMPLES
.062	.212	RM222-030-531-0256
.094	.244	RM222-030-541-0256
.125	.275	RM222-030-551-0256
CONNECTOR SAVER	.150	RM222-030-291-0256

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

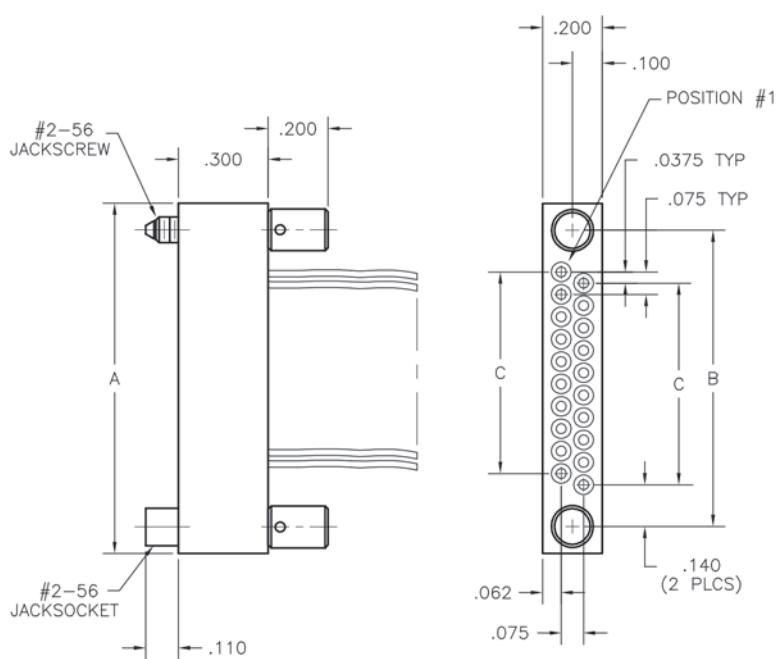
## TWO ROW – CRIMPED WIRE I/O RECEPTACLE

RA2

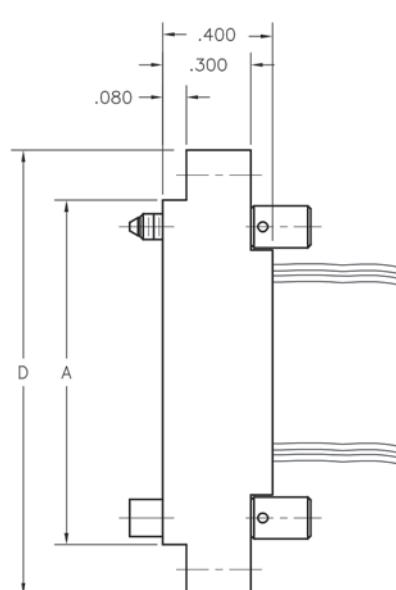
0.075" | 10 THROUGH 100 CONTACTS



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-37 FOR CRIMP INSTRUCTIONS, CONTACT  
INSERTION AND CONTACT REMOVAL TOOLS.

PLEASE CONSULT THE MOLEX WEBSITE FOR THE LATEST VERSION OF THIS INFORMATION PRIOR TO BEGINNING ANY DESIGN WORK.  
SOURCE: CTR098 REV. B

SOURCE: CTR089-REV B

AIRBORN R SERIES CONNECTORS | R-16

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## LEAD CONFIGURATION OPTIONS

RECEPTACLE:	RA2H2-020-2HC-5900 XXXXX-XXX-XXX-XXXX
SERIES	RA .075" Screw Machine PC Connector
BODY	
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)	
SIZE	010, 020, 030, 040, 050, 060, 070, 080, 090, 100
CONTACTS	
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	
HARDWARE	
GUIDE HARDWARE	
0256 None	
5500 Guide set	
5501-5568 Guide set, polarized (see page R-47)	
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-37 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"
Mil-W-22759/33				
L	22 awg	Ten repeating	M	72"
M	22 awg	White	N	84"
N	24 awg	Ten repeating	P	96"
P	24 awg	White	R	108"
R	26 awg	Ten repeating	S	120"
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

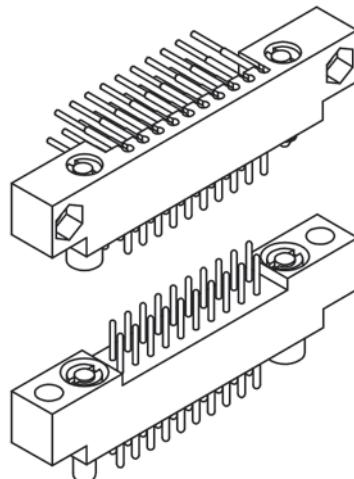
Repeat this sequence until  
connector is fully loaded.

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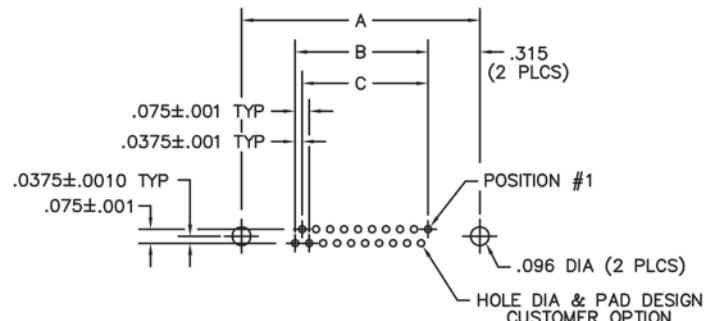
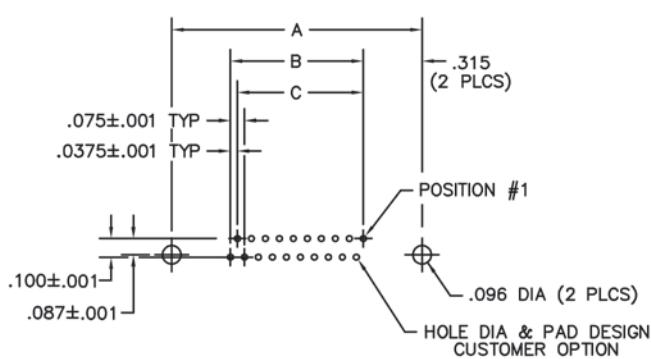
# TWO ROW - RIGHT-ANGLE PTH PLUG/STRAIGHT PTH PLUG

## RM2 - RECOMMENDED BOARD LAYOUT

0.075" | 10 THROUGH 100 CONTACTS



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

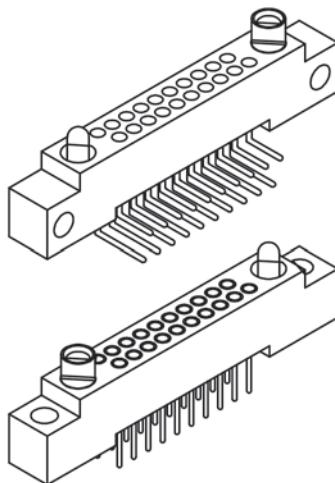


SIZE	CONTACT ID	SIZE	CONTACT ID
10	(5 4 3 2 1) (10 9 8 7 6)	60	(30 29 28) (60 59 58) (3 2 1) (33 32 31)
20	(10 9 8) (20 19 18)	70	(35 34 33) (70 69 68) (3 2 1) (38 37 36)
30	(15 14 13) (30 29 28)	80	(40 39 38) (80 79 78) (3 2 1) (43 42 41)
40	(20 19 18) (40 39 38)	90	(45 44 43) (90 89 88) (3 2 1) (48 47 46)
50	(25 24 23) (50 49 48)	100	(50 49 48) (100 99 98) (3 2 1) (53 52 51)

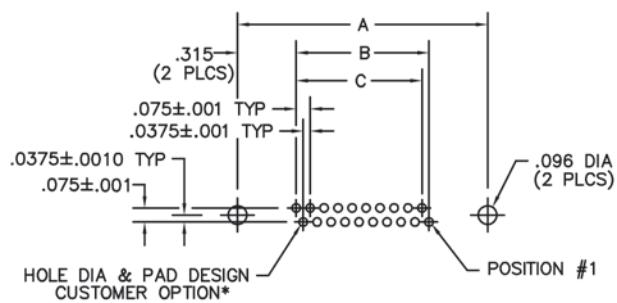
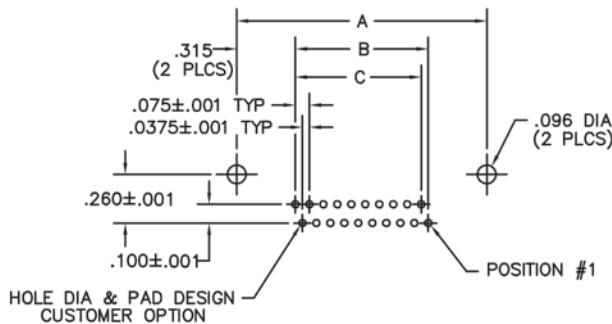
# TWO ROW - STRAIGHT PTH RECEPTACLE

## RM2 - RECOMMENDED BOARD LAYOUT

0.075" | 10 THROUGH 100 CONTACTS



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 RECEPTACLE  
PC BOARD VIEWED FROM COMPONENT SIDE

STRAIGHT PTH RECEPTACLE  
PC BOARD VIEWED FROM COMPONENT SIDE

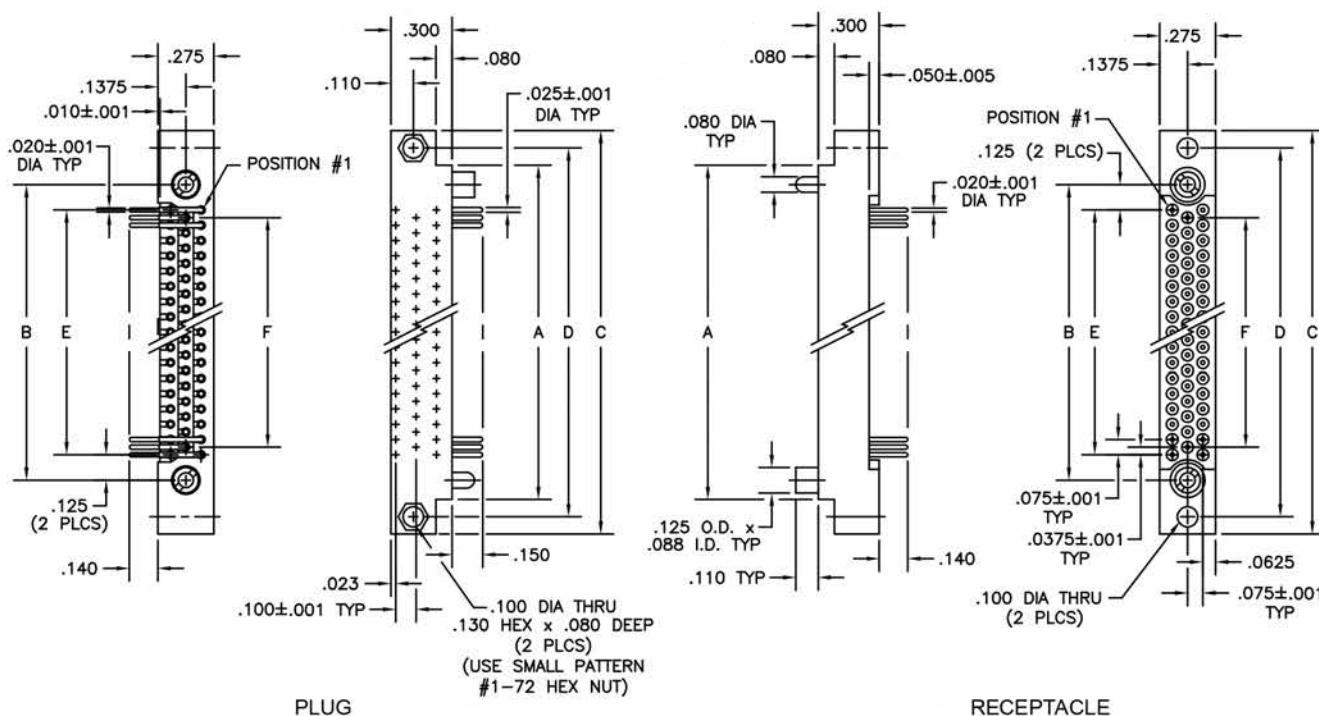
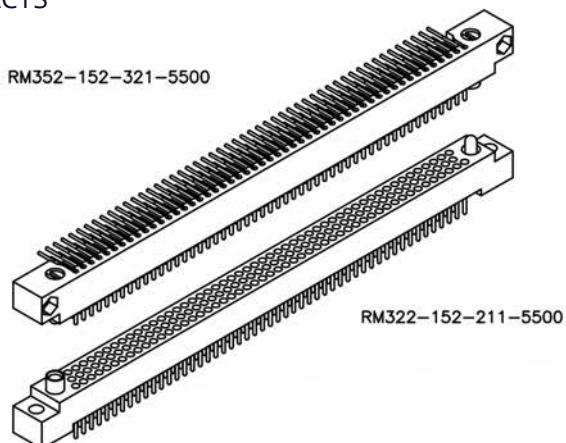
**\*COMPLIANT TERMINATION PCB REQUIREMENTS:**  
Board Material: FR-4 w/ 1.0 oz. copper  
Minimum nominal board thickness: .062"  
Drilled hole: .0319"-.0339"  
Copper plating thickness: .0010" minimum  
Tin-lead plating thickness: .0006" maximum  
Electroplated tin-lead composition: 63/37 (Sn/Pb)  
Finished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

SIZE	CONTACT ID	SIZE	CONTACT ID
10	10 9 8 7 6 5 4 3 2 1	60	60 59 58 30 29 28 33 32 31 3 2 1
20	20 19 18 10 9 8 13 12 11 3 2 1	70	70 69 68 35 34 33 38 37 36 3 2 1
30	30 29 28 15 14 13 18 17 16 3 2 1	80	80 79 78 40 39 38 43 42 41 3 2 1
40	40 39 38 20 19 18 23 22 21 3 2 1	90	90 89 88 45 44 43 48 47 46 3 2 1
50	50 49 48 25 24 23 28 27 26 3 2 1	100	100 99 98 50 49 48 53 52 51 3 2 1

# THREE ROW - DAUGHTERBOARD-TO-MOTHERBOARD OR CHASSIS

**RM3**

0.075" | 11 THROUGH 206 CONTACTS



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

DIMENSIONS						
SIZE	A	B	C	D	E	F
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

**molex**

## LEAD CONFIGURATION OPTIONS

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

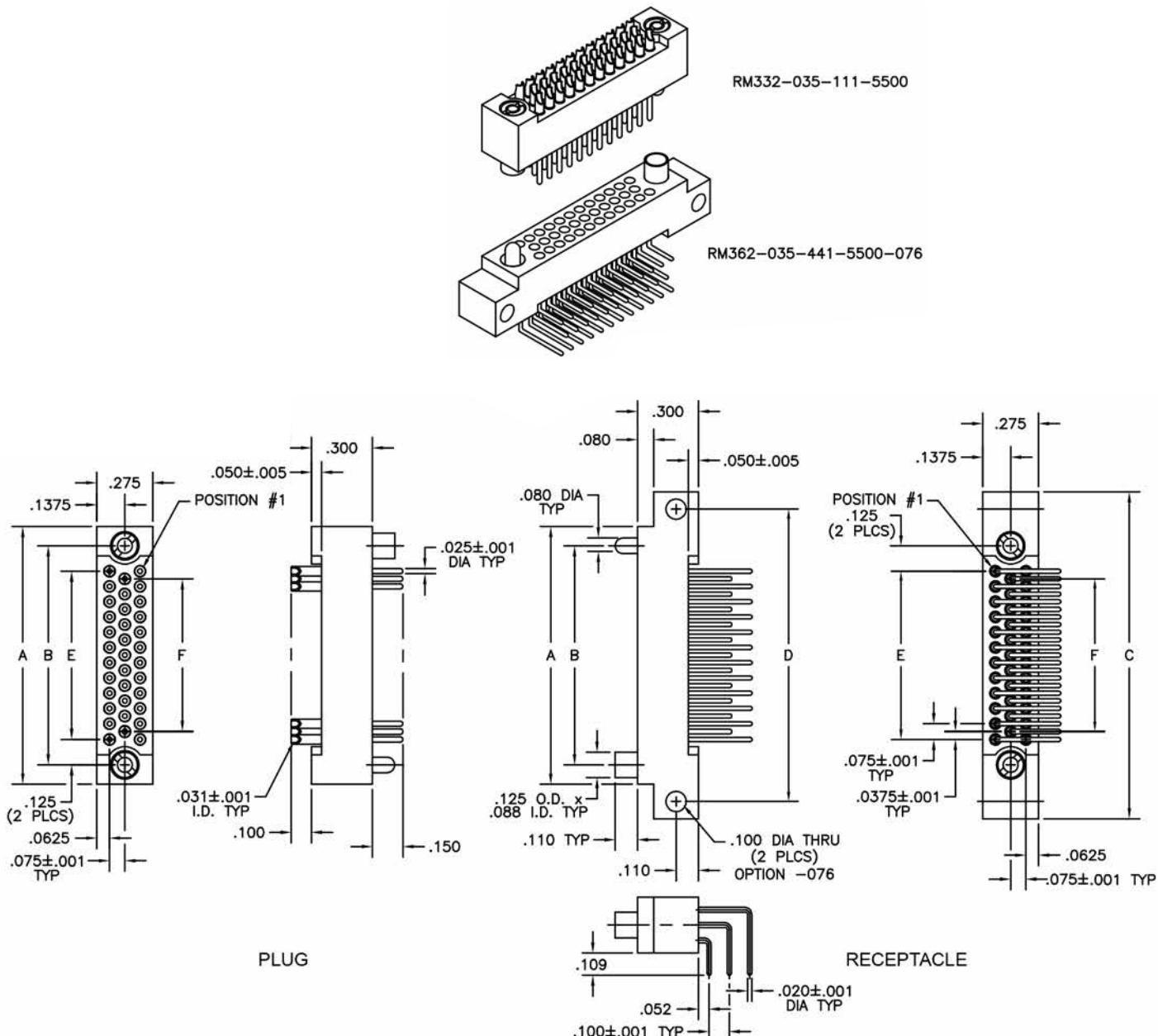
PLUG	RECEPTACLE			
<b>SERIES</b>				
RM .075" Screw Machine PC Connector		RM .075" Screw Machine PC Connector		
<b>BODY</b>				
3 3-Row		3 3-Row		
BODY STYLE:		BODY STYLE:		
5 Plug, right angle, with mounting ears		2 Receptacle, straight, with mounting ears		
7 Plug, right angle, without mounting ears		4 Receptacle, straight, without mounting ears		
BODY MATERIAL:		BODY MATERIAL:		
2 Polyphenylene sulfide (PPS)		2 Polyphenylene sulfide (PPS)		
<b>SIZE</b>				
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		
<b>CONTACTS</b>				
TYPE CONTACTS/TERMINATIONS:		TYPE CONTACTS/TERMINATIONS:		
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		
		30 Socket, straight, dip solder, .140" x .016" dia		
		31 Socket, straight, dip solder, .172" x .016" dia		
		32 Socket, straight, stacking, .212" x .025" dia		
		33 Socket, straight, stacking, .244" x .025" dia		
		34 Socket, straight, stacking, .275" x .025" dia		
		35 Socket, straight, press-fit, .203" (Board .093"-.125" thk)		
		36 Socket, straight, press-fit, .323" (Board .156"-.200" thk)		
		37 Socket, straight, press-fit, .403" (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)		
<b>HARDWARE</b>				
STYLE OF HARDWARE: (See page R-46 & R-47 for all options)		STYLE OF HARDWARE: (See page R-46 & R-47 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:		POLARIZATION		
00 None		00 None		
01 thru 68 are special identifiers, see R-43		01 thru 68 are special identifiers, see R-43		
70 Same configuration as 01 without Loctite® (To be keyed by customer)		70 Same configuration as 01 without Loctite® (To be keyed by customer)		
<b>OPTIONS</b>				
BN Bond #1-72, sm. pattern hex nuts into mtg. ears				

= Option not RoHS compliant

# THREE ROW - MOTHERBOARD- OR CHASSIS-TO-DAUGHTERBOARD

RM3

0.075" | 11 THROUGH 206 CONTACTS



DIMENSIONS						
SIZE	A	B	C	D	E	
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

DIMENSIONS						
SIZE	A	B	C	D	E	
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

**molex**

## LEAD CONFIGURATION OPTIONS

		PLUG: RM332-035-111-5500
		RECEPTACLE: RM362-035-441-5500-076
		XXXXX-XXX-XXX-XXXX-XXX
<b>PLUG</b>	<b>RECEPTACLE</b>	
<b>SERIES</b>		
RM .075" Screw Machine PC Connector		RM .075" Screw Machine PC Connector
<b>BODY</b>		
3 3-Row	3 3-Row	
BODY STYLE:	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:	BODY MATERIAL:	
2 Polyphenylene sulfide (PPS)	2 Polyphenylene sulfide (PPS)	
<b>SIZE</b>		
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	
<b>CONTACTS</b>		
TYPE CONTACTS/TERMINATIONS:	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:	PLATING OPTIONS:	
1 Gold plated termination	1 Gold plated termination	
2 Pre-tinned termination, SnPb alloy (dip solder options only) <input checked="" type="checkbox"/>	2 Pre-tinned termination, SnPb alloy <input checked="" type="checkbox"/>	
3 Pre-tinned termination, SAC305 alloy (dip solder options only)	3 Pre-tinned termination, SAC305 alloy	
<b>HARDWARE</b>		
STYLE OF HARDWARE: (See page R-46 & R-47 for all options)	STYLE OF HARDWARE: (See page R-46 & R-47 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:	POLARIZATION	
00 None	00 None	
01 thru 68 are special identifiers, see R-43	01 thru 68 are special identifiers, see R-43	
70 Same configuration as 01 without Loctite® (To be keyed by customer)	70 Same configuration as 01 without Loctite® (To be keyed by customer)	
<b>OPTIONS</b>		
076 PWB mounting holes, .100" dia (cross drilled)		

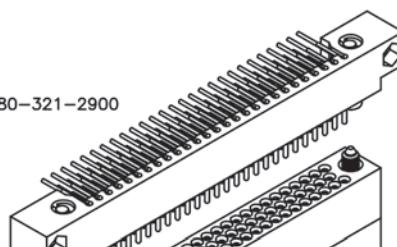
= Option not RoHS compliant

# THREE ROW - BOARD-TO-CRIMP REMOVABLE

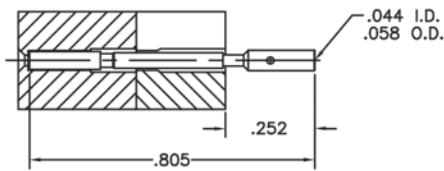
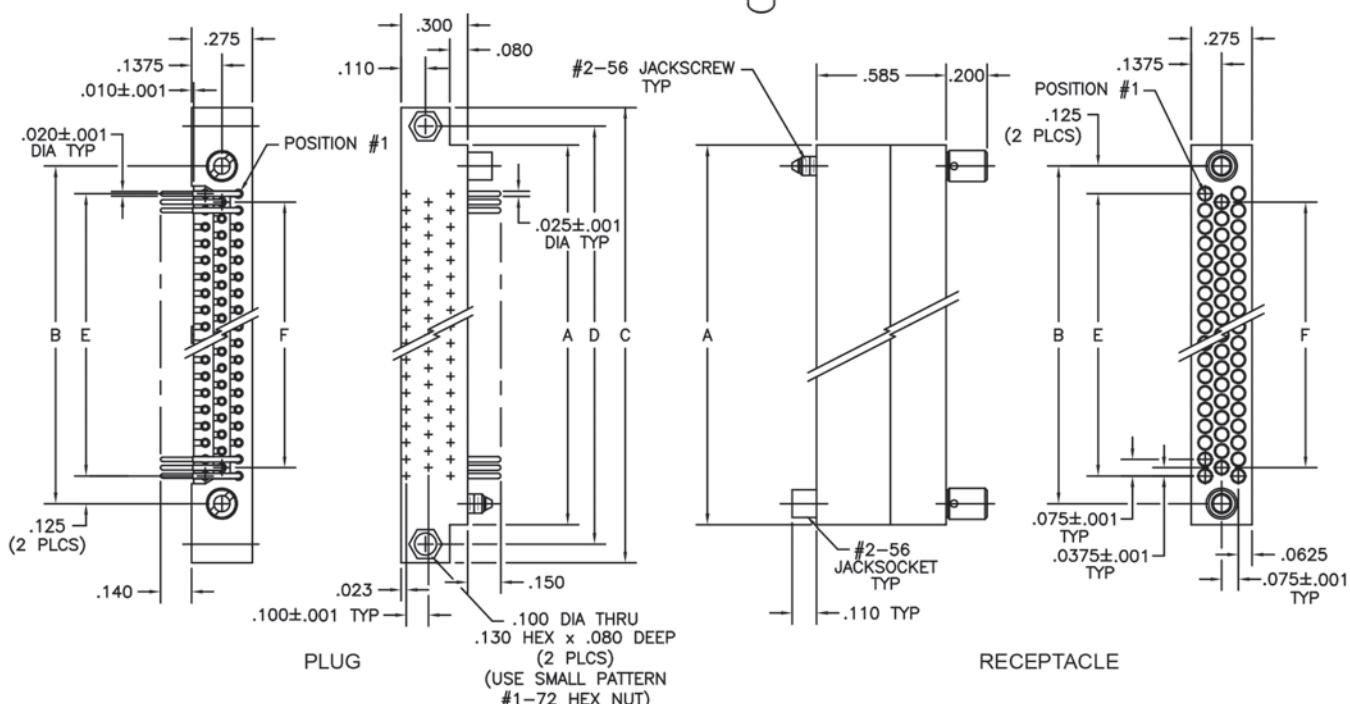
RM3

0.075" | 11 THROUGH 80 CONTACTS

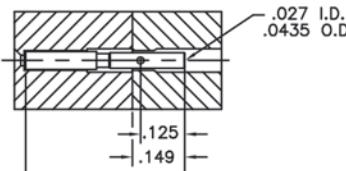
RM352-080-321-2900



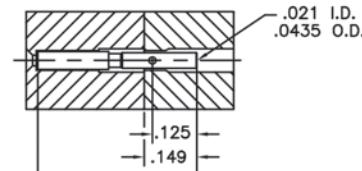
RM342-080-581-5900



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

## LEAD CONFIGURATION OPTIONS

		PLUG: RM352-080-321-2900 RECEPTACLE: RM342-080-581-5900 XXXXX-XXX-XXX-XXXXXX
<b>PLUG</b>		<b>RECEPTACLE</b>
<b>SERIES</b>		
RM .075" Screw Machine PC Connector		RM .075" Screw Machine PC Connector
<b>BODY</b>		
3 3-Row	3 3-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)
<b>SIZE</b>		
011, 023, 035, 047, 059, 071, 080	011, 023, 035, 047, 059, 071, 080	
<b>CONTACTS</b>		
TYPE CONTACTS/TERMINATIONS: 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		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 <input checked="" type="checkbox"/> 3 Pre-tinned termination, SAC305 alloy		PLATING OPTIONS: 0 No plating (use with Contact Option "00" only) 1 Gold plated termination
<b>HARDWARE</b>		
STYLE OF HARDWARE: (See page R-46 & R-47 for all options)		STYLE OF HARDWARE: (See page R-46 & R-47 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	
POLARIZATION: 00 None		POLARIZATION
01 thru 68 are special identifiers, see R-43	00 None	
70 Same configuration as 01 without Loctite® (To be keyed by customer)	01 thru 68 are special identifiers, see R-43	
70 Same configuration as 01 without Loctite® (To be keyed by customer)		70 Same configuration as 01 without Loctite® (To be keyed by customer)
<b>OPTIONS</b>		
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)

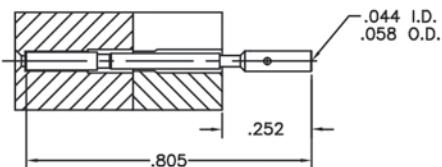
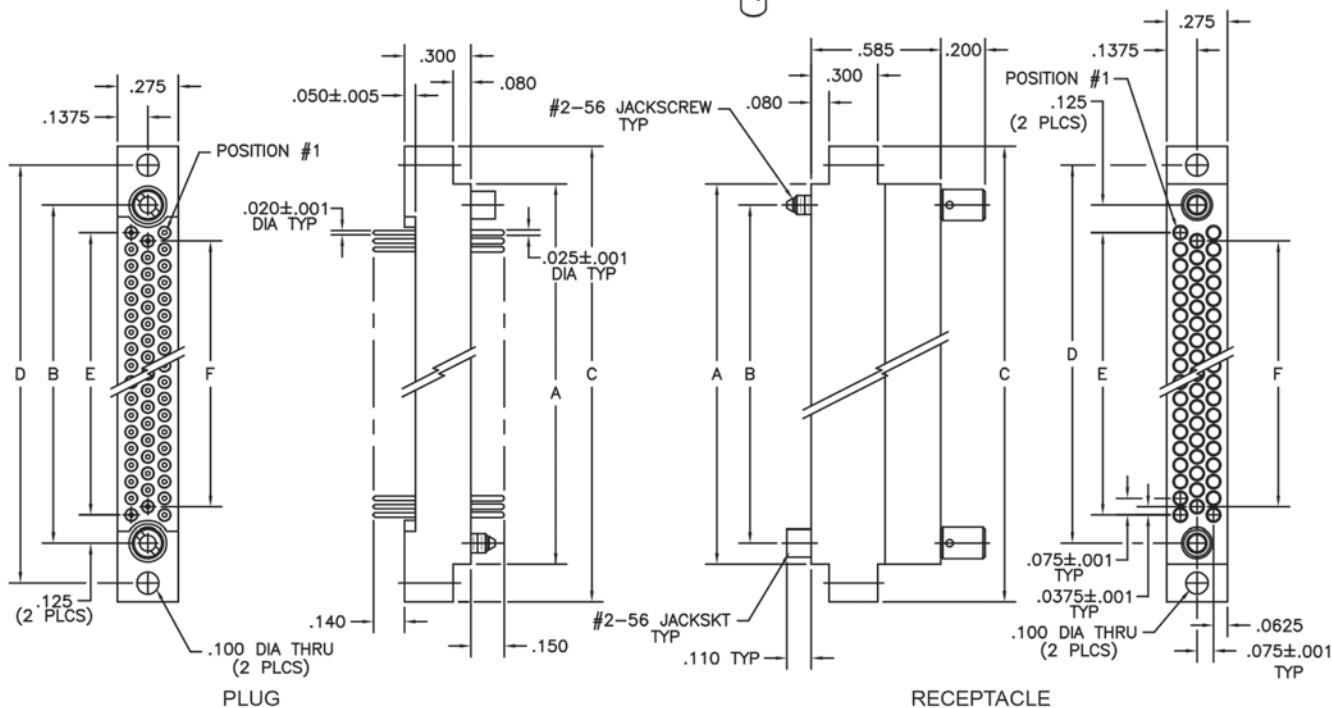
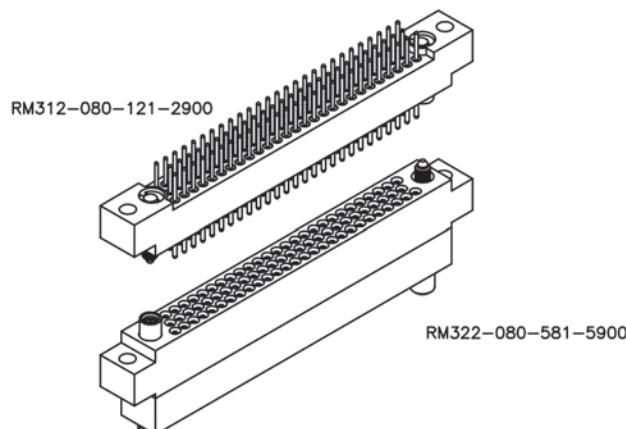
3. Crimp removal tool - AirBorn part number: CDG8161 (All AWGs)
4. Crimp contact part number on previous page.

= Option not RoHS compliant

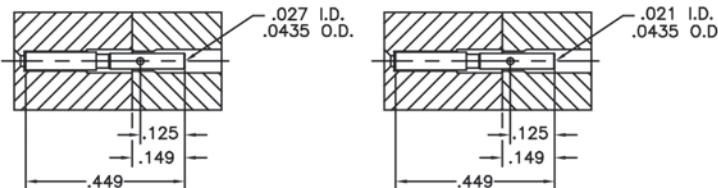
# THREE ROW - CABLE- OR BOARD-TO-CRIMP REMOVABLE

RM3

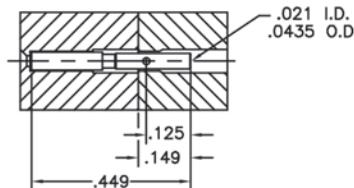
0.075" | 11 THROUGH 80 CONTACTS



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

## LEAD CONFIGURATION OPTIONS

		PLUG: RM312-080-121-2900
		RECEPTACLE: RM322-080-581-5900
		XXXXX-XXX-XXX-XXXX
<b>PLUG</b>	<b>RECEPTACLE</b>	
<b>SERIES</b>		
RM .075" Screw Machine PC Connector		RM .075" Screw Machine PC Connector
<b>BODY</b>		
3 3-Row	3 3-Row	
BODY STYLE:	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:	BODY MATERIAL:	
2 Polyphenylene sulfide (PPS)	2 Polyphenylene sulfide (PPS)	
<b>SIZE</b>		
011, 023, 035, 047, 059, 071, 080	011, 023, 035, 047, 059, 071, 080	
<b>CONTACTS</b>		
TYPE CONTACTS/TERMINATIONS:	TYPE CONTACTS/TERMINATIONS:	
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		
PLATING OPTIONS:	PLATING OPTIONS:	
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)		
<b>HARDWARE</b>		
STYLE OF HARDWARE: (See page R-46 & R-47 for all options)	STYLE OF HARDWARE: (See page R-46 & R-47 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	
POLARIZATION:	POLARIZATION	
00 None	00 None	
01 thru 68 are special identifiers, see R-43	01 thru 68 are special identifiers, see R-43	
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.

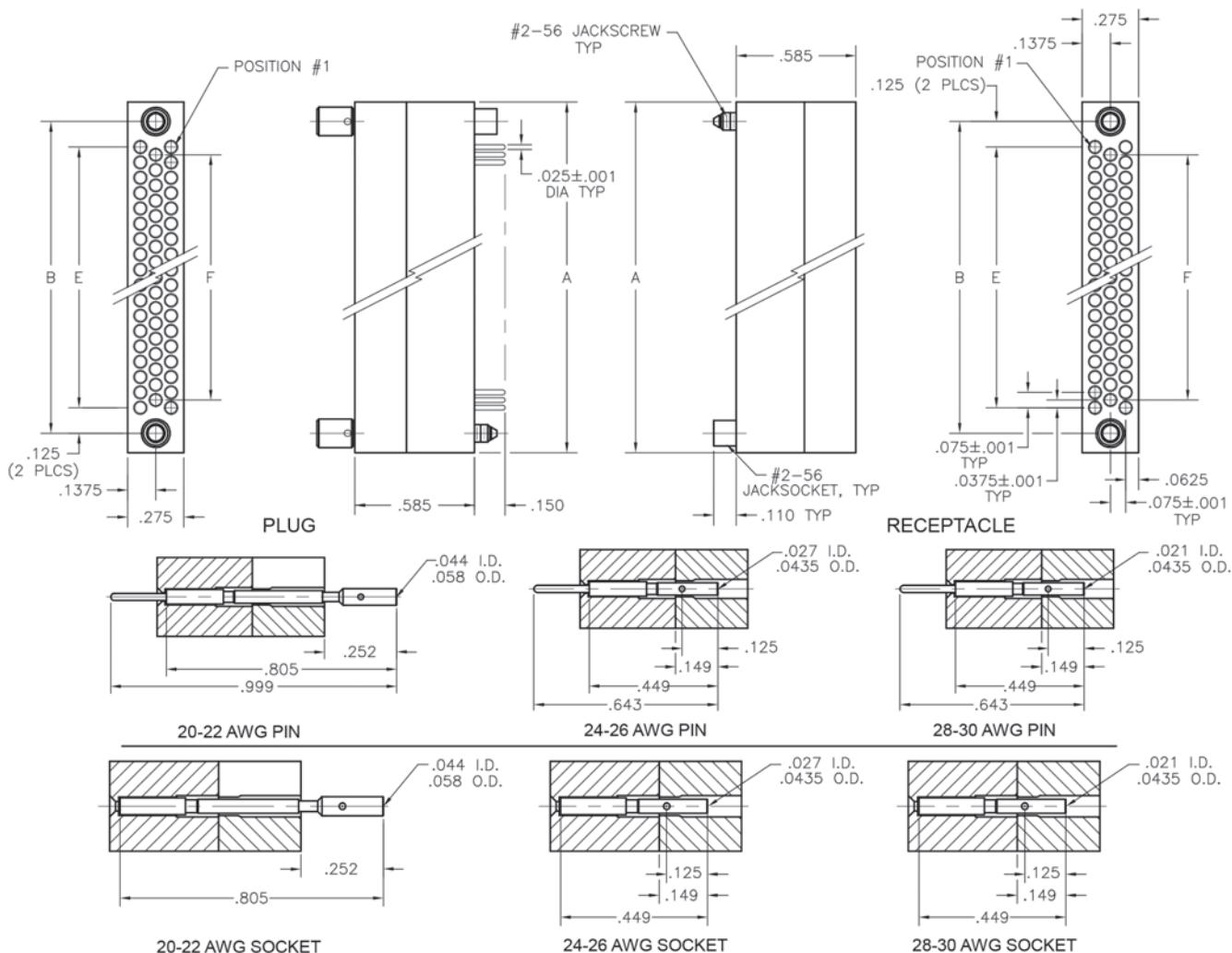
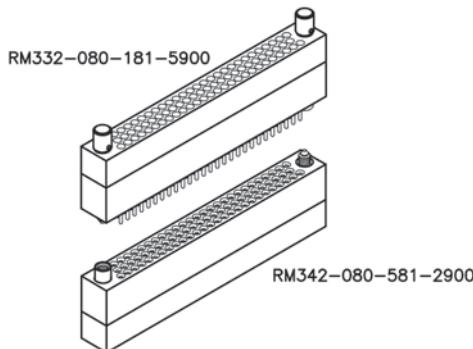
= Option not RoHS compliant

**molex**

# THREE ROW - CRIMP REMOVABLE-TO-CRIMP REMOVABLE

RM3

0.075" | 11 THROUGH 80 CONTACTS



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

## LEAD CONFIGURATION OPTIONS

		PLUG	RECEPTACLE	PLUG: RM332-080-181-5900 RECEPTACLE: RM342-080-581-2900 XXXXX-XXX-XXX-XXXX
		SERIES		
RM .075" Screw Machine PC Connector			RM .075" Screw Machine PC Connector	
		BODY		
3	3-Row	3	3-Row	
BODY STYLE:		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:		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:		TYPE CONTACTS/TERMINATIONS:		
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)*	
PLATING OPTIONS:		PLATING OPTIONS:		
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		
STYLE OF HARDWARE: (See page R-46 & R-47 for all options)		STYLE OF HARDWARE: (See page R-46 & R-47 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	
POLARIZATION:		POLARIZATION		
00	None	00	None	
01	thru 68 are special identifiers, see R-43	01	thru 68 are special identifiers, see R-43	
70	Same configuration as 01 without Loctite® (To be keyed by customer)	70	Same configuration as 01 without Loctite® (To be keyed by customer)	

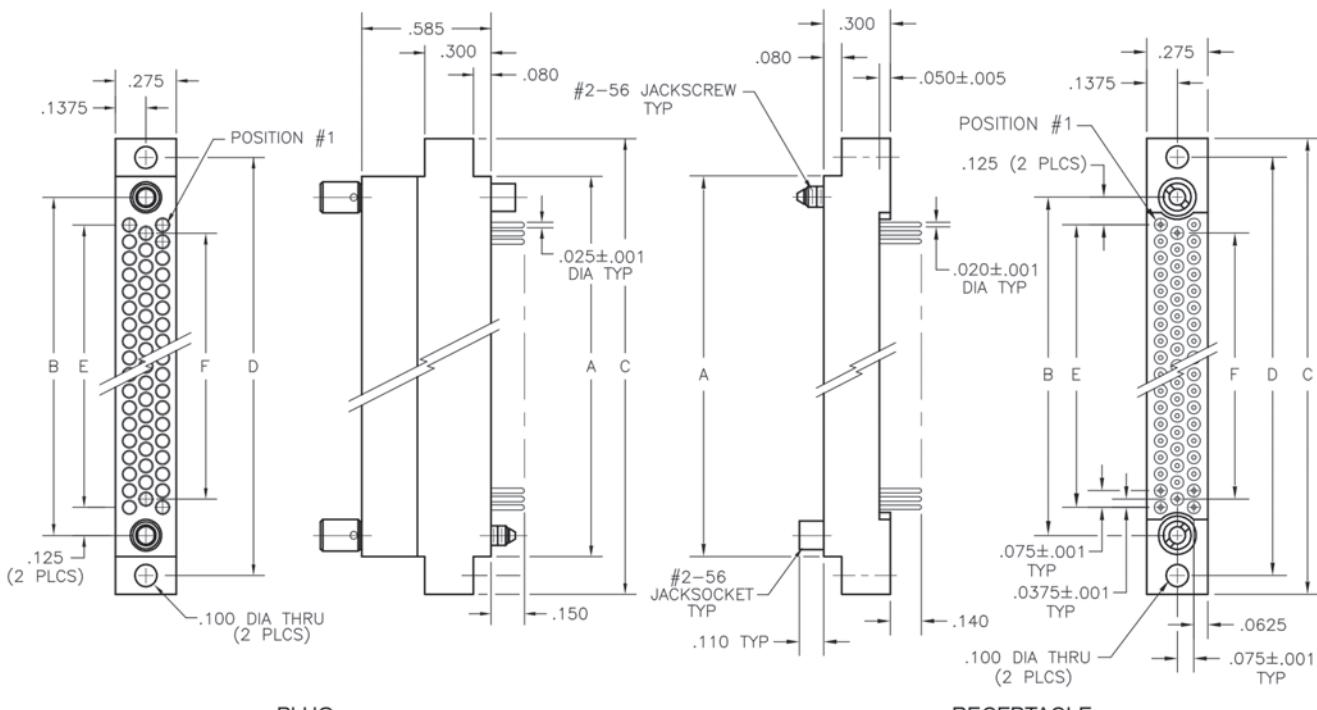
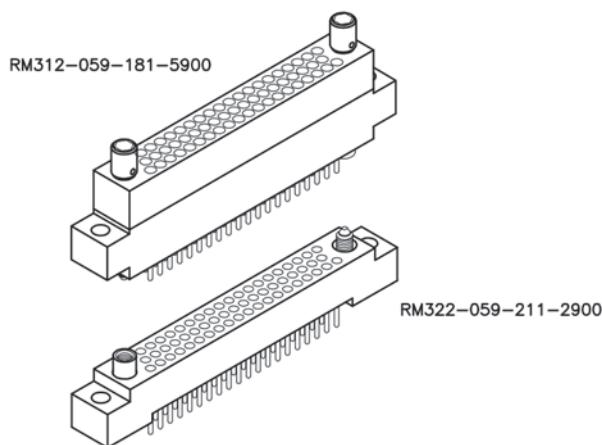
\* Full compliment of crimp removable sockets packaged with connectors

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.

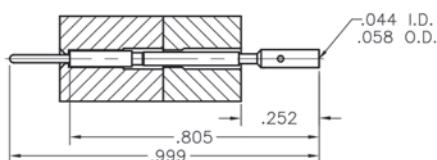
# THREE ROW - CRIMP REMOVABLE-TO-CABLE OR BOARD

**RM3**

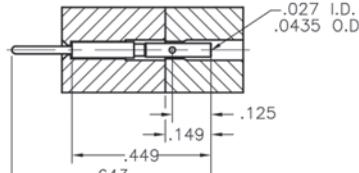
0.075" | 11 THROUGH 80 CONTACTS



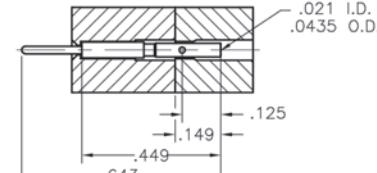
PLUG



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

## LEAD CONFIGURATION OPTIONS

		PLUG: RM312-059-181-5900 RECEPTACLE: RM322-059-211-2900 XXXXX-XXX-XXX-XXXX
<b>PLUG</b>		<b>RECEPTACLE</b>
<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: 1 Plug, straight, with mounting ears	2 BODY STYLE: 2 Receptacle, straight, with mounting ears	
3 Plug, straight, without mounting ears	4 Receptacle, straight, without mounting ears	
2 BODY MATERIAL: 2 Polyphenylene sulfide (PPS)	2 BODY MATERIAL: 2 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: 00 Contacts not supplied	20 TYPE CONTACTS/TERMINATIONS: 20 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®, .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"-.125" thk)	
	65 Socket, straight, press-fit, .323" (Board .156"-.200" thk)	
	66 Socket, straight, press-fit, .403" (Board .250"+ thk)	
00 PLATING OPTIONS: 0 No plating (use with Contact Option "00" only)	PLATING OPTIONS: 1 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 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	
00 POLARIZATION: 00 None	00 POLARIZATION None	
01 thru 68 are special identifiers, see R-43	01 thru 68 are special identifiers, see R-43	
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

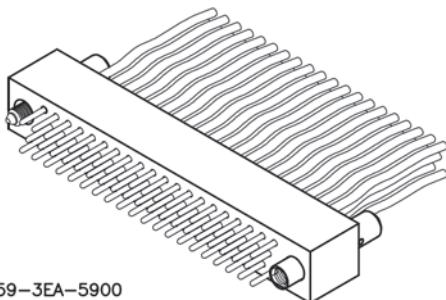
1. Crimp tool - AirBorn part number: CDG4601, Mil Spec number M22520/2-01
2. Crimp positioner - AirBorn part number: CDG4602 (24-26 AWG and 28-30 AWG) / CDG4603 (20-22 AWG)
3. Crimp removal tool - AirBorn part number: CDG8161 (All AWGs)
4. Crimp contact part number on previous page.

= Option not RoHS compliant

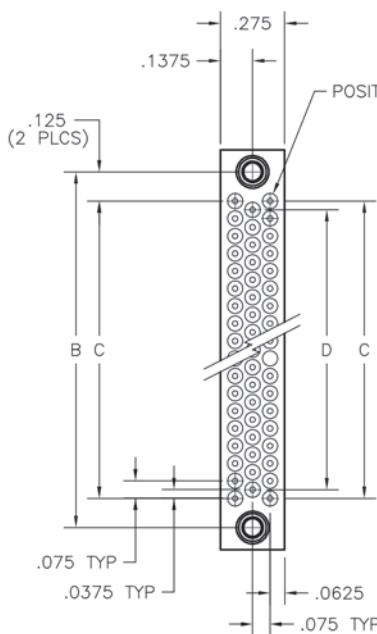
# THREE ROW - CRIMPED WIRE I/O PLUG

RA3

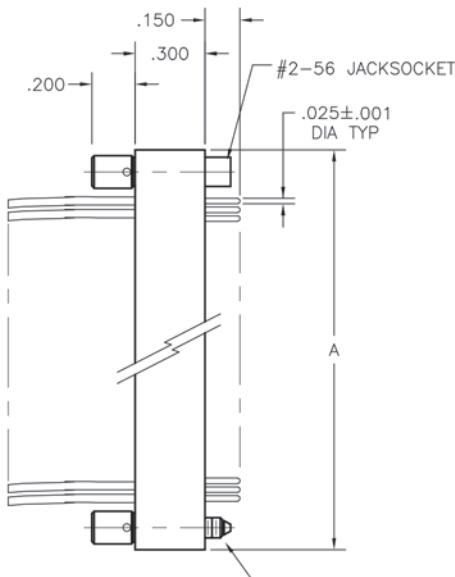
0.075" | 11 THROUGH 104 CONTACTS



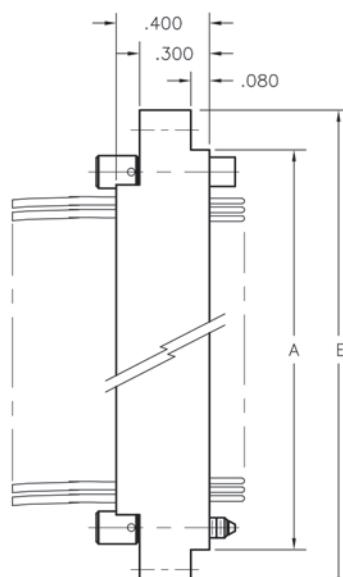
RA3D2-059-3EA-5900



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-37 FOR CRIMP INSTRUCTIONS, CONTACT  
INSERTION AND CONTACT REMOVAL TOOLS.

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## LEAD CONFIGURATION OPTIONS

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-47)	
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-37 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"
Mil-W-22759/33				
L	22 awg	Ten repeating	M	72"
M	22 awg	White	N	84"
N	24 awg	Ten repeating	P	96"
P	24 awg	White	R	108"
R	26 awg	Ten repeating	S	120"
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

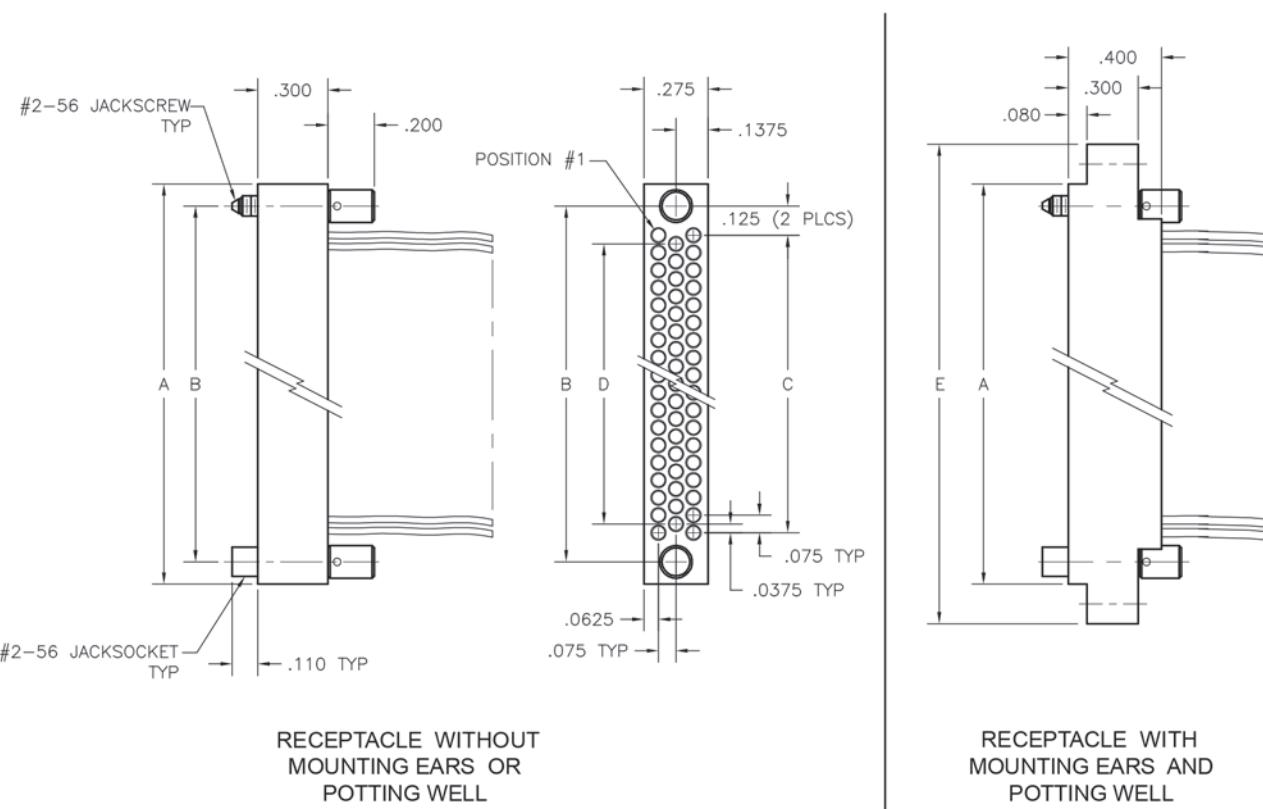
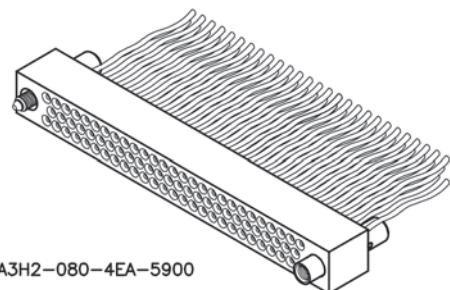
Repeat this sequence until  
connector is fully loaded.

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# THREE ROW - CRIMPED WIRE I/O RECEPTACLE

**RA3**

0.075" | 11 THROUGH 104 CONTACTS



DIMENSIONS					
SIZE	A	B	C	D	
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-37 FOR CRIMP INSTRUCTIONS, CONTACT INSERTION AND CONTACT REMOVAL TOOLS.

**molex**

## LEAD CONFIGURATION OPTIONS

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

SERIES	
RA .075" Screw Machine PC Connector	
BODY	
3 3-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)	
SIZE	
011, 023, 035, 047, 059, 071, 080, 104	
CONTACTS	
TYPE CONTACTS/TERMINATIONS: 2 Socket, crimp, 28-30 awg. contact 4 Socket, crimp, 22-26 awg. contact	
WIRING OPTIONS: XX See wiring codes at right	
HARDWARE	
STYLE OF HARDWARE: 0256 None Guide Hardware 5500 Guide set 5501-5568 Guide set, polarized (see page R-47) 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-37 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"
Mil-W-22759/33			M	72"
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:

RA3H2-080-4EA-5900

Type and Color  Length

### Color sequence for Ten repeating wire colors:

(Beginning in position #1)

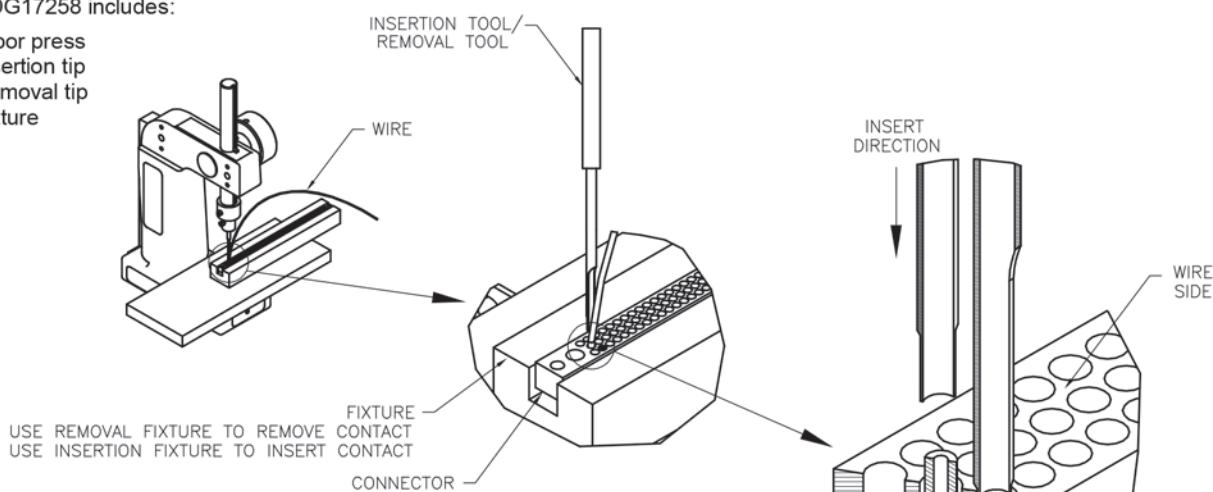
Black  
Brown  
Red  
Orange  
Yellow  
Green  
Blue  
Violet  
Grey  
White

Repeat this sequence until  
connector is fully loaded.

# RA ASSEMBLY INSTRUCTIONS

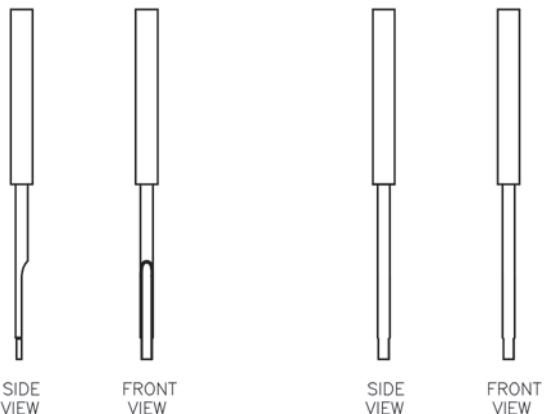
CDG17258 includes:

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.



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 1

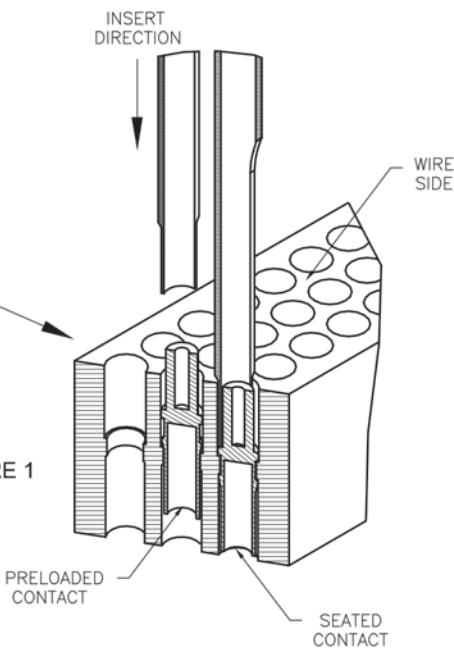
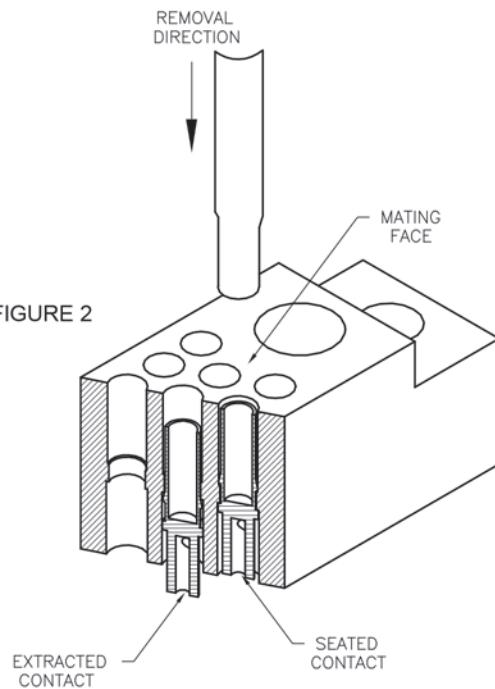


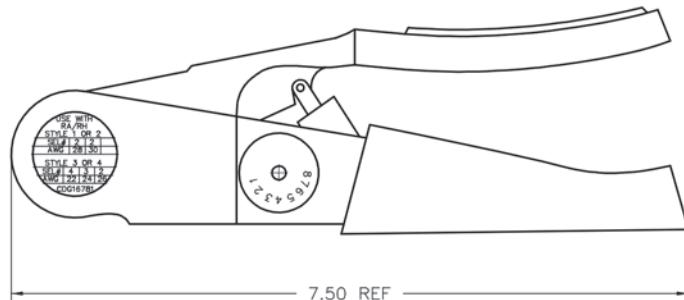
FIGURE 2



# RA ASSEMBLY INSTRUCTIONS

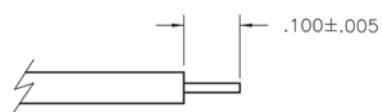
## 1. SET UP CRIMP TOOL

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.



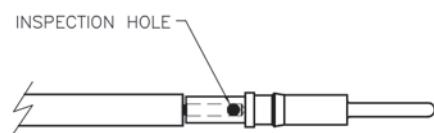
## 2. STRIP WIRE

Remove insulation from wire as shown.



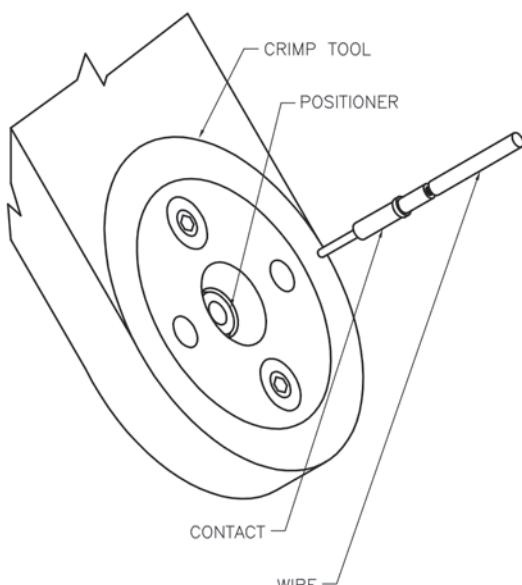
## 3. INSERT WIRE

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



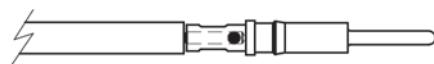
## 4. INSERT CONTACT INTO CRIMP TOOL

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 indentations should be uniform in depth and location.



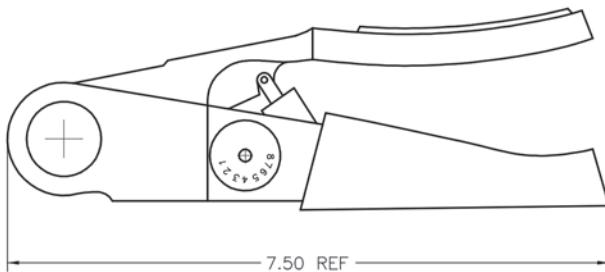
**molex**

# RA ASSEMBLY INSTRUCTIONS

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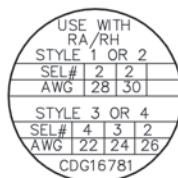
## Crimp Tool

TC2963 - CRIMP TOOL  
REF M22520/2-01

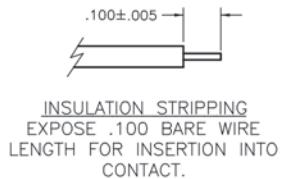
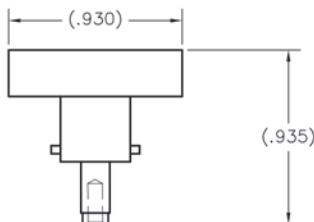


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## Crimp Positioner



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



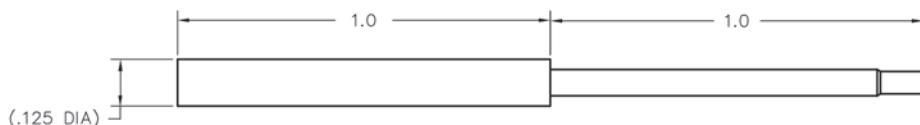
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## Insertion Tool - CDG17256



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## Removal Tool - CDG17257

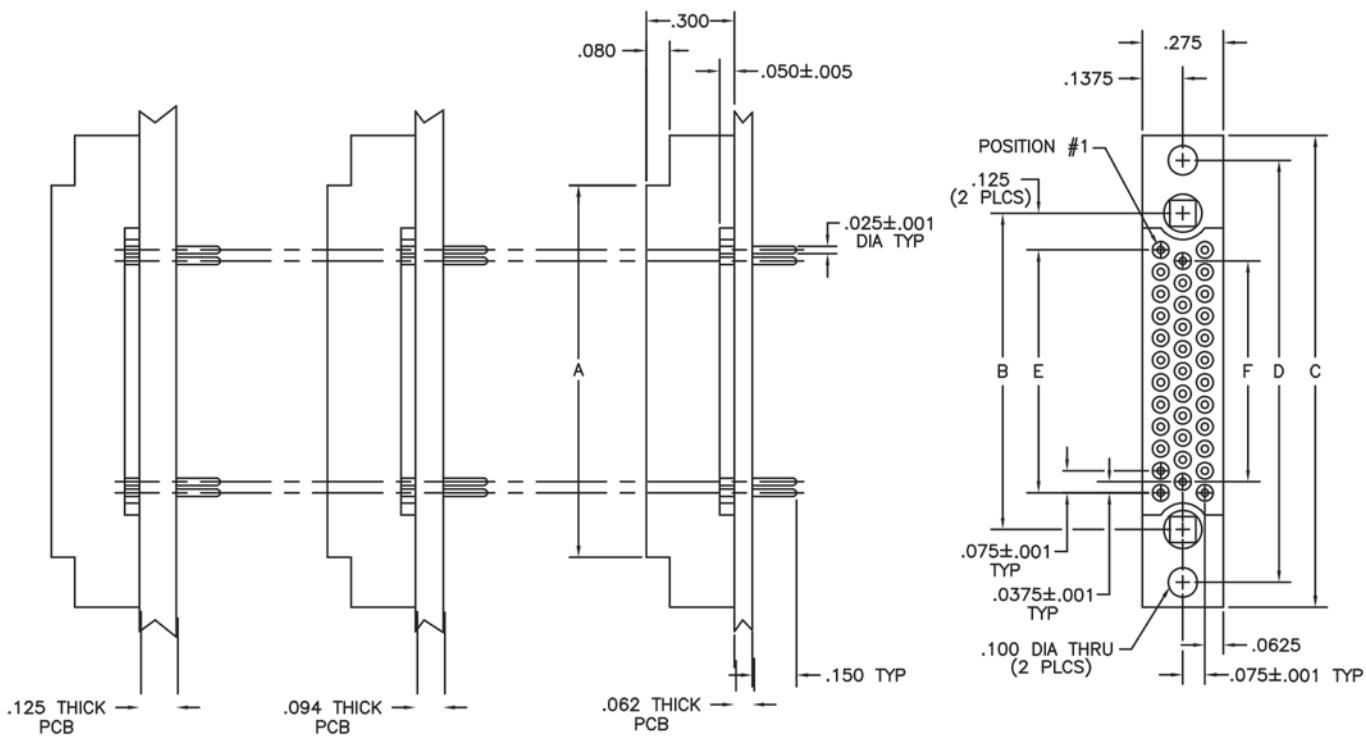
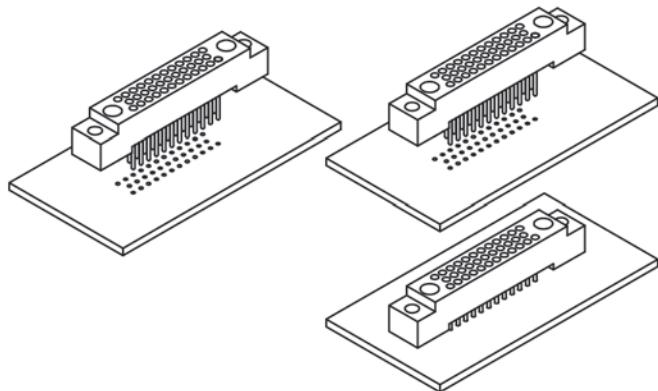


**molex**

# THREE ROW - PC BOARD STACKABLE OR CONNECTOR SAVER

**RM3**

0.075" | 11 THROUGH 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

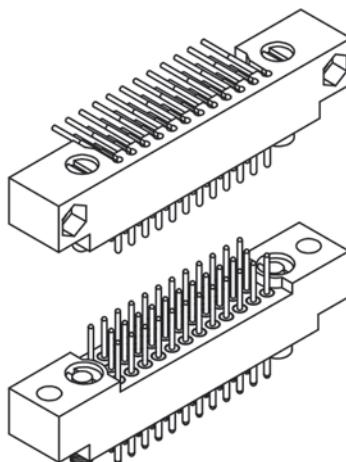
DIMENSIONS						
SIZE	A	B	C	D	E	F
11	.665	.475	1.005	.835	.225	.150
23	.965	.775	1.305	1.135	.525	.450
35	1.265	1.075	1.605	1.435	.825	.750
47	1.565	1.375	1.905	1.735	1.125	1.050
59	1.865	1.675	2.205	2.035	1.425	1.350
71	2.165	1.975	2.505	2.335	1.725	1.650
80	2.390	2.200	2.730	2.560	1.950	1.875

DIMENSIONS						
SIZE	A	B	C	D	E	F
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

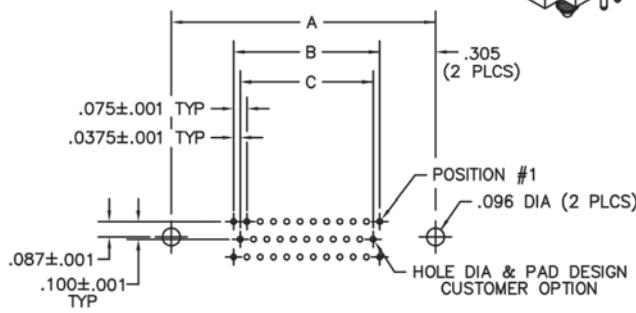
# THREE ROW - RIGHT ANGLE PTH PLUG STRAIGHT PTH PLUG

## RM3 - RECOMMENDED BOARD LAYOUT

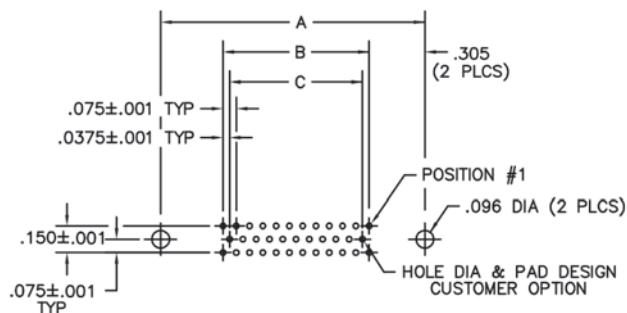
0.075" | 11 THROUGH 206 CONTACTS



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

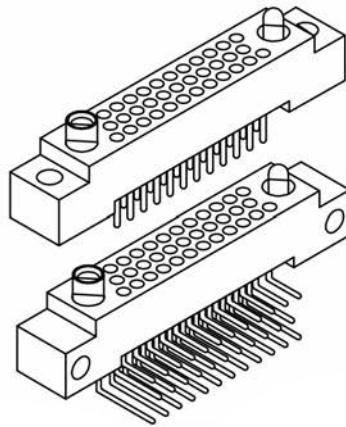


STRAIGHT PTH PLUG  
PC BOARD VIEWED FROM COMPONENT SIDE

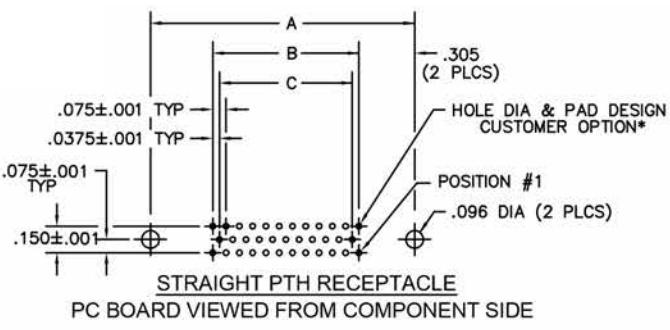
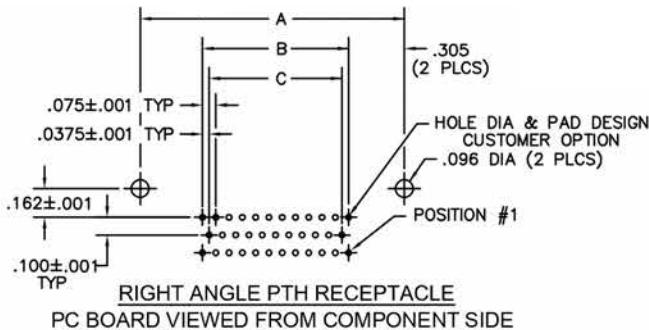
SIZE	CONTACT ID	SIZE	CONTACT ID
11	(4 3 2 1) (7 6 5) (11 10 9 8)	92	(31 30 29) (61 60 59) (92 91 90)
23	(8 7 6 5 4 3 2 1) (15 14 13 12 11 10 9) (23 22 21 20 19 18 17 16)	104	(35 34 33) (69 68 67) (104 103 102)
35	(12 11 10) (23 22 21) (35 34 33)	122	(41 40 39) (81 80 79) (122 121 120)
47	(16 15 14) (31 30 29) (47 46 45)	140	(47 46 45) (93 92 91) (140 139 138)
59	(20 19 18) (39 38 37) (59 58 57)	152	(51 50 49) (101 100 99) (152 151 150)
71	(24 23 22) (47 46 45) (71 70 69)	182	(61 60 59) (121 120 119) (182 181 180)
80	(27 26 25) (53 52 51) (80 79 78)	206	(69 68 67) (137 136 135) (206 205 204)

# THREE ROW - RIGHT ANGLE PTH RCPT STRAIGHT PTH RCPT

## RM3 - RECOMMENDED BOARD LAYOUT 0.075" | 11 THROUGH 206 CONTACTS



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



### \*COMPLIANT TERMINATIONS PCB 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"

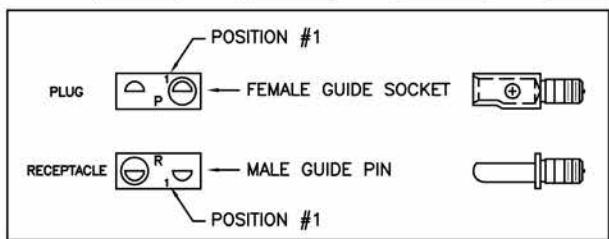
SIZE	CONTACT ID	SIZE	CONTACT ID
11	(11 10 9 8 7 6 5 4 3 2 1)	92	(92 91 90 61 60 59 31 30 29 64 63 62 34 33 32 3 2 1)
23	(23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1)	104	(104 103 102 69 68 67 35 34 33 72 71 70 38 37 36 3 2 1)
35	(35 34 33 23 22 21 15 14 13 12 11 10 3 2 1)	122	(122 121 120 81 80 79 41 40 39 84 83 82 44 43 42 3 2 1)
47	(47 46 45 31 30 29 19 18 17 16 15 14 3 2 1)	140	(140 139 138 93 92 91 47 46 45 96 95 94 50 49 48 3 2 1)
59	(59 58 57 39 38 37 20 19 18 42 41 40 23 22 21 3 2 1)	152	(152 151 150 101 100 99 51 50 49 104 103 102 54 53 52 3 2 1)
71	(71 70 69 47 46 45 24 23 22 50 49 48 27 26 25 3 2 1)	182	(182 181 180 121 120 119 61 60 59 124 123 122 64 63 62 3 2 1)
80	(80 79 78 53 52 51 27 26 25 56 55 54 30 29 28 3 2 1)	206	(206 205 204 137 136 135 69 68 67 140 139 138 72 71 70 3 2 1)

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# POLARIZATION TWO & THREE ROW

## D-Shaped Guide Sets

01	09	17	25	33	41	49	57
02	10	18	26	34	42	50	58
03	11	19	27	35	43	51	59
04	12	20	28	36	44	52	60
05	13	21	29	37	45	53	61
06	14	22	30	38	46	54	62
07	15	23	31	39	47	55	63
08	16	24	32	40	48	56	64



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-47. 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.

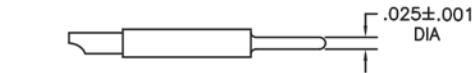
5565 CD8783		For positions 5501 thru 5516
5566 CD8783		For positions 5517 thru 5532
5567P CD8784		For positions 5533 thru 5548
5567R CD7743		For positions 5533 thru 5548
5568P CD7743		For positions 5549 thru 5564
5568R CD8784		For positions 5549 thru 5564

Hardware type shown above catalog order number.

# CONTACTS TWO & THREE ROW

## Pins and Sockets

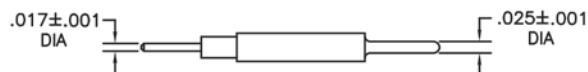
### PINS



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"

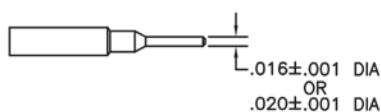


15 Pin, straight, flex circuit, .093"



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



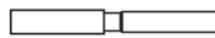
20 Socket, straight, dip solder, .109" x .020" dia  
 21 Socket, straight, dip solder, .140" x .020" dia  
 22 Socket, straight, dip solder, .172" x .020" dia  
 23 Socket, straight, dip solder, .250" x .020" dia  
 50 Socket, straight, dip solder, .140" x .016" dia  
 51 Socket, straight, dip solder, .172" x .016" dia



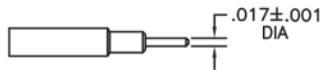
53 Socket, straight, stackable, .212" (Board: .062")  
 54 Socket, straight, stackable, .244" (Board: .094")  
 55 Socket, straight, stackable, .275" (Board: .125")



24 Socket, straight, solder cup



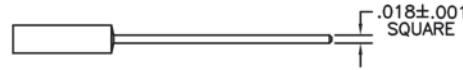
57 Socket, straight, crimp removable (20-22 awg)  
 58 Socket, straight, crimp removable (24-26 awg)  
 59 Socket, straight, crimp removable (28-30 awg)



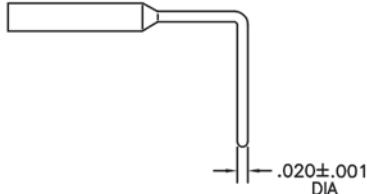
25 Socket, straight, flex circuit, .093"



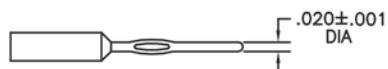
29 Socket, connector saver, .150"



26 Socket, straight, wire-wrap®, .500"  
 27 Socket, straight, wire-wrap®, .375"  
 28 Socket, straight, wire-wrap®, .625"



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"



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 <)

# MILITARY CROSS REFERENCE CHART

M55302/190, 191, 192, 193

Rows	Series & Body Type	Number of Contacts	Type of Terminal	Hardware
2	M55302/190L RM222	Sockets 10, 20, 30, 40, 50, 60, 70, 80, 90, 100	A = 241 B = 201 C = 211	X = 5500 Y = 5501 F = 2900
3	M55302/192L RM322	Sockets 122 152	D = 221 E = 251 F = 271 G = 261 H = 281	S = 5900 N = 7600 L = 5100 M = 6400
2	M55302/191 RM252	Pins 10, 20, 30, 40, 50, 60, 70, 80, 90, 100	A = 311 B = 321 C = 331	X = 5500 Y = 5501 F = 2900 S = 5900
3	M55302/193 RM352	Pins 122 152	A = 311 B = 321 C = 331	N = 7600 L = 5100 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

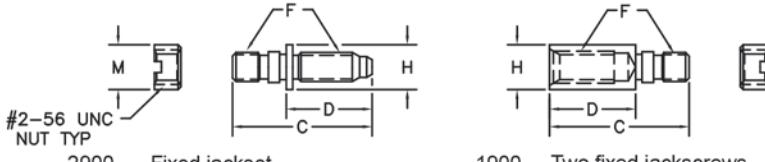
A = Dip terminal, .109" long  
B = Dip terminal, .140" long  
C = Dip terminal, .172" long

## Examples: Mating Pair

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

# #2-56 JACKSETS

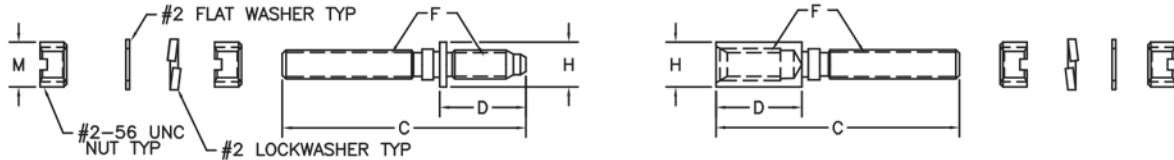
## Fixed Jacksets



2900 Fixed jackset  
3000 Fixed jackset, reversed

1900 Two fixed jackscrews  
2000 Two fixed jacksockets

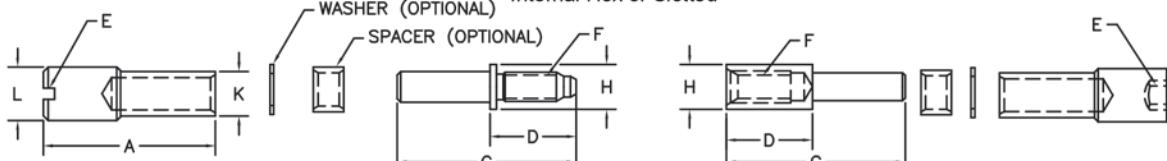
## Fixed Jacksets, Long



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

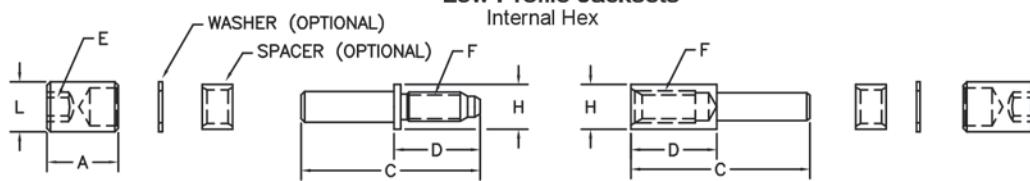
5100 Turning jackset, .700"  
5200 Turning jackset, .700", reversed  
5300 Two turning jackscrews, .700"  
5400 Two turning jacksockets, .700"  
6400 Turning jackset, .490"  
6500 Turning jackset, .490", reversed  
6600 Two turning jackscrews, .490"  
6700 Two turning jacksockets, .490"  
6800 Turning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

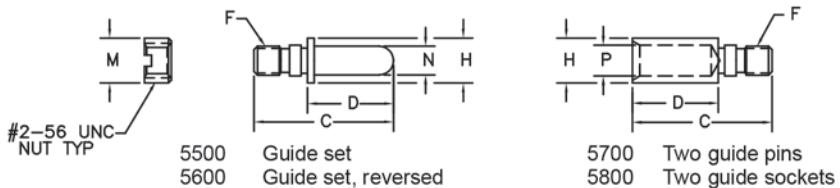
### Notes:

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

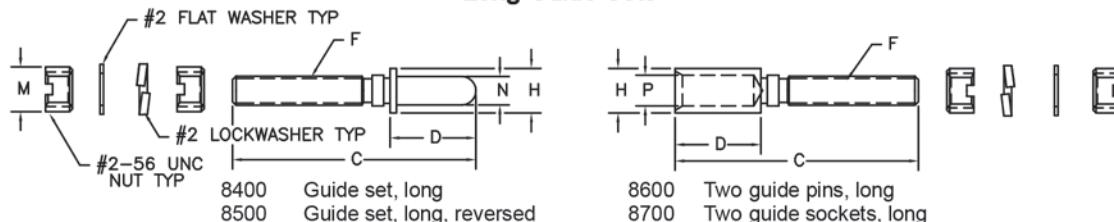
**molex**

# GUIDE SETS

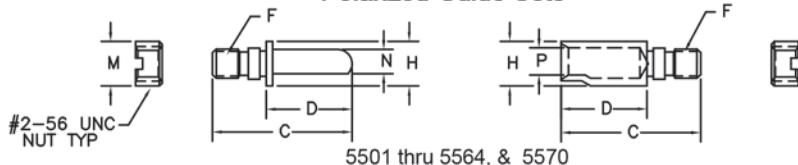
## Guide Sets



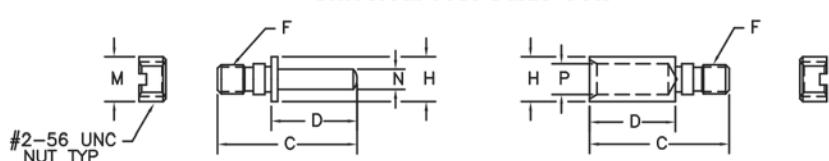
## Long Guide Sets



## Polarized Guide Sets



## Universal Test Guide Sets



HARDWARE TYPE	A	C	D	DIMENSIONS								
				E	F	H	K	L	M	N	P	
1900/2000/2900/3000	—	.390	—	—	—	—	—	—	.125 DIA	—	—	
5100 THRU 5400	.700	.750	—	.031 x .031 SLOT	—	—	.125 DIA	.156 DIA	—	—	—	
5500 THRU 5800	—	—	.390	—	—	—	—	—	.080 DIA	.088 DIA	—	
5501 THRU 5564	—	—	—	—	—	—	—	—	.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	—	—	.680	—	—	—	—	—	.125 DIA	.080 DIA	.088 DIA	
8800 THRU 9100	—	—	—	—	—	—	—	—	—	—	—	

## 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

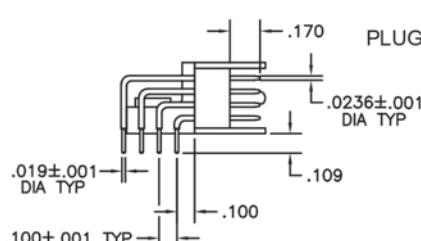
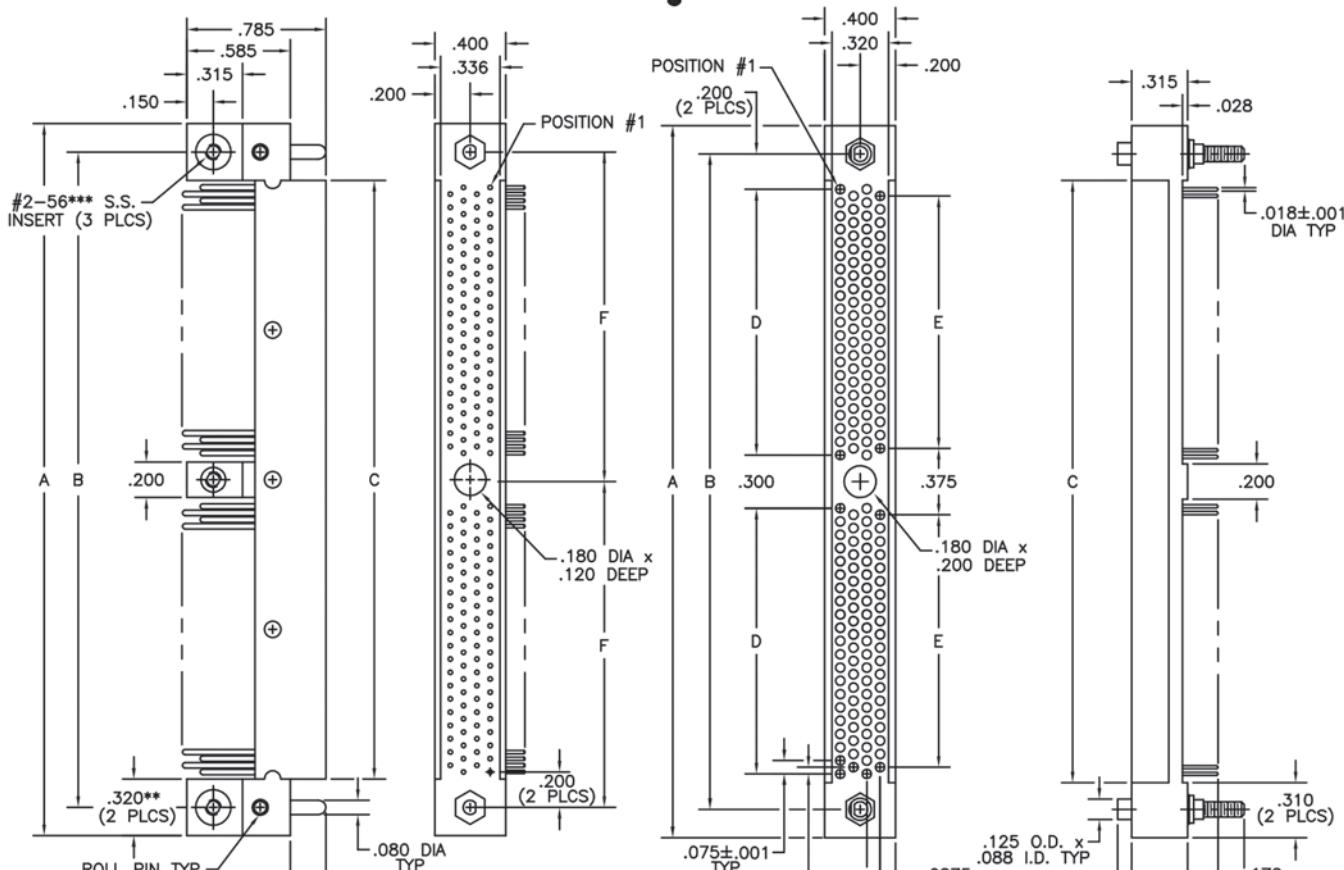
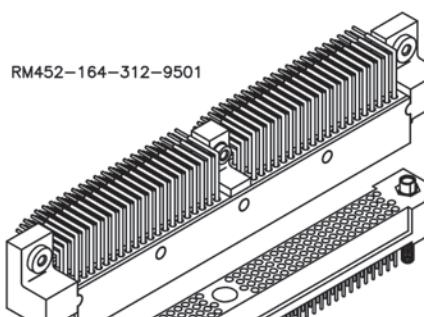
To order connector without hardware, place "-0256" in hardware designation area of catalog number

Example: RM322-152-221-0256

# FOUR ROW - DAUGHTERBOARD-TO-MOTHERBOARD OR CHASSIS

RM4

0.075" | 86 THROUGH 404 CONTACTS



#### NOTES:

\* = Single section, no center mounting hole

\*\* = .280" for 86 position

\*\*\* = #4-40 for 404 position

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
110*	2.745	2.745	2.425	2.105	2.125	2.025
164	4.020	4.020	3.700	3.380	3.400	1.500
196	4.620	4.620	4.300	3.980	4.000	1.800
204	4.770	4.770	4.450	4.130	4.150	1.875
220	5.070	5.070	4.750	4.430	4.450	2.025
250*	5.370	5.370	5.050	4.730	4.750	4.650
276	6.120	6.120	5.800	5.480	5.500	2.550
300	6.570	6.570	6.250	5.930	5.950	2.775
404	8.520	8.520	8.200	7.880	7.900	3.750

## LEAD CONFIGURATION OPTIONS

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

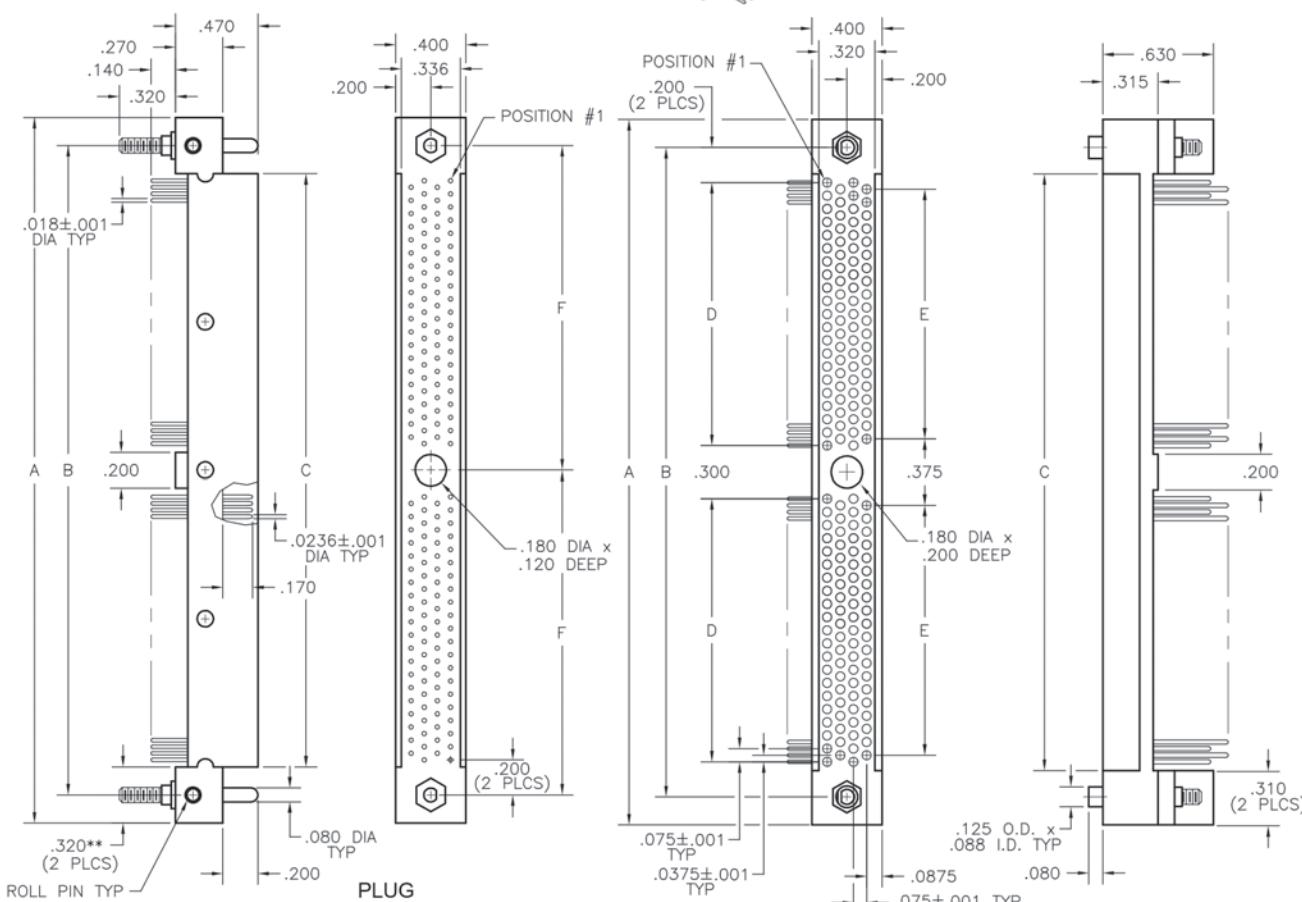
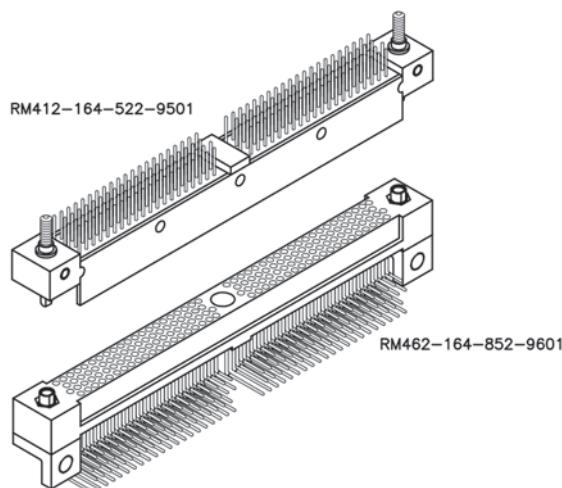
PLUG	RECEPTACLE					
<b>SERIES</b>						
RM .075" Screw Machine PC Connector						RM .075" Screw Machine PC Connector
<b>BODY</b>						
4 4-Row	4 4-Row					
BODY STYLE: 5 Plug, right angle, with mounting ears	BODY STYLE: 2 Receptacle, straight, without mounting ears					
BODY MATERIAL: 2 Polyphenylene sulfide (PPS)	BODY MATERIAL: 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>						
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 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: 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)					
<b>HARDWARE</b>						
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-62	POLARIZATION: 00 None 01 thru 36 are special identifiers, see page R-62					

= Option not RoHS compliant

# FOUR ROW - MOTHERBOARD- OR CHASSIS-TO-DAUGHTERBOARD

RM4

0.075" | 86 THROUGH 404 CONTACTS



SIZE	DIMENSIONS							
	A		B		C			
	PLUG	RCPT		PLUG	RCPT	D	E	F
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

## LEAD CONFIGURATION OPTIONS

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

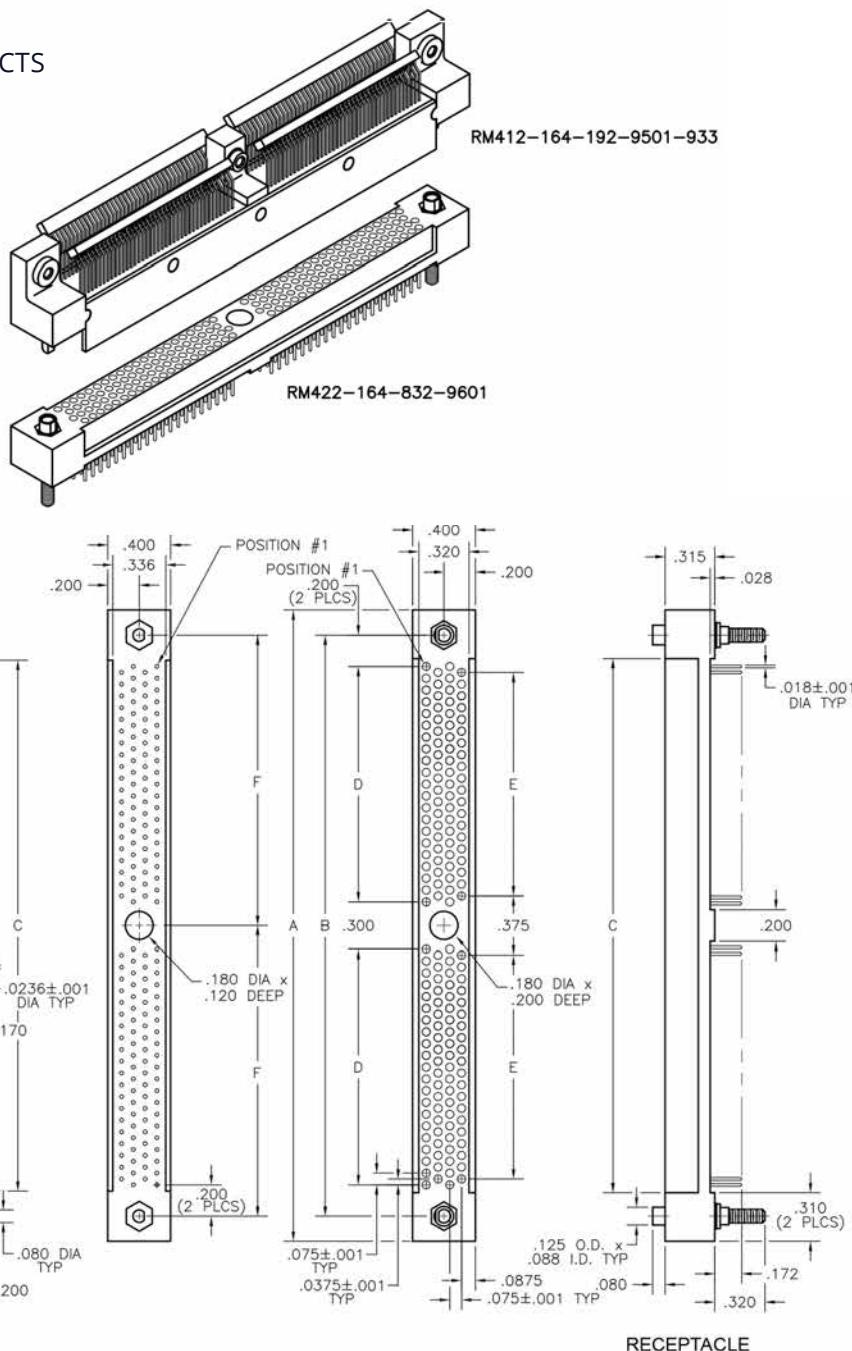
PLUG		RECEPTACLE	
SERIES			
RM .075" Screw Machine PC Connector		RM .075" Screw Machine PC Connector	
BODY			
4 4-Row		4 4-Row	
BODY STYLE: 1 Plug, straight, without mounting ears		BODY STYLE: 6 Receptacle, right angle, with metal mount brackets	
BODY MATERIAL: 2 Polyphenylene sulfide (PPS)		BODY MATERIAL: 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			
TYPE CONTACTS/TERMINATIONS:		TYPE CONTACTS/TERMINATIONS:	
17 Pin, straight, solder cup		84 Socket, right angle, dip solder, .109" x .019" dia	
40 Pin, straight, flex .093" x .017" dia		85 Socket, right angle, dip solder, .140" x .019" dia	
51 Pin, straight, dip solder, .109" x .018" dia		86 Socket, right angle, dip solder, .172" x .019" 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			
PLATING OPTIONS:		PLATING OPTIONS:	
1 Gold plated termination		1 Gold plated termination	
2 Pre-tinned termination, SnPb alloy (dip solder options only) <input checked="" type="checkbox"/>		2 Pre-tinned 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:		STYLE OF HARDWARE:	
0256 None		0256 None	
82 Hex turning jackset, reversed, installed, .200 knob		82 Hex turning jackset, reversed, installed, .200 knob	
83 Fixed jackset, reversed, installed, #2-56 x .247" thd ext		83 Fixed jackset, reversed, installed	
84 Fixed jackset, reversed, installed, #2-56 x .320" thd ext		91 Guide sockets, full round, installed	
90 Guide pins, full round, installed, #2-56 x .320" thd ext		92 Hex turning jackset, installed, .200 knob	
92 Hex turning jackset, installed, .200 knob		93 Fixed jackset, installed	
93 Fixed jackset, installed, #2-56 x .247" thd ext		96 Guide sockets, polarized, unassembled	
94 Fixed jackset, installed, #2-56 x .320" thd ext		9601 - 9636 Guide sockets, polarized, installed	
95 Guide pins, polarized, unassembled, #2-56 x .320" thd ext		97 Guide sockets, polarized, unassembled	
9501 - 9536 Guide pins, polarized, installed, #2-56 x .320" thd ext		9701 - 9736 Guide sockets, polarized, installed	
99 Guide pins, universal, installed #2-56 x .320" thd ext		98 Guide sockets, universal, installed	
POLARIZATION:		POLARIZATION	
00 None		00 None	
01 thru 36 are special identifiers, see page R-62		01 thru 36 are special identifiers, see page R-62	

= Option not RoHS compliant

# FOUR ROW - DAUGHTERBOARD-TO-MOTHERBOARD OR CHASSIS

RM4

0.075" | 86 THROUGH 404 CONTACTS



## 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.

**molex**

## LEAD CONFIGURATION 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

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

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  
 78 Socket, straight, wire wrap <sup>®</sup>, .500" x .018" sq  
 79 Socket, straight, wire wrap <sup>®</sup>, .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:

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, #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-62

#### POLARIZATION

00 None  
 01 thru 36 are special identifiers, see page R-62

#### OPTIONS

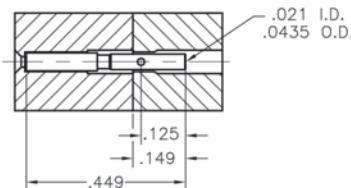
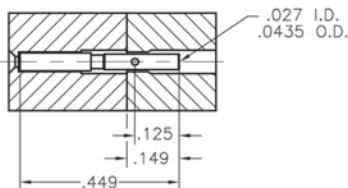
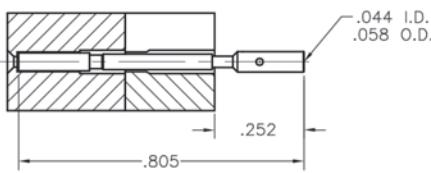
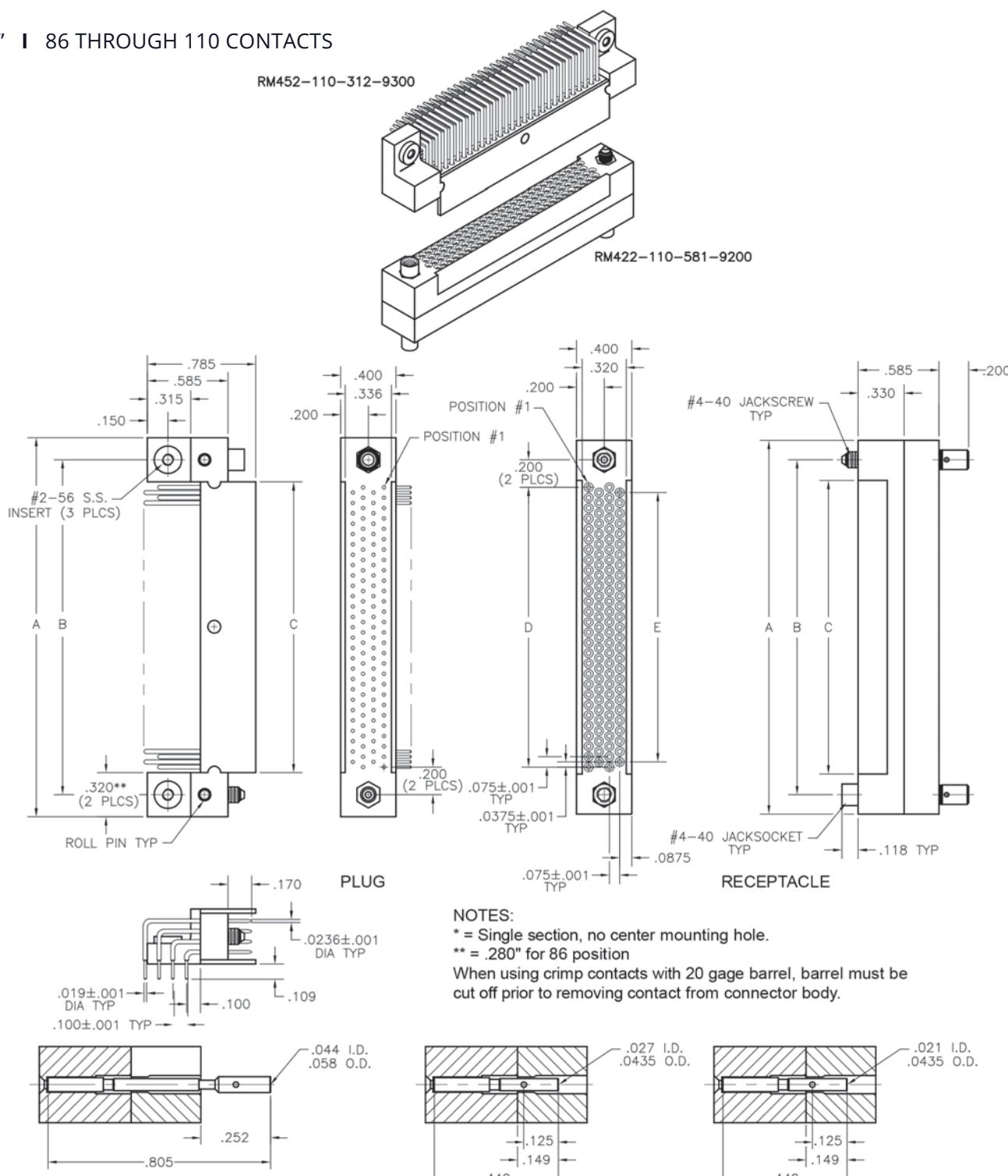
9XX SMT configuration code, see page R-61

= Option not RoHS compliant

# FOUR ROW - CABLE- OR BOARD-TO-CRIMP REMOVABLE

RM4

0.075" | 86 THROUGH 110 CONTACTS



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	A	B	DIMENSIONS			
			PLUG	RCPT	D	E
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

## LEAD CONFIGURATION OPTIONS

PLUG: RM452-110-312-9300  
 RECEPTACLE: RM422-110-581-9200  
 XXXX-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
BODY STYLE: 5 Plug, right angle, with mounting ears	BODY STYLE: 2 Receptacle, straight, without mounting ears
BODY MATERIAL: 2 Polyphenylene sulfide (PPS)	BODY MATERIAL: 2 Polyphenylene sulfide (PPS)
<b>SIZE</b>	
086, 110	086, 110
<b>CONTACTS</b>	
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: 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 <input checked="" type="checkbox"/> 3 Pre-tinned termination, SAC305 alloy	PLATING OPTIONS: 0 No plating (use with Contact Option "00" only) 1 Gold plated termination
<b>HARDWARE</b>	
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 91 Guide sockets, full round, installed 92 Hex turning jackset, installed, .200" knob 96 Guide sockets, polarized, unassembled 9601 - 9636 Guide sockets, polarized, installed 98 Guide sockets, universal, installed
POLARIZATION: 00 None 01 thru 36 are special identifiers, see page R-62	POLARIZATION 00 None 01 thru 36 are special identifiers, see page R-62

\* Full compliment of crimp removable sockets packaged with connectors

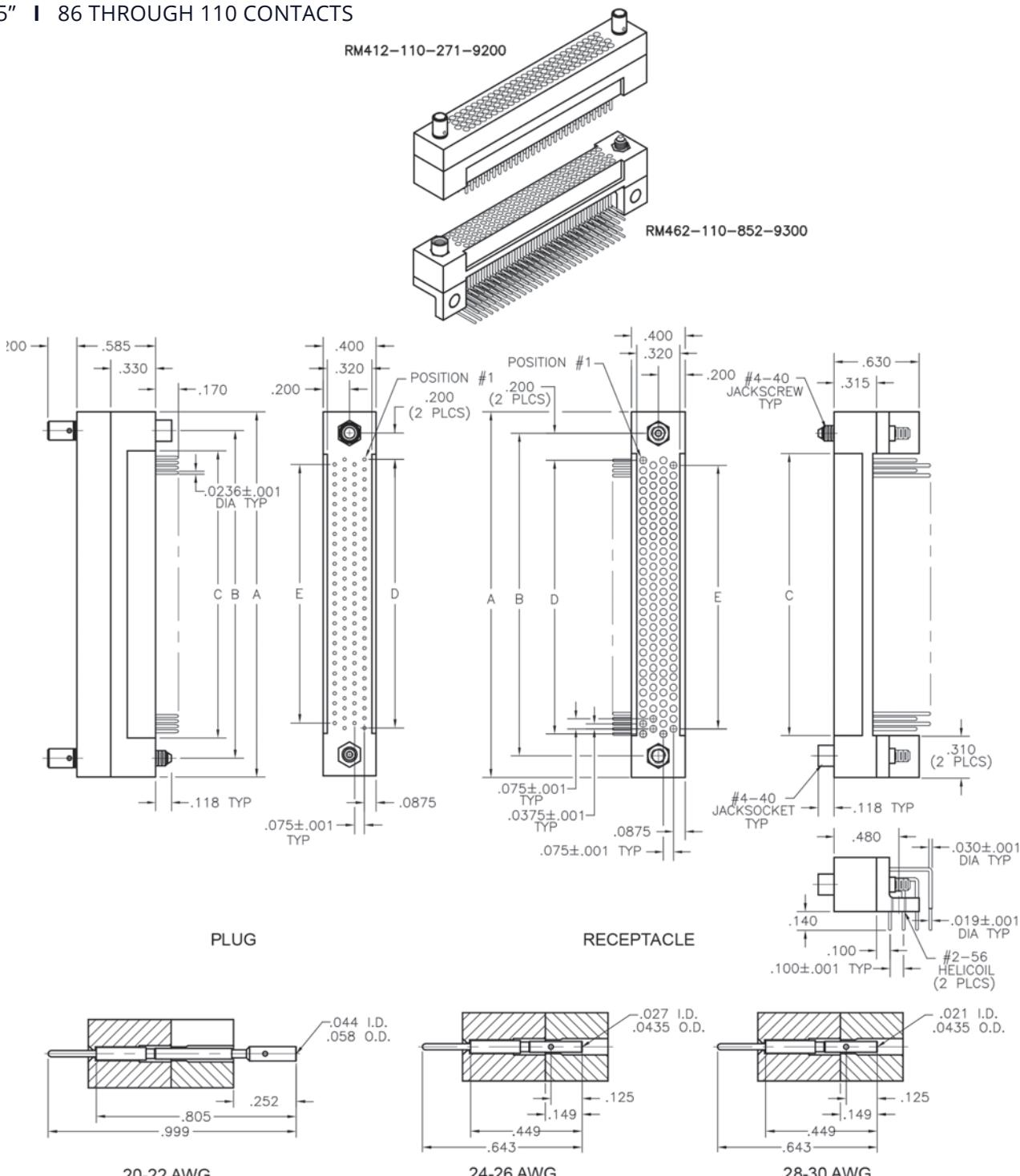
1. Crimp tool - AirBorn part number: CDG4601, Mil Spec number M22520/2-01
2. Crimp positioner - AirBorn part number: CDG4602 (24-26 AWG and 28-30 AWG)  
CDG4603 (20-22 AWG)
3. Crimp removal tool - AirBorn part number: CDG8161 (All AWGs)
4. Crimp contact part number on previous page.

= Option not RoHS compliant

# FOUR ROW - CRIMP REMOVABLE-TO-BOARD

**RM4**

0.075" | 86 THROUGH 110 CONTACTS



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	A	B	DIMENSIONS		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

## LEAD CONFIGURATION OPTIONS

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	BODY STYLE: 6 Receptacle, right angle, with mounting ears		
BODY MATERIAL: 2 Polyphenylene sulfide (PPS)	BODY MATERIAL: 2 Polyphenylene sulfide (PPS)		
SIZE			
086, 110	086, 110		
CONTACTS			
TYPE CONTACTS/TERMINATIONS:		TYPE CONTACTS/TERMINATIONS:	
00 Contacts not supplied		84 Socket, right angle, dip solder, .109" x .019" dia	
26 Pin, straight, crimp removable (20-22 AWG)*		85 Socket, right angle, dip solder, .140" x .019" dia	
27 Pin, straight, crimp removable (24-26 AWG)*		86 Socket, right angle, dip solder, .172" x .019" dia	
28 Pin, straight, crimp removable (28-30 AWG)*			
PLATING OPTIONS:		PLATING OPTIONS:	
0 No plating (use with Contact Option "00" only)		1 Gold plated termination	
1 Gold plated termination		2 Pre-tinned termination, SnPb alloy <input checked="" type="checkbox"/>	
		3 Pre-tinned termination, SAC305 alloy	
HARDWARE			
STYLE OF HARDWARE:		STYLE OF HARDWARE:	
0256 None		0256 None	
82 Hex turning jackset, reversed, installed, .200" knob		82 Hex turning jackset, reversed, installed, .200 knob	
83 Fixed jackset, reversed, installed,		83 Fixed jackset, reversed, installed, #2-56 x .247 thd ext	
90 Guide pins, full round, installed		84 Fixed jackset, reversed, installed, #2-56 x .320 thd ext	
92 Hex turning jackset, installed, .200" knob		91 Guide sockets, full round, installed, #2-56 x .247" thd ext	
93 Fixed jackset, installed		92 Hex turning jackset, installed, .200 knob	
95 Guide pins, polarized, unassembled		93 Fixed jackset, installed, #2-56 x .247" thd ext	
9501 - 9536 Guide pins, polarized, installed		94 Fixed jackset, installed, #2-56 x .320" thd ext	
99 Guide pins, universal, installed		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	
Note: Includes mounting bracket when right angle contacts are supplied			
POLARIZATION:		POLARIZATION	
00 None		00 None	
01 thru 36 are special identifiers, see page R-62		01 thru 36 are special identifiers, see page R-62	

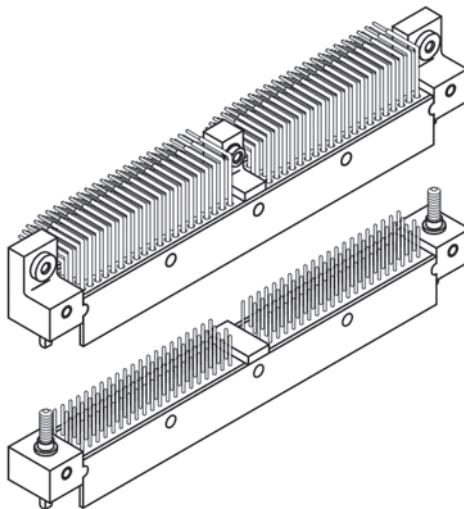
\* Full compliment of crimp removable sockets packaged with connectors

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

# FOUR ROW - RIGHT ANGLE PTH PLUG STRAIGHT PTH PLUG

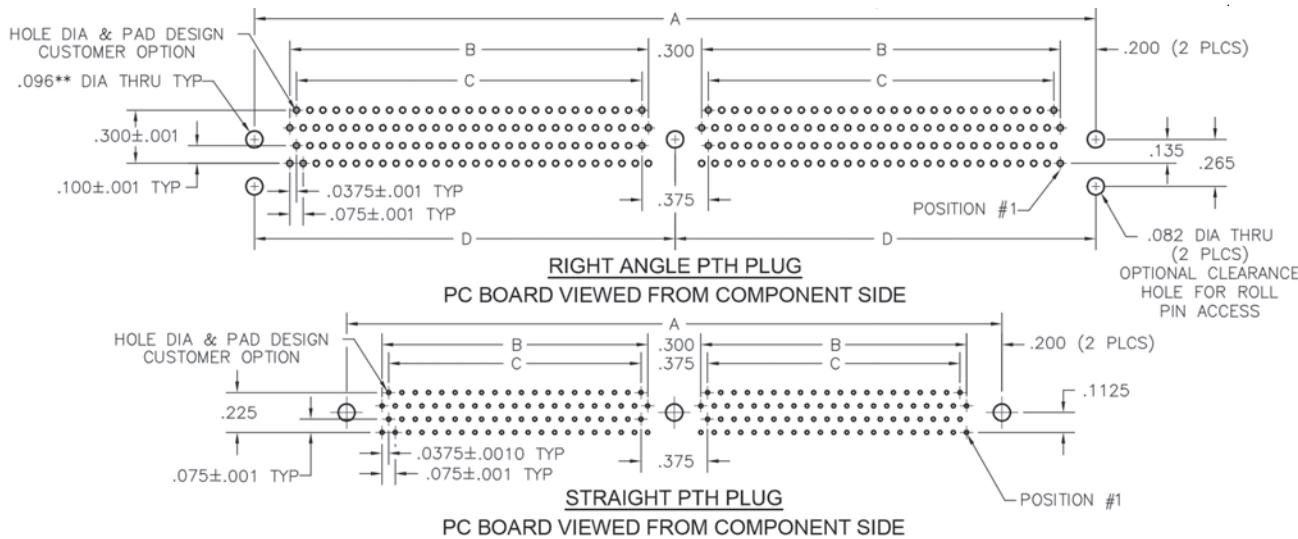
## RM4 - RECOMMENDED BOARD LAYO 0.075" | 86 THROUGH 404 CONTACT



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

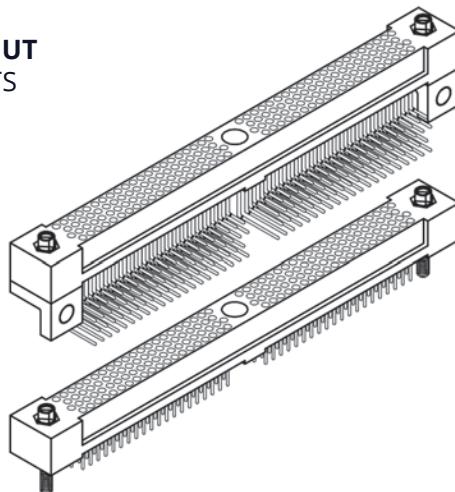


SIZE	CONTACT ID	SIZE	CONTACT ID
86*	(86 85 84) (65 64 63) (43 42 41) (22 21 20)	220	(220 219 218) (166 165 164) (110 109 108)
110*	(110 109 108) (83 82 81) (55 54 53) (28 27 26)	250*	(250 249 248) (188 187 186) (125 124 123)
164	(164 163 162) (147 146 145) (124 123 122) (82 81 80)	276	(276 275 274) (208 207 206) (138 137 136)
196	(196 195 194) (148 147 146) (98 97 96) (50 49 48)	300	(300 299 298) (226 225 224) (150 149 148)
204	(204 203 202) (154 153 152) (102 101 100) (52 51 50)	404	(403 401 399) (404 402 400) (201 199 197)

# FOUR ROW - RIGHT ANGLE PTH RCPT STRAIGHT PTH RCPT

## RM4 - RECOMMENDED BOARD LAYOUT

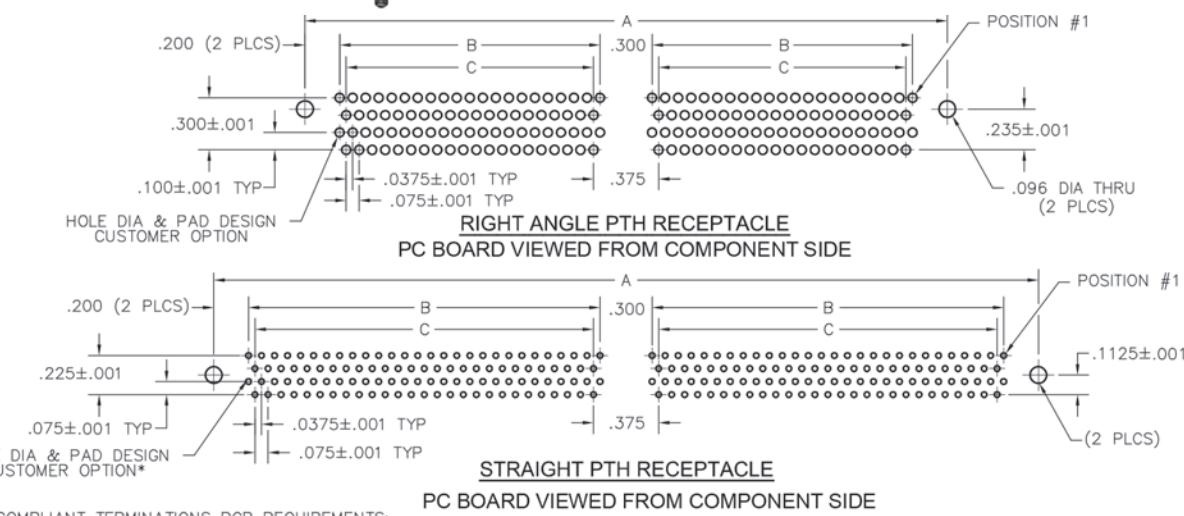
0.075" | 86 THROUGH 404 CONTACTS



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

### NOTES:

\* = Single section, no center mounting hole



### \*COMPLIANT TERMINATIONS PCB 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"

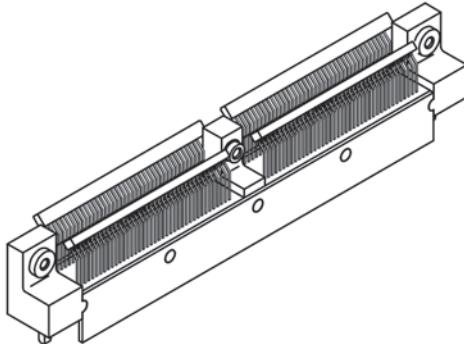
SIZE	CONTACT ID	SIZE	CONTACT ID			
86*	(22 21 20) (43 42 41) (65 64 63) (86 85 84)	(3 2 1) (25 24 23) (46 45 44) (68 67 66)	(56 55 54) (110 109 108) (166 165 164) (220 219 218)	(31 30 29) (86 85 84) (141 140 139) (196 195 194)	(28 27 26) (83 82 81) (138 137 136) (193 192 191)	(3 2 1) (59 58 57) (113 112 111) (169 168 167)
110*	(28 27 26) (55 54 53) (83 82 81) (110 109 108)	(3 2 1) (31 30 29) (58 57 56) (86 85 84)	(63 62 61) (125 124 123) (188 187 186) (250 249 248)	(3 2 1) (66 65 64) (128 127 126) (191 190 189)	(3 2 1)	
164	(42 41 40) (82 81 80) (124 123 122) (164 163 162) (147 146 145)	(24 23 22) (65 64 63) (106 105 104) (144 143 142) (127 126 125)	(21 20 19) (62 61 60) (45 44 43) (85 84 83) (127 126 125)	(3 2 1) (35 34 33) (107 106 105) (176 175 174) (245 244 243)	(3 2 1) (73 72 71) (141 140 139) (211 210 209)	
196	(50 49 48) (98 97 96) (148 147 146) (196 195 194)	(28 27 26) (77 76 75) (126 125 124) (175 174 173)	(25 24 23) (74 73 72) (123 122 121) (172 171 170)	(3 2 1) (53 52 51) (101 100 99) (151 150 149)	(3 2 1) (38 37 36) (116 115 114) (191 190 189) (266 265 264)	
204	(52 51 50) (102 101 100) (154 153 152) (204 203 202)	(29 28 27) (80 79 78) (131 130 129) (182 181 180)	(26 25 24) (77 76 75) (128 127 126) (179 178 177)	(3 2 1) (55 54 53) (105 104 103) (157 156 155)	(3 2 1) (101 99 97) (100 98 96) (153 152 151) (229 228 227)	
220						
250*						
276						
300						
404						

**molex**

# FOUR ROW - STRAIGHT SMT PLUG

## RM4 - RECOMMENDED BOARD LAYOUT

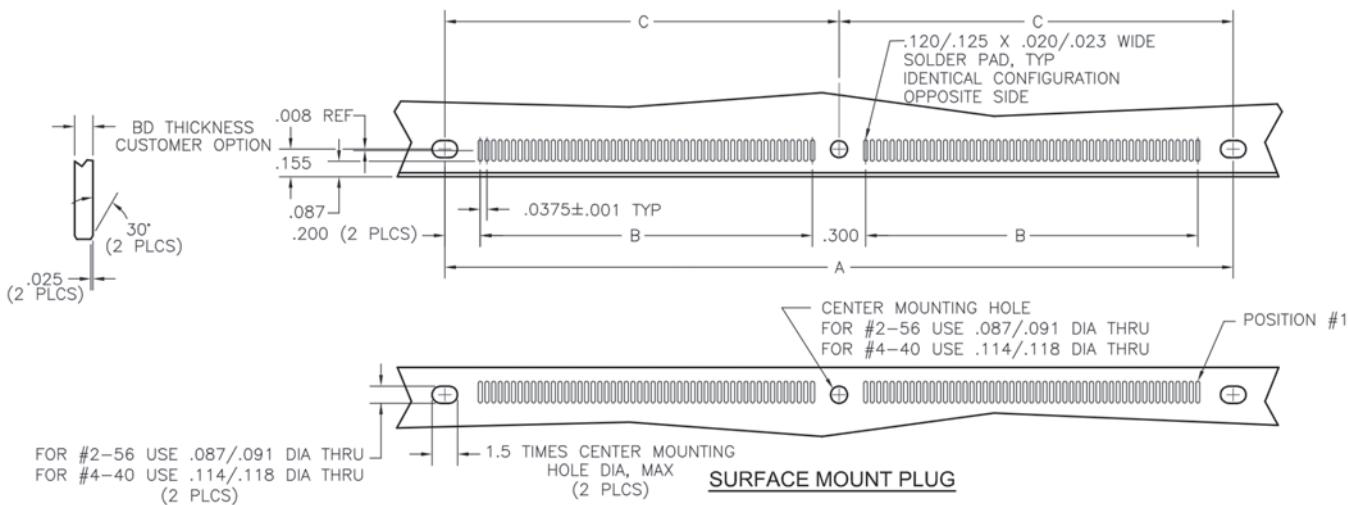
0.075" | 86 THROUGH 404 CONTACTS



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

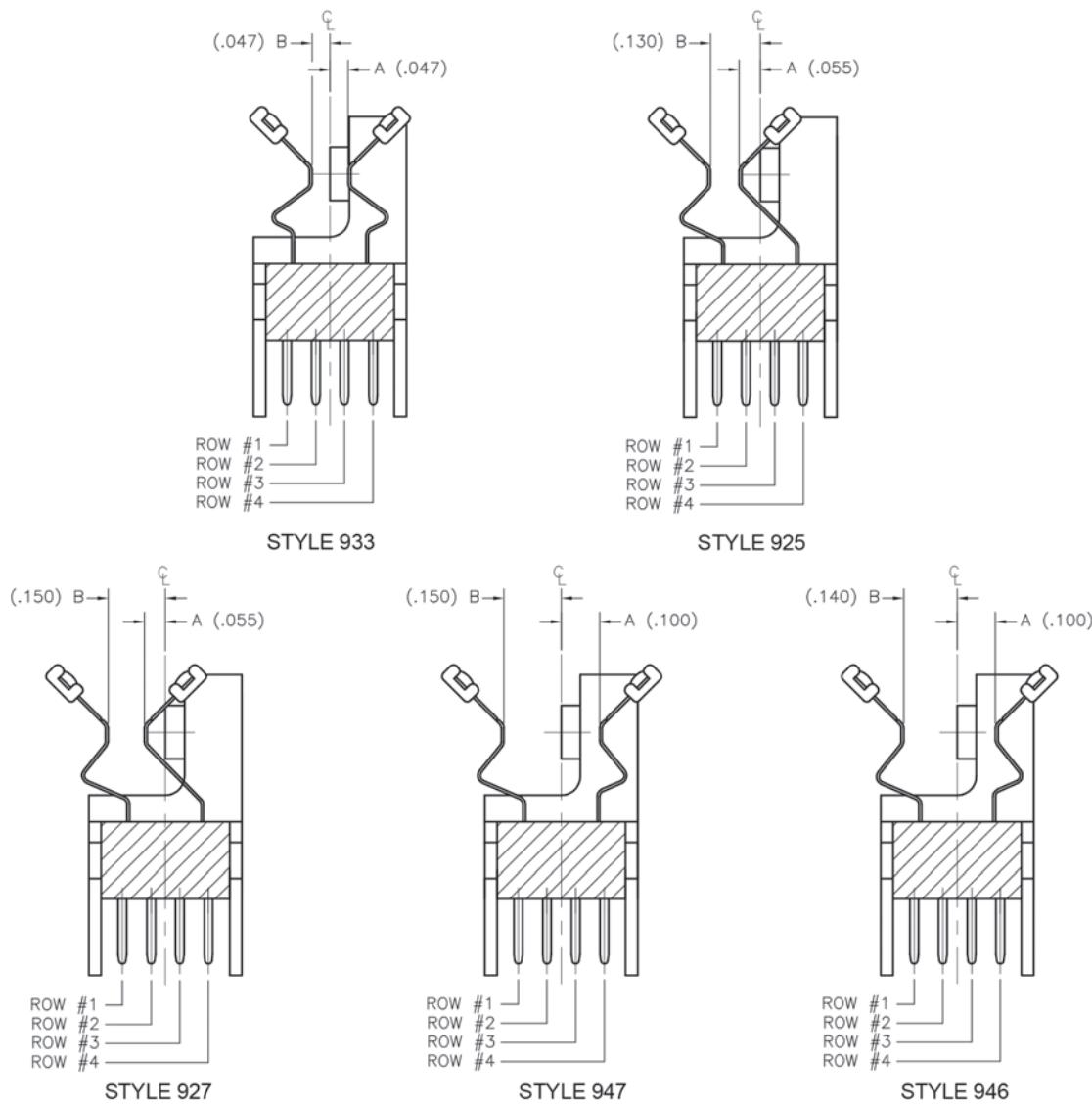
### NOTES:

\* = Single section, no center mounting hole



SIZE	CONTACT ID	SIZE	CONTACT ID
86*	C 52 D C154 D C 50 D C148 D C 52 D C196 D C 51 D C153 D C 51 D C203 D C 50 D C152 D	220	C 56 D C166 D C 110 D C220 D C 55 D C165 D C 55 D C109 D C 81 D C122 D
110*	C 28 D C126 D C 28 D C174 D C 28 D C125 D C 28 D C173 D C 28 D C180 D C 27 D C124 D	250*	C 63 D C46 D C 82 D C86 D C 21 D C64 D C 42 D C85 D C 20 D C63 D
164	C 29 D C131 D C 79 D C181 D C 77 D C179 D C 25 D C127 D C 25 D C178 D C 24 D C126 D C 27 D C129 D	276	C 70 D C208 D C 138 D C276 D C 69 D C207 D C 137 D C275 D C 68 D C206 D
196	C 26 D C128 D C 76 D C123 D C 74 D C172 D C 24 D C122 D C 73 D C171 D C 23 D C121 D C 26 D C124 D	300	C 38 D C191 D C 150 D C300 D C 75 D C252 D C 40 D C190 D C 149 D C299 D C 74 D C224 D
204	C 3 D C105 D C 54 D C52 D C 52 D C156 D C 2 D C104 D C 2 D C149 D C 53 D C155 D C 1 D C103 D	404	C 104 D C404 D C 201 D C403 D C 200 D C402 D C 104 D C306 D C 199 D C401 D C 198 D C400 D C 102 D C304 D

# SMT CONFIGURATION OPTIONS



DISTANCE FROM  $\zeta$  (A)

1 .005	3 .047	7 .150
2 .055	4 .100	8 .070
	5 .130	9 .080
	6 .140	

DISTANCE FROM  $\zeta$  (A OR B)

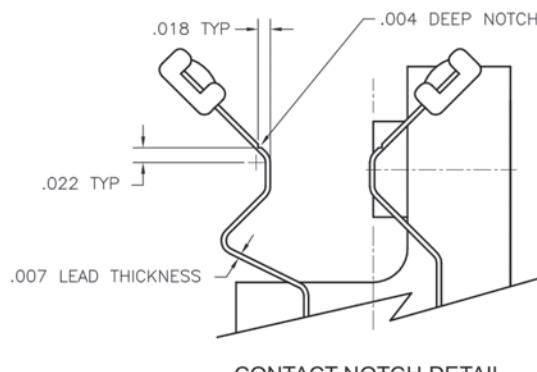
3 .047	7 .150
4 .100	8 .070
5 .130	9 .080
6 .140	

DISTANCE FROM  $\zeta$  (B)

0 .090
--------

NOTES:

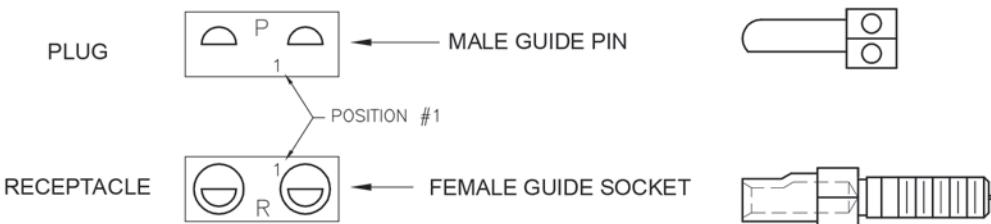
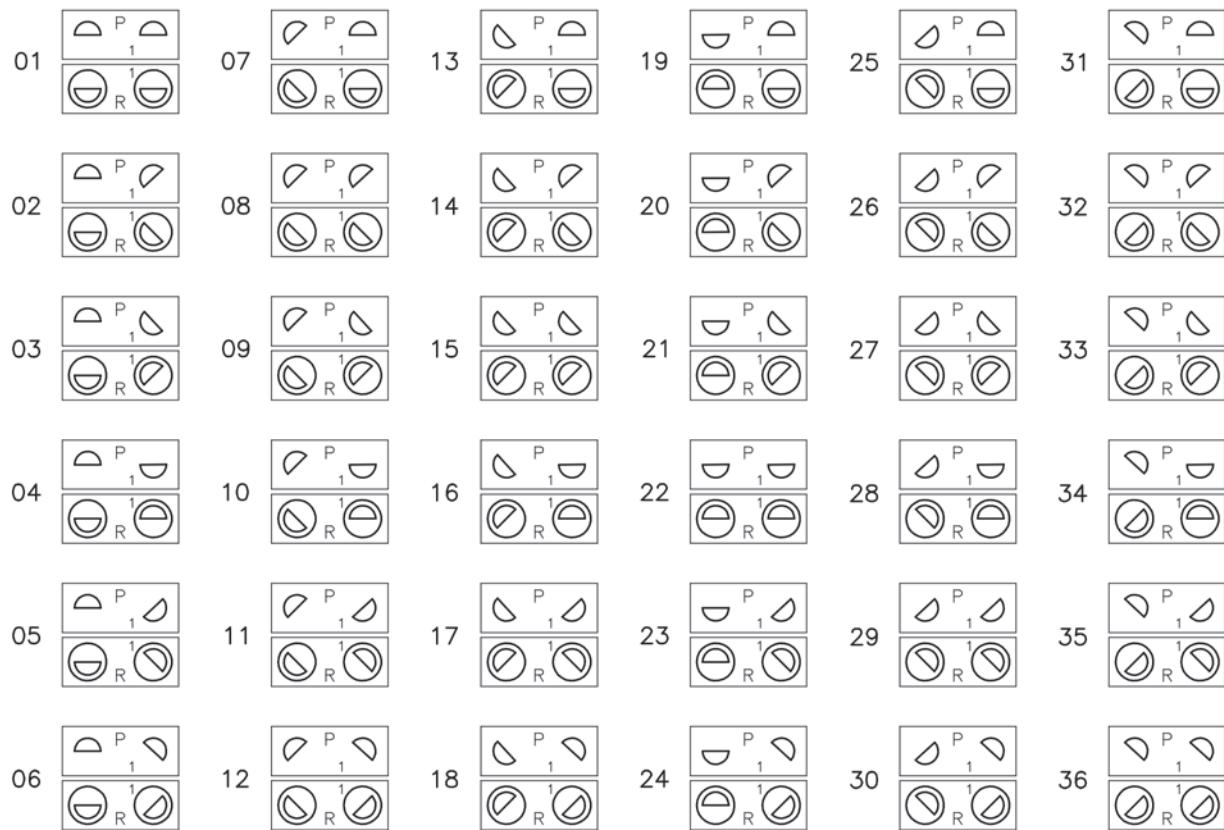
1. Various board thicknesses can be accommodated by specifying A and B designators. For example: 9 (A)(B)
2. Consult factory for other available options.



CONTACT NOTCH DETAIL

# POLARIZATION FOUR ROW AND SIX ROW

## D-Shaped Guide Hardware



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

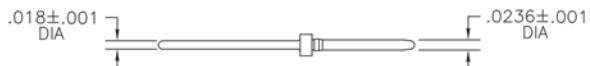
# CONTACTS FOUR ROW

## Pins and Sockets

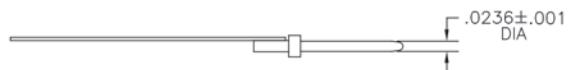
### PINS



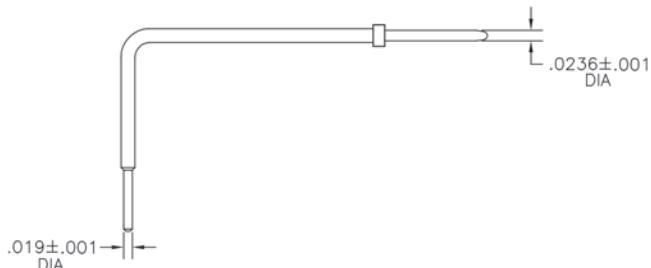
17 Pin, straight, solder cup



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



19 Pin, SMT, .014" x .007", scored for  
organizer removal (see R-56)  
39 Pin, SMT, .014" x .007", unscored



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

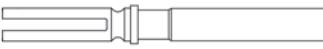
### SOCKETS



75 Socket, straight, dip solder, .250"  
81 Socket, straight, dip solder, .109"  
82 Socket, straight, dip solder, .140"  
83 Socket, straight, dip solder, .172"



87 Socket, straight, press-fit, .188" (Board: .093"-.125")  
88 Socket, straight, press-fit, .308" (Board: .156"-.200")  
89 Socket, straight, press-fit, .388" (Board: .250 or <)



76 Socket, straight, solder cup

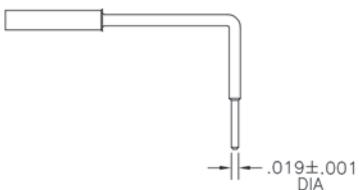


77 Socket, straight, flex circuit, .093"



78 Socket, straight, wire-wrap®, .500"  
79 Socket, straight, wire-wrap®, .375"

57 Socket, straight, crimp removable (20-22 awg)  
58 Socket, straight, crimp removable (24-26 awg)  
59 Socket, straight, crimp removable (28-30 awg)

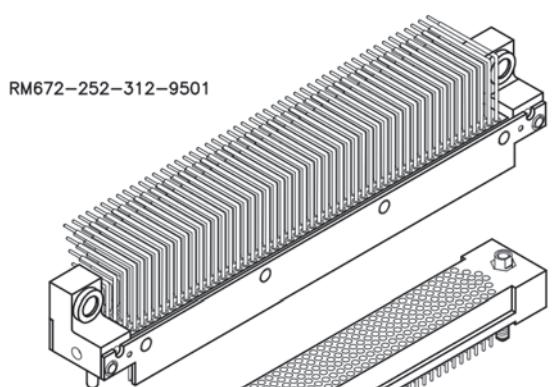


84 Socket, right angle, dip solder, .109"  
85 Socket, right angle, dip solder, .140"  
86 Socket, right angle, dip solder, .172"

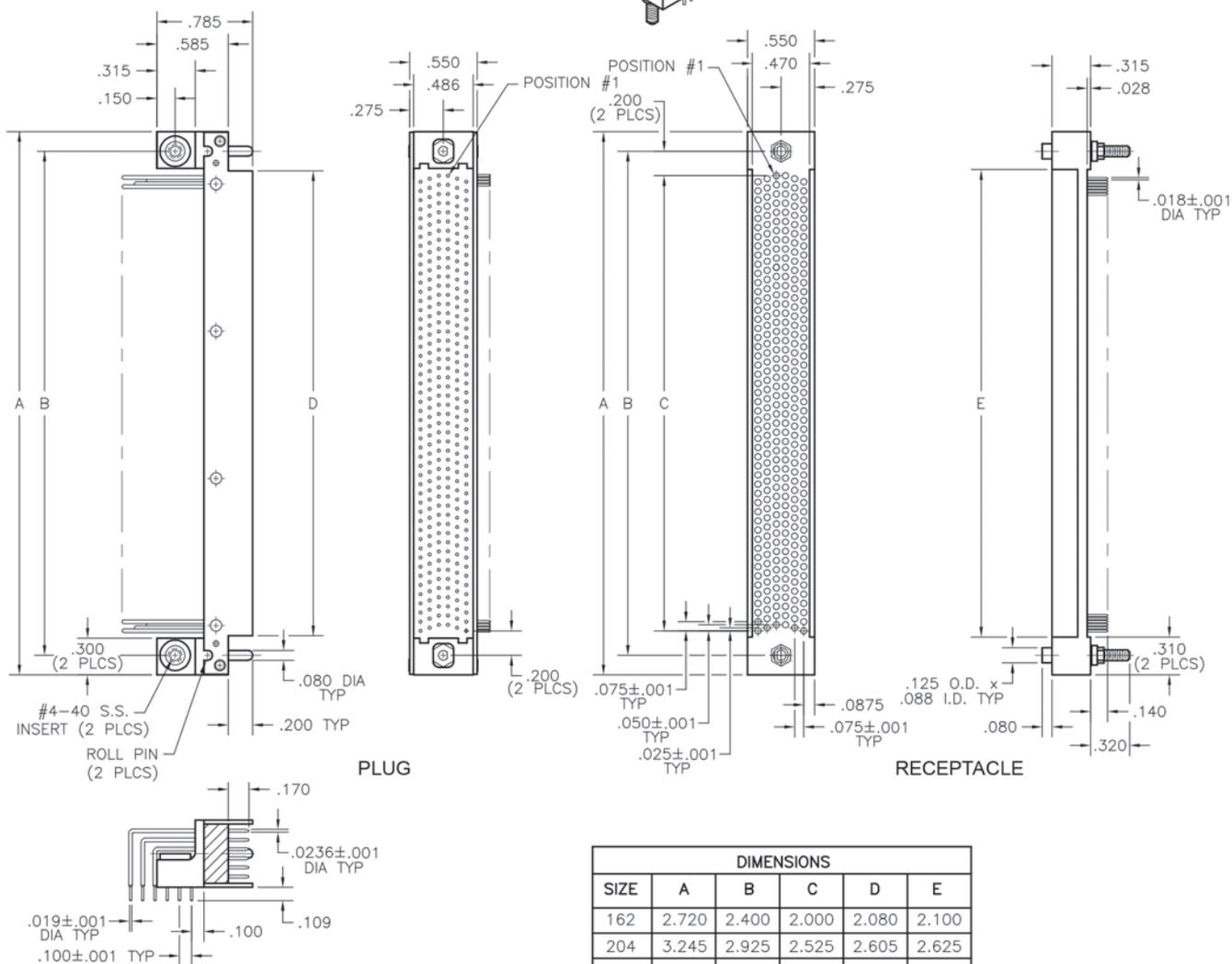
# SIX ROW - DAUGHTERBOARD-TO-MOTHERBOARD OR CHASSIS

**RM6**

0.075" | 162 THROUGH 402 CONTACTS



RM672-252-312-9501



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

## LEAD CONFIGURATION OPTIONS

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

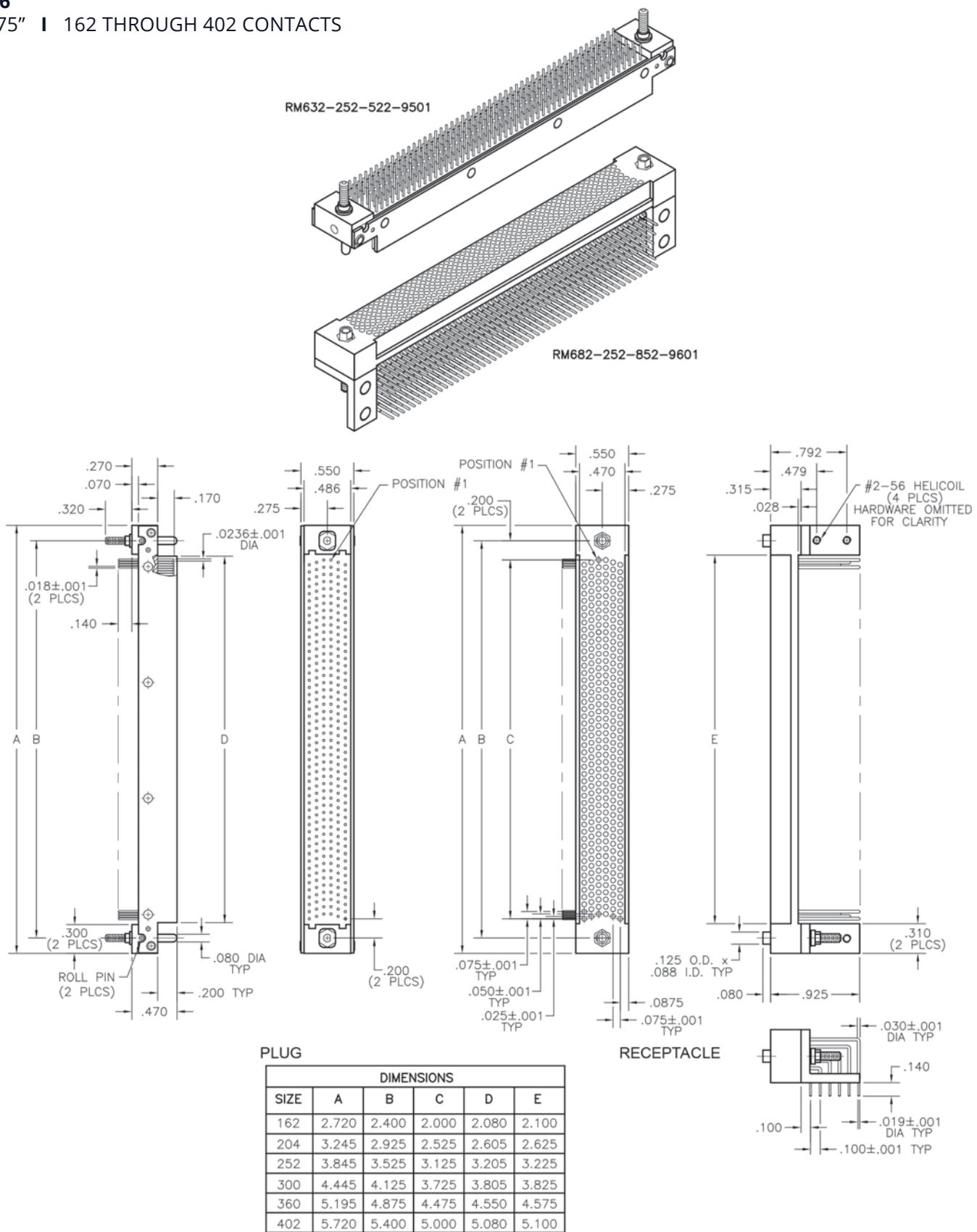
PLUG	RECEPTACLE
<b>SERIES</b>	
RM .075" Screw Machine PC Connector	RM .075" Screw Machine PC Connector
<b>BODY</b>	
6 6-Row	6 6-Row
BODY STYLE: 7 Plug, right angle, with mounting ears	BODY STYLE: 4 Receptacle, straight, without metal mounting ears
BODY MATERIAL: 2 Polyphenylene sulfide (PPS)	BODY MATERIAL: 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: 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)
<b>HARDWARE</b>	
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-62	POLARIZATION: 00 None 01 thru 36 are special identifiers, see page R-62

= Option not RoHS compliant

# SIX ROW - MOTHERBOARD- OR CHASSIS-TO-DAUGHTERBOARD

**RM6**

0.075" | 162 THROUGH 402 CONTACTS



## LEAD CONFIGURATION OPTIONS

		PLUG: RM632-252-522-9501 RECEPTACLE: RM682-252-852-9601 XXXXX-XXX-XXX-XXXX
<b>PLUG</b>		<b>RECEPTACLE</b>
<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 metal mount 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-62		POLARIZATION: 00 None 01 thru 36 are special identifiers, see page R-62

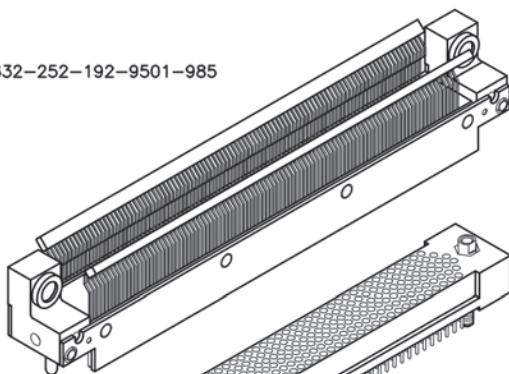
= Option not RoHS compliant

# SIX ROW - DAUGHTERBOARD-TO-MOTHERBOARD OR CHASSIS

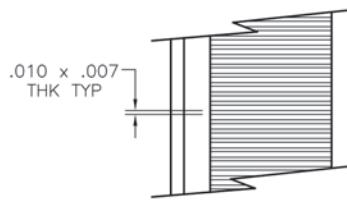
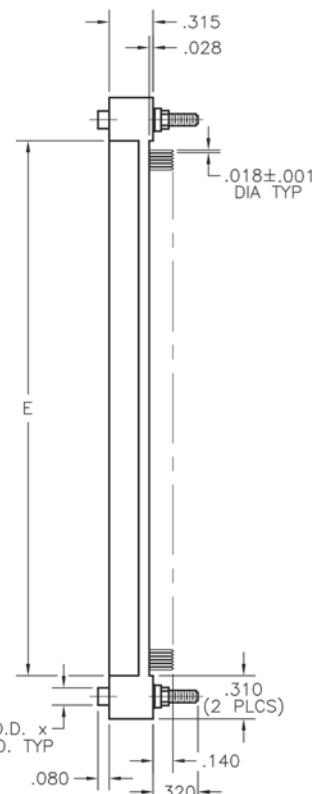
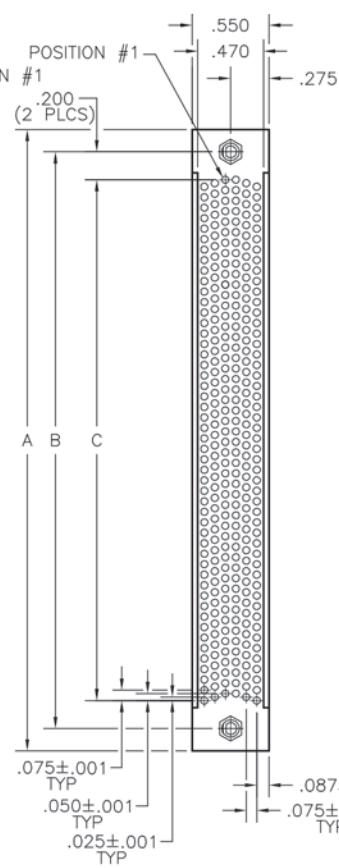
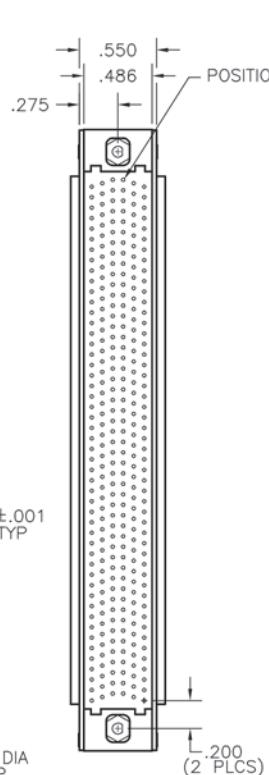
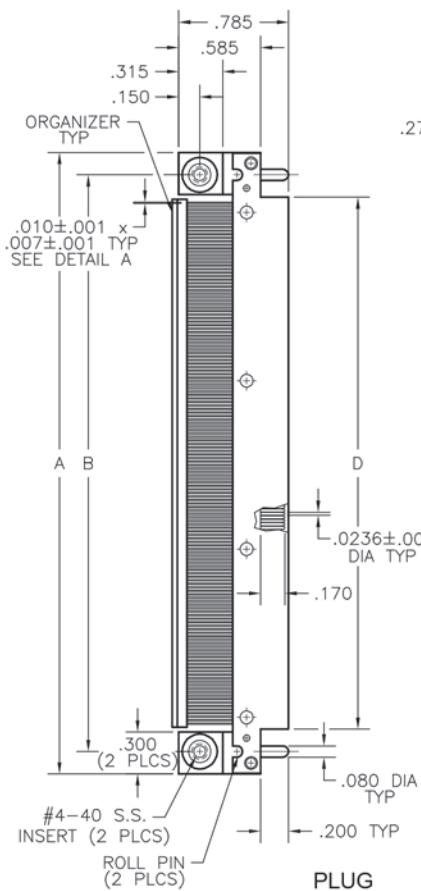
**RM6**

0.075" | 162 THROUGH 402 CONTACTS

RM632-252-192-9501-985



RM642-252-812-9601



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

## LEAD CONFIGURATION OPTIONS

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

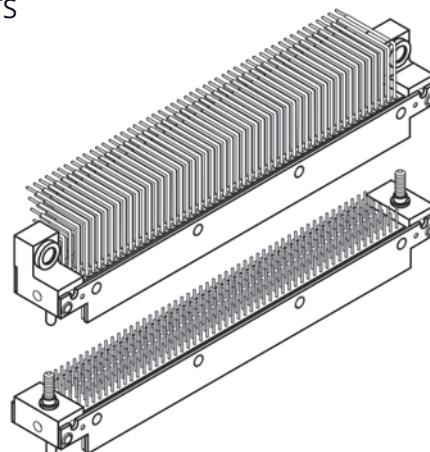
PLUG	RECEPTACLE
<b>SERIES</b>	
RM .075" Screw Machine PC Connector	RM .075" Screw Machine PC Connector
<b>BODY</b>	
6 6-Row	6 6-Row
BODY STYLE: 3 Plug, SMT, with mounting ears	BODY STYLE: 4 Receptacle, straight, without mounting ears
BODY MATERIAL: 2 Polyphenylene sulfide (PPS)	2 Polyphenylene sulfide (PPS)
<b>SIZE</b>	
162, 204, 252, 300, 360, 402	162, 204, 252, 300, 360, 402
<b>CONTACTS</b>	
TYPE CONTACTS/TERMINATIONS: 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)
<b>HARDWARE</b>	
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-62	POLARIZATION: 00 None 01 thru 36 are special identifiers, see page R-62
<b>OPTIONS</b>	
9XX SMT configuration code, see page R-56	

= Option not RoHS compliant

## SIX ROW – RIGHT ANGLE PTH PLUG STRAIGHT PTH PLUG

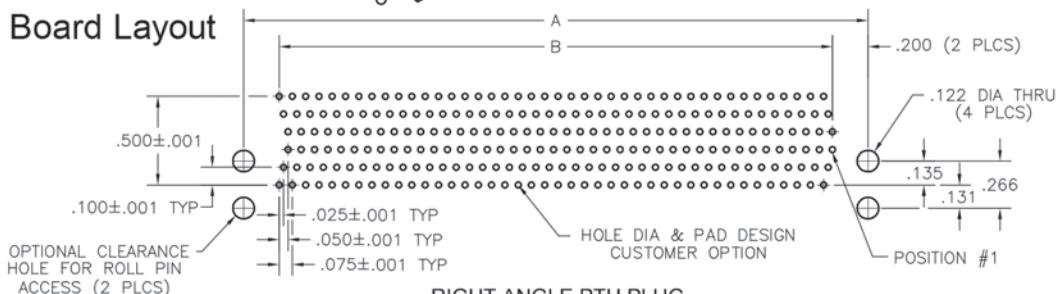
## RM6 – RECOMMENDED BOARD LAYOUT

0.075" | 162 THROUGH 402 CONTACTS

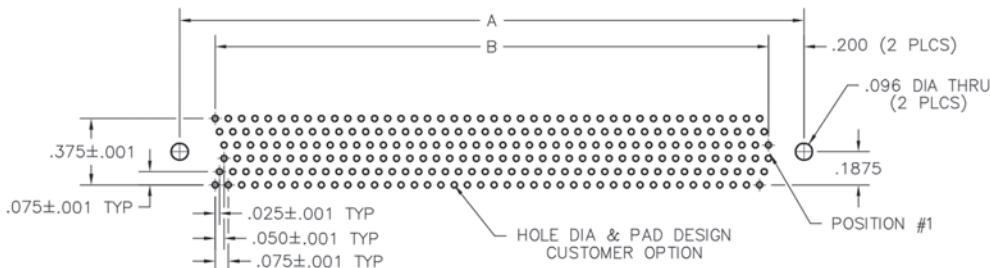


DIMENSIONS		
SIZE	A	B
162	2.400	2.000
204	2.925	2.525
252	3.525	3.125
300	4.125	3.725
360	4.875	4.475
402	5.400	5.000

## Board Layout



RIGHT ANGLE PTH PLUG  
PC BOARD VIEWED FROM COMPONENT SIDE

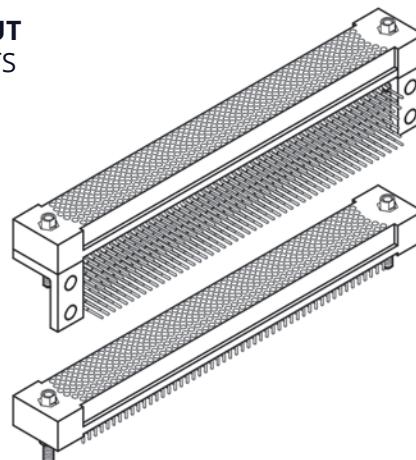


STRAIGHT PTH PLUG  
PC BOARD VIEWED FROM COMPONENT SIDE

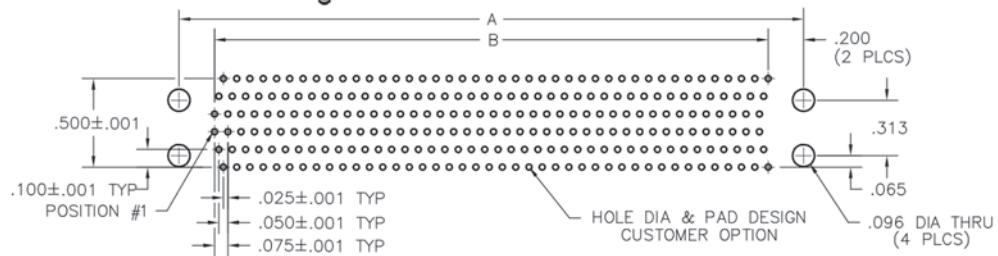
SIZE	CONTACT ID	SIZE	CONTACT ID
162	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <span>162159156</span>  <span>161158155</span>  <span>(160)157154</span>  <span>79 76 73</span>  <span>80 77 74</span>  <span>81 78 75</span> </div> <div style="text-align: center;"> <span>90 87 84</span>  <span>89 86 83</span>  <span>88 85 82</span>  <span>7 4 1</span>  <span>8 5 2</span>  <span>9 6 3</span> </div> </div>	300	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <span>500297294</span>  <span>299296293</span>  <span>298295292</span>  <span>148145142</span>  <span>149146143</span>  <span>(150)147144</span> </div> <div style="text-align: center;"> <span>159156153</span>  <span>158155152</span>  <span>(157)154151</span>  <span>7 4 1</span>  <span>8 5 2</span>  <span>9 6 3</span> </div> </div>
204	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <span>204201198</span>  <span>203200197</span>  <span>202199196</span>  <span>100 97 94</span>  <span>101 98 95</span>  <span>102 99 96</span> </div> <div style="text-align: center;"> <span>1110108105</span>  <span>110107104</span>  <span>109106103</span>  <span>7 4 1</span>  <span>8 5 2</span>  <span>9 6 3</span> </div> </div>	360	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <span>560357354</span>  <span>359356353</span>  <span>358355352</span>  <span>178175172</span>  <span>179176173</span>  <span>180177174</span> </div> <div style="text-align: center;"> <span>189186183</span>  <span>188185182</span>  <span>187184181</span>  <span>7 4 1</span>  <span>8 5 2</span>  <span>9 6 3</span> </div> </div>
252	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <span>25249246</span>  <span>251248245</span>  <span>250247244</span>  <span>(241)21118</span>  <span>125122119</span>  <span>126123120</span> </div> <div style="text-align: center;"> <span>135132129</span>  <span>134131128</span>  <span>133130127</span>  <span>7 4 1</span>  <span>8 5 2</span>  <span>9 6 3</span> </div> </div>	402	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <span>402399396</span>  <span>401398395</span>  <span>400397394</span>  <span>(199)196193</span>  <span>200197194</span>  <span>201198195</span> </div> <div style="text-align: center;"> <span>210207204</span>  <span>209206203</span>  <span>208205202</span>  <span>7 4 1</span>  <span>8 5 2</span>  <span>9 6 3</span> </div> </div>

# SIX ROW - RIGHT ANGLE PTH RCPT STRAIGHT PTH RCPT

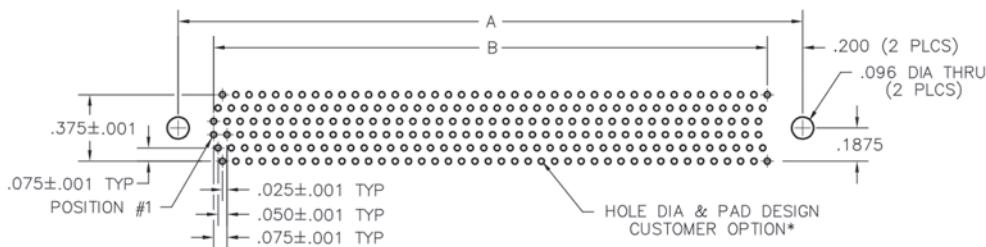
## RM6 - RECOMMENDED BOARD LAYOUT 0.075" | 162 THROUGH 402 CONTACTS



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      Tin-lead plating thickness: .0006" maximum  
Minimum nominal board thickness: .062"      Electroplated tin-lead composition: 63/37 (Sn/Pb)  
Drilled hole: .0319"- .0339"      Finished hole diameter: .028"±.002"  
Copper plating thickness: .0010" minimum

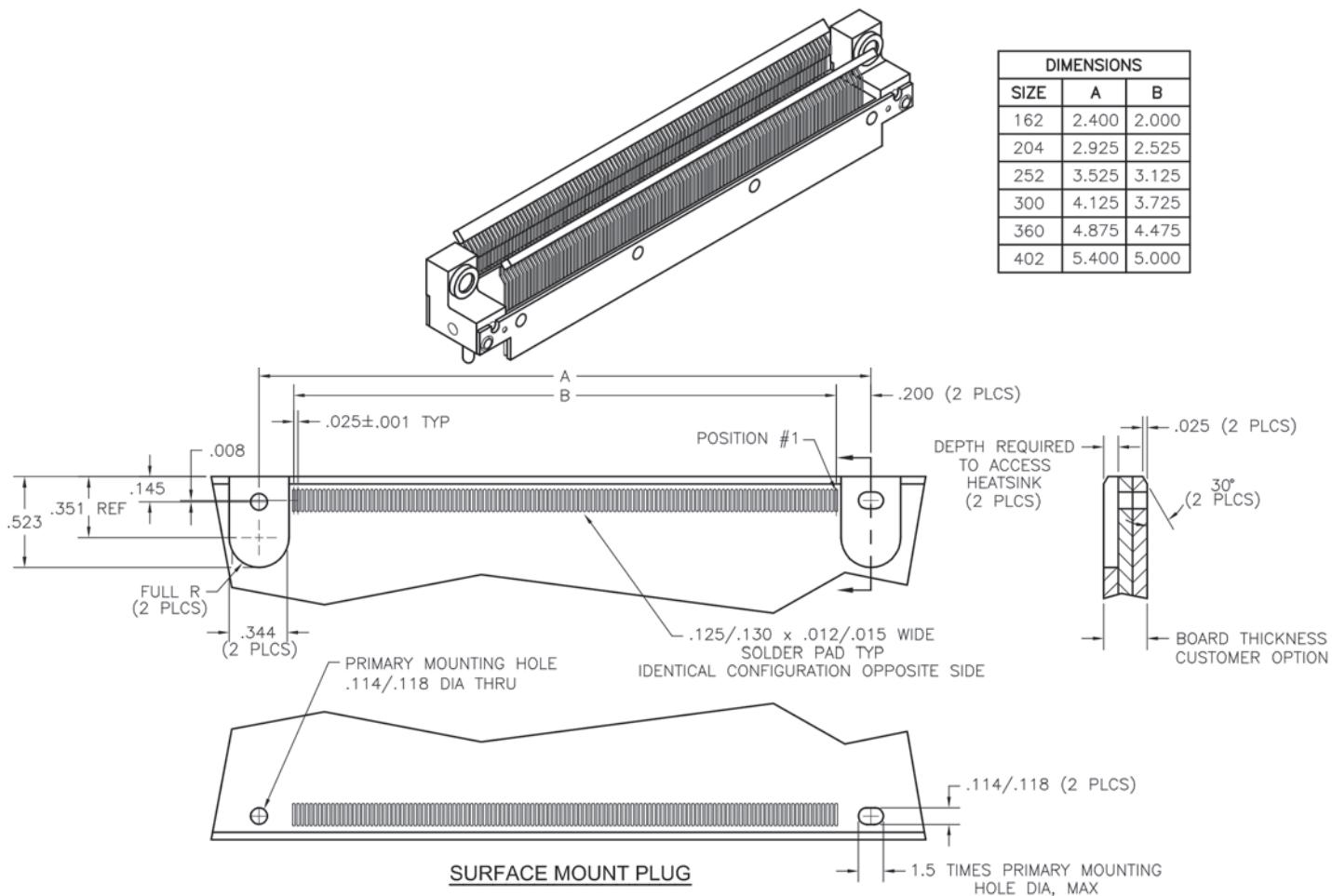
SIZE	CONTACT ID	SIZE	CONTACT ID				
162	(84 87 90) (83 86 89) (82 85 88) (1 4 7) (2 5 8) (3 6 9)	162	(156 159 162) (155 158 161) (154 157 160) (73 76 79) (74 77 80) (75 78 81)	300	(153 156 159) (152 153 158) (151 154 157) (1 4 7) (2 5 8) (3 6 9)	300	(29 29 300) (29 29 299) (29 29 298) (142 143 148) (143 146 149) (144 147 150)
204	(105 108 111) (104 107 110) (103 106 109) (1 4 7) (2 5 8) (3 6 9)	204	(198 201 204) (197 200 203) (196 199 202) (94 97 100) (95 98 101) (96 99 102)	360	(183 186 189) (182 185 188) (181 184 187) (1 4 7) (2 5 8) (3 6 9)	360	(35 435 436) (35 335 359) (35 235 358) (172 173 178) (173 176 179) (174 177 180)
252	(129 132 135) (128 131 134) (127 130 133) (1 4 7) (2 5 8) (3 6 9)	252	(246 249 252) (245 248 251) (244 247 250) (118 121 124) (119 122 125) (120 123 126)	402	(204 207 210) (203 206 209) (202 205 208) (1 4 7) (2 5 8) (3 6 9)	402	(39 39 402) (39 339 401) (39 439 400) (193 196 199) (194 197 200) (195 198 201)

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## SIX ROW – STRAIGHT SMT PLUG

## RM6 – RECOMMENDED BOARD LAYOUT

0.075" | 162 THROUGH 402 CONTACTS



PLEASE CONSULT THE MOLEX WEBSITE FOR THE LATEST VERSION OF THIS INFORMATION PRIOR TO BEGINNING ANY DESIGN WORK.  
SOURCE: CTR061 REV D

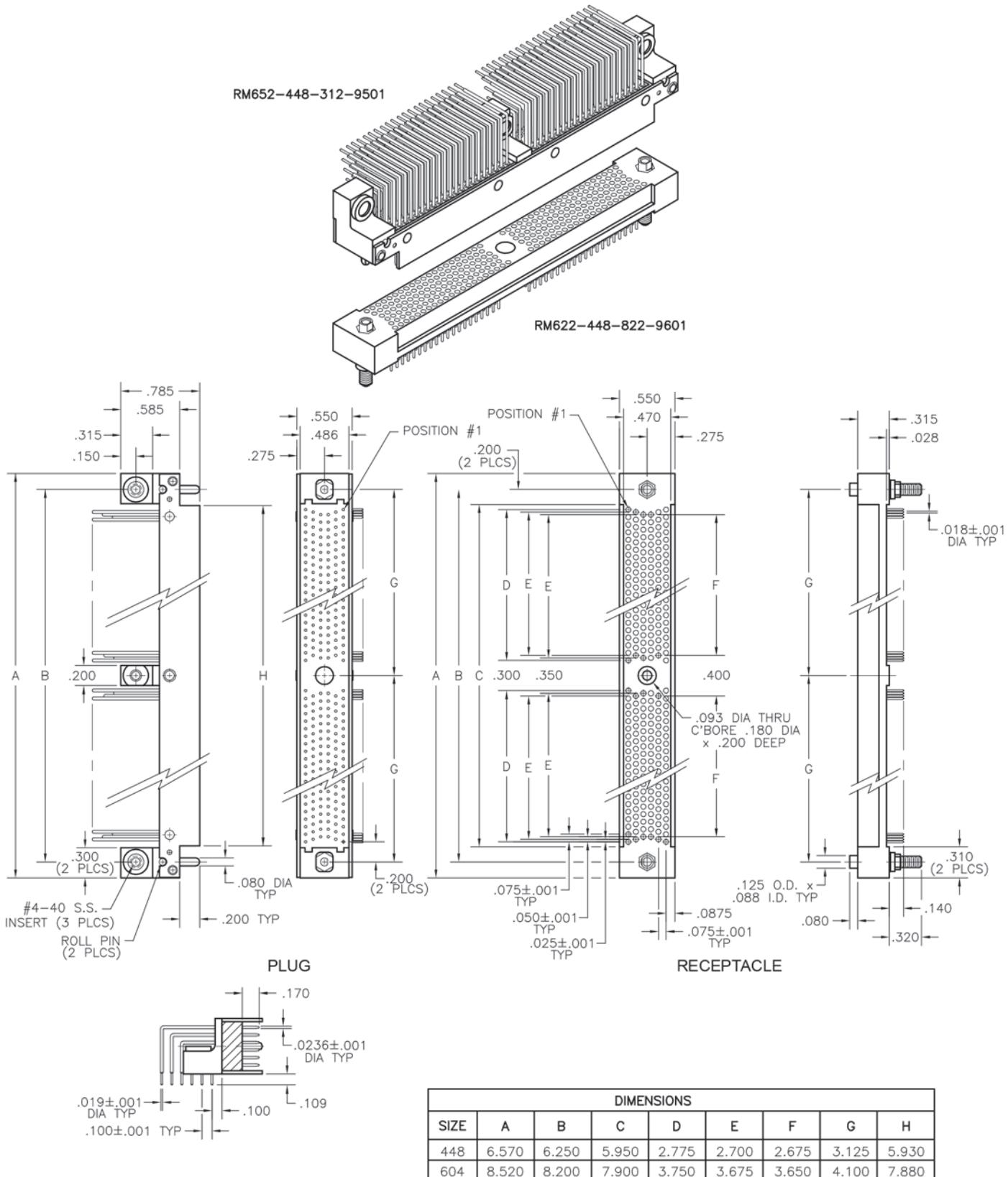
SOURCE: CTR061-REV D

AIRBORN R SERIES CONNECTORS | P-71

# SIX ROW - DAUGHTERBOARD-TO-MOTHERBOARD OR CHASSIS

**RM6**

0.075" | 448 THROUGH 604 CONTACTS



## LEAD CONFIGURATION OPTIONS

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

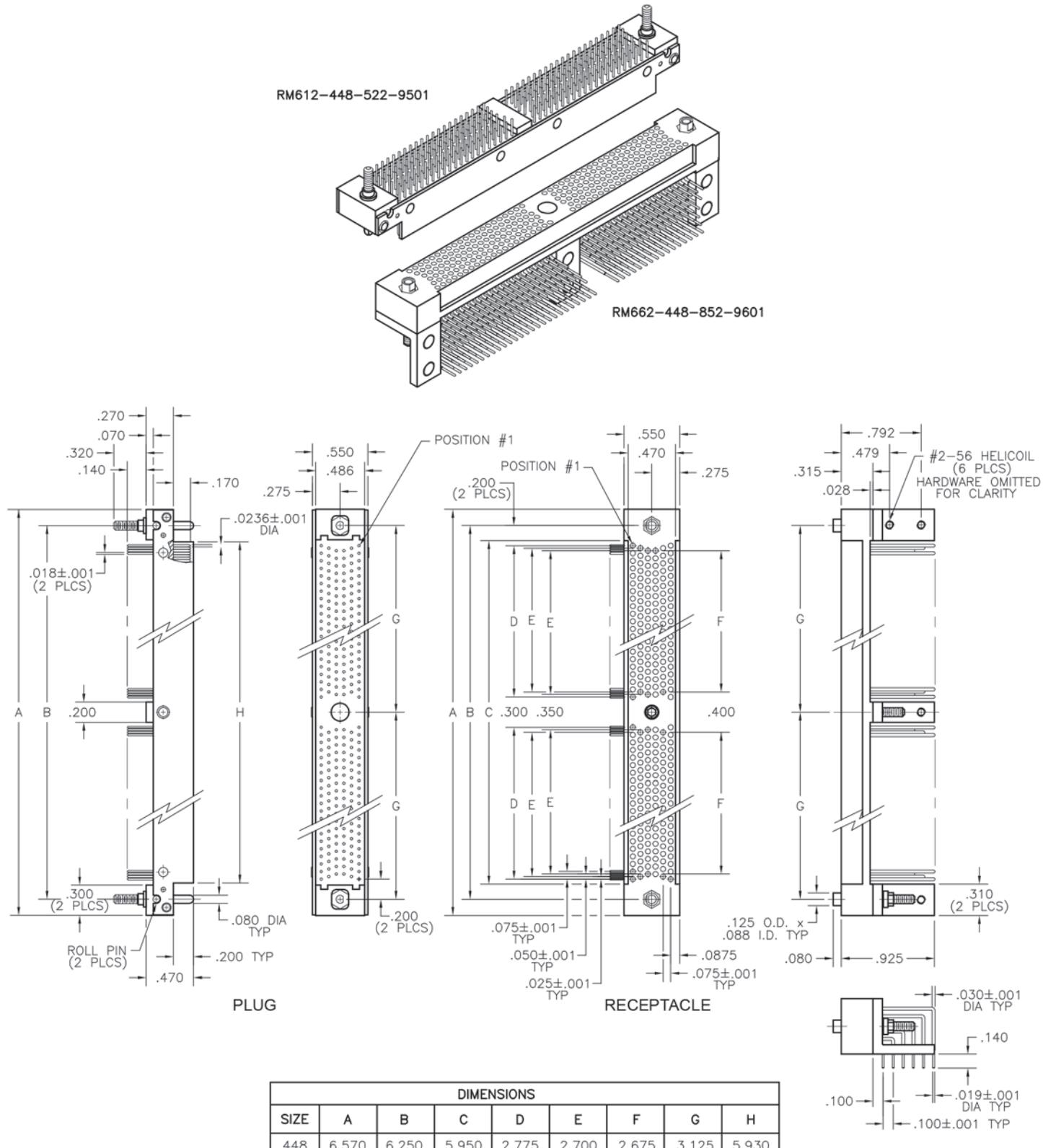
PLUG	RECEPTACLE				
<b>SERIES</b>					
RM .075" Screw Machine PC Connector	RM .075" Screw Machine PC Connector				
BODY					
6 6-Row	6 6-Row				
BODY STYLE: 5 Plug, right angle, with mounting ears	BODY STYLE: 2 Receptacle, straight, without mounting ears				
BODY MATERIAL: 2 Polyphenylene sulfide (PPS)	BODY MATERIAL: 2 Polyphenylene sulfide (PPS)				
SIZE					
448, 604	448, 604				
CONTACTS					
TYPE 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:					
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:					
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:					
00 None	00 None				
01 thru 36 are special identifiers, see page R-62	01 thru 36 are special identifiers, see page R-62				

= Option not RoHS compliant

# SIX ROW - MOTHERBOARD- OR CHASSIS-TO-DAUGHTERBOARD

**RM6**

0.075" | 448 THROUGH 604 CONTACTS



## LEAD CONFIGURATION OPTIONS

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

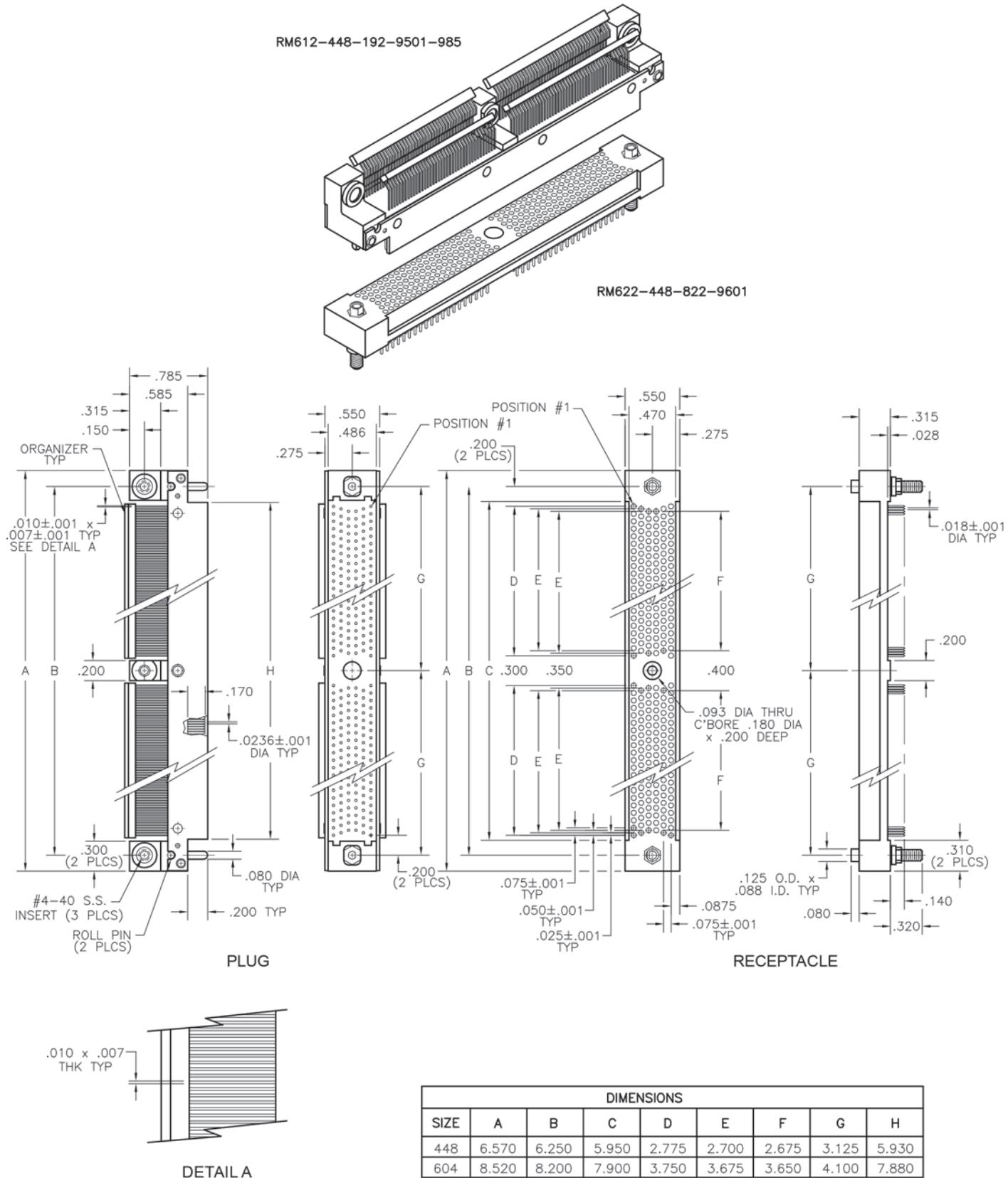
PLUG	RECEPTACLE
<b>SERIES</b>	
RM .075" Screw Machine PC Connector	RM .075" Screw Machine PC Connector
<b>BODY</b>	
6 6-Row	6 6-Row
BODY STYLE: 1 Plug, straight, without mounting ears	BODY STYLE: 6 Receptacle, right angle, with metal mount brackets
BODY MATERIAL: 2 Polyphenylene sulfide (PPS)	2 Polyphenylene sulfide (PPS)
<b>SIZE</b>	
448, 604	448, 604
<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 #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	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
POLARIZATION: 00 None 01 thru 36 are special identifiers, see page R-62	POLARIZATION: 00 None 01 thru 36 are special identifiers, see page R-62

= Option not RoHS compliant

# SIX ROW - DAUGHTERBOARD-TO-MOTHERBOARD OR CHASSIS

**RM6**

0.075" | 448 THROUGH 604 CONTACTS



## LEAD CONFIGURATION OPTIONS

PLUG: RM612-448-192-9501-985  
 RECEPTACLE: RM622-448-822-9601  
 XXXX-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, SMT, with mounting ears	BODY STYLE: 2 Receptacle, straight, without mounting ears
BODY MATERIAL: 2 Black anodized side shield (PPS) 5 Nickel plated side shield (PPS)	BODY MATERIAL: 2 Black anodized 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)	75 Socket, straight, dip solder, .250" x .018" dia
39 Pin, SMT, .014" x .007" tail, unscored	76 Socket, straight, solder cup
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:	
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:	
00 None	00 None
01 thru 36 are special identifiers, see page R-62	01 thru 36 are special identifiers, see page R-62

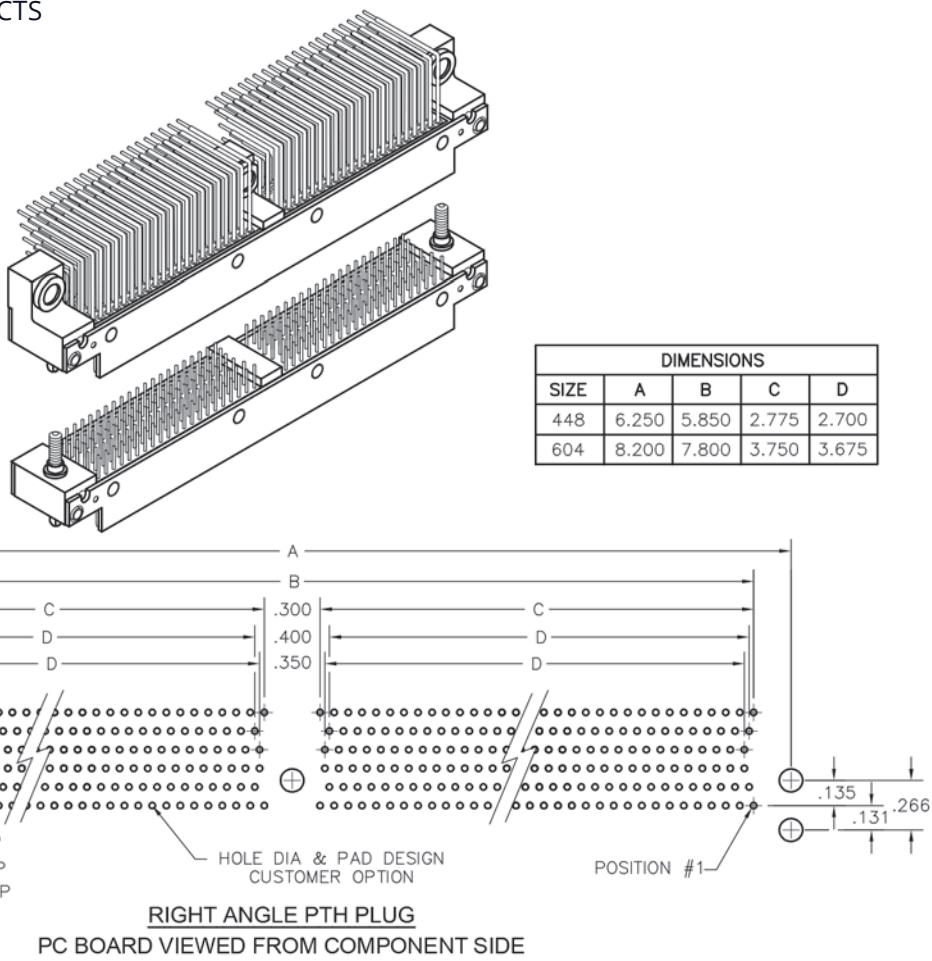
### OPTIONS

9XX SMT configuration code, see page R-56

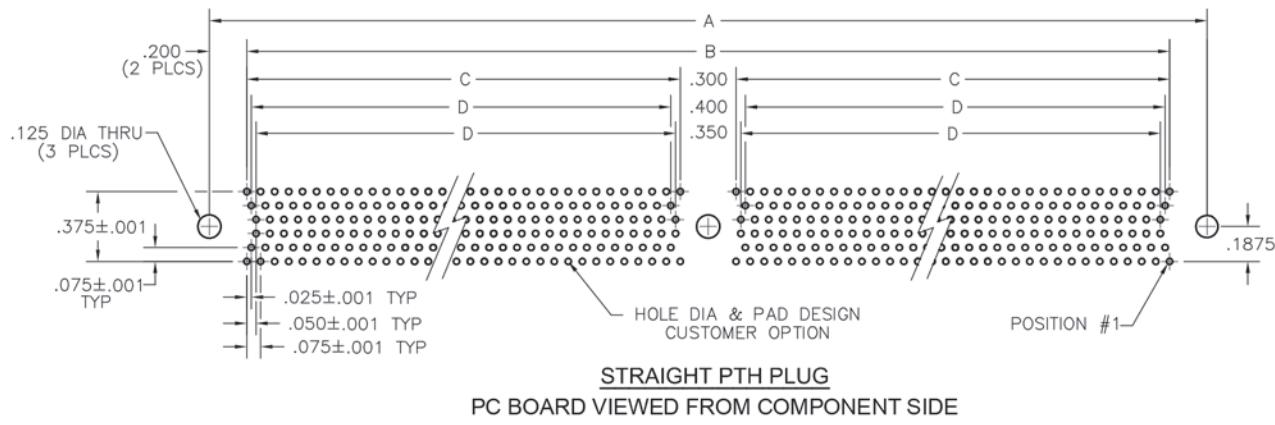
= Option not RoHS compliant

# SIX ROW - RIGHT ANGLE PTH PLUG STRAIGHT PTH PLUG

## RM6 - RECOMMENDED BOARD LAYOUT 0.075" | 448 THROUGH 604 CONTACTS



RIGHT ANGLE PTH PLUG  
PC BOARD VIEWED FROM COMPONENT SIDE

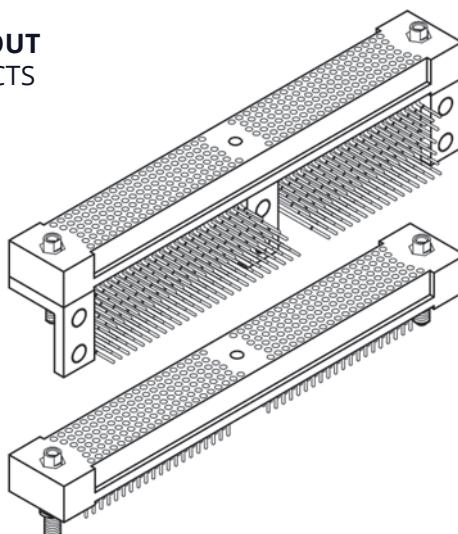


STRAIGHT PTH PLUG  
PC BOARD VIEWED FROM COMPONENT SIDE

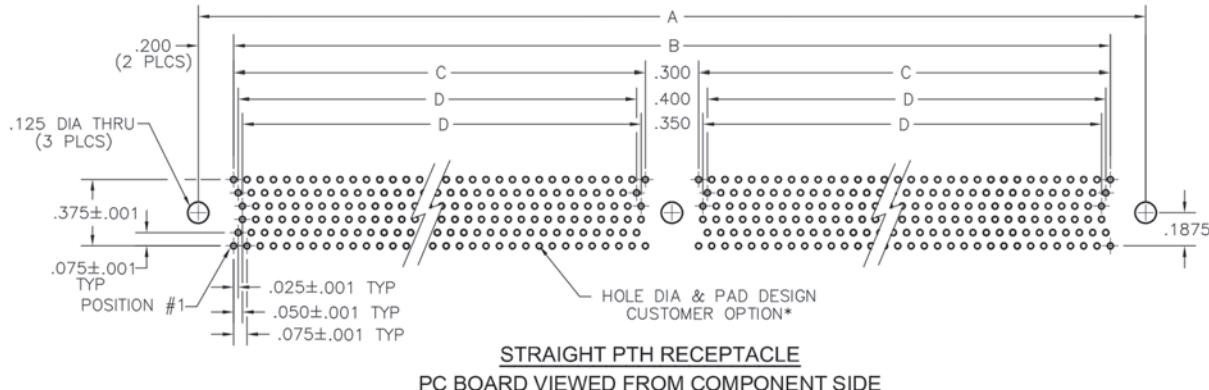
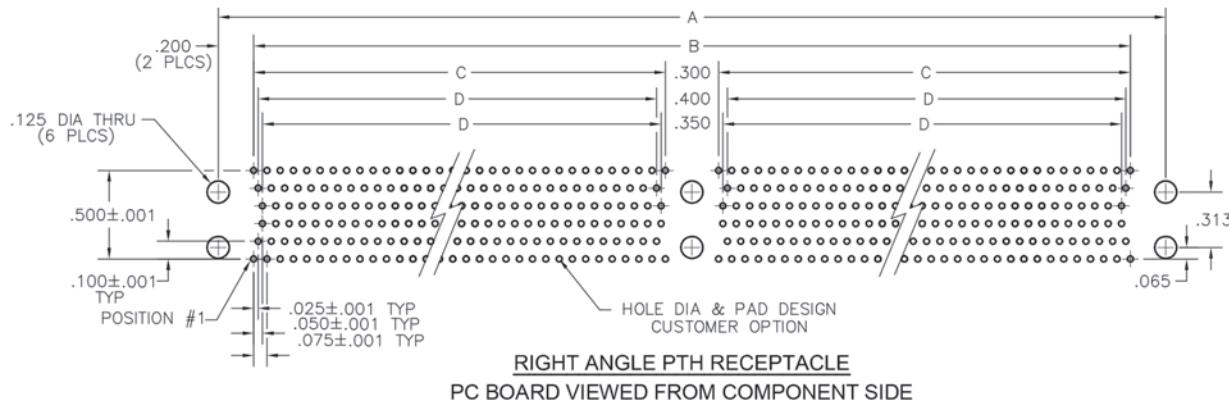
SIZE	CONTACT ID				SIZE	CONTACT ID			
448	448445442 447444441 4464443440 222219216 223220217 224221218	343340337 343342339 344341338 120117114 121118115 119116113	336333330 334331328 335332329 111108105 110107104 112109106	231228225 232229226 233230227 9 6 3 8 5 2 7 4 1	604	604601598 603600597 602599596 300297294 301298295 302299296	460457454 462459456 461458455 159156153 160157154 158155152	453450447 451448445 452449446 150147144 149146143 151148145	309306303 310307304 311308305 9 6 3 8 5 2 7 4 1

# SIX ROW - RIGHT ANGLE PTH RCPT STRAIGHT PTH RCPT

## RM6 - RECOMMENDED BOARD LAYOUT 0.075" | 448 THROUGH 604 CONTACTS



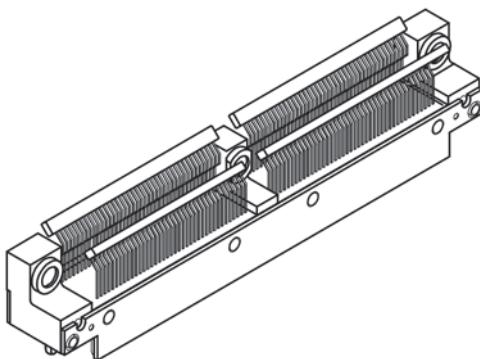
DIMENSIONS				
SIZE	A	B	C	D
448	6.250	5.850	2.775	2.700
604	8.200	7.800	3.750	3.675



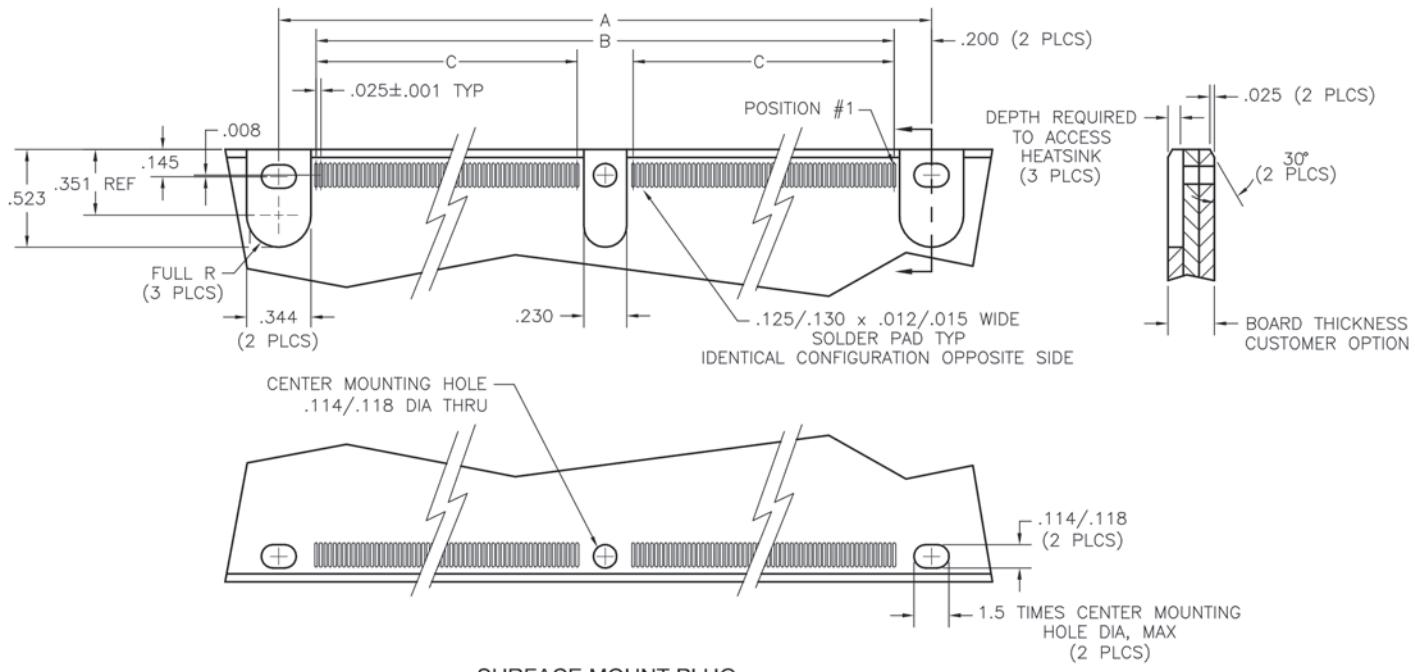
SIZE	CONTACT ID				SIZE	CONTACT ID			
448	225 228 231 226 229 232 227 230 233 3 6 9 2 5 8 1 4 7	330 333 336 328 331 334 329 332 335 105 108 111 104 107 110 106 109 112	337 340 343 339 342 345 338 341 344 114 117 120 115 118 121 113 116 119	442 445 448 441 444 447 440 443 446 216 219 222 217 220 223 218 221 224	503 506 509 504 507 510 505 508 511 3 6 9 2 5 8 1 4 7	447 450 453 445 448 451 446 449 452 144 147 150 143 146 149 145 148 151	454 457 460 456 459 462 455 458 461 153 156 159 154 157 160 152 155 158	598 601 604 597 600 603 596 599 602 294 297 300 295 298 301 296 299 302	
604									

# SIX ROW - STRAIGHT SMT PLUG

## RM6 - RECOMMENDED BOARD LAYOUT 0.075" | 448 THROUGH 604 CONTACTS



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

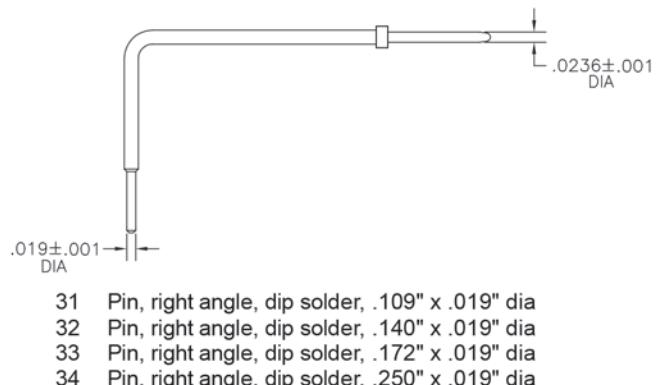
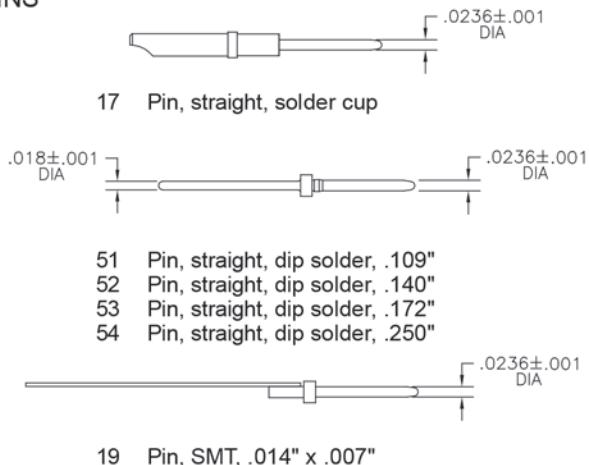


SIZE	CONTACT ID	SIZE	CONTACT ID
448	C224D C223D C222D C221D C220D C117D C116D C115D C114D C113D	604	C336D C335D C334D C333D C332D C112D C111D C110D C109D C108D C5D C4D C3D C2D C1D C229D C228D C227D C226D C225D C604D C603D C602D C601D C600D C302D C301D C300D C299D C298D C156D C155D C154D C153D C152D C145D C1457D C1451D C1456D C1455D C1454D C151D C150D C149D C148D C147D C453D C452D C451D C450D C449D C307D C306D C305D C304D C303D

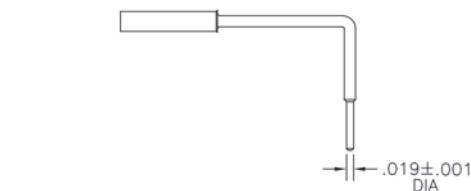
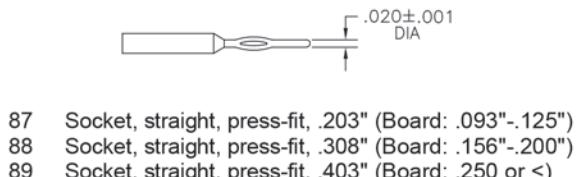
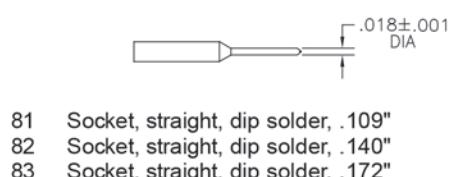
# CONTACTS SIX ROW

## Pins and Sockets

### PINS



### SOCKETS



# SPECIFICATIONS – STACKABLE COMPLIANT PIN CONNECTORS

## MATERIALS AND FINISHES\*

<b>CONTACTS:</b>	BeCu, per ASTM-B768 (BeCu C17410 brush alloy 174).
<b>CONTACT FINISHES:</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>JACKSOCKETS:</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-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> <i>(Unless otherwise specified)</i>	Angles: $\pm 5^\circ$ Decimals: $\pm 0.010"$ ; Fractions: $\pm 1/64"$

### NOTES

Molex can manufacture special configurations for your exact specifications.

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

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# PERFORMANCE REFERENCE STACKABLE COMPLIANT PIN CONNECTORS (075)

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

## CONTACT

**CURRENT RATING:** 3 amperes

## OPERATING

**TEMPERATURE:** -65° to +125° C or -85° to +257° F

**DWV TEST VOLTAGE:** 750V (RMS), 60 Hz at sea level

## INSULATION

**RESISTANCE:** 5,000 megohms minimum at 500 VDC

**DURABILITY:** 500 connector mating cycles

## CONTACT

**RESISTANCE:** 3 to 5 milliohms (contact length dependent)

## CONTACT

**ENGAGEMENT FORCE:** 4.0 oz (113 g) maximum with 0.0246" diameter test pin

## CONTACT

**SEPARATION FORCE:** 0.5 oz (14 g) minimum with 0.0226" diameter test pin

## TOTAL

**MATING FORCE:** Maximum, 4.0 oz (113 g) X number of contacts

Average 2.5 oz (70 g) X number of contacts

## COMPLIANT

### INSERTION AND

### REMOVAL FORCES:

Maximum insertion force - 22.5 pounds (10.22 Kg)

Minimum retention force after conditioning - 4.5 pounds (2.04 Kg)

## SUGGESTED BOARD

### AND PLATED THROUGH-

### HOLE REQUIREMENTS:

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)

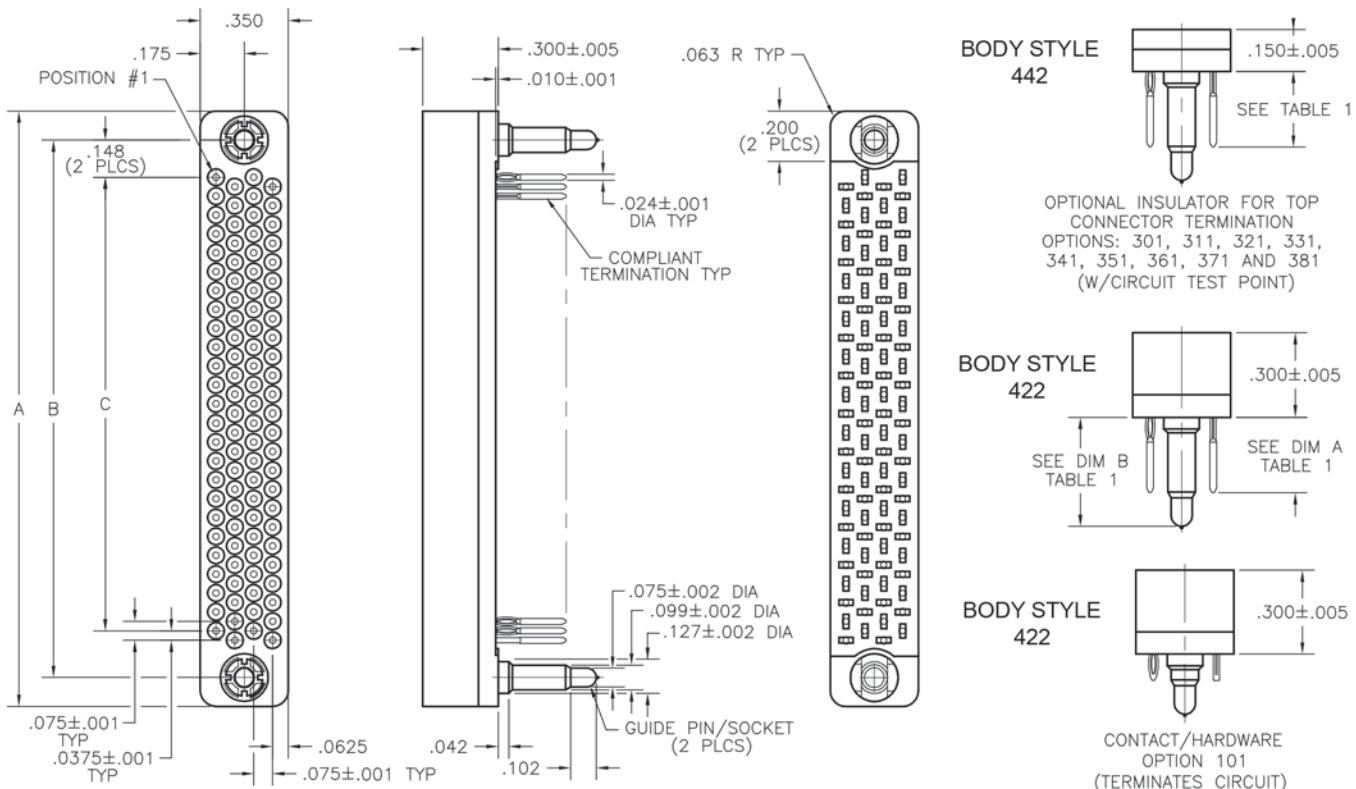
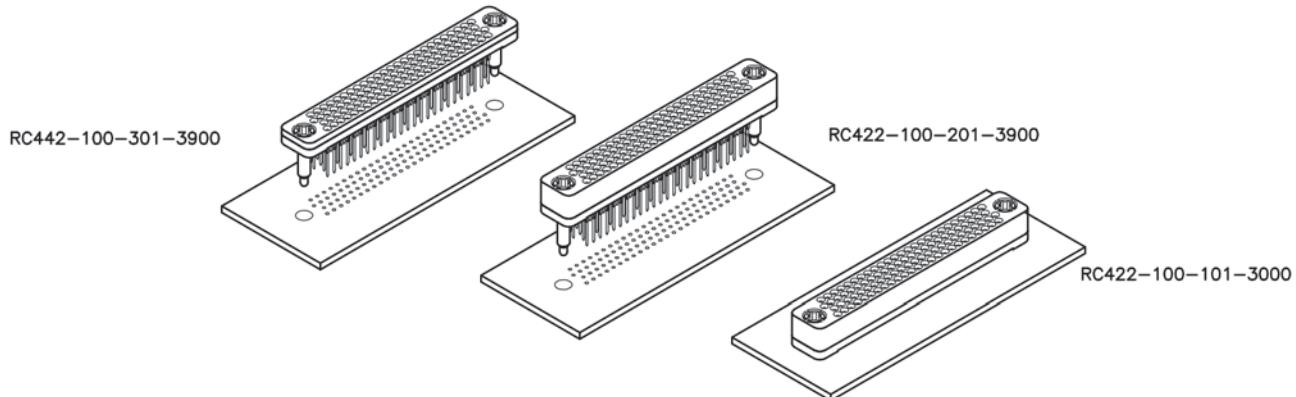
Finished hole diameter - .028" ±.002

**molex**

# FOUR ROW - PRESS-FIT STACKABLE

RC4

0.075" | 28 THROUGH 300 CONTACTS



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

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

## LEAD CONFIGURATION OPTIONS

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

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

### CONTACT/TERMINATION TYPES



101



201 251  
211 261  
221 271  
231 281  
241



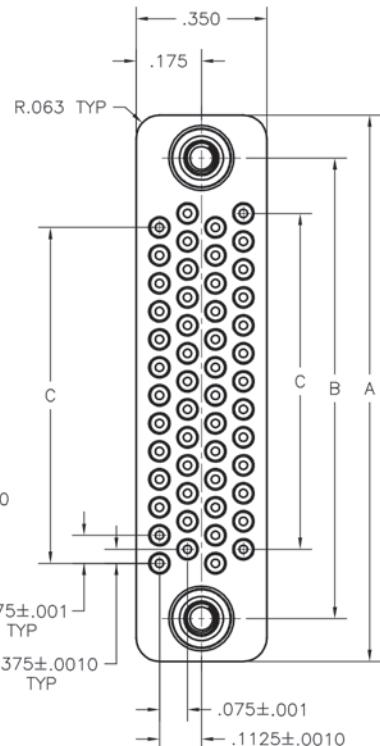
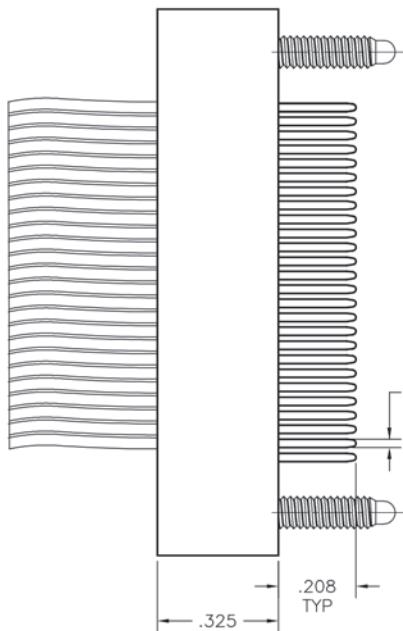
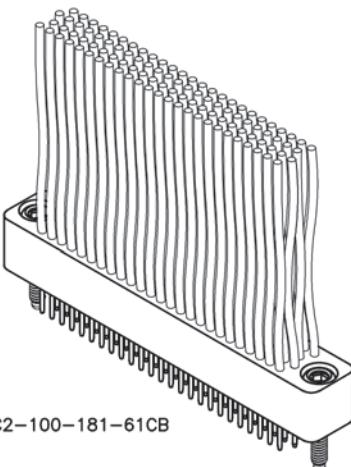
301 351  
311 361  
321 371  
331 381  
341

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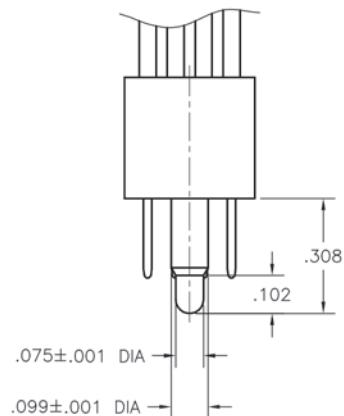
# FOUR ROW - PRESS-FIT STACKABLE CABLE MATE

RC4

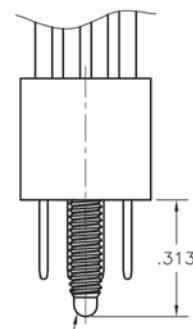
0.075" | 28 THROUGH 152 CONTACTS



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



HARDWARE STYLE  
57



#2-56 JACKSCREW

HARDWARE STYLE  
61

## LEAD CONFIGURATION OPTIONS

		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 (+1"/-0")	
Code	Size	Color	Code	Length
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			K	60"
N	24 awg	Ten repeating	L	66"
P	24 awg	White	M	72"
R	26 awg	Ten repeating	N	84"
S	26 awg	White	P	96"
T	28 awg	Ten repeating	R	108"
U	28 awg	White	S	120"
V	30 awg	Ten repeating		
W	30 awg	White		

### Part number example:

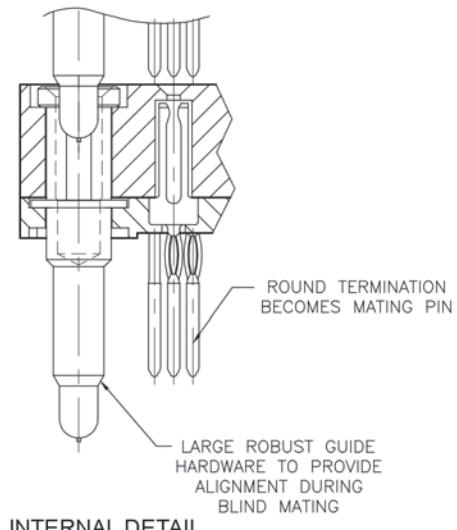
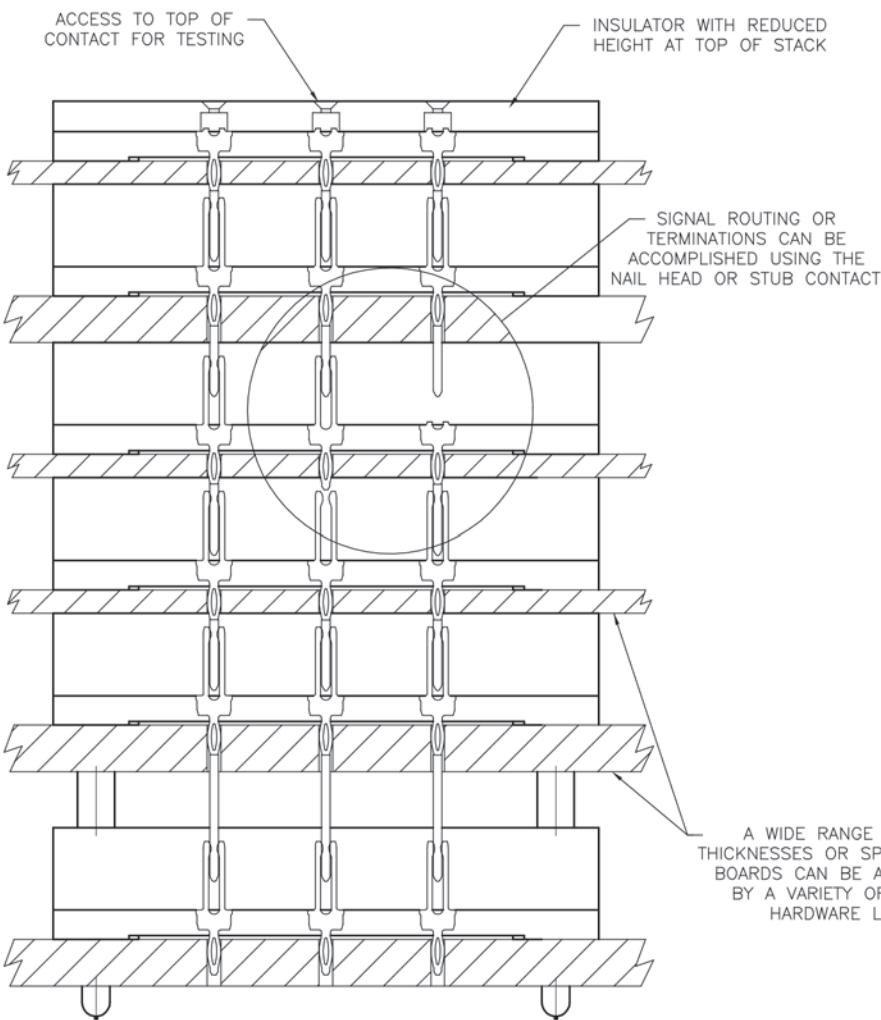
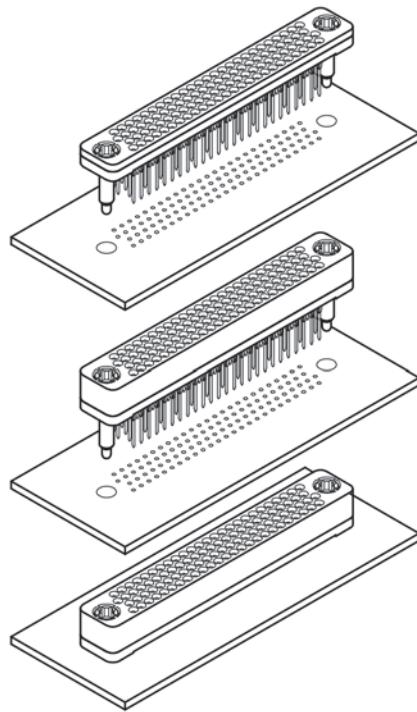
RC4C2-100-181-61CB  
 Type and Color ———  
 Length ———

### Ten repeating colors:

Black  
 Brown  
 Red  
 Orange  
 Yellow  
 Green  
 Blue  
 Violet  
 Grey  
 White

# FOUR ROW – PRESS-FIT STACKABLE

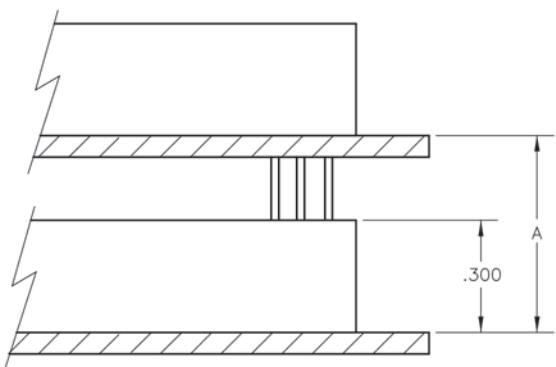
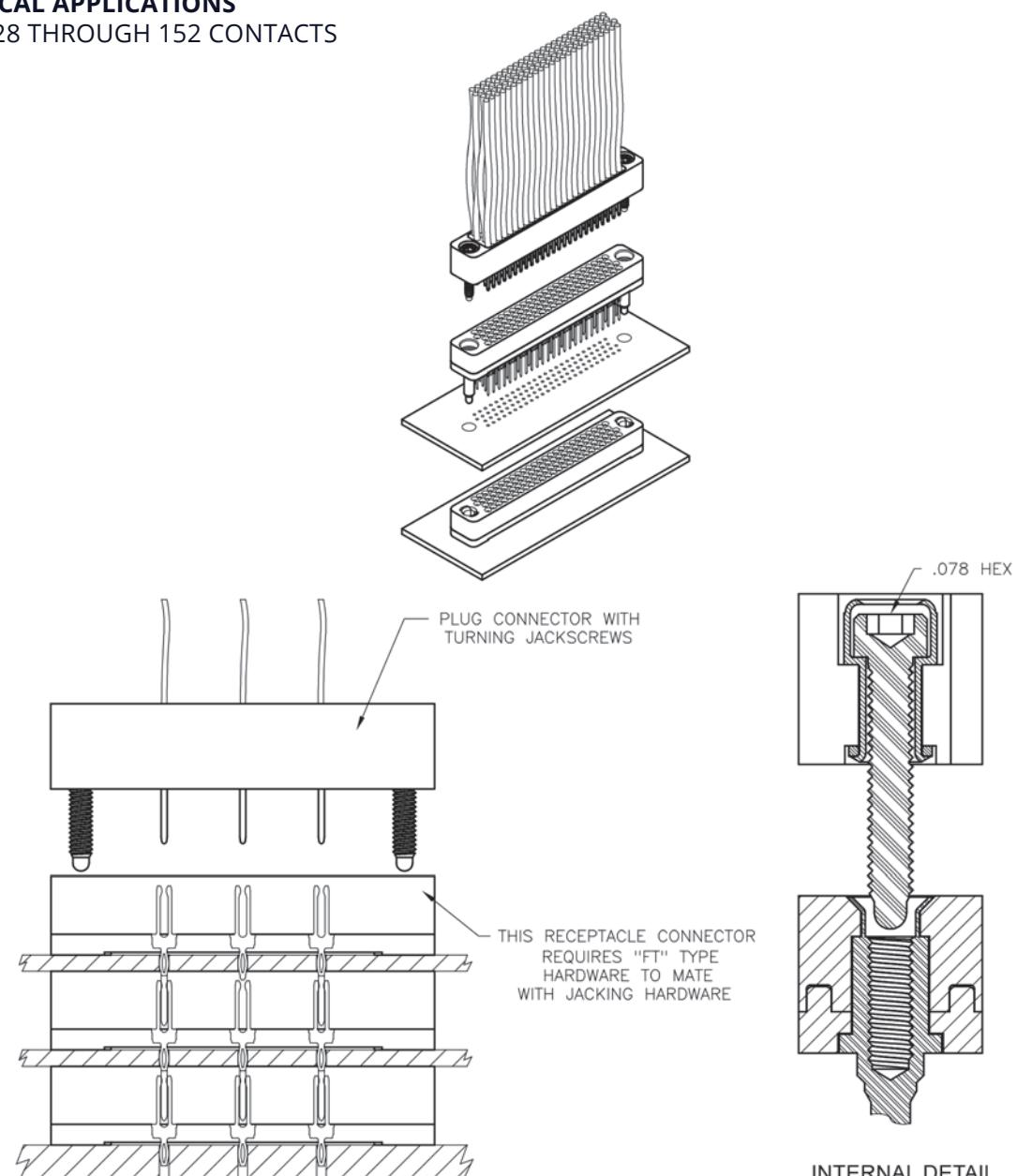
**RC4 – TYPICAL APPLICATIONS**  
0.075" | 28 THROUGH 300 CONTACTS



INTERNAL DETAIL

# FOUR ROW - PRESS-FIT STACKABLE WITH CABLE MATE

RC4 - TYPICAL APPLICATIONS  
0.075" | 28 THROUGH 152 CONTACTS



## 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.

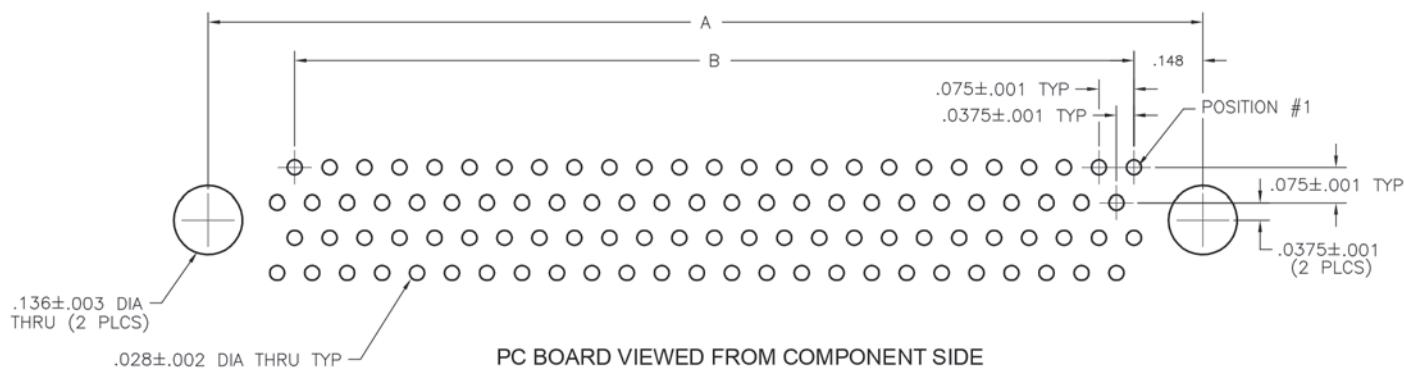
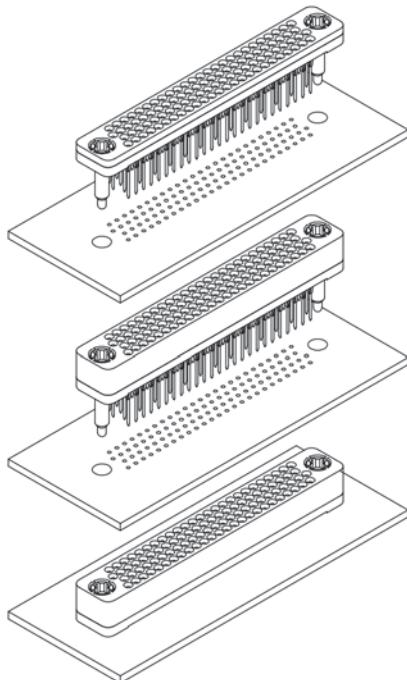
The contact termination option will be a length between the minimum and maximum pin engagement measurement. Contact lengths can be found on page R-86.

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# FOUR ROW – PRESS-FIT STACKABLE

## RM4 – RECOMMENDED BOARD LAYOUT

0.075" | 28 THROUGH 300 CONTACTS



SIZE	CONTACT ID	SIZE	CONTACT ID	SIZE	CONTACT ID
28	7 6 5 4 3 2 1 14 13 12 11 10 9 8 21 20 19 18 17 16 15 28 27 26 25 24 23 22	100	25 24 23 50 49 48 75 74 73 100 99 98	200	50 49 48 100 99 98 175 174 173 200 199 198
52	13 12 11 3 2 1 26 25 24 16 15 14 39 38 37 29 28 27 52 51 50 42 41 40	128	32 31 30 64 63 62 96 95 94 (128) 127 126	252	63 62 61 126 125 124 189 188 187 252 251 250
76	19 18 17 3 2 1 38 37 36 22 21 20 57 56 55 41 40 39 76 75 74 60 59 58	152	38 37 36 76 75 74 114 113 112 (152) 151 150	300	75 74 73 150 149 148 225 224 223 300 299 298

DIMENSIONS		
SIZE	A	B
28	.784	.450
52	1.234	.900
76	1.684	1.350
100	2.134	1.800
128	2.859	2.325
152	3.109	2.775
200	4.009	3.675
252	4.984	4.650
300	5.884	5.550

PLEASE CONSULT THE MOLEX WEBSITE FOR THE LATEST VERSION OF THIS INFORMATION PRIOR TO BEGINNING ANY DESIGN WORK.  
SOURCE: CTR076 REV E

SOURCE: CTR076-REV F

AIRBORN P SERIES CONNECTORS | P. 90

## SPECIFICATIONS – MATERIALS AND FINISHES\*

<b>PIN CONTACTS:</b>	Brass C26000, copper alloy C18080, or BeCu C17200
<b>SOCKET CONTACTS:</b>	BBeCu 17200, BeCu C17410, or copper alloy C18080
<b>CONTACT FINISHES:</b>	Selective gold over 50 microinch minimum nickel plating in contact mating areas Option 1: 50 microinch minimum gold Option 2: 30 microinch minimum gold
<b>MOLDED INSULATORS:</b>	Glass filled liquid crystal polymer (LCP) per Mil-M-24519
<b>HARDWARE:</b>	Corrosion-resistant steel per ASTM-A-582/A582M; Passivated per ASTM-A-967, SAE AMS-QQ-P-35
<b>SOLDER BALLS:</b>	Option 1: Sn63/Pb37 eutectic solder Option 2: Lead free Sn96.5/Ag3.0/Cu0.5
<b>TOLERANCES:</b> <i>(Unless otherwise specified)</i>	Angles: $\pm 5^\circ$ Decimals: $\pm 0.010"$ Fractions: $\pm 1/64"$

### NOTES

Molex can manufacture special configurations for your exact specifications.

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

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