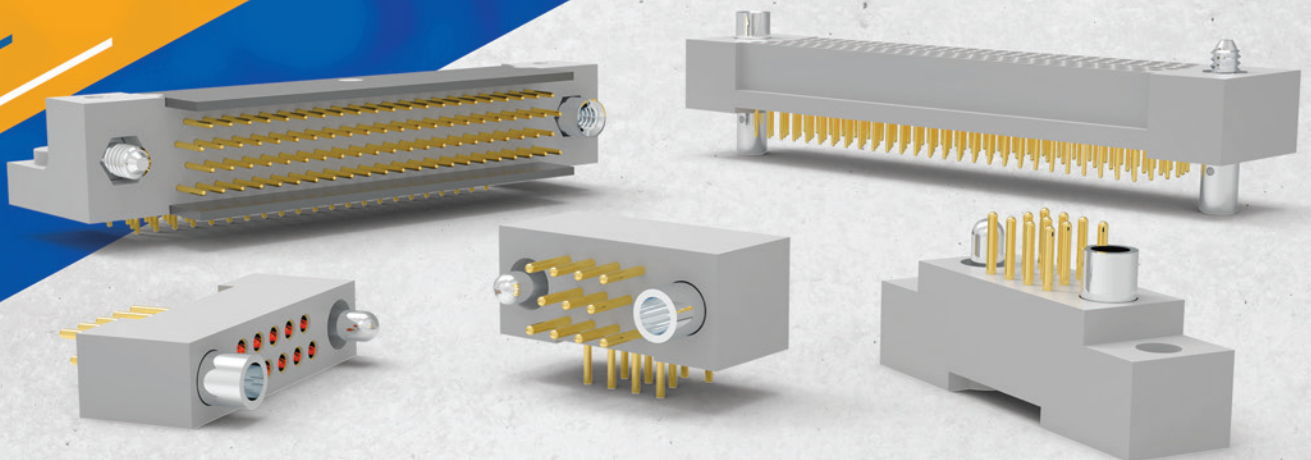


R Series

Rectangular — 0.075" (1.91mm)

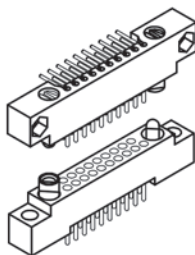
 **AirBorn**
High-Reliability Interconnect Solutions



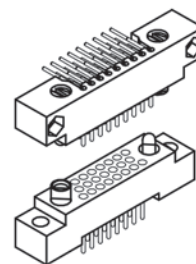
"R" SERIES - .075"
MIL-C-55302

Daughterboard to Motherboard or Chassis

**Right angle plug mating to
straight receptacle.**

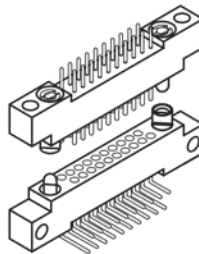


2 Row
Sizes: 10 thru 100
Page: R-9

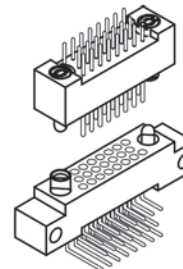


3 Row
Sizes: 11 thru 206
Page: R-21

**Right angle receptacle mating to
straight plug.**

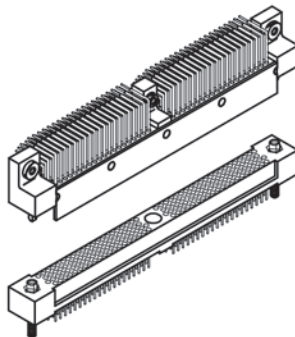


2 Row
Sizes: 10 thru 100
Page: R-11

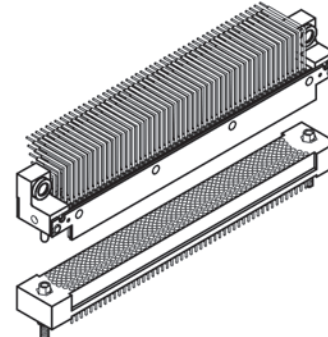


3 Row
Sizes: 11 thru 206
Page: R-23

**Right angle plug mating to
straight receptacle.**

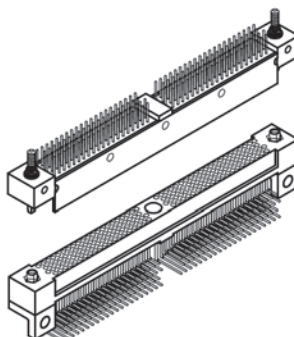


4 Row
Sizes: 86 thru 404
Page: R-43

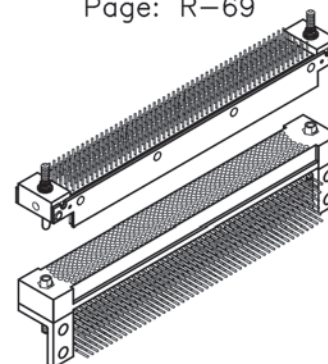


6 Row
Sizes: 162 thru 402
Page: R-59
Sizes: 448 & 604
Page: R-69

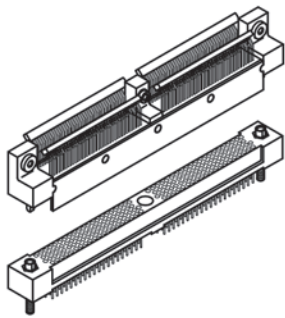
Right angle receptacle mating to straight plug.



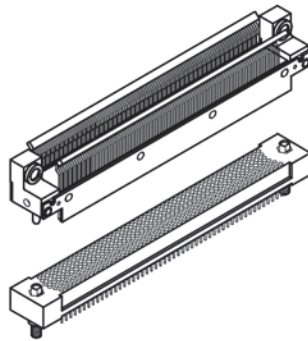
4 Row
Sizes: 86 thru 404
Page: R-45



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



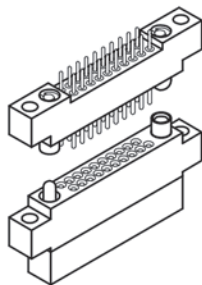
4 Row
 Sizes: 86 thru 404
 Page: R-47



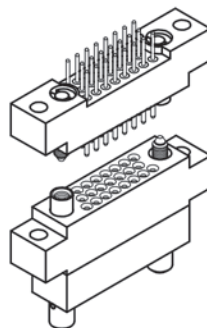
6 Row
 Sizes: 162 thru 402
 Page: R-63
 Sizes: 448 & 604
 Page: R-73

Daughterboard to Motherboard or Chassis

Surface mount plug
 mating to straight receptacle.



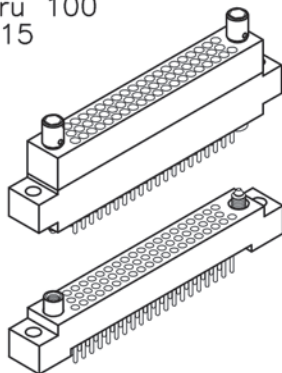
2 Row
 Sizes: 10 thru 100
 Page: R-15



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

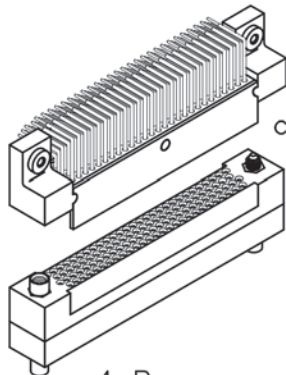
Cable or Board mating to Crimp Removable

Straight plug mating to
 crimp removable receptacle.



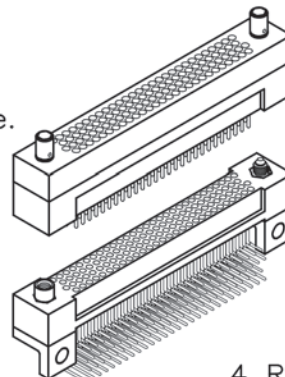
3 Row
 Sizes: 11 thru 80
 Page: R-31

Crimp removable plug mating to
 straight receptacle



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

Straight plug mating to
 crimp removable receptacle.

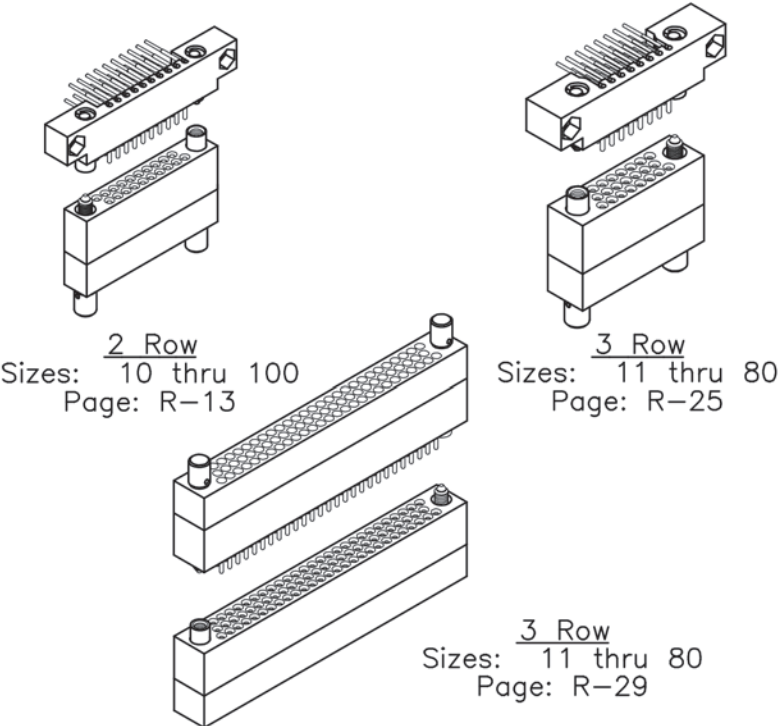


4 Row
 Sizes: 86 & 110
 Page: R-51

Crimp removable plug mating
 to right angle receptacle.



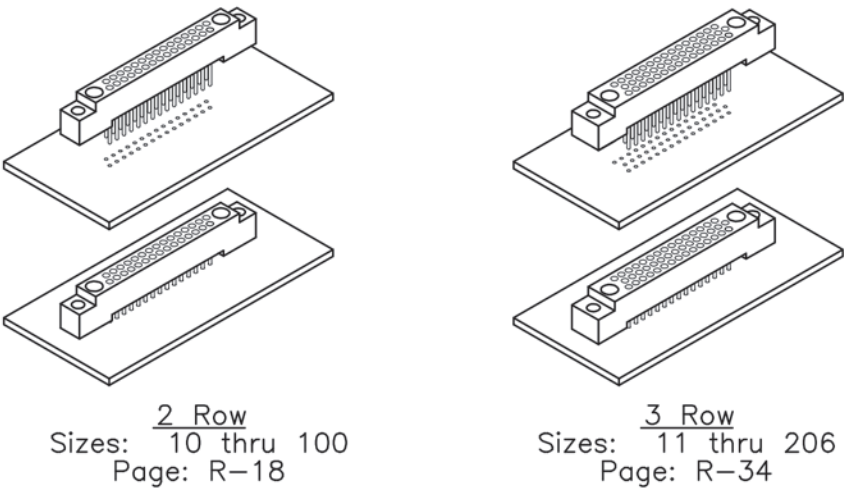
Right angle plug mating to crimp removable receptacle.



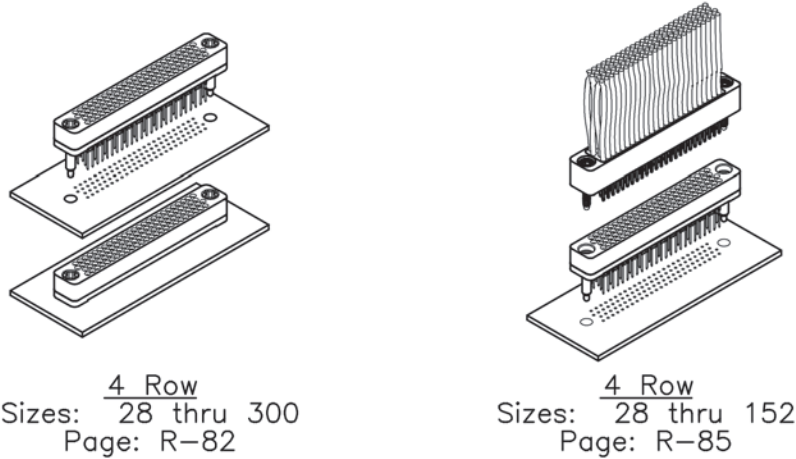
Crimp removable plug mating to crimp removable receptacle.

PC Board Stackable

Plated thru hole stackable or connector saver.



Compliant pin (press fit) stackable.



Contents

"R" Series

.075" Rectangular Plastic Board Level Connectors

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R-6	Specifications
R-7	Performance
R-8	Part number description

2-Row Connectors - Board to Board, Board to Cable, Sizes: 10-100

R-9	RM252, RM272	Plug, right angle with or without mounting ears
	RM222, RM242	Receptacle, straight, with or without mounting ears
R-11	RM212, RM232	Plug, straight, with or without mounting ears
	RM262, RM282	Receptacle, right angle, with or without mounting ears
R-13	RM252, RM272	Plug, right angle, with or without mounting ears
	RM222, RM242	Receptacle, straight, crimp removable, with or without mounting ears
R-15	RM212, RM232	Plug, straight, with or without mounting ears
	RM222, RM242	Receptacle, straight, crimp removable, with or without mounting ears
R-18	RM222, RM242	Receptacle, straight, stackable or connector saver
R-18.1	RA2	Receptacle, straight with or without potting well or mounting ears
R-19	RM252, RM272	Board layout - plug, right angle
	RM212, RM232	Board layout - plug, straight
R-20	RM262, RM282	Board layout - receptacle, right angle
	RM222, RM242	Board layout - receptacle, straight

3-Row Connectors - Board to Board, Board to Cable, Sizes: 11-206

R-21	RM352, RM372	Plug, right angle with or without mounting ears
	RM322, RM342	Receptacle, straight, with or without mounting ears
R-23	RM312, RM332	Plug, straight, with or without mounting ears
	RM362, RM382	Receptacle, right angle, with or without mounting ears
R-25	RM352, RM372	Plug, right angle, with or without mounting ears
	RM322, RM342	Receptacle, straight, crimp removable, with or without mounting ears
R-27	RM312, RM332	Plug, straight, with or without mounting ears
	RM322, RM342	Receptacle, straight, crimp removable, with or without mounting ears
R-29	RM312, RM332	Plug, straight, crimp removable, with or without mounting ears
	RM322, RM342	Receptacle, straight, crimp removable, with or without mounting ears
R-31	RM312, RM332	Plug, straight, crimp removable, with or without mounting ears
	RM322, RM342	Receptacle, straight, with or without mounting ears
R-33	RA3	Plug, straight, with or without potting well or mounting ears
R-33.2	RA3	Receptacle, straight, with or without potting well or mounting ears
R-33.4	RA	RA Assembly instructions, crimp instructions and crimp accessories
R-34	RM322, RM342	Receptacle, straight, stackable or connector saver
R-35	RM352, RM372	Board layout - plug, right angle
	RM312, RM332	Board layout - plug, straight
R-36	RM362, RM382	Board layout - receptacle, right angle
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R-38		Guide hardware, polarization chart, 2 & 3 row
R-39		Contacts, 2 & 3 row
R-40		Military cross reference chart, 2 & 3 row
R-41		Jacksets and guide sets, 2 & 3 row

4-Row Connectors - Board to Board, Board to Cable, Sizes: 86-300

R-43	RM452	Plug, right angle, with mounting ears
	RM422	Receptacle, straight, with mounting ears
R-45	RM412	Plug, straight, with mounting ears
	RM462	Receptacle, right angle, with mounting brackets
R-47	RM412	Plug, surface mount, with mounting ears
	RM422	Receptacle, straight, with mounting ears
R-49	RM412	Plug, right angle, with mounting ears
	RM422	Receptacle, straight, crimp removable, without mounting ears

-- Continued on next page

Contents

-- Continued from previous page

R-51	RM412	Plug, straight, crimp removable, with or without mounting ears
	RM462	Receptacle, right angle, with mounting ears
R-53	RM452	Board layout - plug, right angle
	RM412	Board layout - plug, straight
R-54	RM462	Board layout - receptacle, right angle
	RM422	Board layout - receptacle, straight
R-55	RM412	Board layout - plug, straddle mount SMT, with mounting ears
R-56	RM412	Configuration chart - plug, straddle mount SMT
R-57	RM4	Polarization chart - guide hardware
R-58	RM4	Contacts, 4 row

6-Row Connectors - PC Card SMT to Board, Sizes: 162-402

R-59	RM672	Plug, right angle, with mounting ears
	RM642	Receptacle, straight, with mounting ears
R-61	RM632	Plug, straight, with mounting ears
	RM682	Receptacle, right angle, with mounting brackets
R-63	RM632	Plug, surface mount, with mounting ears
	RM642	Receptacle, straight, with mounting ears
R-65	RM672	Board layout - plug, right angle
	RM632	Board layout - plug, straight
R-66	RM682	Board layout - receptacle, right angle
	RM642	Board layout - receptacle, straight
R-67	RM632	Board layout - plug, straddle mount SMT, with mounting ears

6-Row Connectors - PC Card SMT to Board, Sizes: 448 & 604

R-69	RM652	Plug, right angle, with mounting ears
	RM622	Receptacle, straight, with mounting ears
R-71	RM612	Plug, straight, with mounting ears
	RM662	Receptacle, right angle, with mounting brackets
R-73	RM612	Plug, surface mount, with mounting ears
	RM622	Receptacle, straight, with mounting ears
R-75	RM652	Board layout - plug, right angle
	RM612	Board layout - plug, straight
R-76	RM662	Board layout - receptacle, right angle
	RM622	Board layout - receptacle, straight
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R-78	RM6	Contacts, 6 row

4-Row Connectors - Press fit, Stackable, Sizes: 28-300

R-79	RC422, RC442	Specifications, Stackable Compliant Pin Connectors
R-80	RC422, RC442	Performance, Stackable Compliant Pin Connectors
R-81	RC422, RC442	Receptacle, standard and low profile
R-82	RC422, RC442	Part number build-up
R-82.1	RC4C2	Plug, with potting well, stranded wire
R-82.2	RC4C2	Part number build-up
R-83	RC422, RC442	Typical applications
R-83.1	RC4C2	Press fit stackable with cable mate
R-84	RC422, RC442	Board layout

Specifications

Materials and Finishes *

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

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

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

☒ Symbolizes options that are not ROHS compliant.



Performance

Reference MIL-C-55302

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

<u>Category:</u>	<u>Requirements:</u>	<u>Test Method Per:</u> <u>SAE AS 13441</u>
Test Voltage:	750 V, RMS, 60 Hz @ sea level 250 V, RMS, 60 Hz @ 70,000 feet	#3001
Insulation Resistance:	5,000 megohms minimum @ 500 VDC	#3003
Durability:	500 connector mating cycles	
Vibration:	Mated connectors, Test condition III	#2005
Salt Spray:	Mated connectors, Test condition B	#1001
Shock:	Mated connectors, Test condition G	#2004
Humidity:	Test Type II, except steps 7A and 7B not required	#1002
Temperature Cycling:	Mated connectors, Test condition A	#1003
Contact Resistance:	.015 ohms max (interface measurement) @ 3 amperes	#3004
Connector 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 .010" to .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. When the size, for example, is less than 100, indicate as 010, 080, etc.

Series:

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

Body:

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

Size:

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

Contacts:

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

Hardware:

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

Special Instructions (Options):

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

Note:

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

☒ Symbolizes options that are not RoHS compliant.

2 • ROW

Daughterboard to Motherboard or Chassis

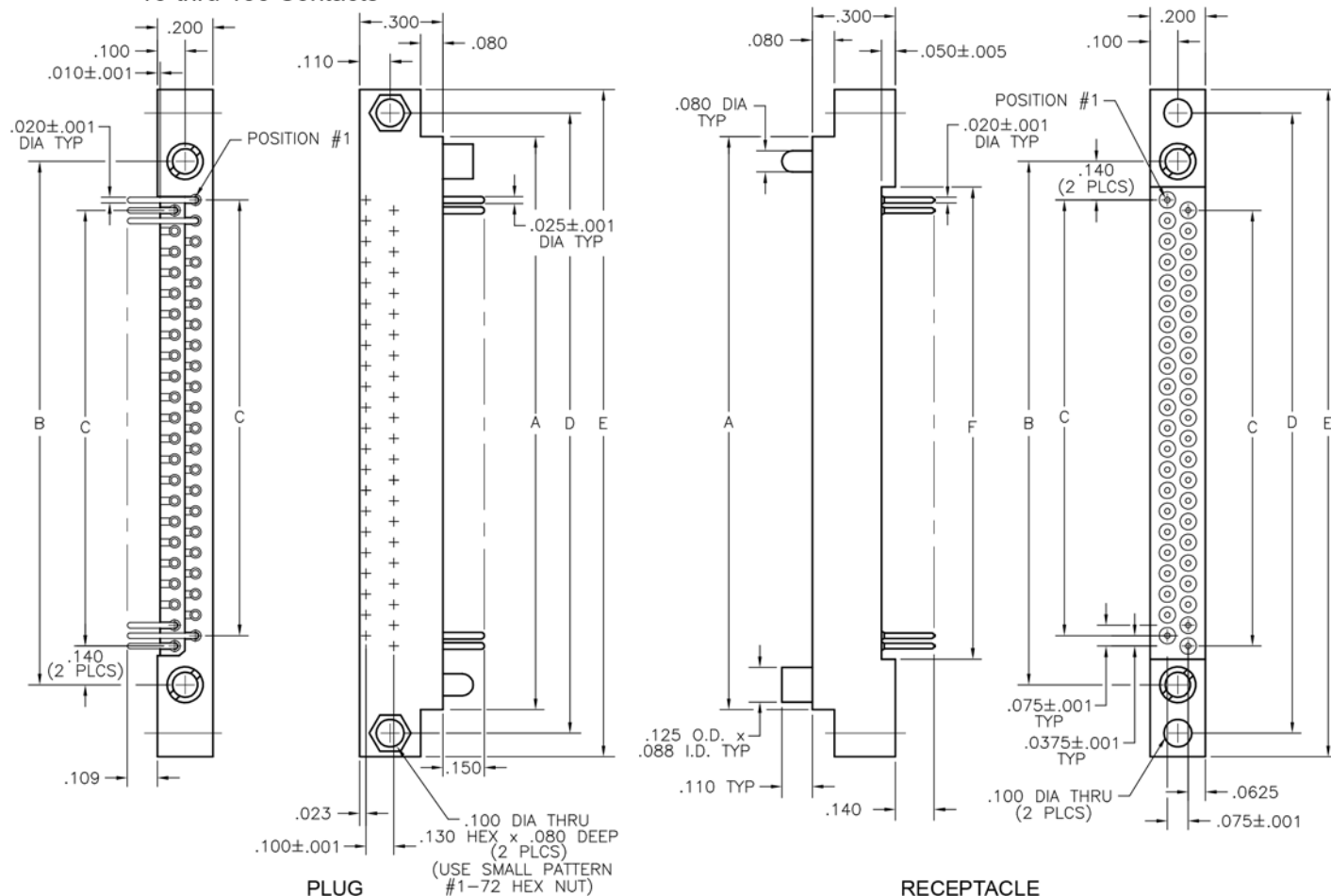
.075"

RM2

10 thru 100 Contacts

RM252-100-312-5500

RM222-100-212-5500



DIMENSIONS						
SIZE	A	B	C	D	E	F
10	.797	.617	.300	.967	1.137	.420
20	1.172	.992	.675	1.342	1.512	.795
30	1.547	1.367	1.050	1.717	1.887	1.170
40	1.922	1.742	1.425	2.092	2.262	1.545
50	2.297	2.117	1.800	2.467	2.637	1.920
60	2.672	2.492	2.175	2.842	3.012	2.295
70	3.047	2.867	2.550	3.217	3.387	2.670
80	3.422	3.242	2.925	3.592	3.762	3.045
90	3.797	3.617	3.300	3.967	4.137	3.420
100	4.172	3.992	3.675	4.342	4.512	3.795

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
	27 Socket, straight, wire wrap®, .375" x .018 square
	28 Socket, straight, wire wrap®, .625" x .018 square
	29 Socket, connector saver, .150" x .025" dia
	50 Socket, straight, dip solder, .140" x .016" dia
	51 Socket, straight, dip solder, .172" x .016" dia
	53 Socket, straight, stackable, .212" x .025" dia
	54 Socket, straight, stackable, .244" x .025" dia
	55 Socket, straight, stackable, .275" x .025" dia
	64 Socket, straight, press fit, .203" (Board .093"-.125" thk)
	65 Socket, straight, press fit, .323" (Board .156"-.200" thk)
	66 Socket, straight, press fit, .403" (Board .250"+ thk)
PLATING OPTIONS:	PLATING OPTIONS:
1 Gold plated termination	1 Gold plated termination
2 Pre-tinned termination, SnPb alloy ☒	2 Pre-tinned termination, SnPb alloy (dip solder options only) ☒
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 jackscrews	20 Two fixed jackscrews
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 jackscrews, .200"	62 Two hex turning jackscrews, .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 jackscrews, .490"	67 Two turning jackscrews, .490"
POLARIZATION:	POLARIZATION
00 None	00 None
01 thru 68 are special identifiers, see R-38	01 thru 68 are special identifiers, see R-38
70 Same configuration as 01 without Loctite® (To be keyed by customer)	70 Same configuration as 01 without Loctite® (To be keyed by customer)

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

☒ = Option not RoHS compliant

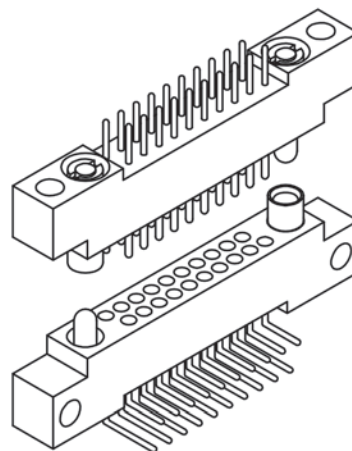
2 · ROW Motherboard or Chassis to Daughterboard

.075"

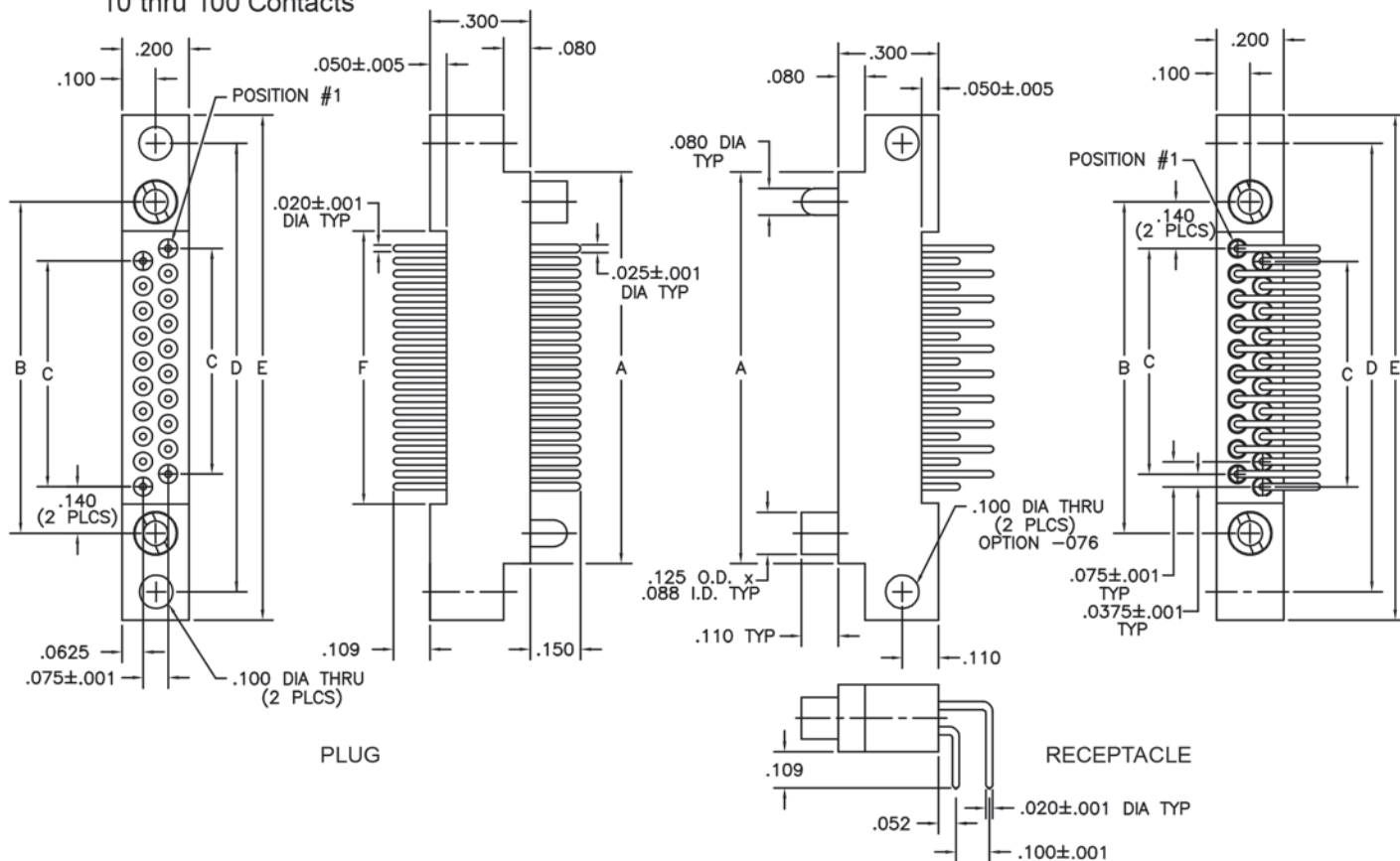
RM2

10 thru 100 Contacts

RM212-020-102-5500



RM262-020-442-5500-076



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

PLUG: RM212-020-102-5500

RECEPTACLE: RM262-020-442-5500-076

XXXXX-XXX-XXX-XXXX-XXX

PLUG

RECEPTACLE

SERIES

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

BODY

2	2-Row	2	2-Row
BODY STYLE:		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)

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:	
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) ☒	2	Pre-tinned termination, SnPb alloy ☒
3	Pre-tinned termination, SAC305 alloy (dip solder options only)	3	Pre-tinned termination, SAC305 alloy

HARDWARE

STYLE OF HARDWARE: (See R-41 & R-42 for all options)		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-38	01	thru 68 are special identifiers, see R-38
70	Same configuration as 01 without Loctite® (To be keyed by customer)	70	Same configuration as 01 without Loctite® (To be keyed by customer)

OPTIONS

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

☒ = Option not RoHS compliant



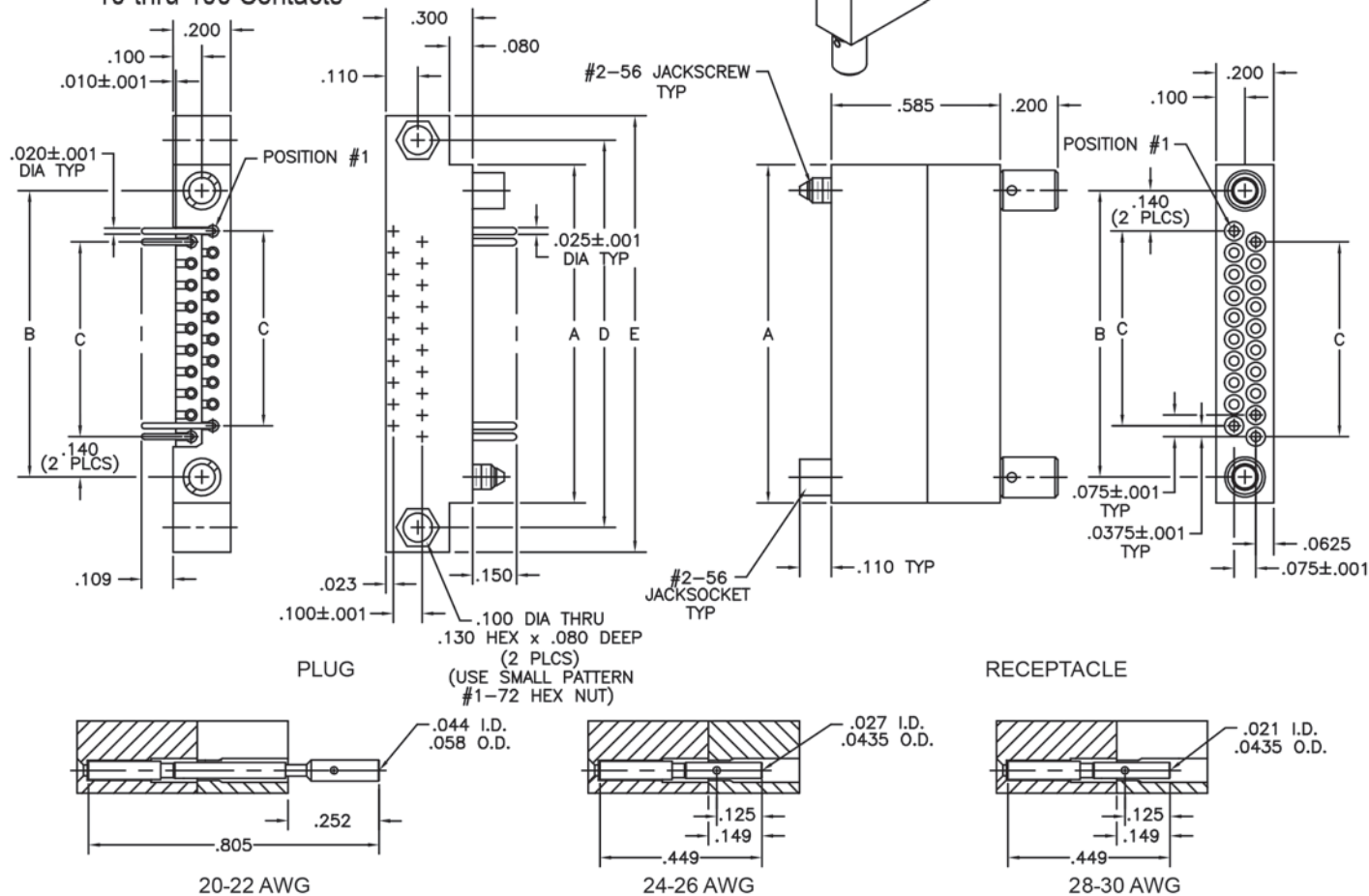
2 · ROW

Board to
Crimp Removable

.075"

RM2

10 thru 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

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

PLUG

RECEPTACLE

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

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

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 jackscrews	20 Two fixed jackscrews
59 Hex turning jackset, .200" knob	59 Hex turning jackset, .200" knob
60 Hex turning jackset, reversed, .200" knob	60 Hex turning jackset, reversed, .200" knob
61 Two hex turning jackscrews, .200" knob	61 Two hex turning jackscrews, .200" knob
62 Two hex turning jackscrews, .200" knob	62 Two hex turning jackscrews, .200" knob
64 Turning jackset, .490" knob	64 Turning jackset, .490" knob
65 Turning jackset, reversed, .490" knob	65 Turning jackset, reversed, .490" knob
66 Two turning jackscrews, .490" knob	66 Two turning jackscrews, .490" knob
67 Two turning jackscrews, .490" knob	67 Two turning jackscrews, .490" knob
POLARIZATION:	POLARIZATION
00 None	00 None
01 thru 68 are special identifiers, see R-38	01 thru 68 are special identifiers, see R-38
70 Same configuration as 01 without Loctite® (To be keyed by customer)	70 Same configuration as 01 without Loctite® (To be keyed by customer)

OPTIONS	
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

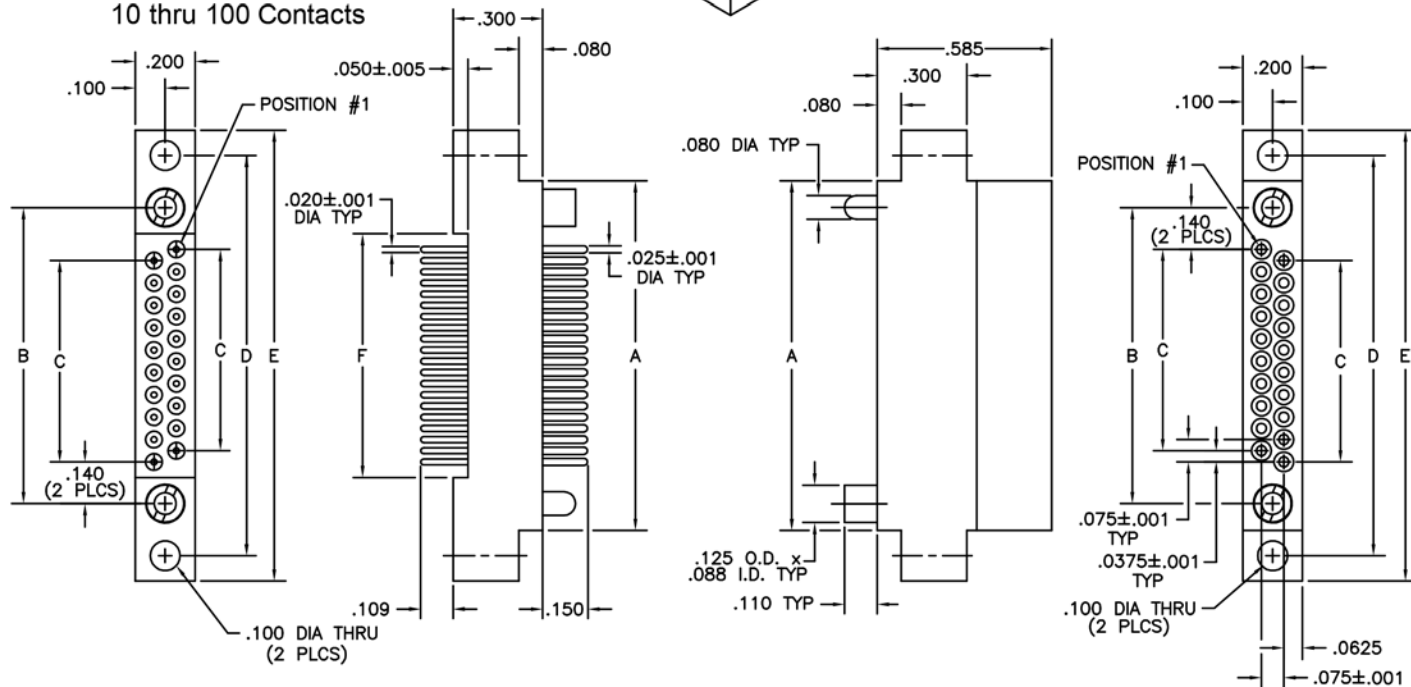
2 · ROW

Cable or Board to Crimp Removable

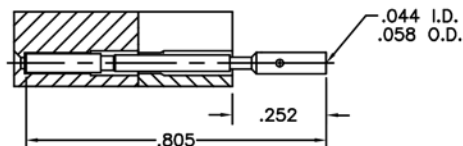
.075"

RM2

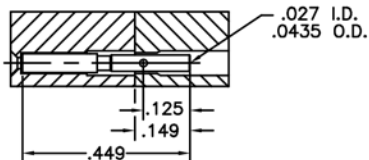
10 thru 100 Contacts



PLUG

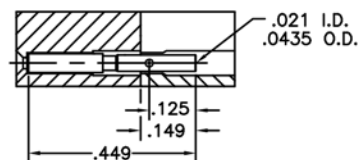


20-22 AWG



24-26 AWG

RECEPTACLE



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

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

PLUG

RECEPTACLE

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

BODY	
2 2-Row	2 2-Row

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	
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:
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) ☒	1 Gold plated termination
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-38	01 thru 68 are special identifiers, see R-38
70 Same configuration as 01 without Loctite® (To be keyed by customer)	70 Same configuration as 01 without Loctite® (To be keyed by customer)

* Full compliment of crimp removable sockets packaged with connectors

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

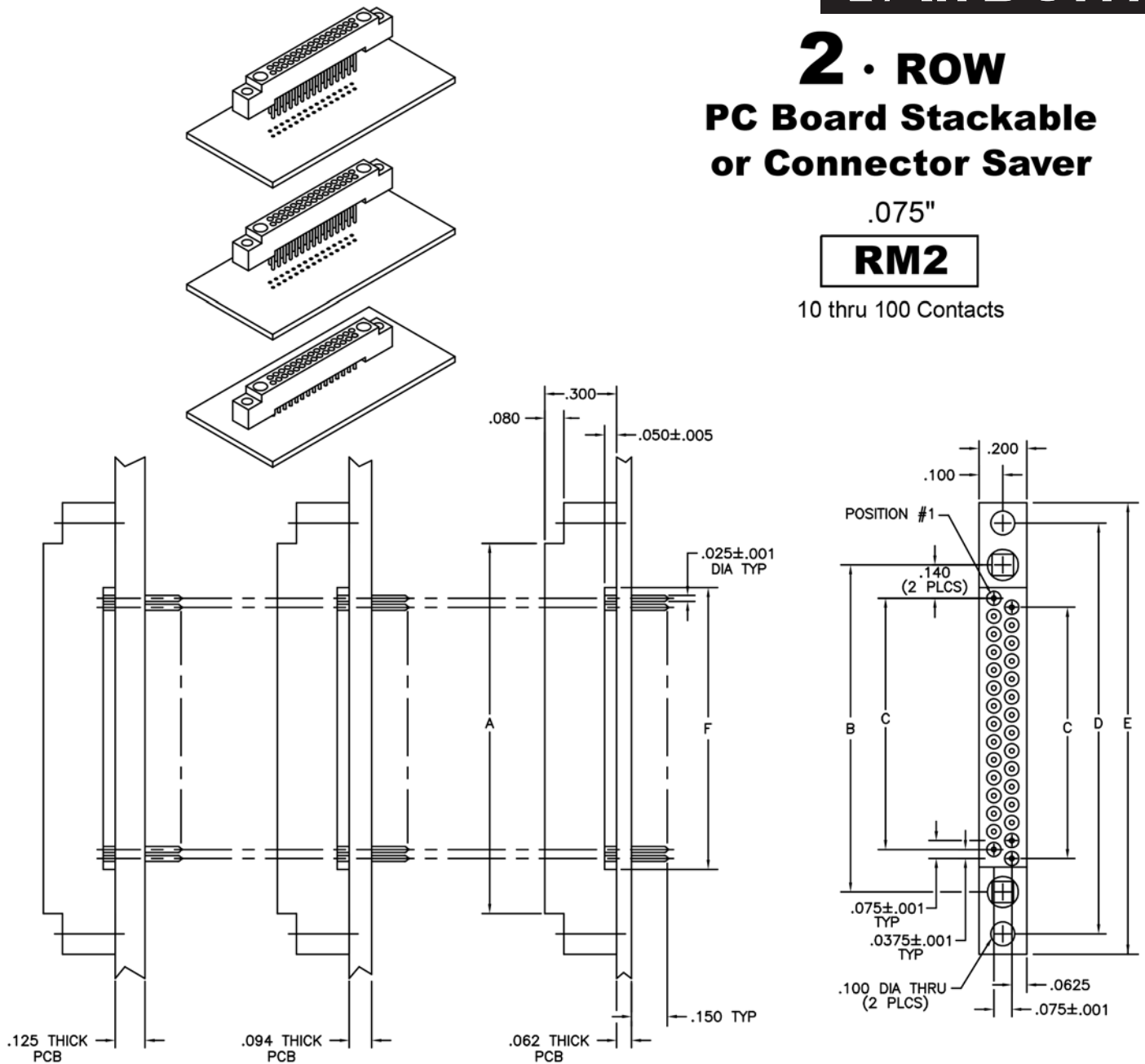
☒ = Option not RoHS compliant

2 · ROW PC Board Stackable or Connector Saver

.075"

RM2

10 thru 100 Contacts



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

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

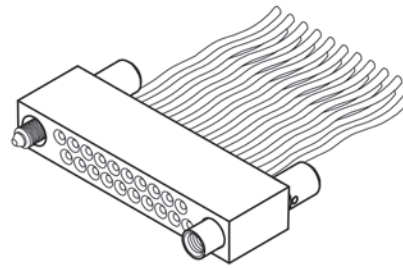
DIMENSIONS						
SIZE	A	B	C	D	E	F
10	.797	.617	.300	.967	1.137	.442
20	1.172	.992	.675	1.342	1.512	.817
30	1.547	1.367	1.050	1.717	1.887	1.192
40	1.922	1.742	1.425	2.092	2.262	1.567
50	2.297	2.117	1.800	2.467	2.637	1.942
60	2.672	2.492	2.175	2.842	3.012	2.317
70	3.047	2.867	2.550	3.217	3.387	2.692
80	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

2 • ROW Crimped Wire I/O Receptacle

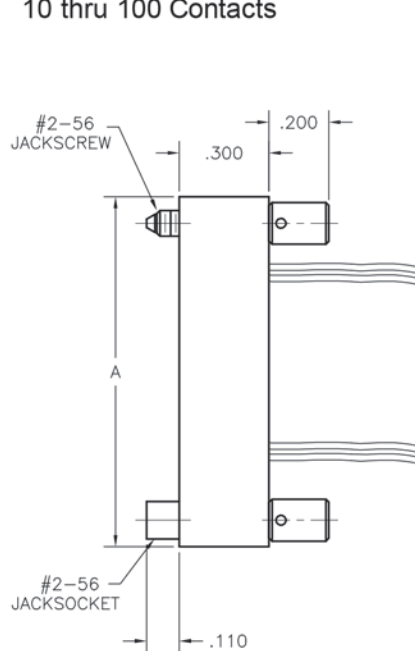
.075"

RA2

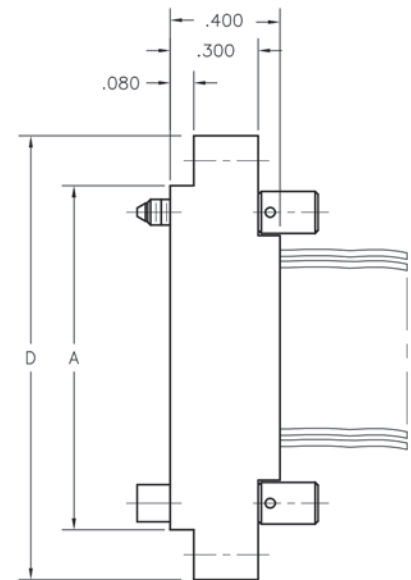
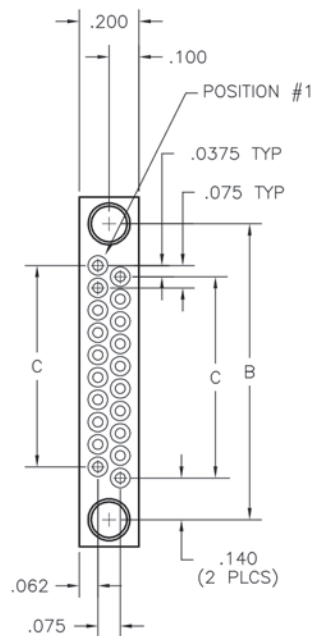
10 thru 100 Contacts



RA2H2-020-2HC-5900



RECEPTACLE WITHOUT
MOUNTING EARS OR
POTTING WELL



RECEPTACLE WITH
MOUNTING EARS AND
POTTING WELL

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

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

REPLACEMENT CONTACTS:

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

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

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

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-38)
- 5570 Guide set, polarized, same as 5501 without Loctite®
(to be keyed by customer)
- 5700 Two guide pins
- 5800 Two guide sockets

JACKING HARDWARE

- 2900 Fixed jackset
- 3000 Fixed jackset, reversed
- 1900 Two fixed jackscrews
- 2000 Two fixed jacksockets
- 5900 Hex turning jackset, .200" knob
- 6000 Hex turning jackset, reversed, .200" knob
- 6100 Two hex turning jackscrews, .200" knob
- 6200 Two hex turning jacksockets, .200" knob
- 6400 Turning jackset, .490" knob
- 6500 Turning jackset, reversed, .490" knob
- 6600 Two turning jackscrews, .490" knob
- 6700 Two turning jacksockets, .490" knob

☒ = Option not RoHS compliant

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

WIRE CODES

TYPE and COLOR

Code	Size	Color
Mil-W-16878/4		
A	22 awg	Ten repeating
B	22 awg	White
C	24 awg	Ten repeating
D	24 awg	White
E	26 awg	Ten repeating
F	26 awg	White
G	28 awg	Ten repeating
H	28 awg	White
J	30 awg	Ten repeating
K	30 awg	White

LENGTH

Code	Length (+1"/-0")
A	6"
B	12"
C	18"
D	24"
E	30"
F	36"
G	42"
H	48"
J	54"
K	60"
L	66"
M	72"
N	84"
P	96"
R	108"
S	120"

Mil-W-22759/33

L	22 awg	Ten repeating
M	22 awg	White
N	24 awg	Ten repeating
P	24 awg	White
R	26 awg	Ten repeating
S	26 awg	White
T	28 awg	Ten repeating
U	28 awg	White
V	30 awg	Ten repeating
W	30 awg	White

USING WIRE CODES:

RA2H2-020-2HC-5900

Type and Color  Length

Color sequence for Ten repeating wire colors:

(Beginning in position #1)

Black
Brown
Red
Orange
Yellow
Green
Blue
Violet
Grey
White

Repeat this sequence until
connector is fully loaded.

2 · ROW

Right Angle PTH Plug Straight PTH Plug

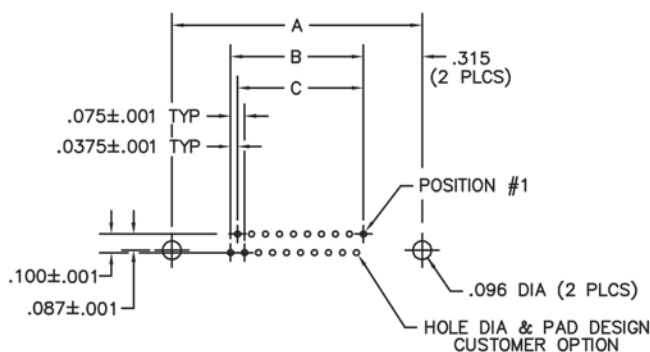
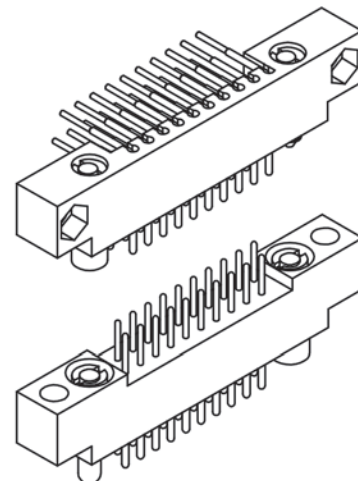
.075"

RM2

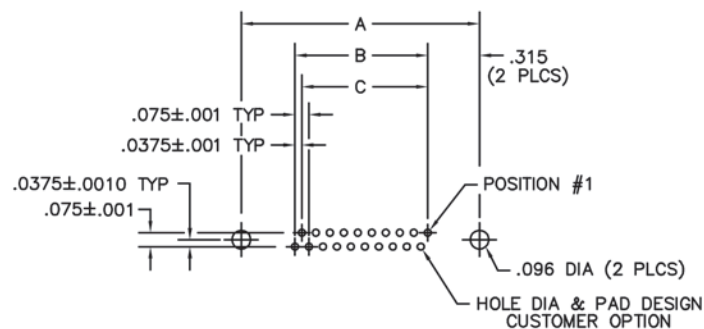
10 thru 100 Contacts

Recommended
Board Layout

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



RIGHT ANGLE PTH PLUG
PC BOARD VIEWED FROM COMPONENT SIDE



STRAIGHT PTH PLUG
PC BOARD VIEWED FROM COMPONENT SIDE

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

2 · ROW

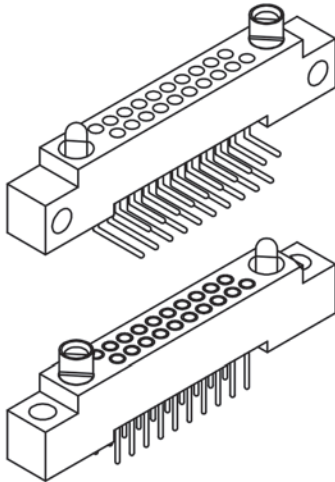
Straight PTH Rcpt

.075"

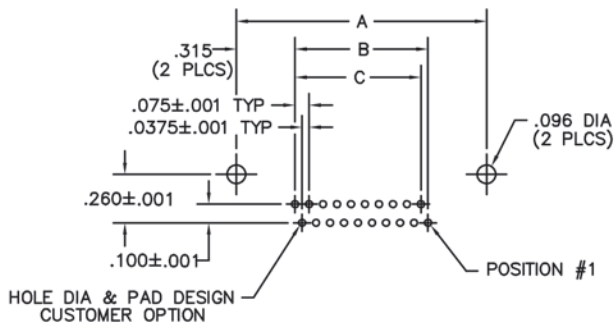
RM2

10 thru 100 Contacts

Recommended
Board Layout

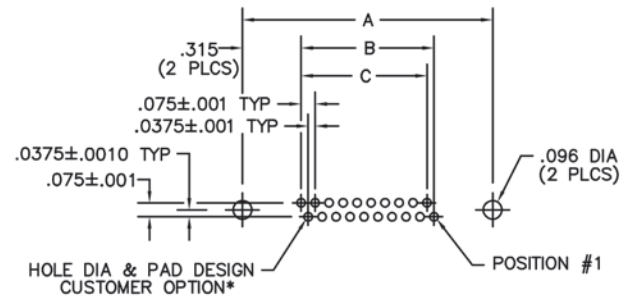


DIMENSIONS			
SIZE	A	B	C
10	.967	.337	.300
20	1.342	.712	.675
30	1.717	1.087	1.050
40	2.092	1.462	1.425
50	2.467	1.837	1.800
60	2.842	2.212	2.175
70	3.217	2.587	2.550
80	3.592	2.962	2.925
90	3.967	3.337	3.300
100	4.342	3.712	3.675



RIGHT ANGLE PTH 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		60	
20		70	
30		80	
40		90	
50		100	

3 · ROW Daughterboard to Motherboard or Chassis

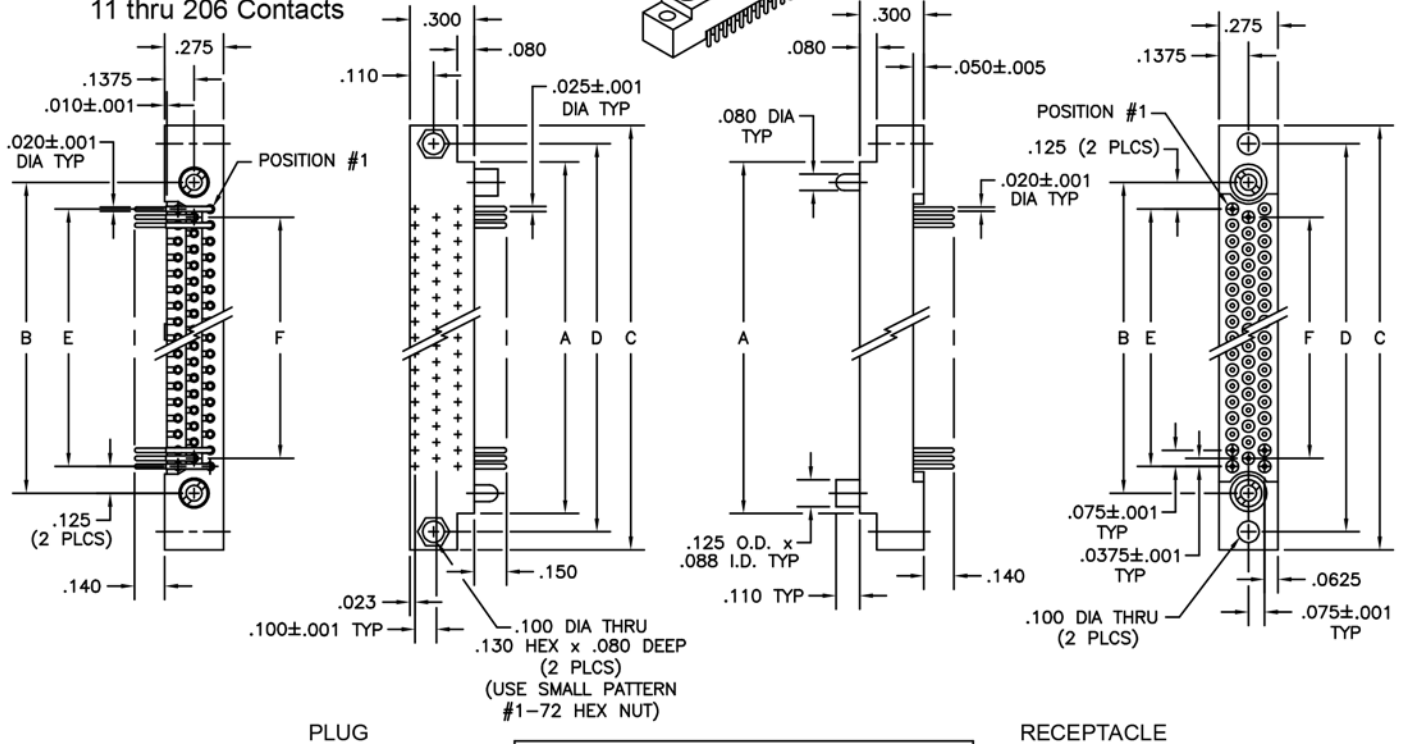
.075"

RM3

11 thru 206 Contacts

RM352-152-321-5500

RM322-152-211-5500



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

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

PLUG

RECEPTACLE

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

BODY	
3 3-Row	3 3-Row

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

CONTACTS	
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
	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)

PLATING OPTIONS:	PLATING OPTIONS:
1 Gold plated termination	1 Gold plated termination
2 Pre-tinned termination, SnPb alloy ☒	2 Pre-tinned termination, SnPb alloy (dip solder options only) ☒
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 jackscrews	20 Two fixed jackscrews
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 jackscrews, .200"	62 Two hex turning jackscrews, .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 jackscrews, .490"	67 Two turning jackscrews, .490"

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

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

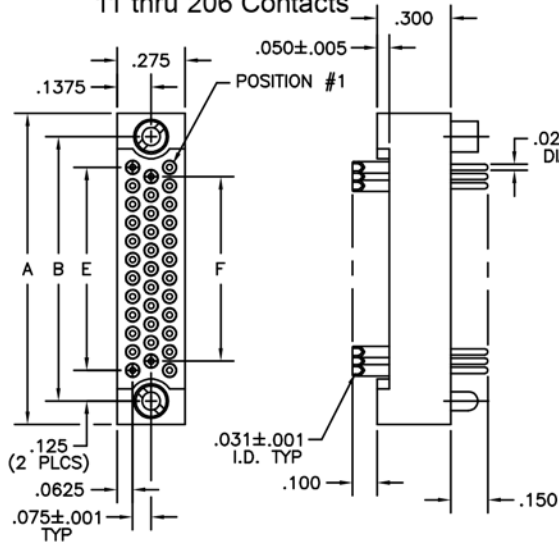
☒ = Option not RoHS compliant

3 · ROW Motherboard or Chassis to Daughterboard

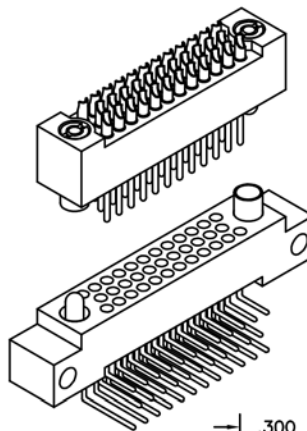
.075"

RM3

11 thru 206 Contacts

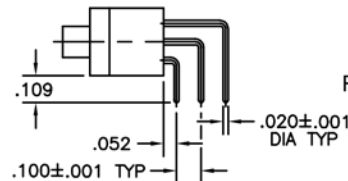
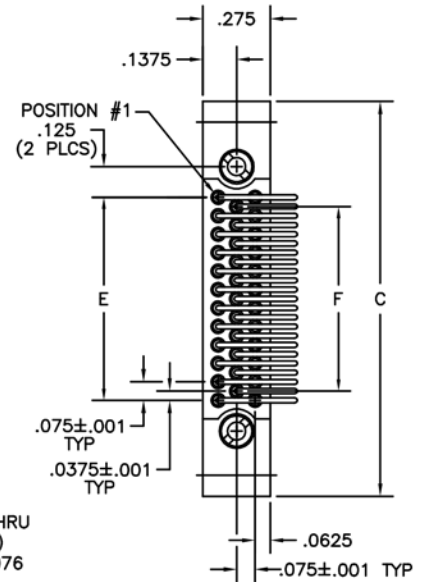
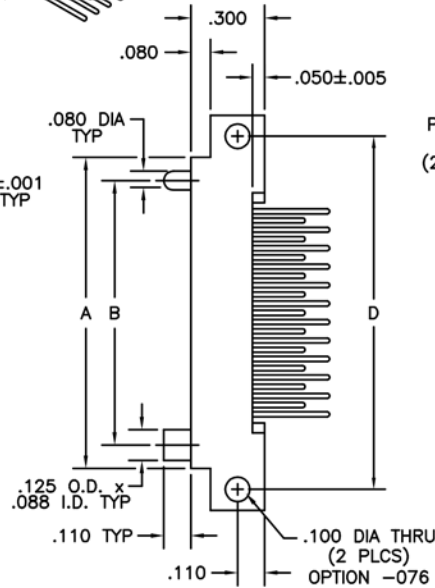


PLUG



RM332-035-111-5500

RM362-035-441-5500-076



RECEPTACLE

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

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

PLUG

RECEPTACLE

SERIES

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

BODY

3	3-Row	3	3-Row
BODY STYLE:		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)

SIZE

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

CONTACTS

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

HARDWARE

STYLE OF HARDWARE: (See R-41 & R-42 for all options)		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-38	01	thru 68 are special identifiers, see R-38
70	Same configuration as 01 without Loctite® (To be keyed by customer)	70	Same configuration as 01 without Loctite® (To be keyed by customer)

OPTIONS

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

☒ = Option not RoHS compliant

3 · ROW Board to Crimp Removable

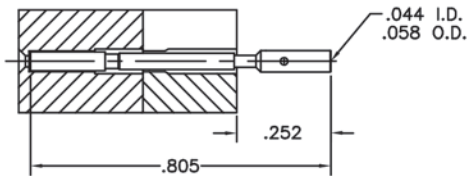
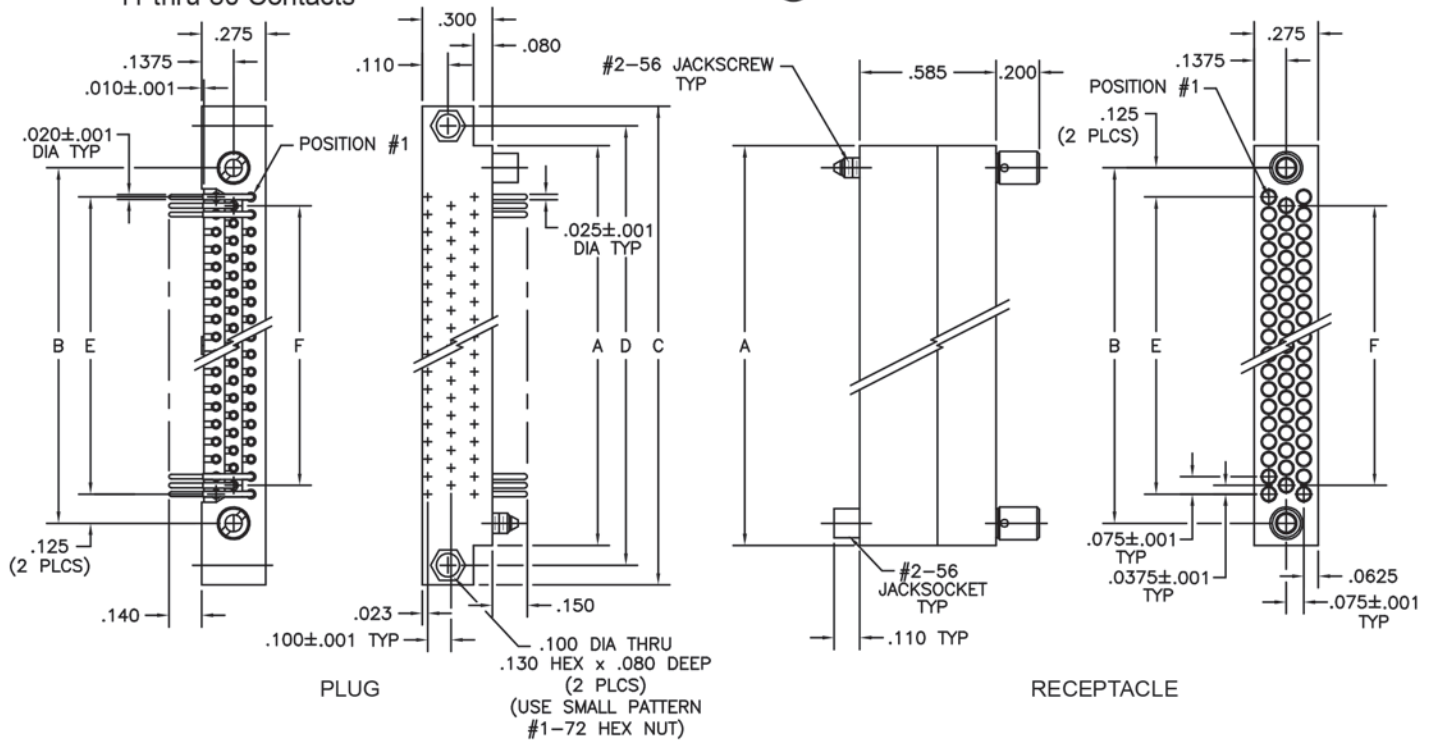
.075"

RM3

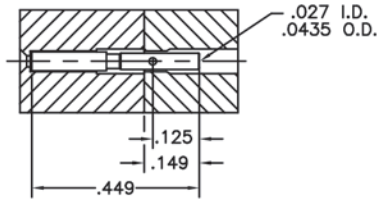
11 thru 80 Contacts

RM352-080-321-2900

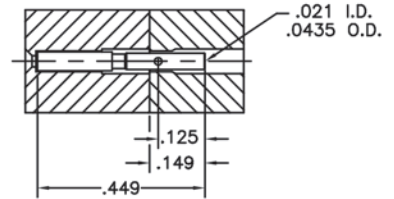
RM342-080-581-5900



20-22 AWG



24-26 AWG



28-30 AWG

NOTE:

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

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

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

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

PLUG		RECEPTACLE	
SERIES			
RM .075" Screw Machine PC Connector		RM .075" Screw Machine PC Connector	
BODY			
3	3-Row	3	3-Row
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			
011, 023, 035, 047, 059, 071, 080		011, 023, 035, 047, 059, 071, 080	
CONTACTS			
TYPE CONTACTS/TERMINATIONS:		TYPE CONTACTS/TERMINATIONS:	
31	Pin, right angle, dip solder, .109" x .020" dia	00	Contacts not supplied
32	Pin, right angle, dip solder, .140" x .020" dia	57	Socket, straight, crimp removable (20-22 AWG)*
33	Pin, right angle, dip solder, .172" x .020" dia	58	Socket, straight, crimp removable (24-26 AWG)*
34	Pin, right angle, dip solder, .109" x .016" dia	59	Socket, straight, crimp removable (28-30 AWG)*
35	Pin, right angle, dip solder, .140" x .016" dia		
36	Pin, right angle, dip solder, .172" x .016" dia		
PLATING OPTIONS:		PLATING OPTIONS:	
1	Gold plated termination	0	No plating (use with Contact Option "00" only)
2	Pre-tinned termination, SnPb alloy ☒	1	Gold plated termination
3	Pre-tinned termination, SAC305 alloy		
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 jackscrews	20	Two fixed jackscrews
59	Hex turning jackset, .200" knob	59	Hex turning jackset, .200" knob
60	Hex turning jackset, reversed, .200" knob	60	Hex turning jackset, reversed, .200" knob
61	Two hex turning jackscrews, .200" knob	61	Two hex turning jackscrews, .200" knob
62	Two hex turning jackscrews, .200" knob	62	Two hex turning jackscrews, .200" knob
64	Turning jackset, .490" knob	64	Turning jackset, .490" knob
65	Turning jackset, reversed, .490" knob	65	Turning jackset, reversed, .490" knob
66	Two turning jackscrews, .490" knob	66	Two turning jackscrews, .490" knob
67	Two turning jackscrews, .490" knob	67	Two turning jackscrews, .490" knob
POLARIZATION:		POLARIZATION	
00	None	00	None
01	thru 68 are special identifiers, see R-38	01	thru 68 are special identifiers, see R-38
70	Same configuration as 01 without Loctite® (To be keyed by customer)	70	Same configuration as 01 without Loctite® (To be keyed by customer)
OPTIONS			
BN Bond #1-72, sm. pattern hex nuts into mtg. ears			

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

3 · ROW Cable or Board to Crimp Removable

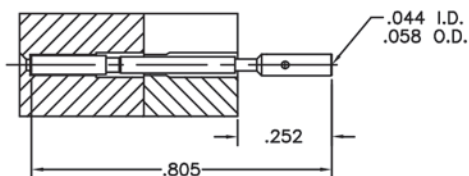
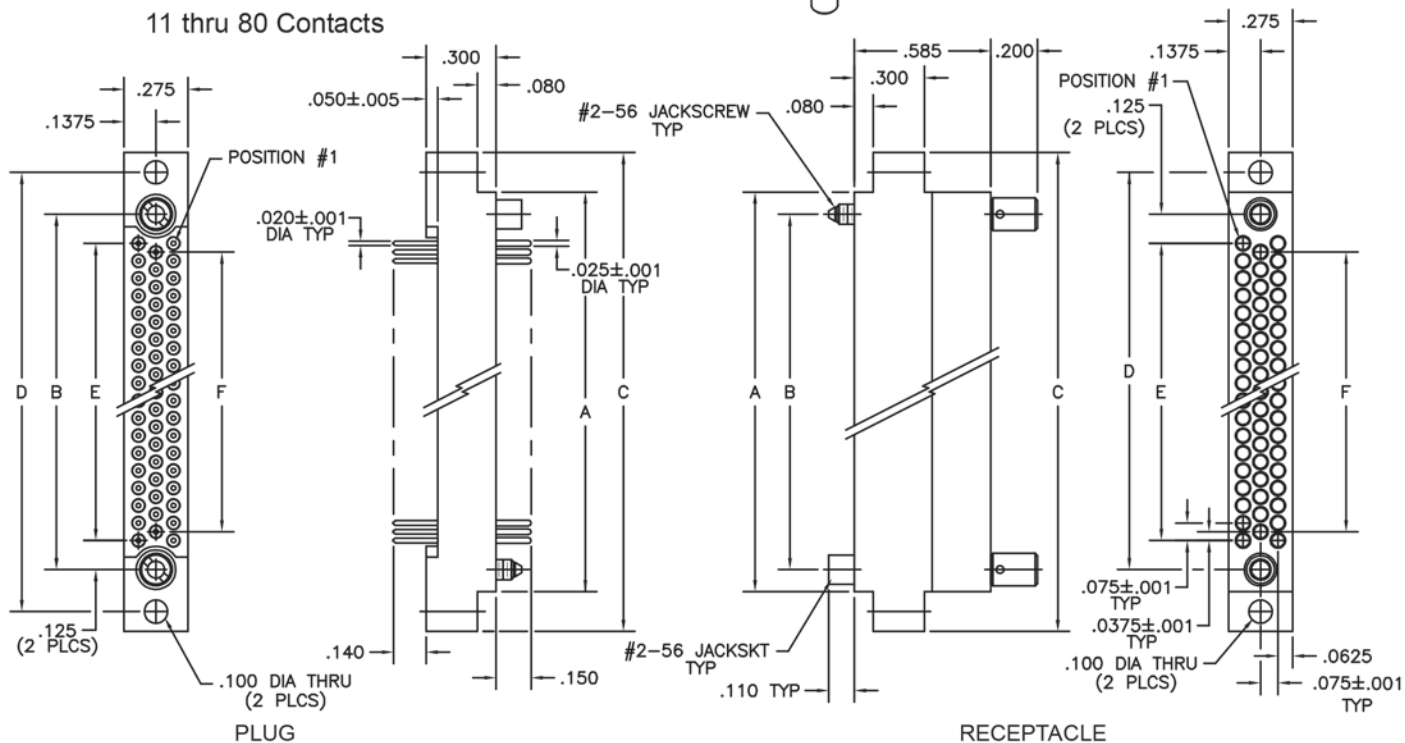
.075"

RM3

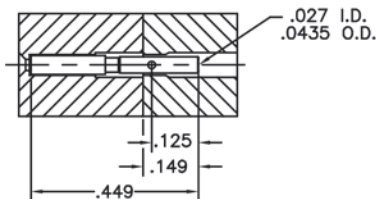
11 thru 80 Contacts

RM312-080-121-2900

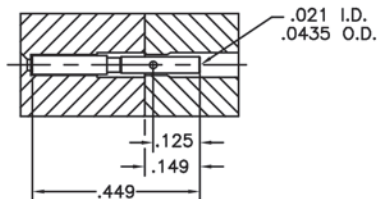
RM322-080-581-5900



20-22 AWG



24-26 AWG



28-30 AWG

NOTE:

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

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

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

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

PLUG

RECEPTACLE

SERIES	
RM .075" Screw Machine PC Connector	RM .075" Screw Machine PC Connector
BODY	
3 3-Row	3 3-Row
BODY STYLE:	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:
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) ☒	1 Gold plated termination
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 jackscrews	20 Two fixed jackscrews
59 Hex turning jackset, .200" knob	59 Hex turning jackset, .200" knob
60 Hex turning jackset, reversed, .200" knob	60 Hex turning jackset, reversed, .200" knob
61 Two hex turning jackscrews, .200" knob	61 Two hex turning jackscrews, .200" knob
62 Two hex turning jackscrews, .200" knob	62 Two hex turning jackscrews, .200" knob
64 Turning jackset, .490" knob	64 Turning jackset, .490" knob
65 Turning jackset, reversed, .490" knob	65 Turning jackset, reversed, .490" knob
66 Two turning jackscrews, .490" knob	66 Two turning jackscrews, .490" knob
67 Two turning jackscrews, .490" knob	67 Two turning jackscrews, .490" knob
POLARIZATION:	POLARIZATION
00 None	00 None
01 thru 68 are special identifiers, see R-38	01 thru 68 are special identifiers, see R-38
70 Same configuration as 01 without Loctite® (To be keyed by customer)	70 Same configuration as 01 without Loctite® (To be keyed by customer)

* Full compliment of crimp removable sockets packaged with connectors

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

☒ = Option not RoHS compliant

3 · ROW Crimp Removable to Crimp Removable

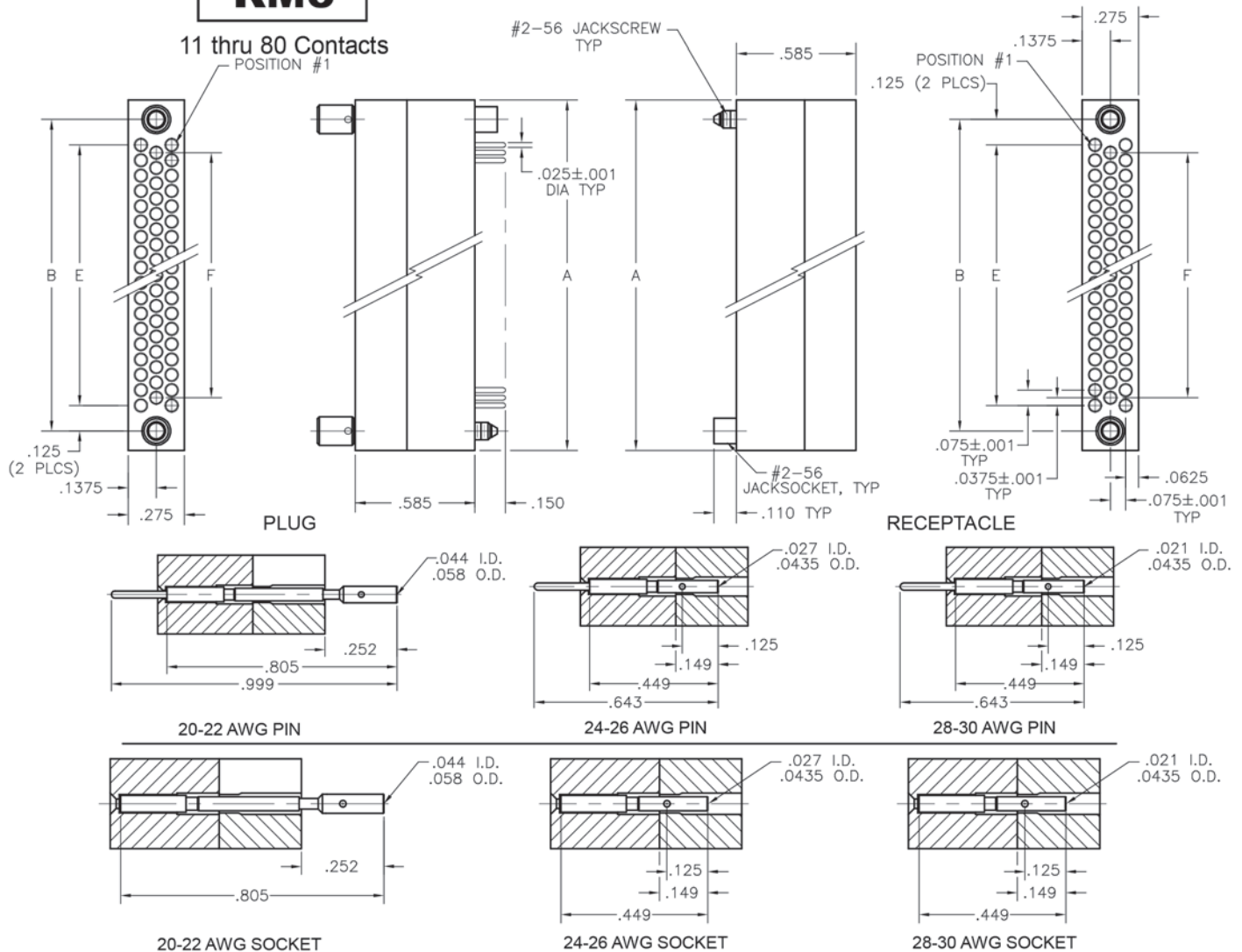
.075"

RM3

11 thru 80 Contacts
POSITION #1

RM332-080-181-5900

RM342-080-581-2900



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

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

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

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

PLUG

RECEPTACLE

SERIES

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

BODY

3	3-Row	3	3-Row
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 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 jackscrews	20	Two fixed jackscrews
59	Hex turning jackset, .200" knob	59	Hex turning jackset, .200" knob
60	Hex turning jackset, reversed, .200" knob	60	Hex turning jackset, reversed, .200" knob
61	Two hex turning jackscrews, .200" knob	61	Two hex turning jackscrews, .200" knob
62	Two hex turning jackscrews, .200" knob	62	Two hex turning jackscrews, .200" knob
64	Turning jackset, .490" knob	64	Turning jackset, .490" knob
65	Turning jackset, reversed, .490" knob	65	Turning jackset, reversed, .490" knob
66	Two turning jackscrews, .490" knob	66	Two turning jackscrews, .490" knob
67	Two turning jackscrews, .490" knob	67	Two turning jackscrews, .490" knob
POLARIZATION:		POLARIZATION	
00	None	00	None
01	thru 68 are special identifiers, see R-38	01	thru 68 are special identifiers, see R-38
70	Same configuration as 01 without Loctite® (To be keyed by customer)	70	Same configuration as 01 without Loctite® (To be keyed by customer)

* Full compliment of crimp removable sockets packaged with connectors

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

3 • ROW

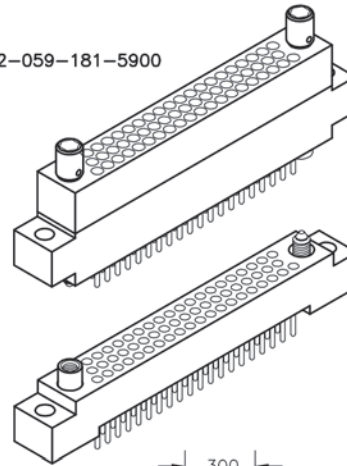
**Crimp Removable to
Cable or Board**

.075"

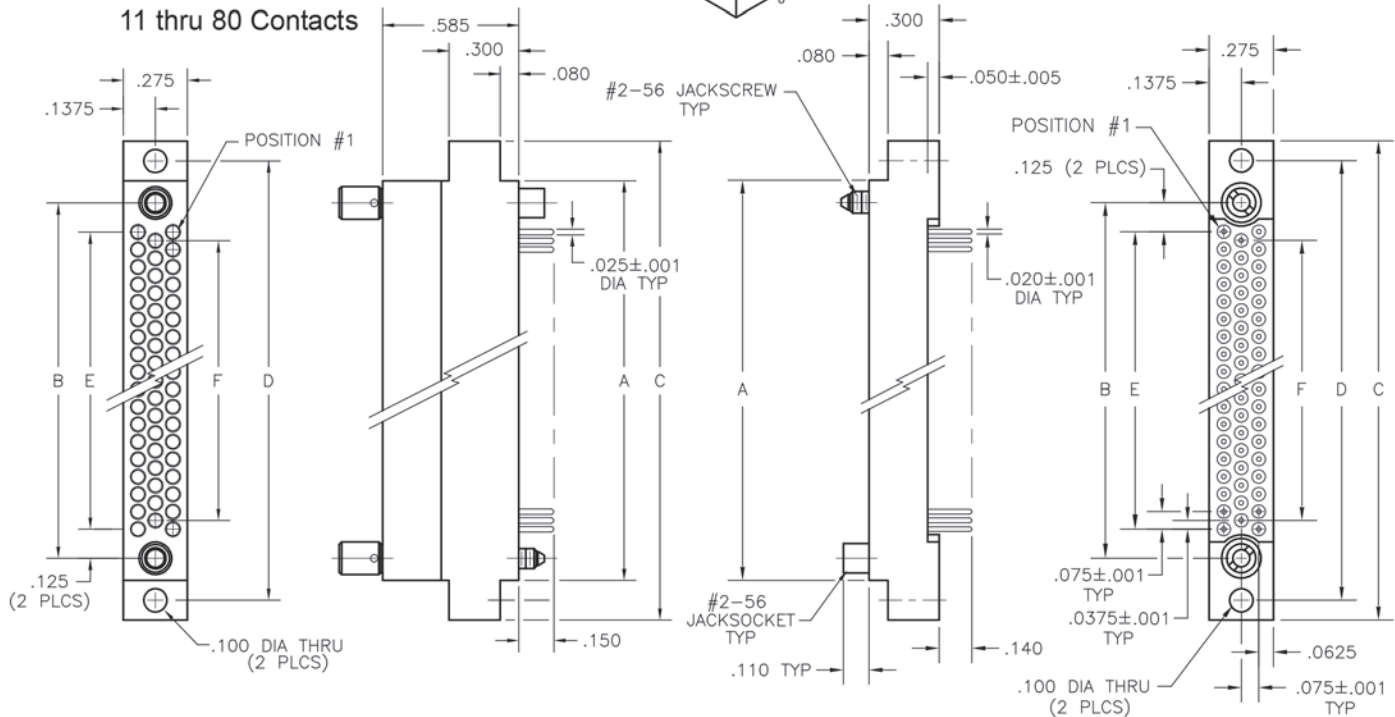
RM3

11 thru 80 Contacts

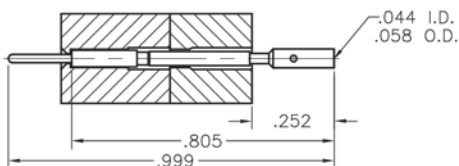
RM312-059-181-5900



RM322-059-211-2900

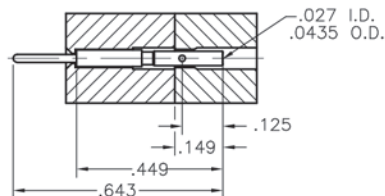


PLUG

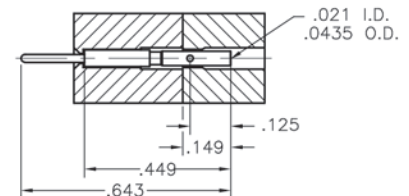


20-22 AWG

RECEPTACLE



24-26 AWG



28-30 AWG

NOTE:

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

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

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

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

PLUG

RECEPTACLE

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	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)
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 (dip solder options only) ☒
	3 Pre-tinned termination, SAC305 alloy (dip solder options only)

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

* Full complement of crimp removable sockets packaged with connectors

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

☒ = Option not RoHS compliant

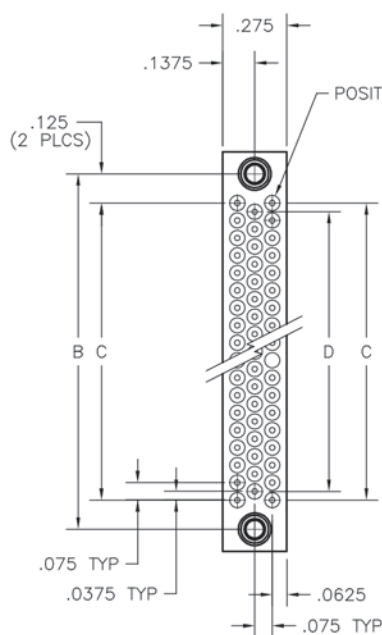
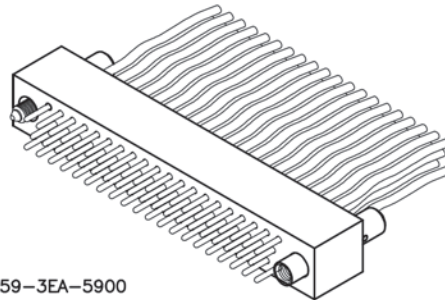
3 • ROW Crimped Wire I/O Plug

.075"

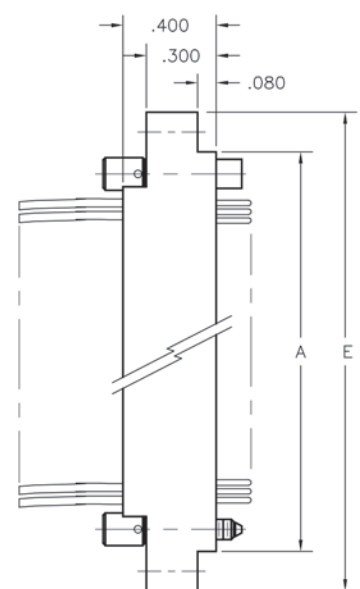
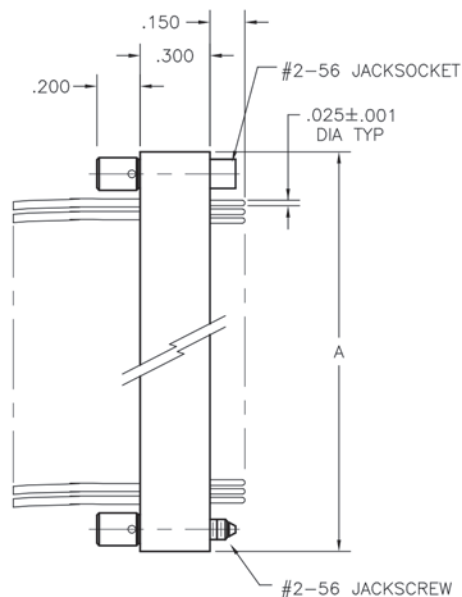
RA3

11 thru 104 Contacts

RA3D2-059-3EA-5900



PLUG WITHOUT
MOUNTING EARS OR
POTTING WELL



PLUG WITH
MOUNTING EARS AND
POTTING WELL

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

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

REPLACEMENT CONTACTS:

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

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

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

SERIES	
RA .075" Screw Machine PC Connector	
BODY	
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)
SIZE	
011, 023, 035, 047, 059, 071, 080, 104	
CONTACTS	
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
HARDWARE	
STYLE OF HARDWARE:	
0256	None
Guide Hardware	
5500	Guide set
5501-5568	Guide set, polarized (see page R-38)
5570	Guide set, polarized, same as 5501 without Loctite® (to be keyed by customer)
5700	Two guide pins
5800	Two guide sockets
Jacking Hardware	
2900	Fixed jackset
3000	Fixed jackset, reversed
1900	Two fixed jackscrews
2000	Two fixed jackscrews
5900	Hex turning jackset, .200" knob
6000	Hex turning jackset, reversed, .200" knob
6100	Two hex turning jackscrews, .200" knob
6200	Two hex turning jackscrews, .200" knob
6400	Turning jackset, .490" knob
6500	Turning jackset, reversed, .490" knob
6600	Two turning jackscrews, .490" knob
6700	Two turning jackscrews, .490" knob

☒ = Option not RoHS compliant

If potting well is used with a pre-wired connector, it will be potted and not repairable.

If potting well is not used with a pre-wired connector, it will not be potted.

Contacts that are not potted in place can be removed and replaced only one time.

See page R-33.4 for crimp instructions, contact insertion and contact removal tools.

WIRE CODES

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

USING WIRE CODES:

RA3D2-059-3EA-5900

Type and Color  Length

Color sequence for

Ten repeating wire colors:

(Beginning in position #1)

Black
Brown
Red
Orange
Yellow
Green
Blue
Violet
Grey
White

Repeat this sequence until
connector is fully loaded.

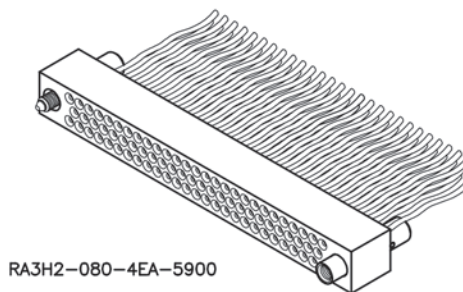


3 • ROW Crimped Wire I/O Receptacle

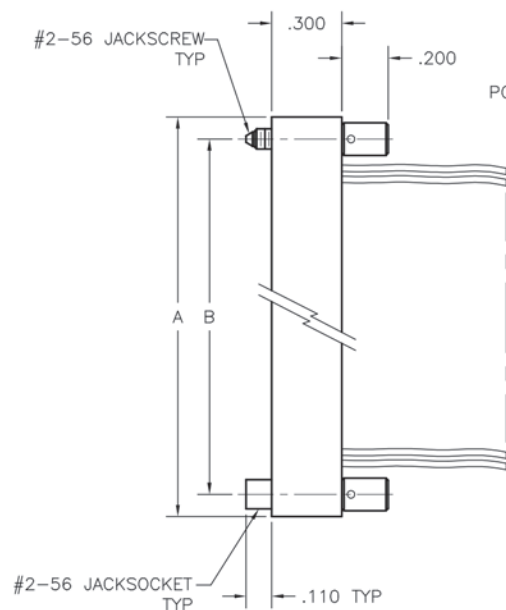
.075"

RA3

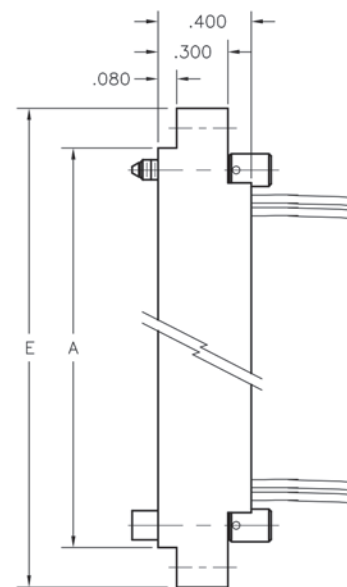
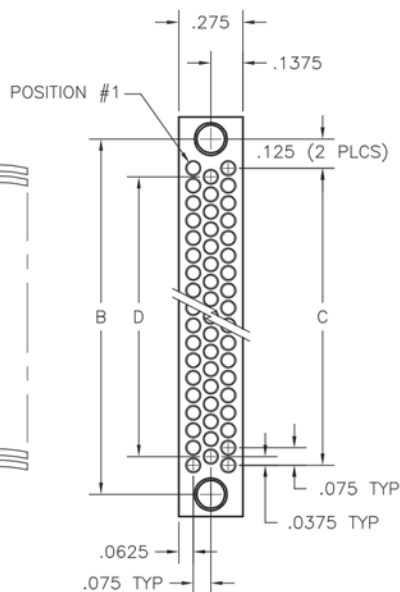
11 thru 104 Contacts



RA3H2-080-4EA-5900



RECEPTACLE WITHOUT
MOUNTING EARS OR
POTTING WELL



RECEPTACLE WITH
MOUNTING EARS AND
POTTING WELL

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

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

REPLACEMENT CONTACTS:

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

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

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

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-38)
5570	Guide set, polarized, same as 5501 without Loctite® (to be keyed by customer)
5700	Two guide pins
5800	Two guide sockets
Jacking Hardware	
2900	Fixed jackset
3000	Fixed jackset, reversed
1900	Two fixed jackscrews
2000	Two fixed jackscrews
5900	Hex turning jackset, .200" knob
6000	Hex turning jackset, reversed, .200" knob
6100	Two hex turning jackscrews, .200" knob
6200	Two hex turning jackscrews, .200" knob
6400	Turning jackset, .490" knob
6500	Turning jackset, reversed, .490" knob
6600	Two turning jackscrews, .490" knob
6700	Two turning jackscrews, .490" knob

☒ = Option not RoHS compliant

If potting well is used with a pre-wired connector, it will be potted and not repairable.

If potting well is not used with a pre-wired connector, it will not be potted.

Contacts that are not potted in place can be removed and replaced only one time.

See page R-33.4 for crimp instructions, contact insertion and contact removal tools.

WIRE CODES

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

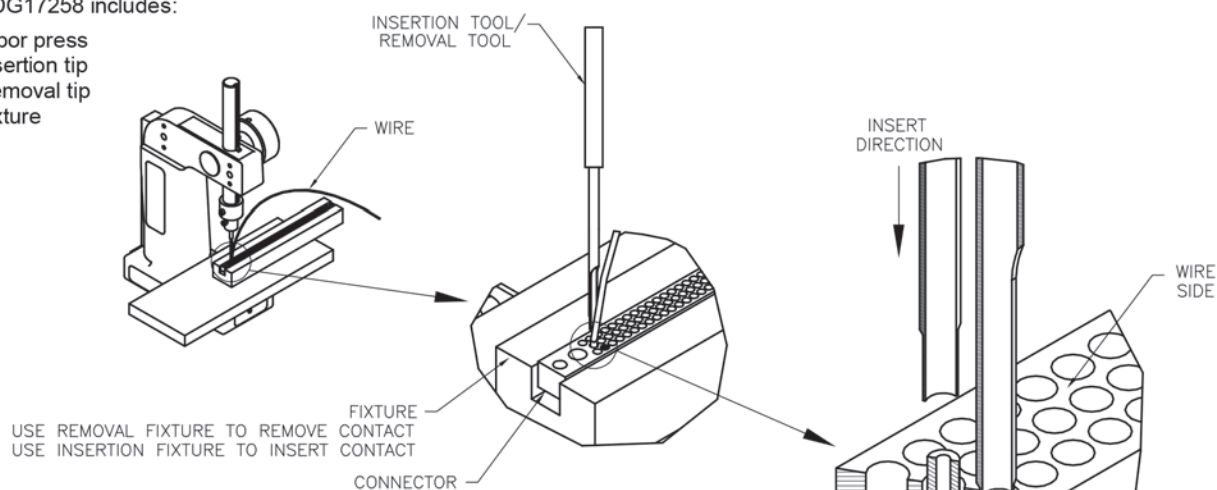
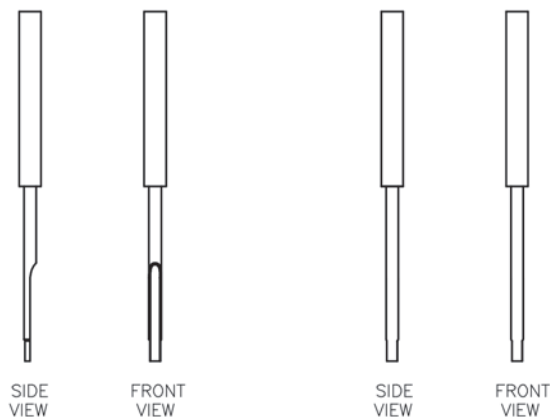


FIGURE 1

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.

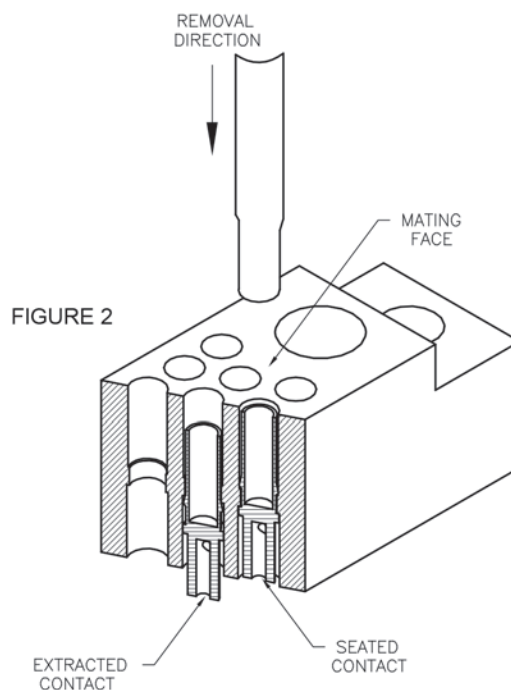


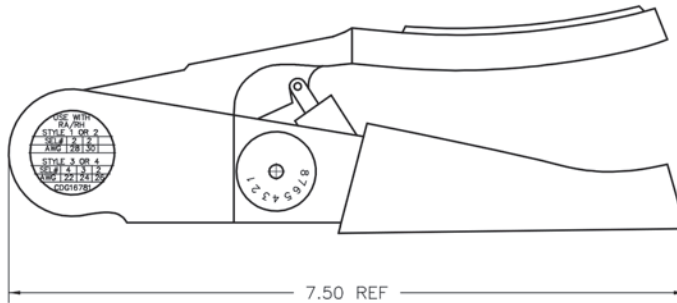
FIGURE 2

RA Crimp Instructions



1. SET UP CRIMP TOOL

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

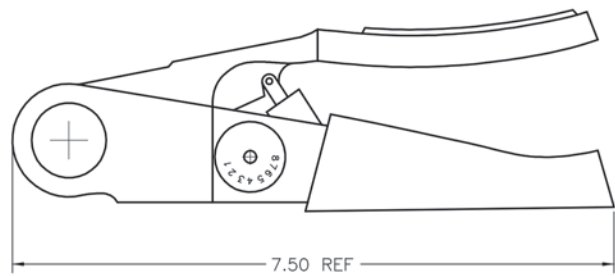




RA Crimp Accessories

Crimp Tool

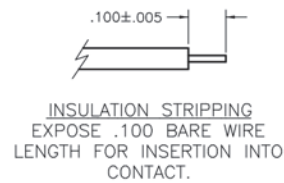
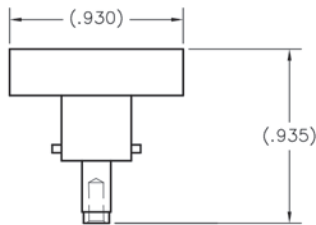
TC2963 - CRIMP TOOL
REF M22520/2-01



Crimp Positioner

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

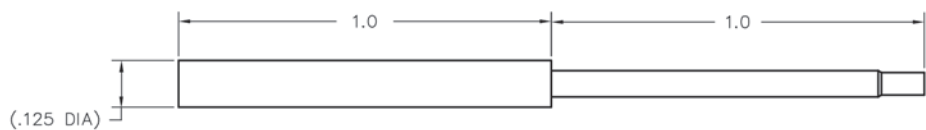
TOOL SELECTION TABLE	
CONTACT	POSITIONER
RA000-001-100-0000	CDG16781
RA000-001-200-0000	
RA000-001-300-0000	
RA000-001-400-0000	



Insertion Tool - CDG17256



Removal Tool - CDG17257

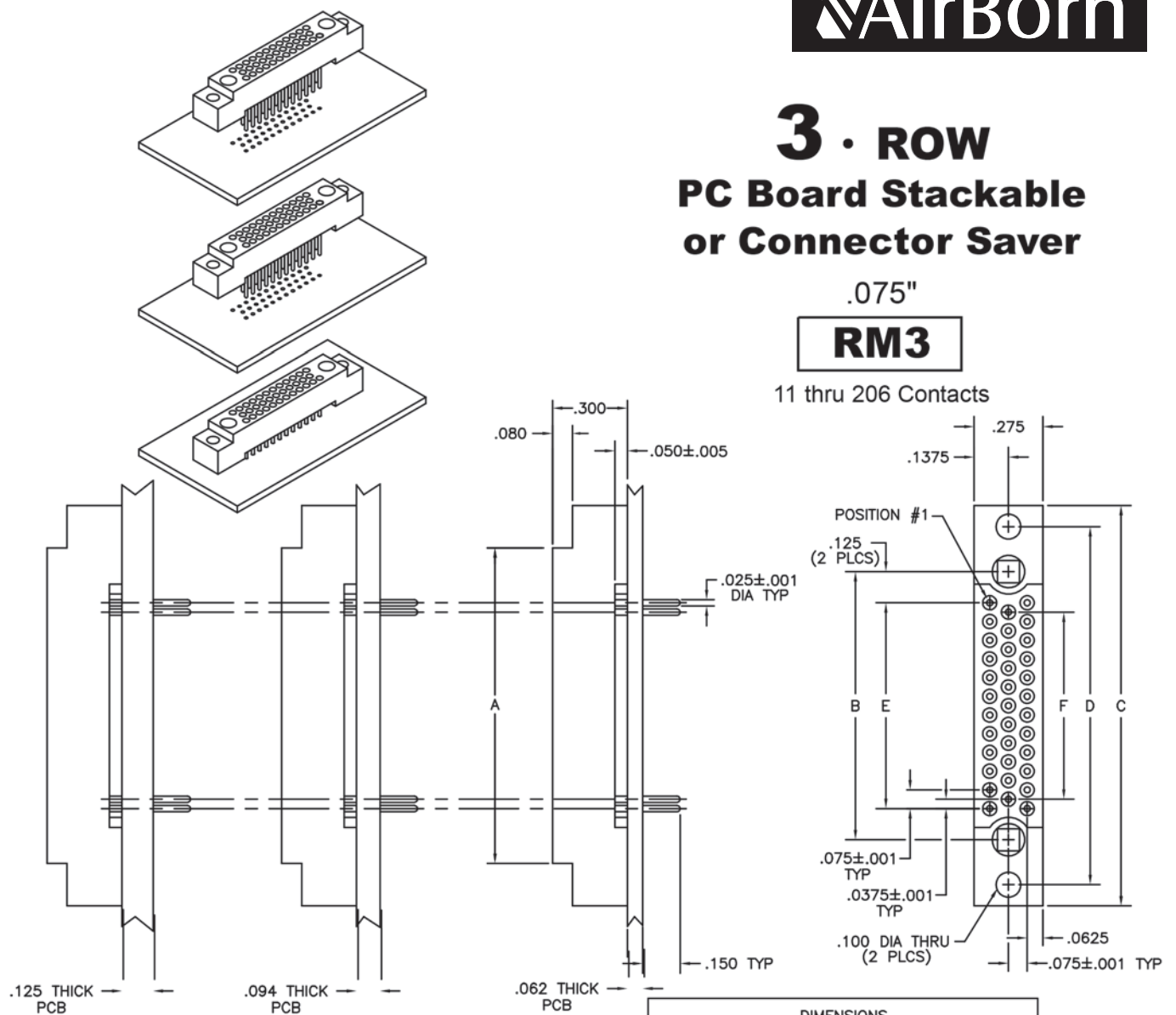


3 · ROW PC Board Stackable or Connector Saver

.075"

RM3

11 thru 206 Contacts



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

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

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

3 · ROW Right Angle PTH Plug Straight PTH Plug

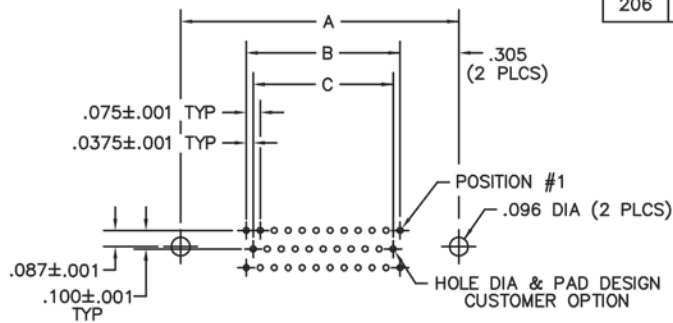
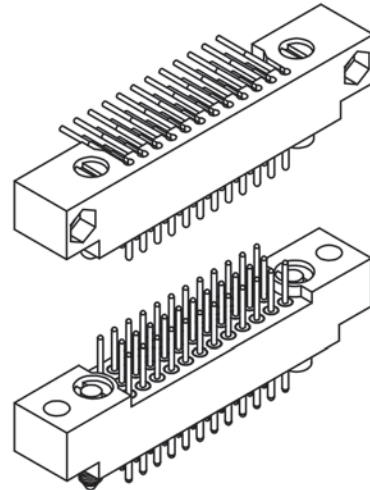
.075"

RM3

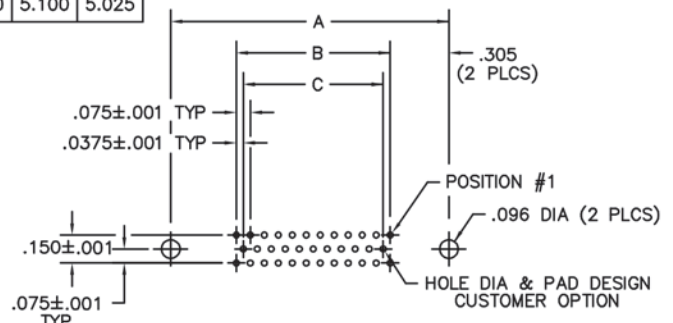
11 thru 206 Contacts

Recommended
Board Layout

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



RIGHT ANGLE PTH PLUG
PC BOARD VIEWED FROM COMPONENT SIDE



STRAIGHT PTH PLUG
PC BOARD VIEWED FROM COMPONENT SIDE

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

3 · ROW

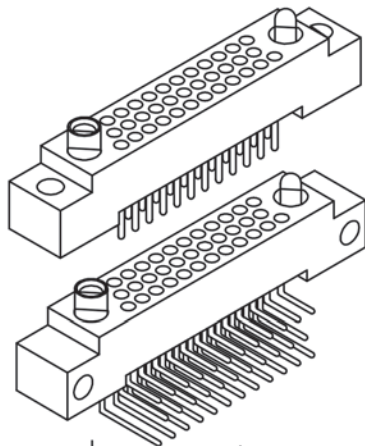
Right Angle PTH Rcpt Straight PTH Rcpt

.075"

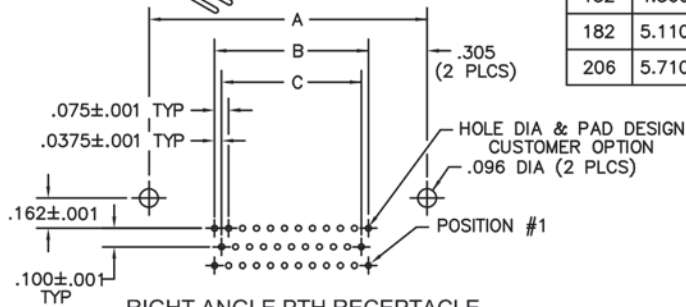
RM3

11 thru 206 Contacts

Recommended
Board Layout

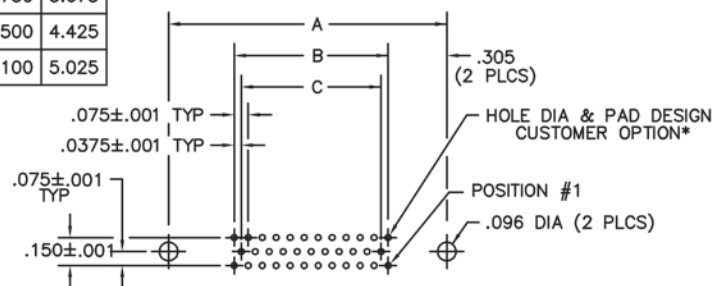


DIMENSIONS			
SIZE	A	B	C
11	.835	.225	.150
23	1.135	.525	.450
35	1.435	.825	.750
47	1.735	1.125	1.050
59	2.035	1.425	1.350
71	2.335	1.725	1.650
80	2.560	1.950	1.875
92	2.860	2.250	2.175
104	3.160	2.550	2.475
122	3.610	3.000	2.925
140	4.060	3.450	3.375
152	4.360	3.750	3.675
182	5.110	4.500	4.425
206	5.710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



RIGHT ANGLE PTH RECEPTACLE

PC BOARD VIEWED FROM COMPONENT SIDE



STRAIGHT PTH RECEPTACLE

PC BOARD VIEWED FROM COMPONENT SIDE

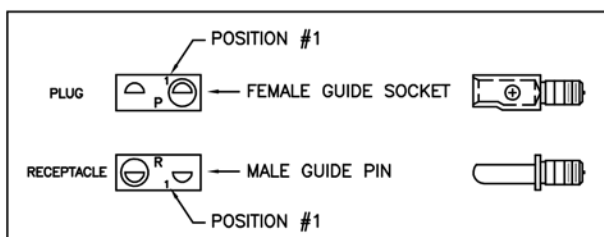
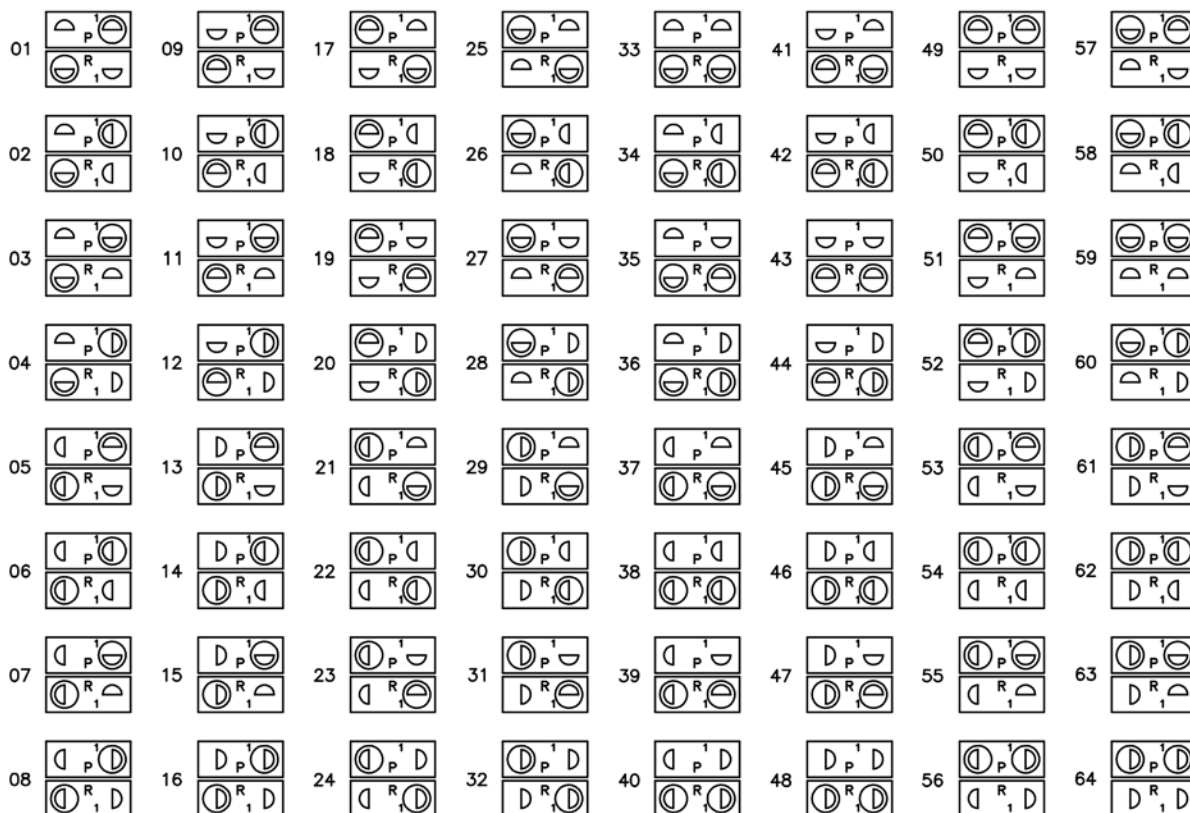
***COMPLIANT TERMINATIONS PCB REQUIREMENTS:**

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 12 11 10 26 25 24 15 14 13 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 16 15 14 34 33 32 19 18 17 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

Polarization 2 & 3 Row D-Shaped Guide Sets



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

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

Example:

Plug RM252-100-311-5501

Receptacle RM222-100-211-5501

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

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

UNIVERSAL TEST CONNECTORS

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

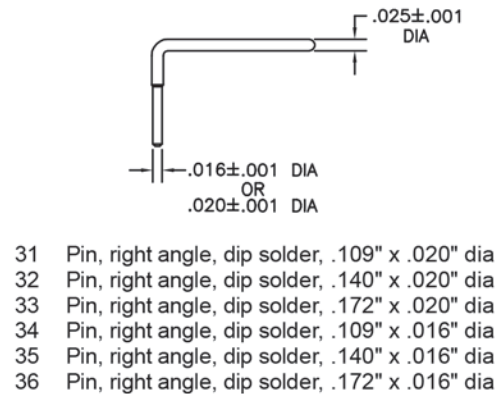
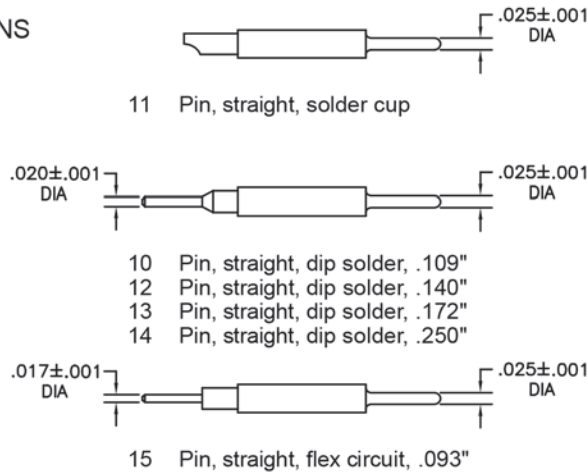
5565 CD8783		For positions 5501 thru 5516
5566 CD8783		For positions 5517 thru 5532
5567P CD8784		For positions 5533 thru 5548
5567R CD7743		For positions 5533 thru 5548
5568P CD7743		For positions 5549 thru 5564
5568R CD8784		For positions 5549 thru 5564

Hardware type shown above catalog order number.

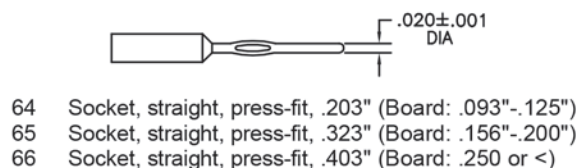
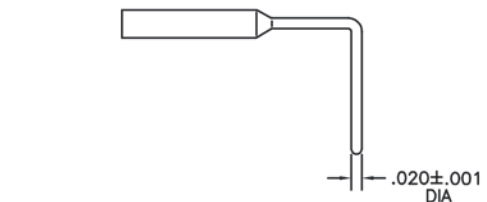
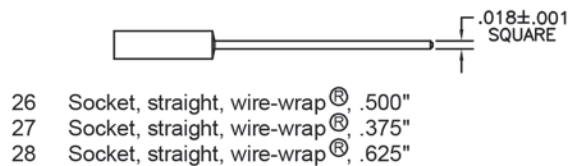
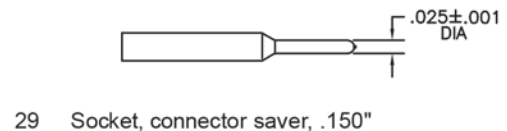
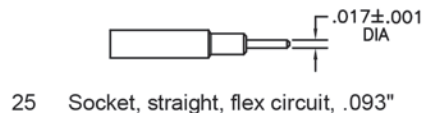
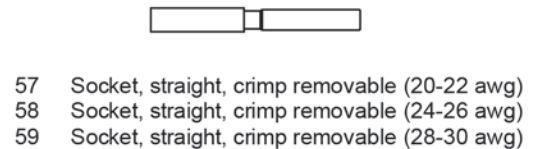
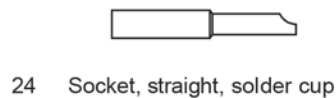
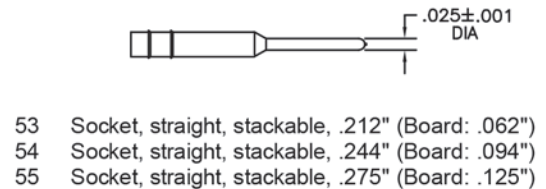
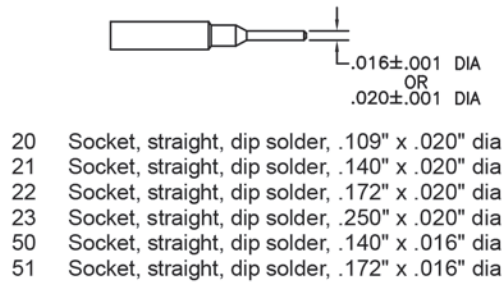
Contacts 2 & 3 Row

Pins and Sockets

PINS



SOCKETS



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

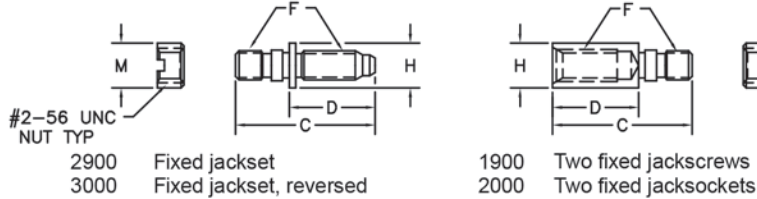
A = Dip terminal, .109" long
B = Dip terminal, .140" long
C = Dip terminal, .172" long

Examples: Mating Pair

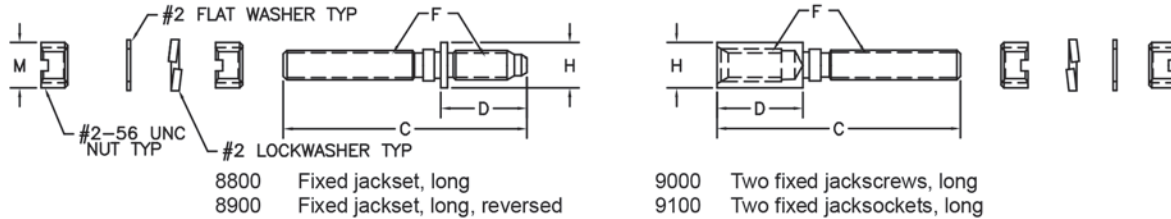
Military AirBorn	M55302/190LC100X RM222-100-211-5500	Two row receptacle, .100 socket contacts with dip terminal, .140" long in a straight thru housing with mounting ears and full round guide set.
Military AirBorn	M55302/191A100X RM252-100-311-5500	Two row plug, 100 pin contacts with dip terminals, .109"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

#2-56 Jacksets

Fixed Jacksets

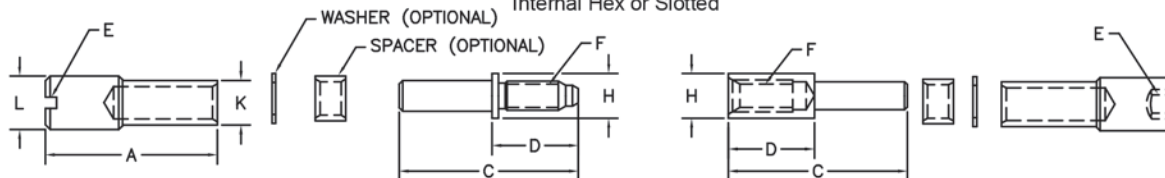


Fixed Jacksets, Long



Turning Jacksets

Internal Hex or Slotted



SLOTTED

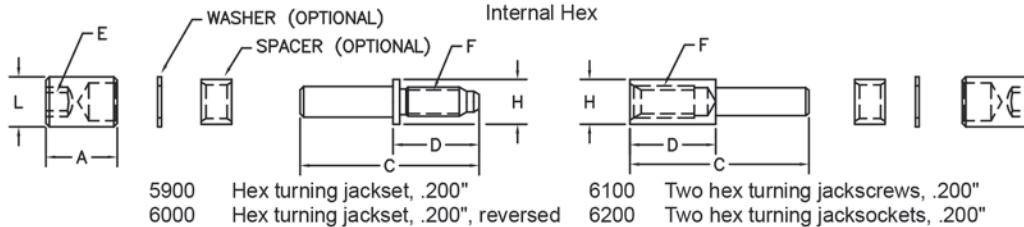
- 5100 Turning jackset, .700"
- 5200 Turning jackset, .700", reversed
- 5300 Two turning jackscrews, .700"
- 5400 Two turning jacksockets, .700"
- 6400 Turning jackset, .490"
- 6500 Turning jackset, .490", reversed
- 6600 Two turning jackscrews, .490"
- 6700 Two turning jacksockets, .490"
- 6800 Turning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



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

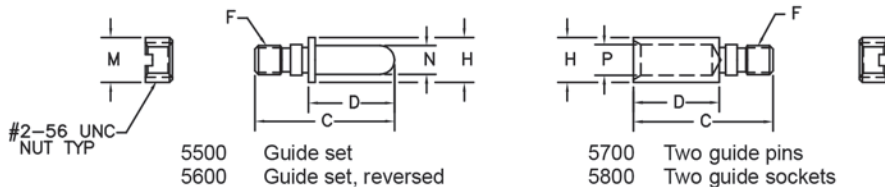
HARDWARE TYPE	PART NUMBER
6800 or 6900	RM000-000-000-6800 (or -6900)
7000	RM000-000-000-7000
7100	RM000-000-000-7100
7200 or 7300	RM000-000-000-7200 (or -7300)
7400	RM000-000-000-7400
7500	RM000-000-000-7500
7600 or 7700	RM000-000-000-7600 (or -7700)
7800	RM000-000-000-7800
7900	RM000-000-000-7900
8000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

Notes:

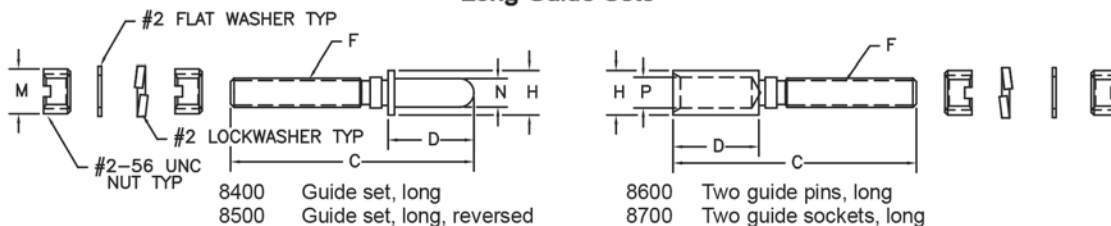
1. For spanner nut wrench, order part number TN1680 (refer to page WA-9 in W-Series Catalog).
2. When installing fixed jacksets, apply Loctite® to threads.

Guide Sets

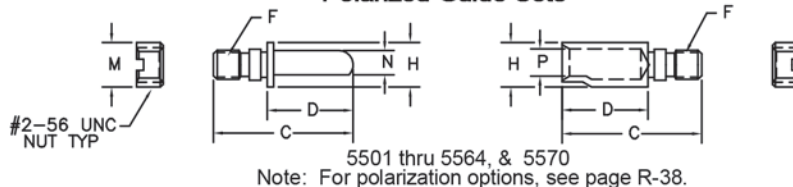
Guide Sets



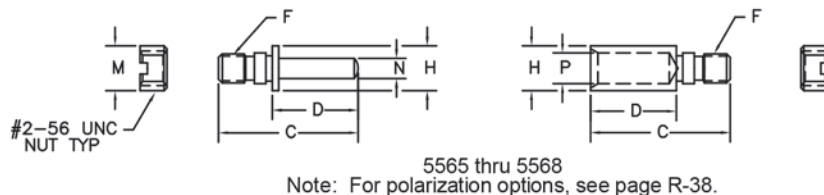
Long Guide Sets



Polarized Guide Sets



Universal Test Guide Sets



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

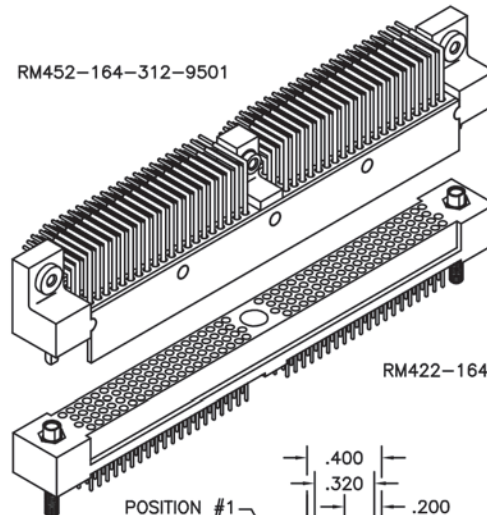
4 · ROW Daughterboard to Motherboard or Chassis

.075"

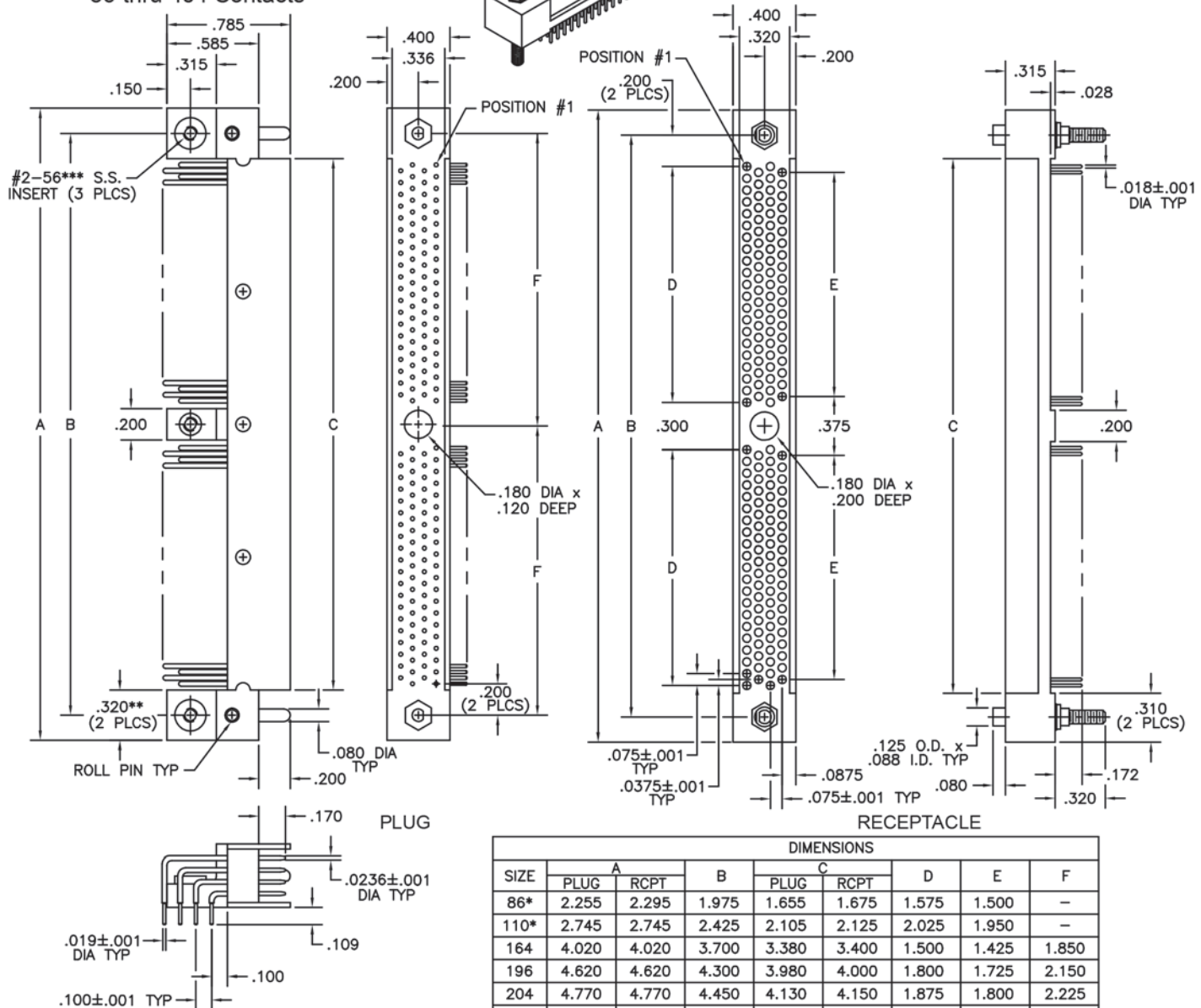
RM4

86 thru 404 Contacts

RM452-164-312-9501



RM422-164-832-9601



NOTES:

* = Single section, no center mounting hole

** = .280" for 86 position

*** = #4-40 for 404 position

SIZE	DIMENSIONS						
	A		B	C		D	E
	PLUG	RCPT		PLUG	RCPT		
86*	2.255	2.295	1.975	1.655	1.675	1.575	1.500
110*	2.745	2.745	2.425	2.105	2.125	2.025	1.950
164	4.020	4.020	3.700	3.380	3.400	1.500	1.425
196	4.620	4.620	4.300	3.980	4.000	1.800	1.725
204	4.770	4.770	4.450	4.130	4.150	1.875	1.800
220	5.070	5.070	4.750	4.430	4.450	2.025	1.950
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
300	6.570	6.570	6.250	5.930	5.950	2.775	2.700
404	8.520	8.520	8.200	7.880	7.900	3.750	3.675

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

PLUG

RECEPTACLE

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

BODY	
4 4-Row	4 4-Row

BODY STYLE: 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	
086, 110, 164, 196, 204, 220, 250, 276, 300, 404	086, 110, 164, 196, 204, 220, 250, 276, 300, 404

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

POLARIZATION: 00 None 01 thru 36 are special identifiers, see page R-57	POLARIZATION 00 None 01 thru 36 are special identifiers, see page R-57
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☒ = Option not RoHS compliant

4 · ROW Motherboard or Chassis to Daughterboard

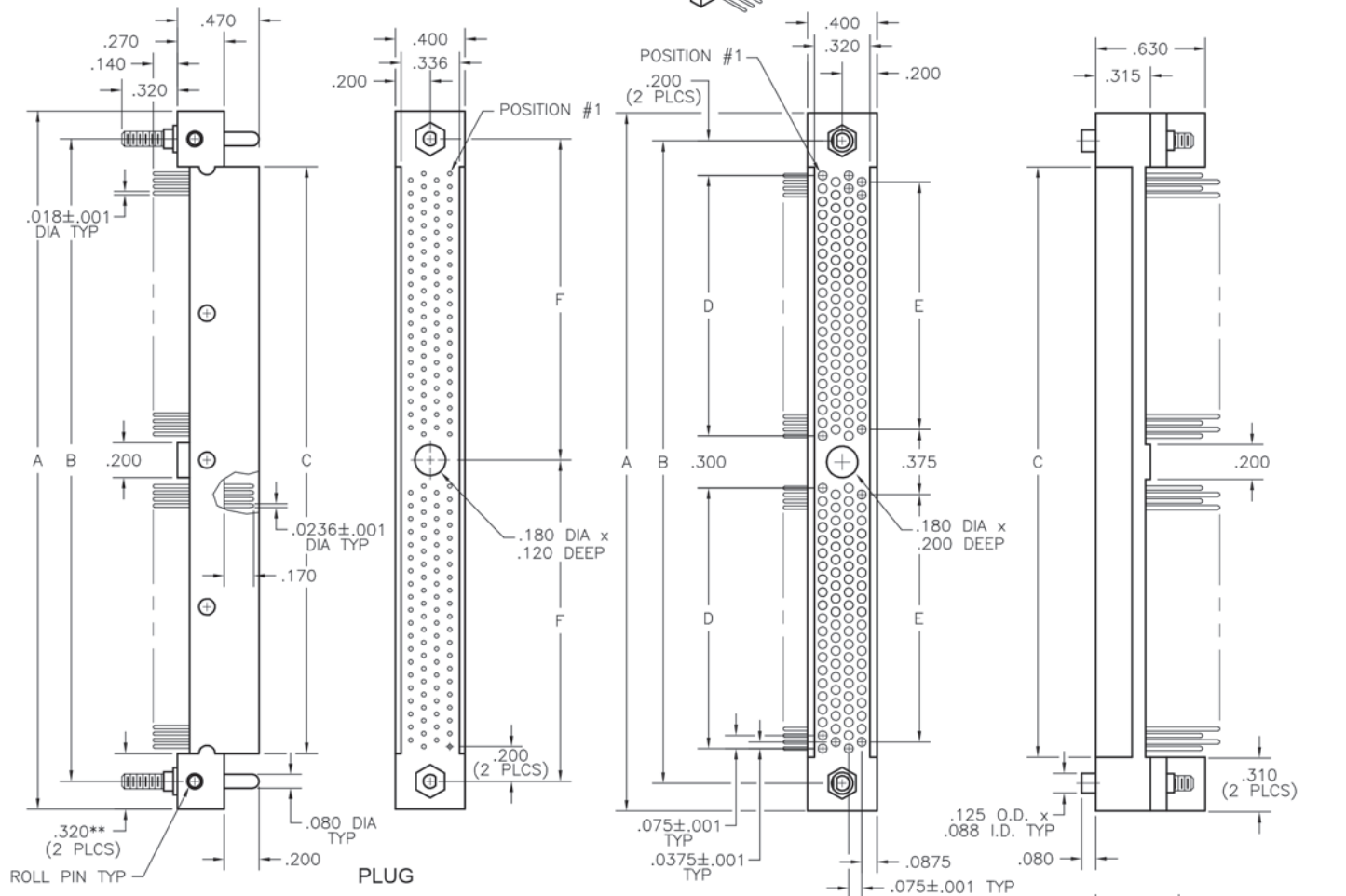
.075"

RM4

86 thru 404 Contacts

RM412-164-522-9501

RM462-164-852-9601



SIZE	DIMENSIONS							
	PLUG	RCPT	B	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

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

PLUG

RECEPTACLE

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

BODY	
------	--

4	4-Row	4	4-Row
1	BODY STYLE: Plug, straight, without mounting ears	6	BODY STYLE: Receptacle, right angle, with metal mount brackets
2	BODY MATERIAL: Polyphenylene sulfide (PPS)	2	BODY MATERIAL: Polyphenylene sulfide (PPS)

SIZE	
------	--

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

CONTACTS	
----------	--

TYPE CONTACTS/TERMINATIONS:		TYPE CONTACTS/TERMINATIONS:	
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) ☒	2	Pre-tinned termination, SnPb alloy ☒
3	Pre-tinned termination, SAC305 alloy (dip solder options only)	3	Pre-tinned termination, SAC305 alloy

HARDWARE	
----------	--

STYLE OF HARDWARE:		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-57	01	thru 36 are special identifiers, see page R-57

Note: Includes mounting bracket when right angle contacts are supplied

☒ = Option not RoHS compliant

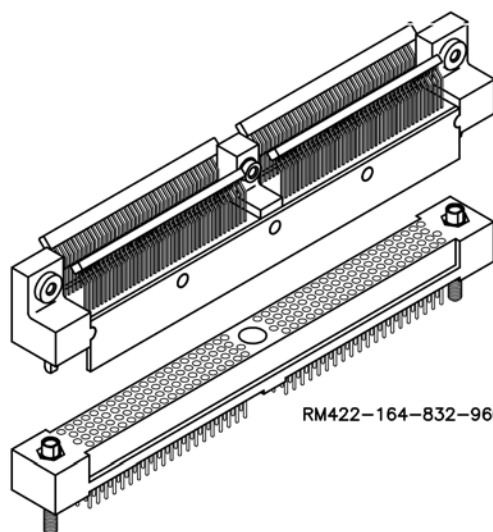
4 • ROW

Daughterboard to Motherboard or Chassis

.075"

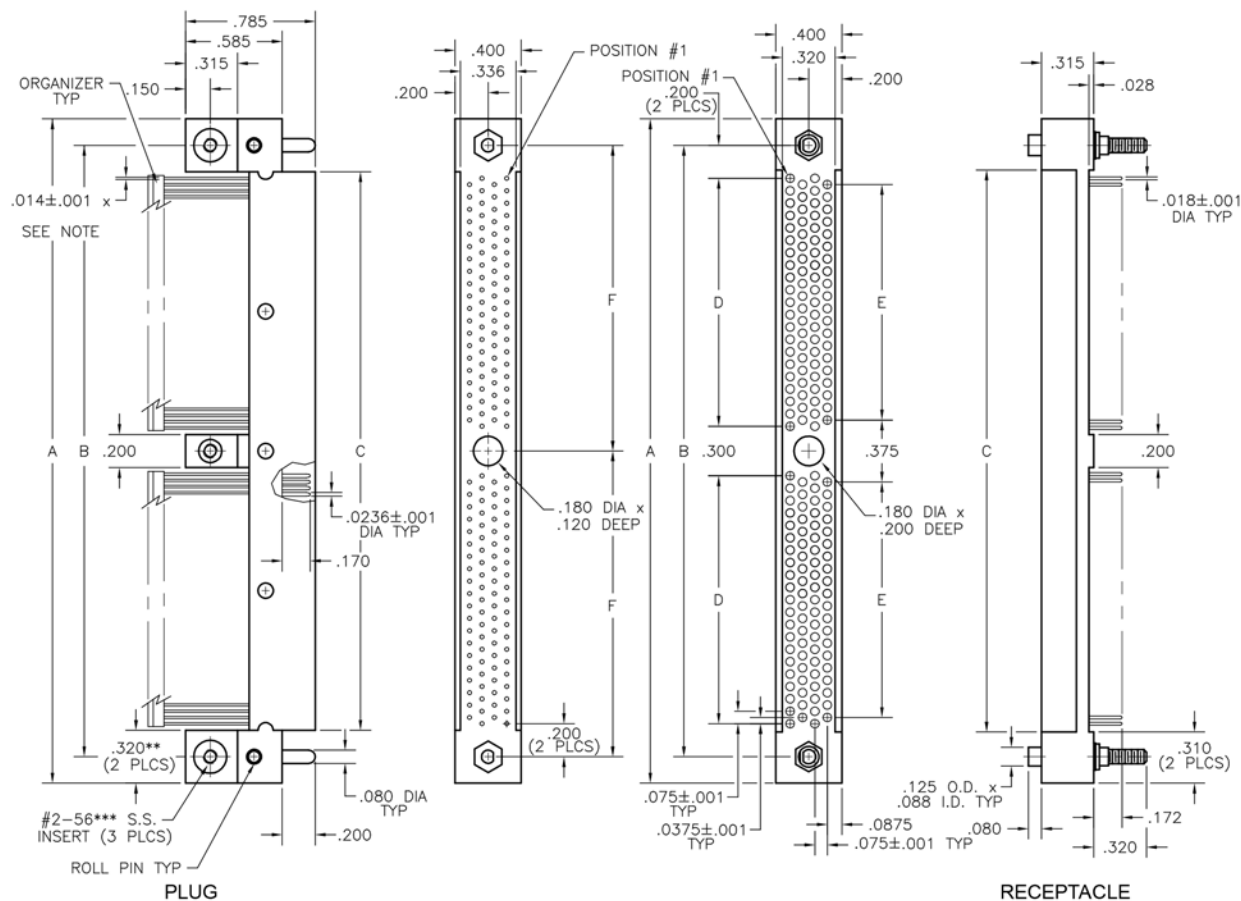
RM4

86 thru 404 Contacts



RM412-164-192-9501-933

RM422-164-832-9601



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

NOTES:

* = Single section, no center mounting hole.

** = .280" for 86 position

*** = Insert is #4-40 for size 404.

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

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

PLUG

RECEPTACLE

SERIES

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

BODY

4	4-Row	4	4-Row
BODY STYLE:		BODY STYLE:	
1	Plug, straight, with mounting ears	2	Receptacle, straight, without mounting ears
BODY MATERIAL:		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:		TYPE CONTACTS/TERMINATIONS:	
19	Pin, SMT, .014" x .007" tail, scored for organizer removal (see R-56)	75	Socket, straight, dip solder, .250" x .018" dia
39	Pin, SMT, .014" x .007" tail, unscored	76	Socket, straight, solder cup
		77	Socket, straight, flex, .093" x .017" dia
		78	Socket, straight, wire wrap [®] , .500" x .018" sq
		79	Socket, straight, wire wrap [®] , .375" x .018" sq
		81	Socket, straight, dip solder, .109" x .018" dia
		82	Socket, straight, dip solder, .140" x .018" dia
		83	Socket, straight, dip solder, .172" x .018" dia
		87	Socket, straight, press-fit, .188" (Board: .093" - .125" thk)
		88	Socket, straight, press-fit, .308" (Board: .156" - .200" thk)
		89	Socket, straight, press-fit, .388" (Board: .250"+ thk)

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

HARDWARE

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

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

OPTIONS

9XX SMT configuration code, see page R-56

☒ = Option not RoHS compliant

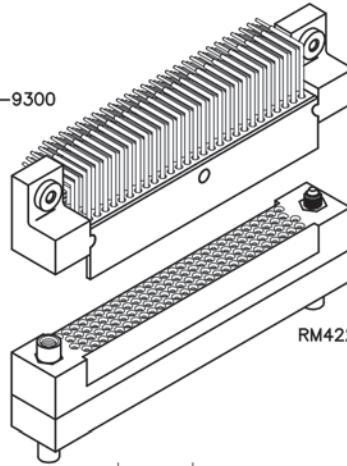
4 · ROW Cable or Board to Crimp Removable

.075"

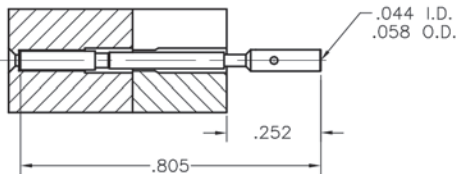
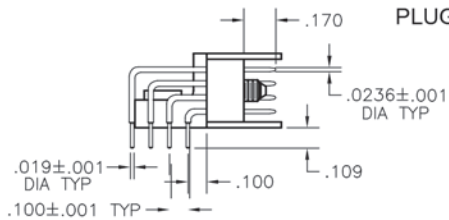
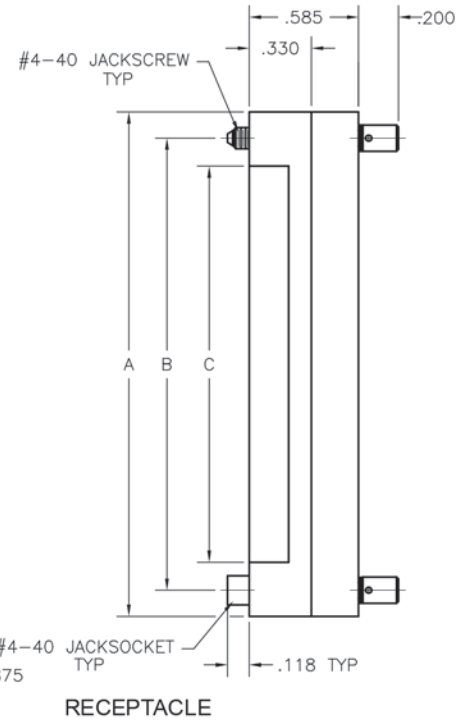
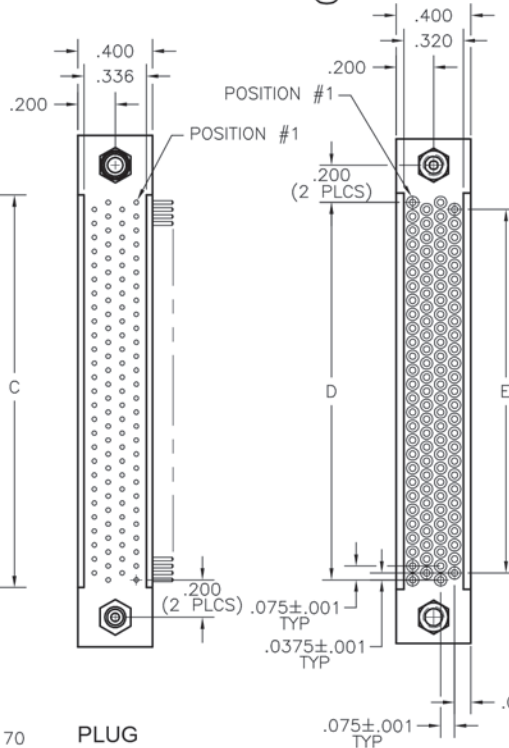
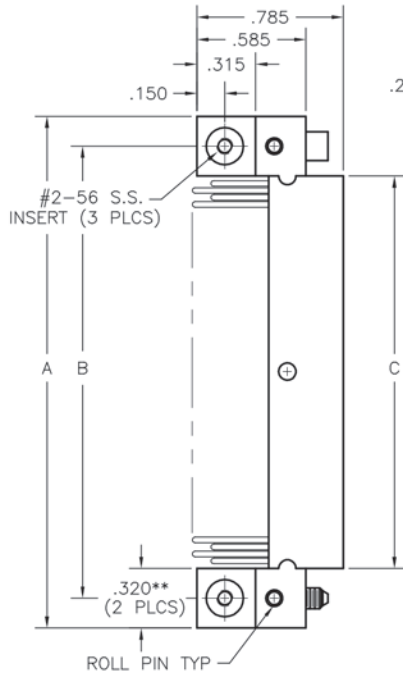
RM4

86 & 110 Contacts

RM452-110-312-9300



RM422-110-581-9200



20-22 AWG

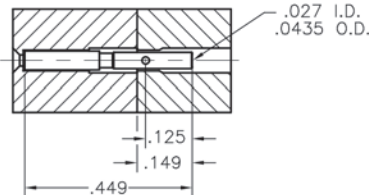
CRIMP REMOVABLE CONTACTS	
SIZE	PART NUMBER
20-22 AWG	RM400-000-571-0000
24-26 AWG	RM400-000-581-0000
28-30 AWG	RM400-000-591-0000

NOTES:

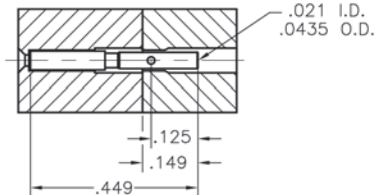
* = Single section, no center mounting hole.

** = .280" for 86 position

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



24-26 AWG



28-30 AWG

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

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

PLUG

RECEPTACLE

SERIES

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

BODY

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)	

SIZE

086, 110 | 086, 110

CONTACTS

TYPE CONTACTS/TERMINATIONS:		TYPE CONTACTS/TERMINATIONS:	
31	Pin, right angle, dip solder, .109" x .019" dia	00	Contacts not supplied
32	Pin, right angle, dip solder, .140" x .019" dia	57	Socket, straight, crimp removable (20-22 AWG)*
33	Pin, right angle, dip solder, .172" x .019" dia	58	Socket, straight, crimp removable (24-26 AWG)*
34	Pin, right angle, dip solder, .250" x .019" dia	59	Socket, straight, crimp removable (28-30 AWG)*

PLATING OPTIONS:		PLATING OPTIONS:	
1	Gold plated termination	0	No plating (use with Contact Option "00" only)
2	Pre-tinned termination, SnPb alloy ☒	1	Gold plated termination
3	Pre-tinned termination, SAC305 alloy		

HARDWARE

STYLE OF HARDWARE:		STYLE OF HARDWARE:	
0256	None	0256	None
83	Fixed jackset, reversed, installed	82	Hex turning jackset, reversed, installed, .200 knob
90	Guide pins, full round, installed	91	Guide sockets, full round, installed
93	Fixed jackset, installed	92	Hex turning jackset, installed, .200" knob
95	Guide pins, polarized, unassembled	96	Guide sockets, polarized, unassembled
9501 - 9536	Guide pins, polarized, installed	9601 - 9636	Guide sockets, polarized, installed
99	Guide pins, universal, installed	98	Guide sockets, universal, installed

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

* Full compliment of crimp removable sockets packaged with connectors

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

☒ = Option not RoHS compliant

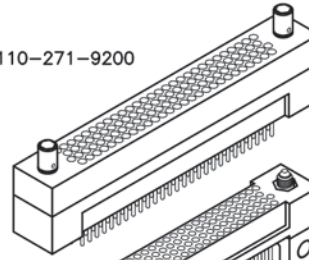
4 · ROW Crimp Removable to Board

.075"

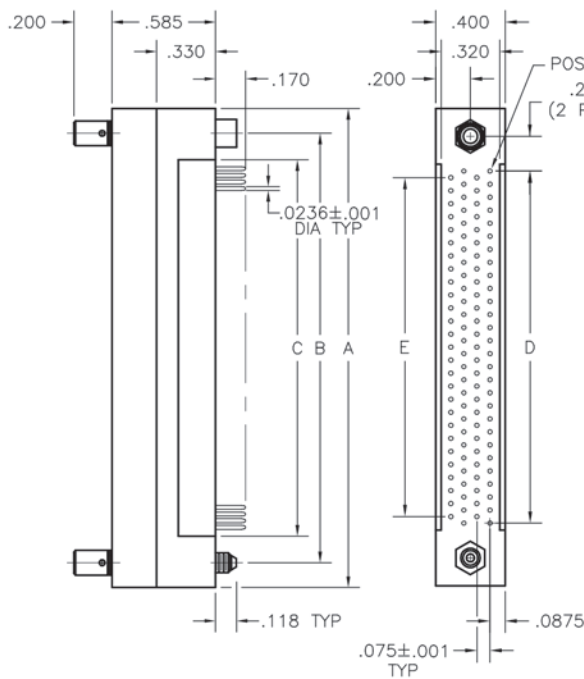
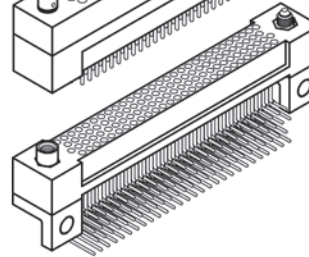
RM4

86 & 110 Contacts

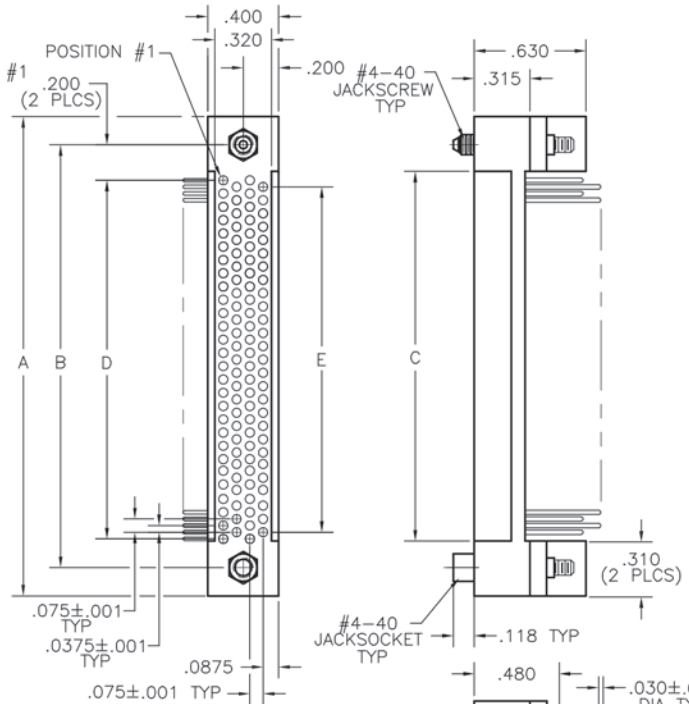
RM412-110-271-9200



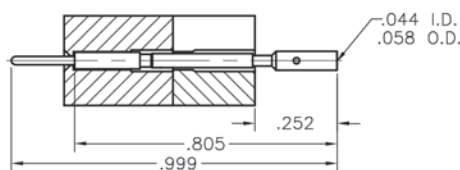
RM462-110-852-9300



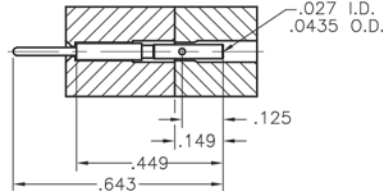
PLUG



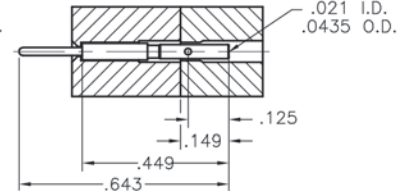
RECEPTACLE



20-22 AWG



24-26 AWG



28-30 AWG

NOTE:

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

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

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

PLUG: 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:		BODY STYLE:	
1	Plug, straight, without mounting ears	6	Receptacle, right angle, with mounting ears
BODY MATERIAL:		BODY MATERIAL:	
2	Polyphenylene sulfide (PPS)	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 ☒
		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-57	01	thru 36 are special identifiers, see page R-57

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

☒ = Option not RoHS compliant

4 • ROW Right Angle PTH Plug Straight PTH Plug

.075"

RM4

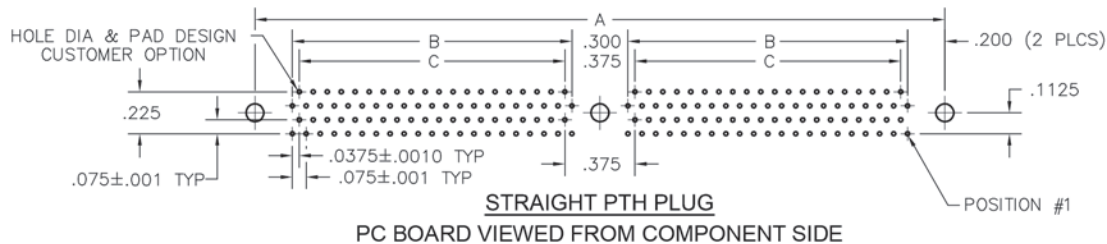
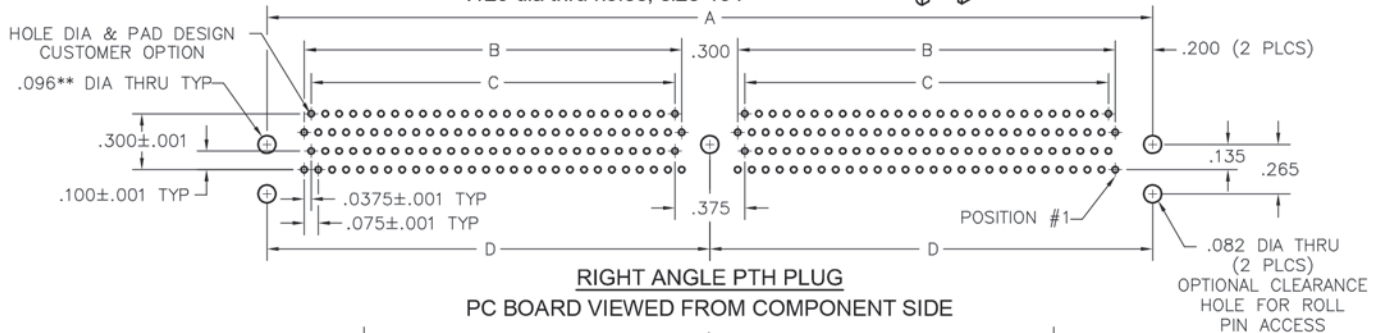
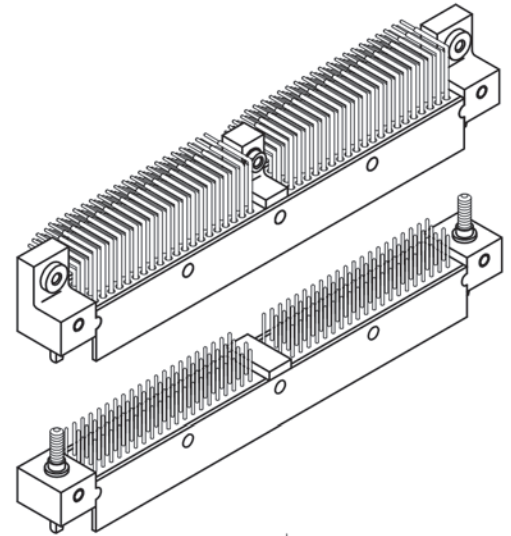
86 thru 404 Contacts
Recommended
Board Layout

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

NOTES:

* = Single section, no center mounting hole

** = .125 dia thru holes, size 404



SIZE	CONTACT ID				SIZE	CONTACT ID			
86*	868584 656463 434241 222120 686766 464544 252423 321				220	220219218 166165164 110109108 565554 196195194 141140139 868584 313029 193192191 138137136 838281 282726 169168167 113112111 595857 321			
110*	110109108 838281 555453 282726 868584 585756 313029 321				250*	250249248 188187186 125124123 636261 191190189 128127126 666564 321			
164	164163162 124123122 828180 424140 147146145 106105104 656463 242322 144143142 103102101 626160 212019 127126125 858483 454443 321				276	276275274 208207206 138137136 706968 245244243 176175174 107106105 383736 242241240 173172171 104103102 353433 211210209 141140139 737271 321			
196	196195194 148147146 989796 504948 173172171 126125124 777675 282726 172171170 123122121 747372 252423 151150149 10110099 535251 321				300	300299298 226225224 150149148 767574 266265264 191190189 116115114 414039 263262261 188187186 113112111 383736 229228227 153152151 797877 321			
204	204203202 154153152 102101100 525150 182181180 131130129 807978 292827 179178177 128127126 777675 262524 157156155 105104103 555453 321				404	403401399 404402400 201199197 202200198 309307305 308306304 107105103 106104102 302300298 303301299 1009896 1019997 208206204 207205203 642 531			

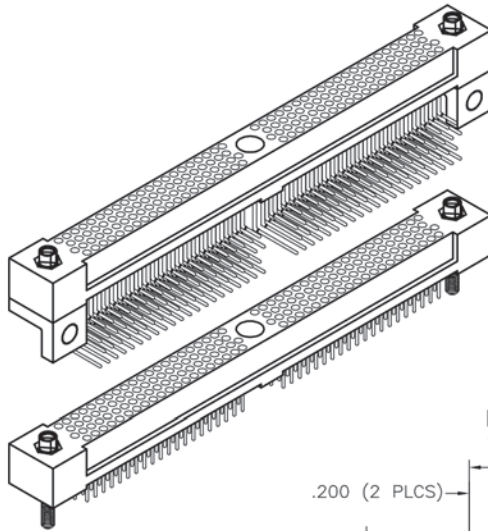
4 · ROW

Right Angle PTH Rcpt Straight PTH Rcpt

.075"

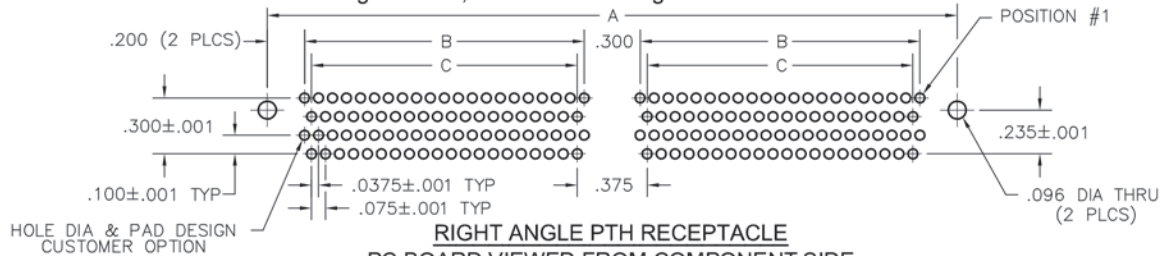
RM4

86 thru 404 Contacts
Recommended Board Layout

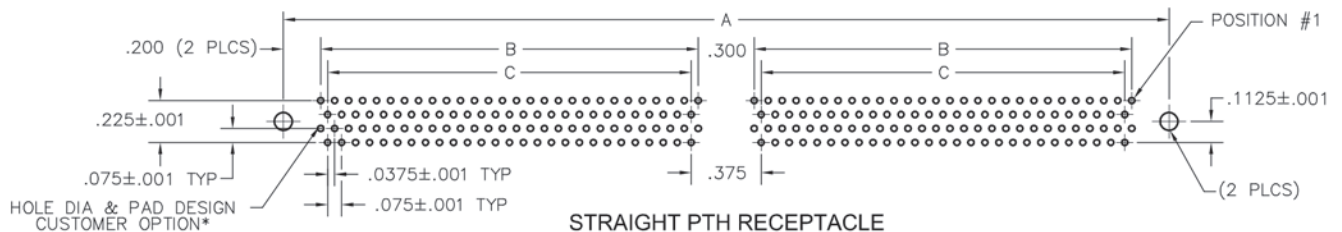


DIMENSIONS			
SIZE	A	B	C
86*	1.975	1.575	1.500
110*	2.425	2.025	1.950
164	3.700	1.500	1.425
196	4.300	1.800	1.725
204	4.450	1.875	1.800
220	4.750	2.025	1.950
250*	5.050	4.650	4.575
276	5.800	2.550	2.475
300	6.250	2.775	2.700
404	8.200	3.750	3.675

NOTES:
* = Single section, no center mounting hole



RIGHT ANGLE PTH RECEPTACLE
PC BOARD VIEWED FROM COMPONENT SIDE



STRAIGHT PTH RECEPTACLE
PC BOARD VIEWED FROM COMPONENT SIDE

*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	3 2 1	220	56	55	54	31 30 29
	43	42	41	25 24 23		110	109	108	86 85 84
	65	64	63	46 45 44		166	165	164	141 140 139
	86	85	84	68 67 66		220	219	218	196 195 194
110*	28	27	26	3 2 1	250*	63	62	61	3 2 1
	55	54	53	31 30 29		125	124	123	66 65 64
	83	82	81	58 57 56		188	187	186	128 127 126
	110	109	108	86 85 84		250	249	248	191 190 189
164	42	41	40	3 2 1	276	70	69	68	38 37 36
	82	81	80	45 44 43		138	137	136	107 106 105
	124	123	122	85 84 83		208	207	206	176 175 174
	164	163	162	127 126 125		276	275	274	243 242 241
196	50	49	48	3 2 1	300	76	75	74	41 40 39
	98	97	96	53 52 51		150	149	148	116 115 114
	148	147	146	101 100 99		226	225	224	191 190 189
	196	195	194	151 150 149		300	299	298	266 265 264
204	52	51	50	3 2 1	404	202	201	200	106 104 102
	102	101	100	55 54 53		201	199	197	107 105 103
	154	153	152	105 104 103		404	402	400	308 306 304
	204	203	202	157 156 155		403	401	399	309 307 305

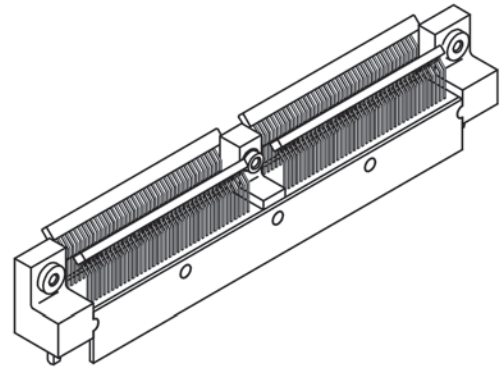
4 ROW Straight SMT Plug

.075"

RM4

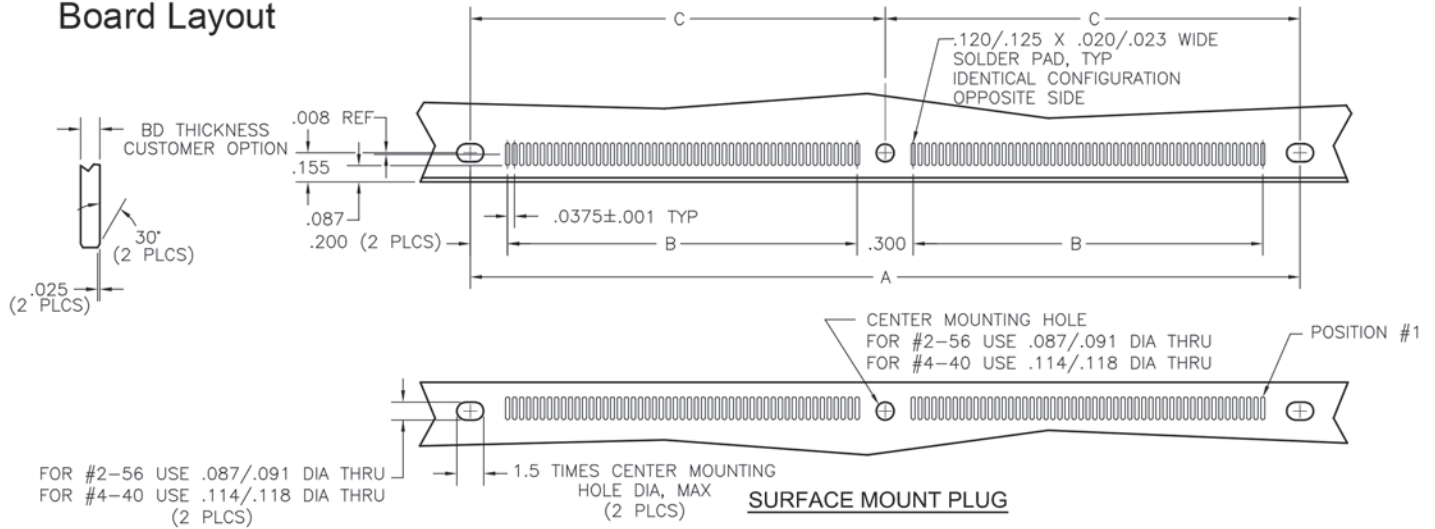
86 thru 404 Contacts
Recommended
Board Layout

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



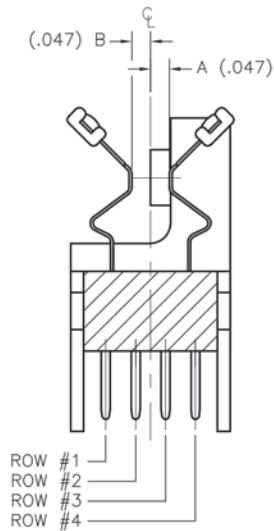
NOTES:

* = Single section, no center mounting hole

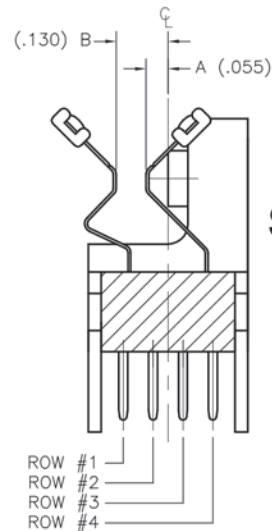


SIZE	CONTACT ID																SIZE	CONTACT ID															
86*																	220																
	C 52 C 102 C 51 C 101 C 50	C 154 C 204 C 153 C 203 C 152	C 29 C 79 C 28 C 78 C 27	C 131 C 181 C 130 C 180 C 129	C 26 C 77 C 25 C 76 C 24	C 128 C 179 C 127 C 178 C 126	C 3 C 54 C 2 C 53 C 1	C 105 C 156 C 104 C 155 C 103	C 202 C 201 C 200 C 199 C 198	C 404 C 403 C 402 C 401 C 400	C 106 C 105 C 104 C 103 C 102	C 308 C 307 C 306 C 305 C 304	C 101 C 100 C 99 C 98 C 97	C 303 C 302 C 301 C 300 C 299	C 5 C 4 C 3 C 2 C 1	C 207 C 206 C 205 C 204 C 203		C 22 C 43 C 21 C 42 C 20 C 65 C 86 C 64 C 85 C 63 C 3 C 46 C 24 C 67 C 2 C 45 C 23 C 66 C 1	C 56 C 110 C 55 C 109 C 54	C 166 C 220 C 165 C 219 C 164	C 31 C 141 C 85 C 30 C 84 C 29	C 141 C 195 C 140 C 194 C 139	C 28 C 83 C 27 C 82 C 26	C 138 C 193 C 137 C 192 C 136	C 3 C 58 C 2 C 57 C 1	C 113 C 168 C 112 C 167 C 111							
110*																	250*																
	C 28 C 55 C 27 C 54 C 26	C 83 C 110 C 82 C 109 C 81	C 24 C 64 C 23 C 63 C 22	C 104 C 146 C 105 C 145 C 104	C 21 C 62 C 20 C 61 C 19	C 103 C 144 C 102 C 143 C 101	C 3 C 30 C 2 C 29 C 1	C 58 C 85 C 57 C 84 C 56	C 63 C 125 C 62 C 124 C 61	C 188 C 250 C 187 C 249 C 186	C 70 C 138 C 69 C 137 C 68	C 208 C 276 C 207 C 275 C 206	C 38 C 106 C 37 C 105 C 36	C 176 C 244 C 175 C 243 C 174	C 35 C 104 C 34 C 103 C 33	C 173 C 242 C 172 C 241 C 171		C 3 C 72 C 2 C 71 C 1	C 141 C 210 C 140 C 209 C 139	C 28 C 55 C 27 C 54 C 26	C 83 C 193 C 137 C 192 C 136	C 3 C 58 C 2 C 57 C 1	C 113 C 168 C 112 C 167 C 111										
164																	276																
	C 42 C 82 C 41 C 81 C 40	C 124 C 164 C 123 C 163 C 122	C 24 C 64 C 23 C 63 C 22	C 104 C 146 C 105 C 145 C 104	C 21 C 62 C 20 C 61 C 19	C 103 C 144 C 102 C 143 C 101	C 3 C 44 C 2 C 43 C 1	C 85 C 126 C 84 C 125 C 83	C 63 C 125 C 62 C 124 C 61	C 188 C 250 C 187 C 249 C 186	C 70 C 138 C 69 C 137 C 68	C 208 C 276 C 207 C 275 C 206	C 38 C 106 C 37 C 105 C 36	C 176 C 244 C 175 C 243 C 174	C 35 C 104 C 34 C 103 C 33	C 173 C 242 C 172 C 241 C 171		C 3 C 72 C 2 C 71 C 1	C 141 C 210 C 140 C 209 C 139	C 28 C 55 C 27 C 54 C 26	C 83 C 193 C 137 C 192 C 136	C 3 C 58 C 2 C 57 C 1	C 113 C 168 C 112 C 167 C 111										
196																	300																
	C 50 C 98 C 49 C 97 C 48	C 148 C 196 C 147 C 195 C 146	C 28 C 76 C 27 C 75 C 26	C 126 C 174 C 125 C 173 C 124	C 25 C 74 C 24 C 73 C 23	C 123 C 172 C 122 C 171 C 121	C 3 C 52 C 2 C 51 C 1	C 101 C 150 C 100 C 149 C 99	C 76 C 150 C 75 C 149 C 74	C 226 C 300 C 225 C 299 C 224	C 76 C 150 C 75 C 149 C 74	C 226 C 300 C 225 C 299 C 224	C 41 C 115 C 40 C 114 C 39	C 191 C 263 C 190 C 264 C 189	C 38 C 113 C 37 C 112 C 36	C 188 C 263 C 187 C 262 C 186		C 3 C 78 C 2 C 77 C 1	C 153 C 228 C 152 C 227 C 151	C 28 C 55 C 27 C 54 C 26	C 83 C 193 C 137 C 192 C 136	C 3 C 58 C 2 C 57 C 1	C 113 C 168 C 112 C 167 C 111										
204																	404																
	C 52 C 102 C 51 C 101 C 50	C 154 C 204 C 153 C 203 C 152	C 29 C 79 C 28 C 78 C 27	C 131 C 181 C 130 C 180 C 129	C 26 C 77 C 25 C 76 C 24	C 128 C 179 C 127 C 178 C 126	C 3 C 54 C 2 C 53 C 1	C 105 C 156 C 104 C 155 C 103	C 202 C 201 C 200 C 199 C 198	C 404 C 403 C 402 C 401 C 400	C 106 C 105 C 104 C 103 C 102	C 308 C 307 C 306 C 305 C 304	C 101 C 100 C 99 C 98 C 97	C 303 C 302 C 301 C 300 C 299	C 5 C 4 C 3 C 2 C 1	C 207 C 206 C 205 C 204 C 203		C 22 C 43 C 21 C 42 C 20 C 65 C 86 C 64 C 85 C 63 C 3 C 46 C 24 C 67 C 2 C 45 C 23 C 66 C 1	C 56 C 110 C 55 C 109 C 54	C 166 C 220 C 165 C 219 C 164	C 31 C 141 C 85 C 30 C 84 C 29	C 141 C 195 C 140 C 194 C 139	C 28 C 83 C 27 C 82 C 26	C 138 C 193 C 137 C 192 C 136	C 3 C 58 C 2 C 57 C 1	C 113 C 168 C 112 C 167 C 111							

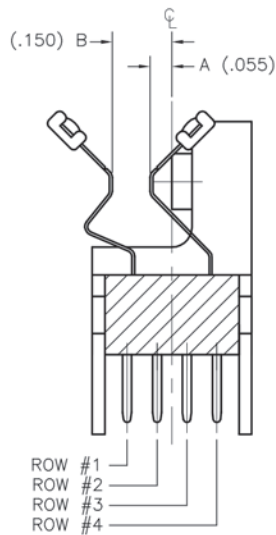
SMT Configuration Options



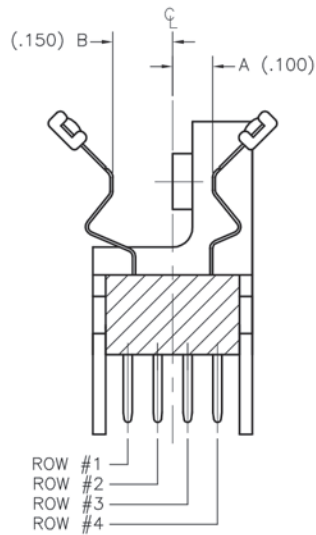
STYLE 933



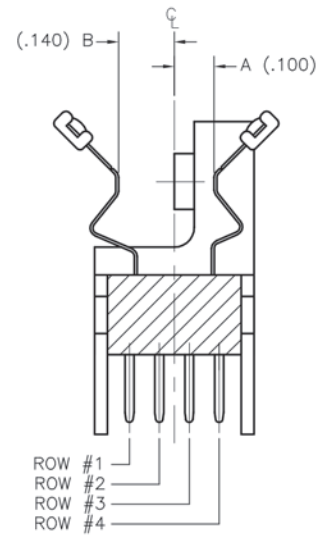
STYLE 925



STYLE 927



STYLE 947



STYLE 946

DISTANCE FROM $\bar{C}$ (A)

1 .005
2 .055

DISTANCE FROM $\bar{C}$ (A OR B)

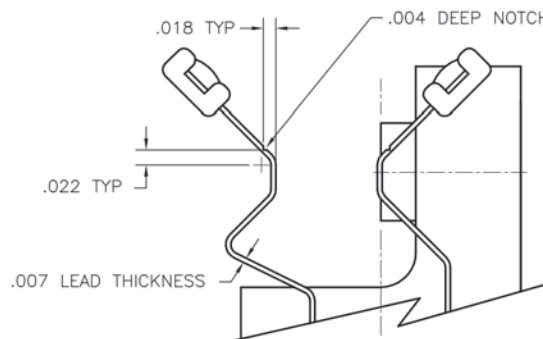
3 .047 7 .150
4 .100 8 .070
5 .130 9 .080
6 .140

DISTANCE FROM $\bar{C}$ (B)

0 .090

NOTES:

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

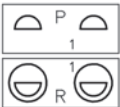
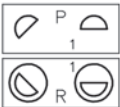
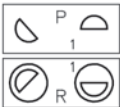
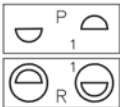
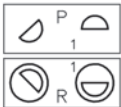
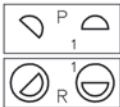
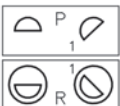
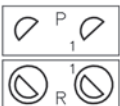
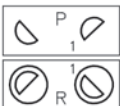
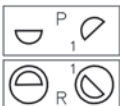
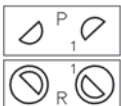
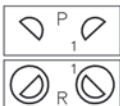
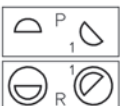
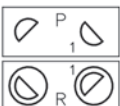
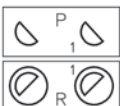
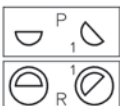
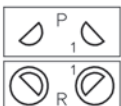
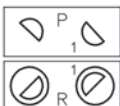
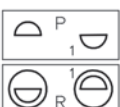
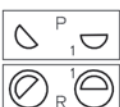
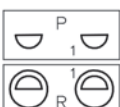
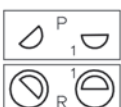
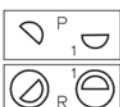
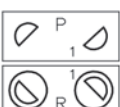
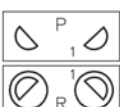
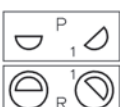
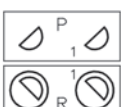
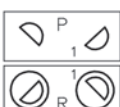
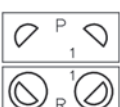
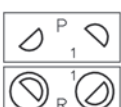
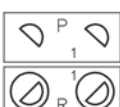


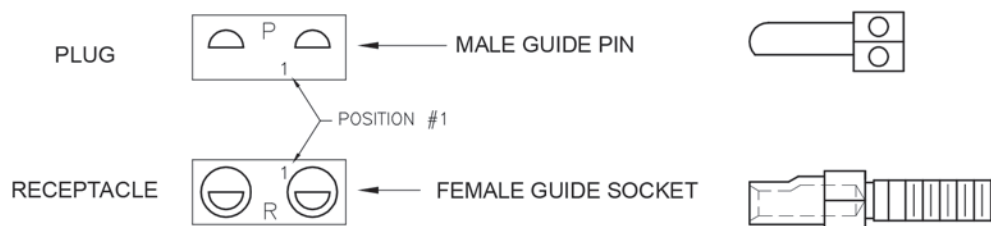
CONTACT NOTCH DETAIL

Polarization

4 Row and 6 Row

D-Shaped Guide Hardware

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



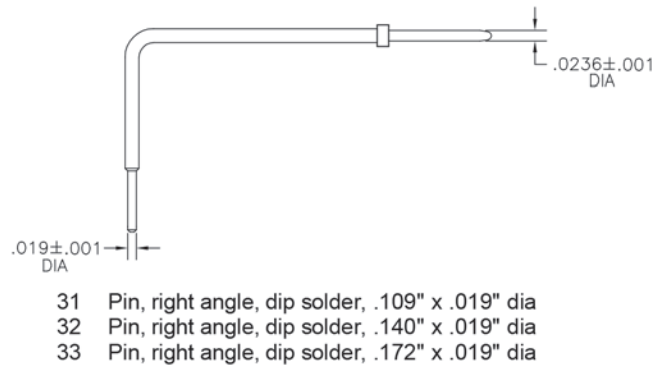
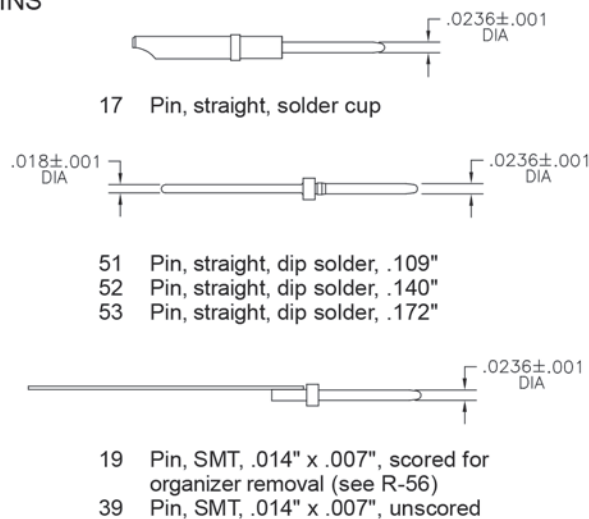
Select the appropriate two digit number above and include as the last two digits of the hardware code in the part number.

Example:
 Plug RM452-220-311-9501
 Receptacle RM462-220-811-9601

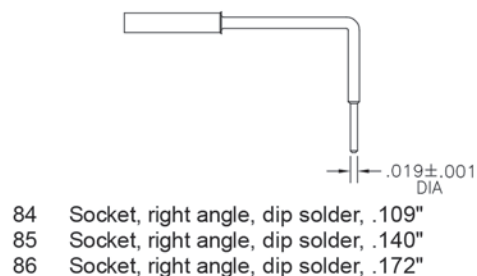
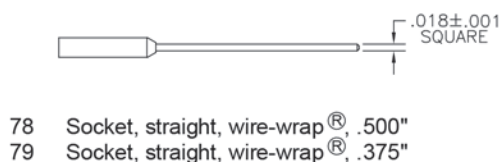
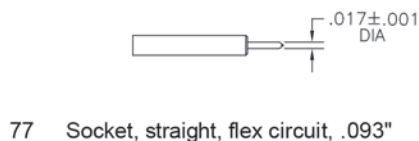
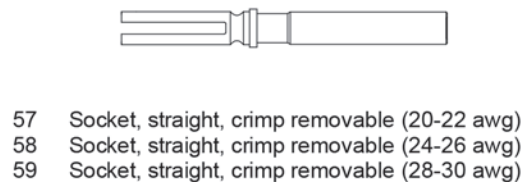
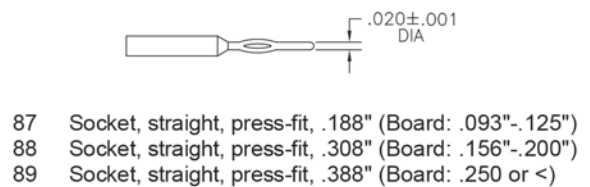
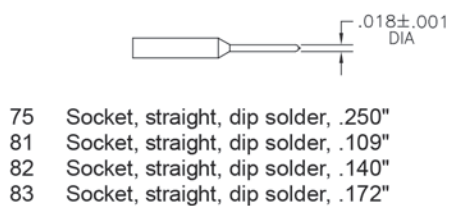
Contacts 4 Row

Pins and Sockets

PINS



SOCKETS



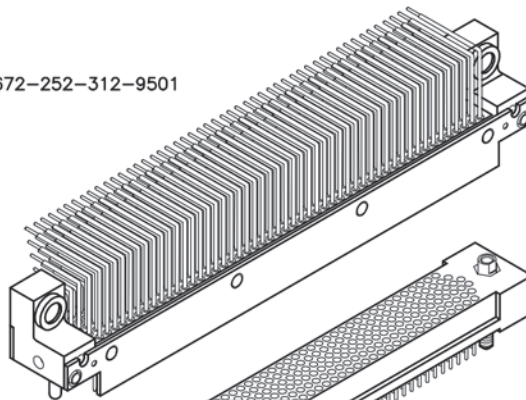
6 · ROW Daughterboard to Motherboard or Chassis

.075"

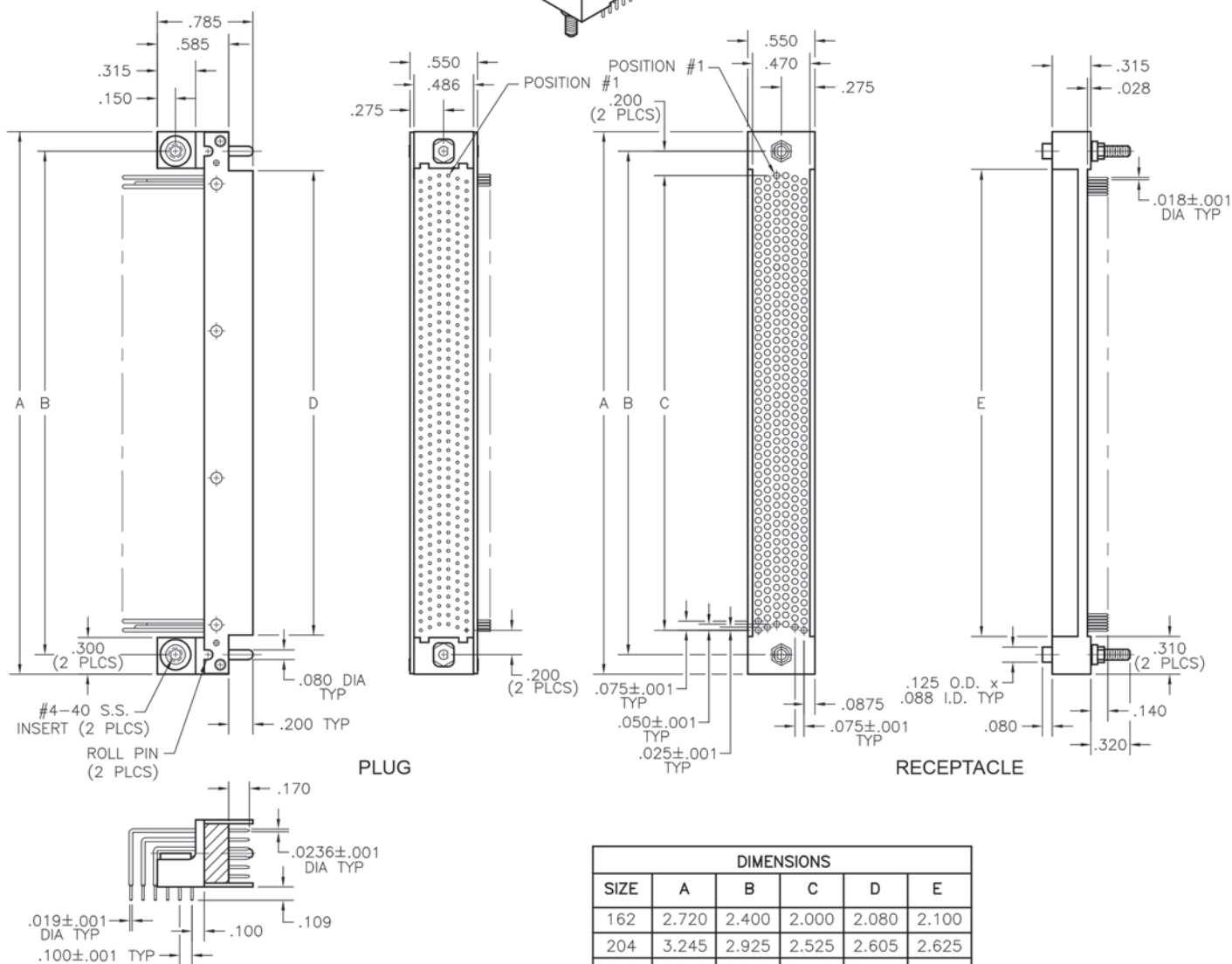
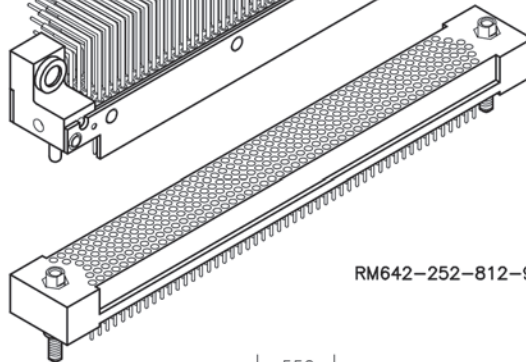
RM6

162 thru 402 Contacts

RM672-252-312-9501



RM642-252-812-9601



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

PLUG

RECEPTACLE

SERIES

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

BODY

6	6-Row	6	6-Row
7	BODY STYLE: Plug, right angle, with mounting ears	4	BODY STYLE: Receptacle, straight, without metal mounting ears
2	BODY MATERIAL: Polyphenylene sulfide (PPS)	2	BODY MATERIAL: Polyphenylene sulfide (PPS)

SIZE

162, 204, 252, 300, 360, 402 | 162, 204, 252, 300, 360, 402

CONTACTS

TYPE CONTACTS/TERMINATIONS:		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:		PLATING OPTIONS:	
1	Gold plated termination	1	Gold plated termination
2	Pre-tinned termination, SnPb alloy ☒	2	Pre-tinned termination, SnPb alloy (dip solder options only) ☒
3	Pre-tinned termination, SAC305 alloy	3	Pre-tinned termination, SAC305 alloy (dip solder options only)

HARDWARE

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

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

☒ = Option not RoHS compliant

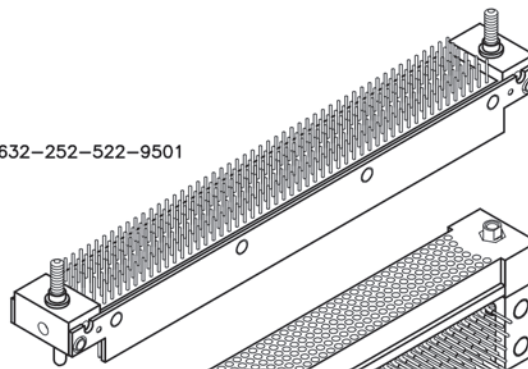
6 · ROW Motherboard or Chassis to Daughterboard

.075"

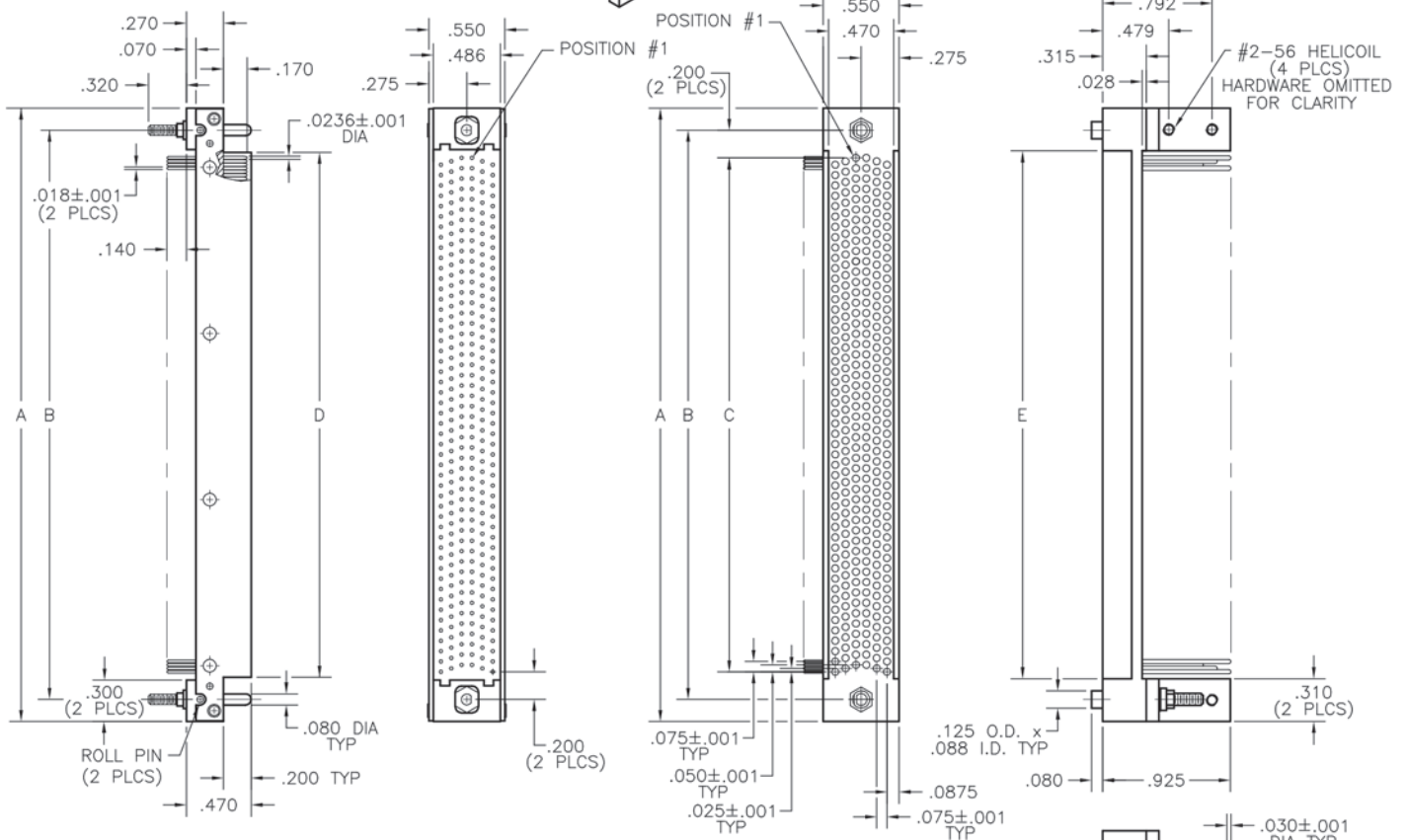
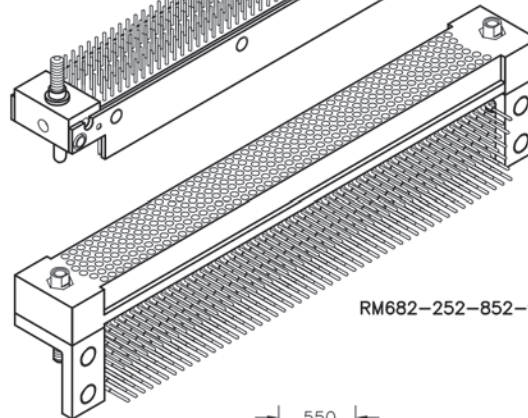
RM6

162 thru 402 Contacts

RM632-252-522-9501



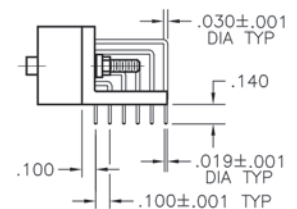
RM682-252-852-9601



PLUG

RECEPTACLE

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



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

PLUG

RECEPTACLE

SERIES

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

BODY

6	6-Row	6	6-Row
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)	

SIZE

162, 204, 252, 300, 360, 402 | 162, 204, 252, 300, 360, 402

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

HARDWARE

STYLE OF HARDWARE:		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
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-57	01	thru 36 are special identifiers, see page R-57

☒ = Option not RoHS compliant

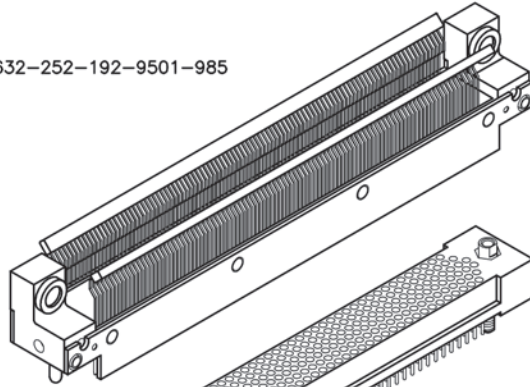
6 · ROW Daughterboard to Motherboard or Chassis

.075"

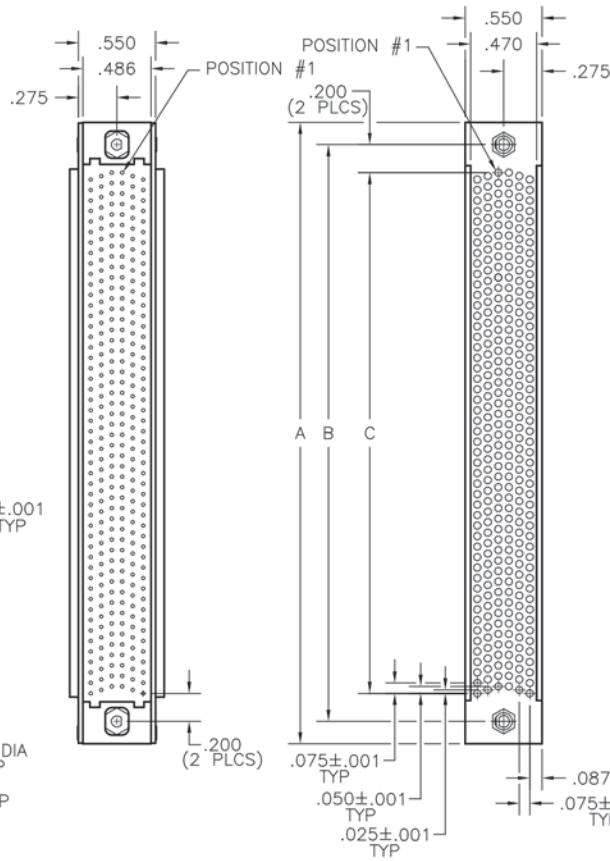
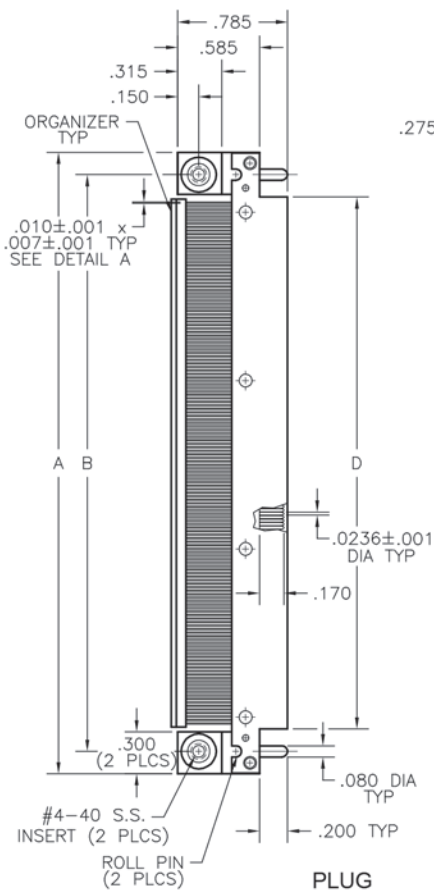
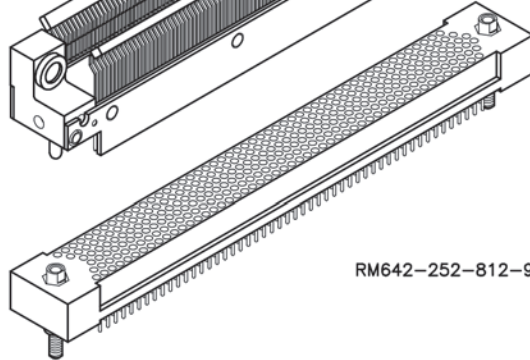
RM6

162 thru 402 Contacts

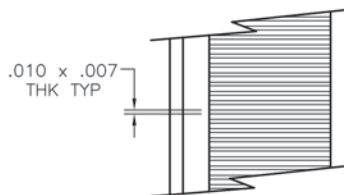
RM632-252-192-9501-985



RM642-252-812-9601



RECEPTACLE



DETAIL A

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

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

PLUG

RECEPTACLE

SERIES

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

BODY

6	6-Row	6	6-Row
BODY STYLE:		BODY STYLE:	
3	Plug, SMT, with mounting ears	4	outReceptacle, straight, without mounting ears
BODY MATERIAL:		BODY MATERIAL:	
2	Polyphenylene sulfide (PPS)	2	Polyphenylene sulfide (PPS)

SIZE

162, 204, 252, 300, 360, 402 | 162, 204, 252, 300, 360, 402

CONTACTS

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

HARDWARE

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

OPTIONS

9XX SMT configuration code, see page R-56

☒ = Option not RoHS compliant

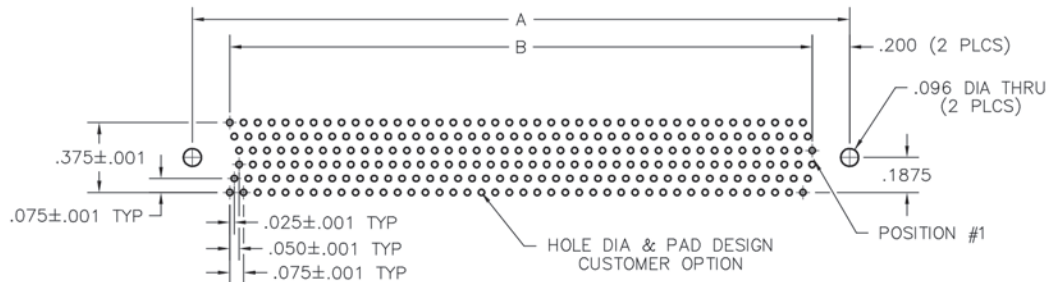
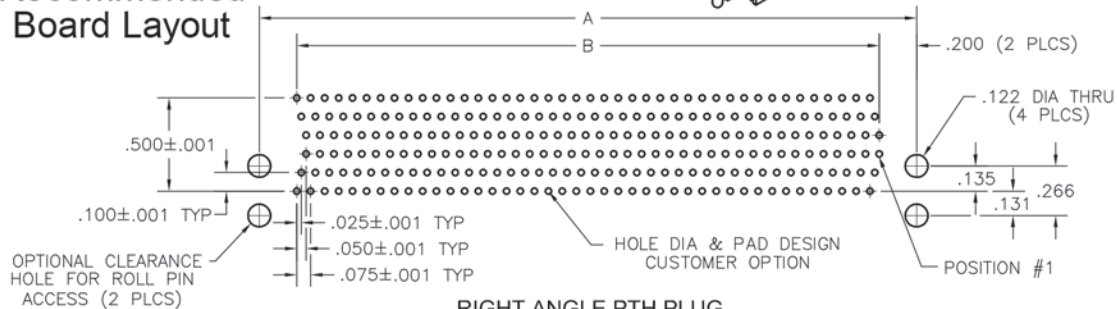
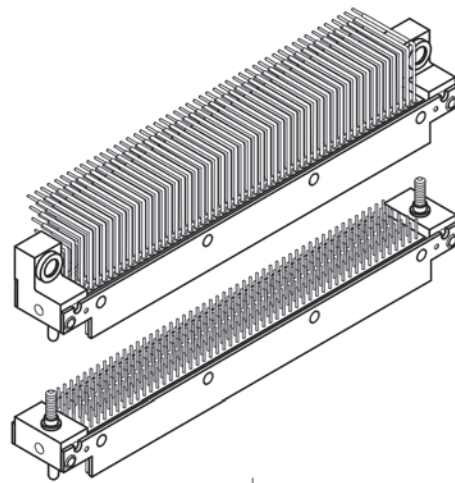
6 • ROW Right Angle PTH Plug Straight PTH Plug

.075"

RM6

162 thru 402 Contacts
Recommended
Board Layout

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



SIZE	CONTACT ID		SIZE	CONTACT ID	
162	162	159	300	300	297
	158	155		296	293
	160	157		298	295
	79	76		148	145
	80	77		149	146
	81	78		150	147
204	204	201	360	360	357
	203	200		359	356
	202	199		358	355
	100	97		178	175
	101	98		179	176
	102	99		180	177
252	252	249	402	402	399
	251	248		401	398
	250	247		400	397
	124	121		199	196
	125	122		200	197
	126	123		201	198

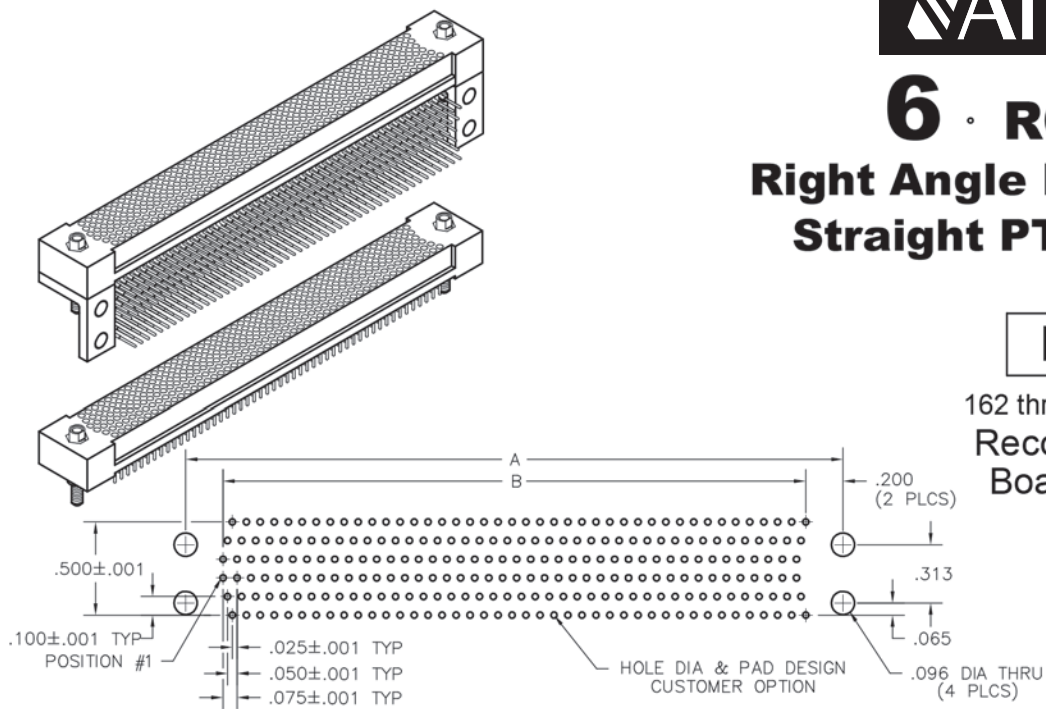
6 · ROW

Right Angle PTH Rcpt Straight PTH Rcpt

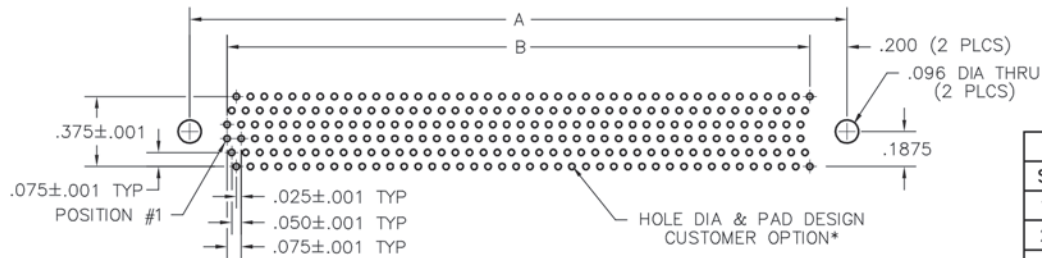
.075"

RM6

162 thru 402 Contacts
Recommended
Board Layout



RIGHT ANGLE PTH RECEPTACLE
PC BOARD VIEWED FROM COMPONENT SIDE



STRAIGHT PTH RECEPTACLE
PC BOARD VIEWED FROM COMPONENT SIDE

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

***COMPLIANT TERMINATION REQUIREMENTS:**

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

SIZE	CONTACT ID	SIZE	CONTACT ID
162	84 87 90	300	153 156 159
	83 86 89		294 297 300
	82 85 88		152 155 158
	1 4 7		293 296 299
	2 5 8		151 154 157
204	3 6 9		1 4 7
	156 159 162		2 5 8
	155 158 161		3 6 9
	154 157 160		142 145 148
	73 76 79		143 146 149
252	74 77 80	360	183 186 189
	75 78 81		354 357 360
	105 108 111		182 185 188
	104 107 110		353 356 359
	103 106 109		181 184 187
300	1 4 7		1 4 7
	2 5 8		2 5 8
	3 6 9		3 6 9
	198 201 204		173 176 179
	197 200 203		174 177 180
360	196 199 202	402	204 207 210
	94 97 100		396 399 402
	95 98 101		203 206 209
	96 99 102		395 398 401
	129 132 135		202 205 208
402	128 131 134		1 4 7
	127 130 133		2 5 8
	1 4 7		3 6 9
	2 5 8		193 196 199
	3 6 9		194 197 200

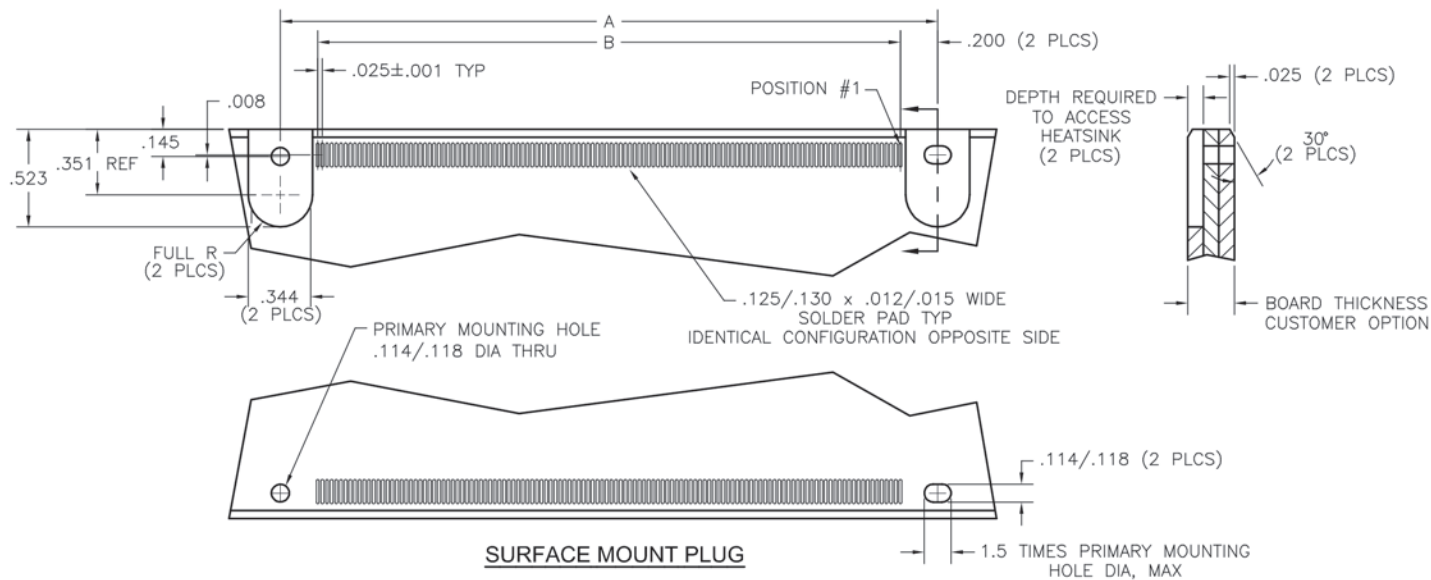
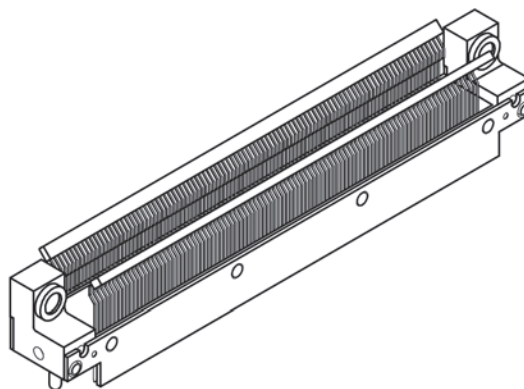
6 · ROW Straight SMT Plug

.075"

RM6

162 thru 402 Contacts
Recommended
Board Layout

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



SURFACE MOUNT PLUG

SIZE	CONTACT ID										SIZE	CONTACT ID									
162	C162										300	C300									
	C161											C299									
	C160											C298									
	C159											C297									
	C158											C296									
	C81											C150									
204	C204										360	C360									
	C203											C359									
	C202											C358									
	C201											C357									
	C200											C356									
	C102											C180									
252	C252										402	C402									
	C251											C401									
	C250											C400									
	C249											C399									
	C248											C398									
	C126											C201									
	C125											C200									
	C124											C199									
	C123											C198									
	C122											C197									
	C131											C206									
	C130											C205									
	C129											C204									
	C128											C203									
	C127											C202									
	C4											C5									
	C3											C4									
	C2											C3									
	C1											C2									
	C85											C154									
	C84											C153									
	C83											C152									
	C82											C151									
	C5											C5									

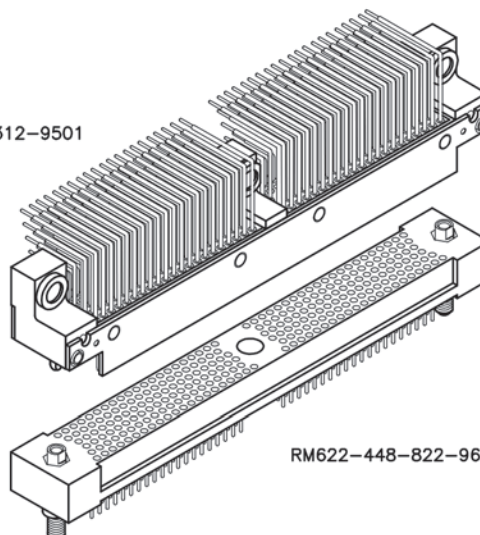
6 · ROW Daughterboard to Motherboard or Chassis

.075"

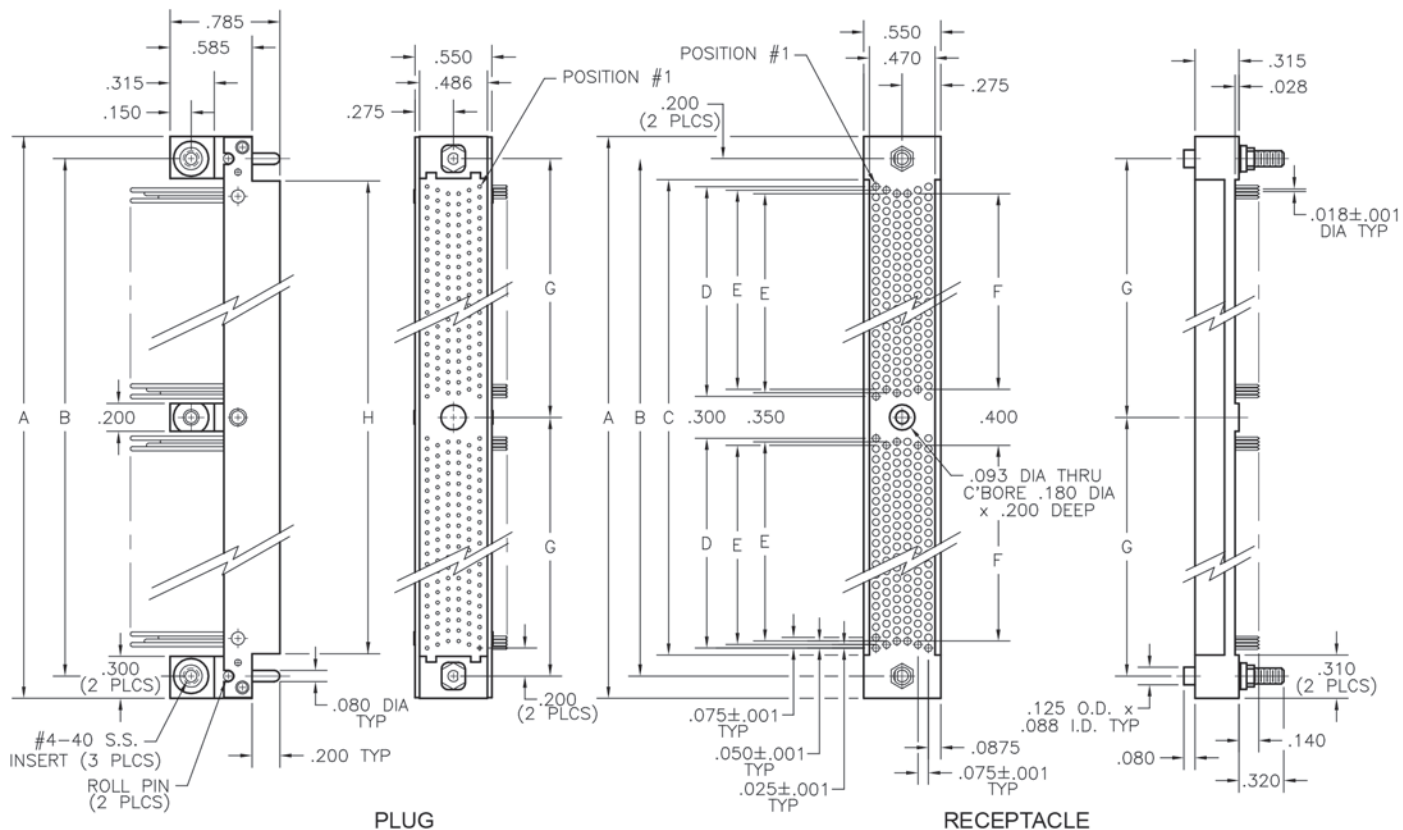
RM6

448 & 604 Contacts

RM652-448-312-9501



RM622-448-822-9601



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

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

PLUG

RECEPTACLE

SERIES

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

BODY

6	6-Row	6	6-Row
BODY STYLE:		BODY STYLE:	
5	Plug, right angle, with mounting ears	2	Receptacle, straight, without mounting ears
BODY MATERIAL:		BODY MATERIAL:	
2	Polyphenylene sulfide (PPS)	2	Polyphenylene sulfide (PPS)

SIZE

448, 604 | 448, 604

CONTACTS

TYPE CONTACTS/TERMINATIONS:		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:		PLATING OPTIONS:	
1	Gold plated termination	1	Gold plated termination
2	Pre-tinned termination, SnPb alloy ☒	2	Pre-tinned termination, SnPb alloy (dip solder options only) ☒
3	Pre-tinned termination, SAC305 alloy	3	Pre-tinned termination, SAC305 alloy (dip solder options only)

HARDWARE

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

☒ = Option not RoHS compliant

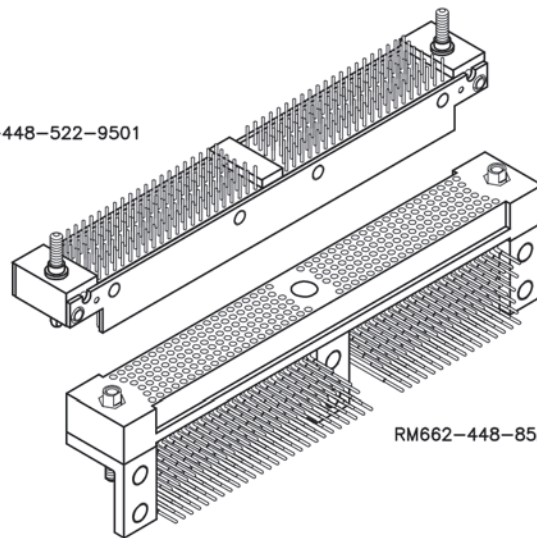
6 · ROW Motherboard or Chassis to Daughterboard

.075"

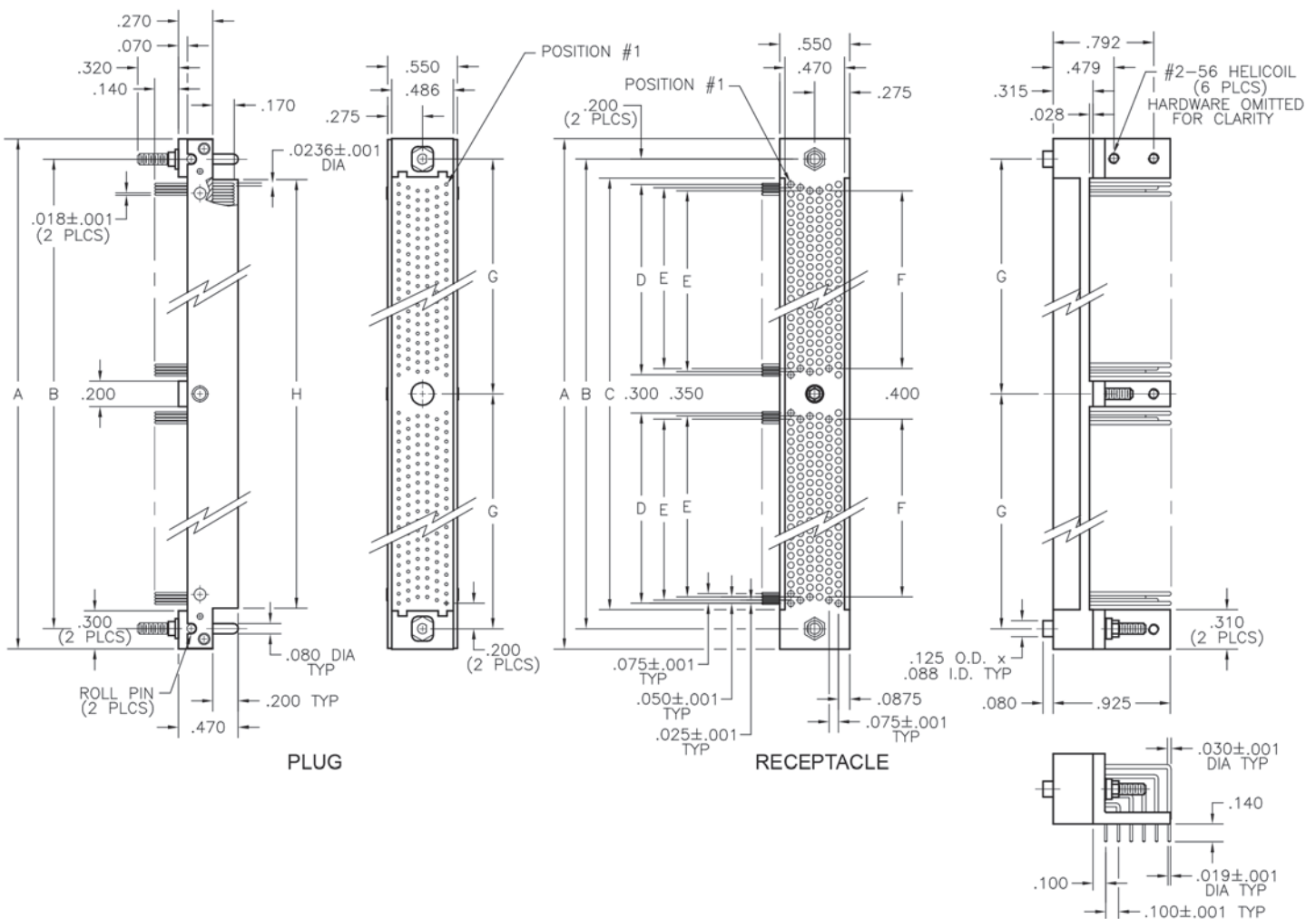
RM6

448 & 604 Contacts

RM612-448-522-9501



RM662-448-852-9601



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

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

PLUG

RECEPTACLE

SERIES

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

BODY

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

SIZE

448, 604 | 448, 604

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

HARDWARE

STYLE OF HARDWARE:		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 #4-40 x .247" thd ext	83	Fixed jackset, reversed, installed
84	Fixed jackset, reversed, installed #4-40 x .320" thd ext	91	Guide sockets, full round, installed
90	Guide pins, full round, installed #4-40 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, #4-40 x .247" thd ext	96	Guide sockets, polarized, unassembled
94	Fixed jackset, installed, #4-40 x .320" thd ext	9601 - 9636	Guide sockets, polarized, installed
95	Guide pins, polarized, unassembled, #4-40 x .320" thd ext	97	Guide sockets, polarized, unassembled
9501 - 9536	Guide pins, polarized, installed, #4-40 x .320" thd ext	9701 - 9736	Guide sockets, polarized, installed
99	Guide pins, universal, installed #4-40 x .320" thd ext	98	Guide sockets, universal, installed
POLARIZATION:		POLARIZATION:	
00	None	00	None
01	thru 36 are special identifiers, see page R-57	01	thru 36 are special identifiers, see page R-57

Note: Includes mounting bracket when right angle contacts are supplied

☒ = Option not RoHS compliant

6 • ROW

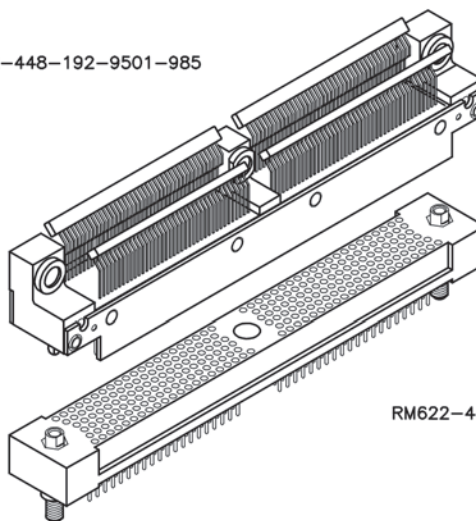
Daughterboard to Motherboard or Chassis

.075"

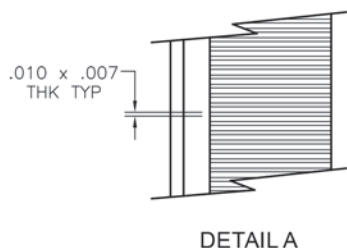
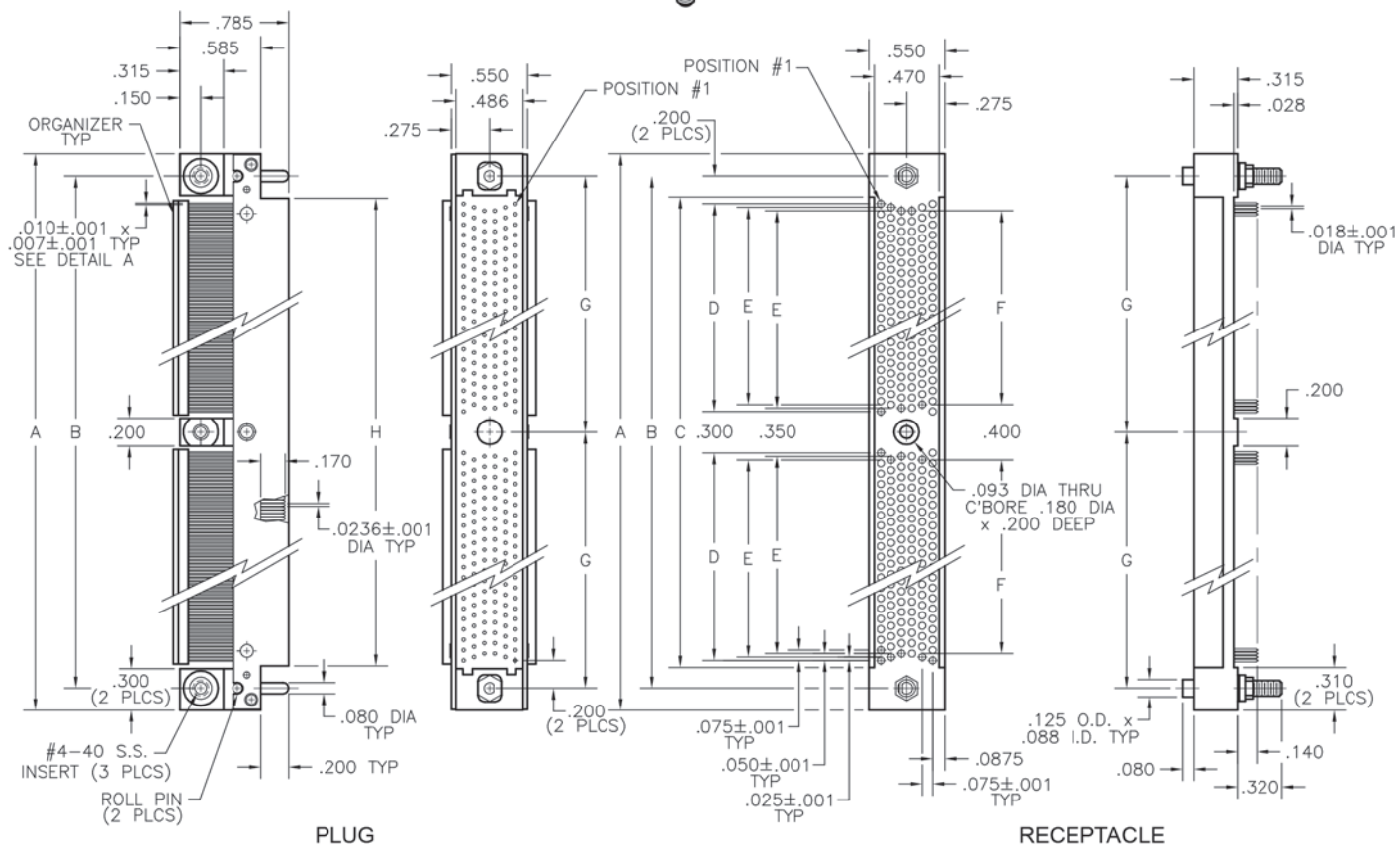
RM6

448 & 604 Contacts

RM612-448-192-9501-985



RM622-448-822-9601



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

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

PLUG

RECEPTACLE

SERIES

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

BODY

6	6-Row	6	6-Row
1	BODY STYLE: Plug, SMT, with mounting ears	2	BODY STYLE: Receptacle, straight, without mounting ears
2	BODY MATERIAL: Black anodized side shield (PPS)	2	BODY MATERIAL: Black anodized side shield (PPS)
5	Nickel plated side shield (PPS)	5	Nickel plated side shield (PPS)

SIZE

448, 604 | 448, 604

CONTACTS

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

HARDWARE

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

OPTIONS

9XX SMT configuration code, see page R-56

☒ = Option not RoHS compliant

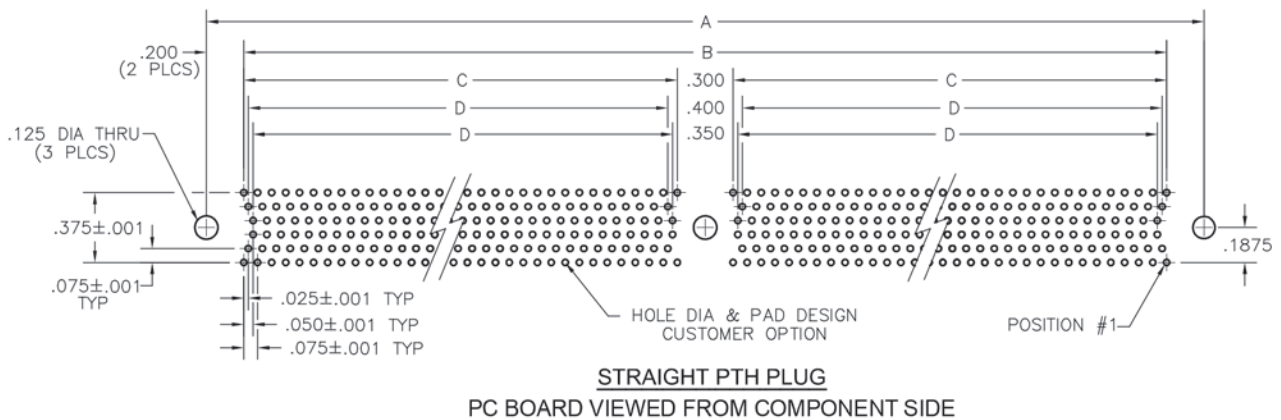
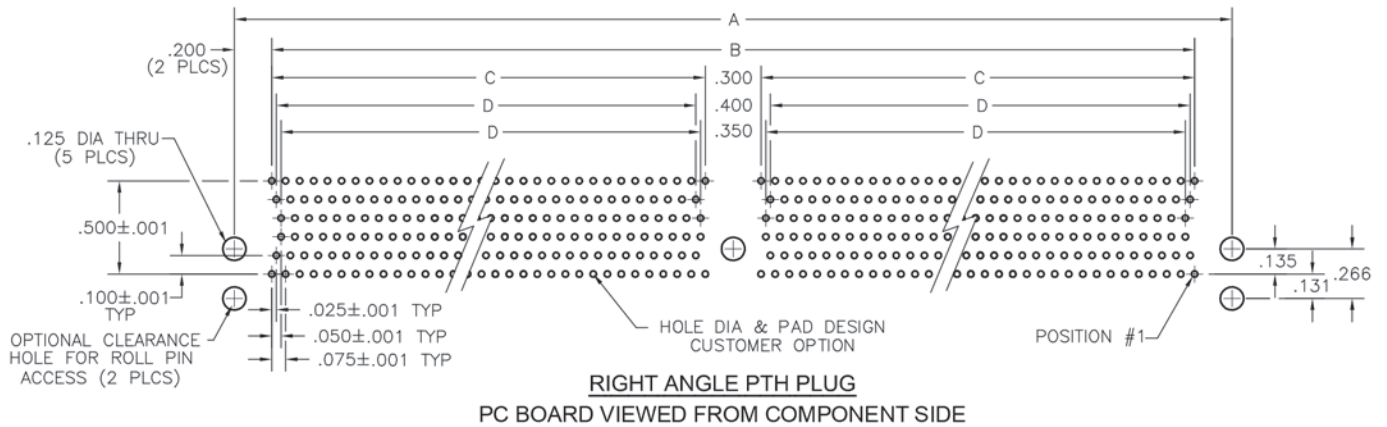
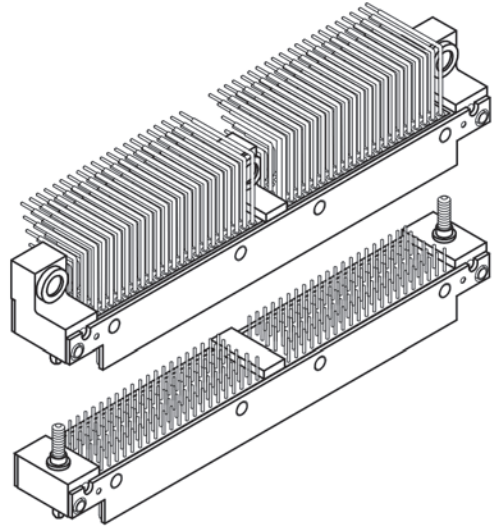
6 • ROW Right Angle PTH Plug Straight PTH Plug

.075"

RM6

448 & 604 Contacts
Recommended
Board Layout

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



SIZE	CONTACT ID				SIZE	CONTACT ID			
448	448	445	442	343	340	337	336	333	330
	447	444	441	342	339	336	333	330	328
	446	443	440	341	338	335	332	329	327
	222	219	216	120	117	114	111	108	105
	223	220	217	121	118	115	110	107	104
	224	221	218	119	116	113	112	109	106
604	604	601	598	460	457	454	453	450	447
	603	600	597	462	459	456	451	448	445
	602	599	596	461	458	455	452	449	446
	300	297	294	159	156	153	150	147	144
	301	298	295	160	157	154	149	146	143
	302	299	296	158	155	152	151	148	145

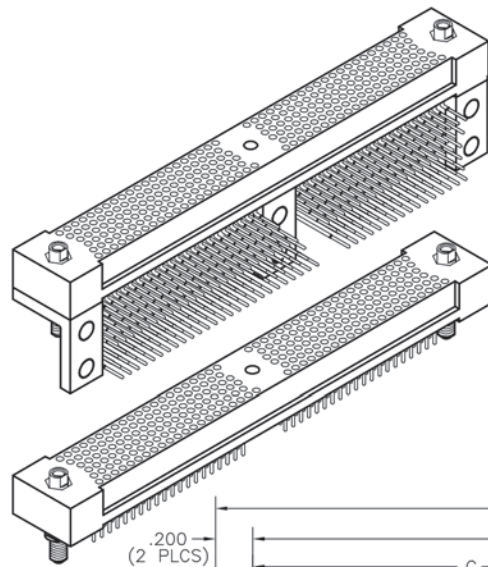
6 · ROW

Right Angle PTH Rcpt Straight PTH Rcpt

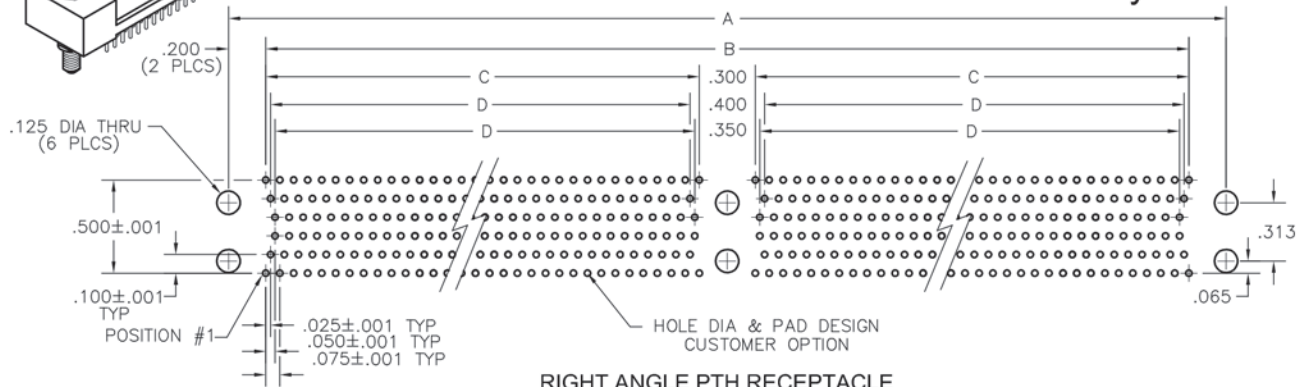
.075"

RM6

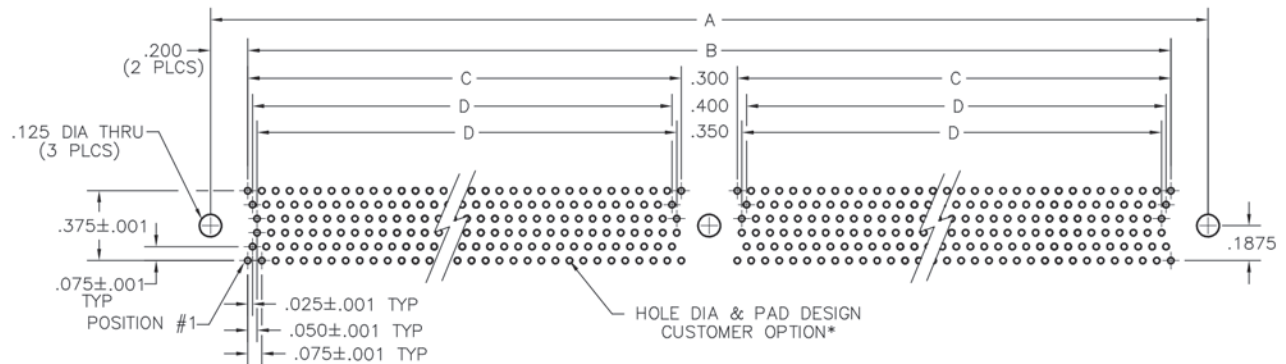
448 & 604 Contacts
Recommended
Board Layout



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



RIGHT ANGLE PTH RECEPTACLE
PC BOARD VIEWED FROM COMPONENT SIDE



STRAIGHT PTH RECEPTACLE
PC BOARD VIEWED FROM COMPONENT SIDE

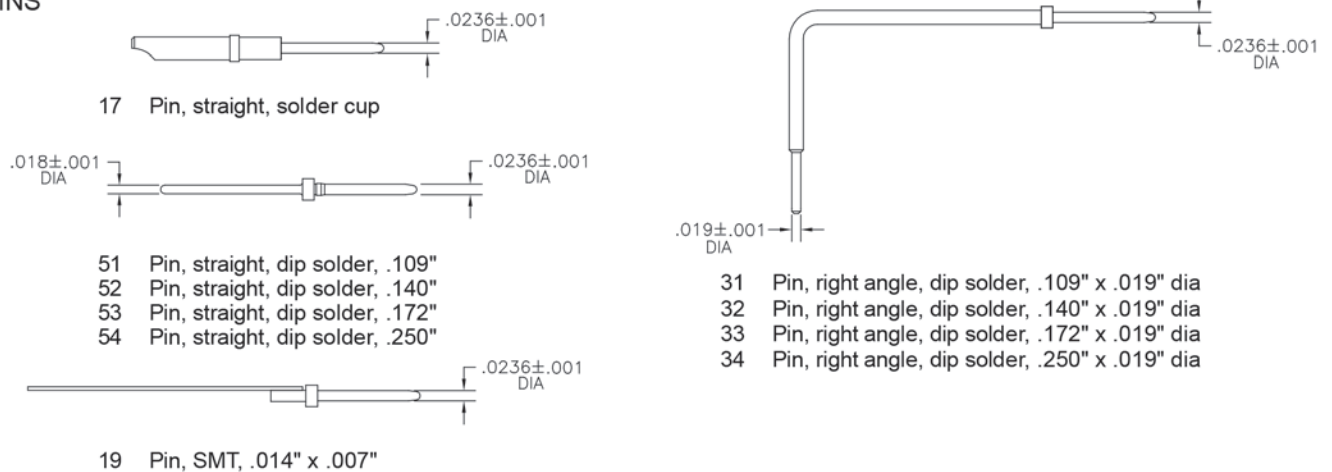
*COMPLIANT TERMINATIONS PCB REQUIREMENTS:
Board Material: FR-4 w/ 1.0 oz. copper
Minimum nominal board thickness: .062"
Drilled hole: .0319"-.0339"
Copper plating thickness: .0010" minimum
Tin-lead plating thickness: .0006" maximum
Electroplated tin-lead composition: 63/37 (Sn/Pb)
Finished hole diameter: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

SIZE	CONTACT ID				SIZE	CONTACT ID			
448	225	228	231	330	333	336	337	340	343
	226	229	232	328	331	334	339	342	345
	227	230	233	329	332	335	338	341	344
	3	6	9	105	108	111	114	117	120
	2	5	8	104	107	110	115	118	121
604	1	4	7	106	109	112	113	116	119
	217	220	223	216	219	222	218	221	224
	303	306	309	447	450	453	454	457	460
	304	307	310	448	451	454	456	459	462
	305	308	311	449	452	455	458	461	464
604	3	6	9	144	147	150	153	156	159
	2	5	8	143	146	149	154	157	160
	1	4	7	145	148	151	152	155	158
	598	601	604	596	599	602	597	600	603
	294	297	300	295	298	301	296	299	302

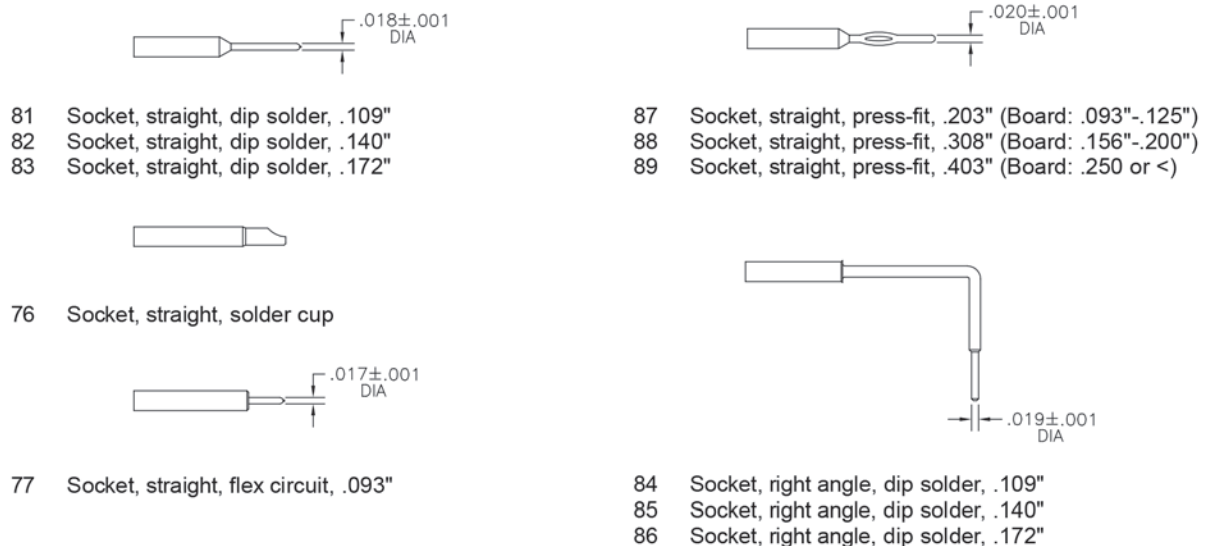
Contacts 6 Row

Pins and Sockets

PINS



SOCKETS





Specifications - Stackable Compliant Pin Connectors (075)

Materials and Finishes *

Contacts:	BeCu, per ASTM-B768 (BeCu C17410 Brush Alloy 174).
Contact Finish:	Gold plate per MIL-G-45204 over Nickel plating per IAW QQ-N-290.
Molded Insulators:	Glass filled polyphenylene sulfide (PPS) per MIL-M-24519.
Screws:	Stainless steel per ASTM-A-582, passivated per ASTM-A-967.
Guide Pins, Guide Sockets:	BeCu per ASTM-B-196, ASTM-B-197, Nickel plated per QQ-N-290.
Connector Markings:	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.
Tolerances:	Unless otherwise specified: Fractions = $\pm 1/64$ " Decimals = $\pm .010$ " Angles = $\pm 5^\circ$

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

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

Performance - Stackable Compliant Pin Connectors (075)

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

Contact Current Rating:	3 Amperes
Operating Temperature:	-65° to +125° C or -85° to +257° F
DWV Test Voltage:	750 V, RMS, 60 Hz @ sea level
Insulation Resistance:	5,000 megohms minimum @ 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 w/.0246" dia. test pin
Contact Separation Force:	0.5 oz. (14 g.) minimum w/.0226" dia. 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 thickness058". Drilled Hole0319" - .0339". Copper plating thickness0010" minimum Tin-lead plating thickness0003" minimum. Electroplated tin-lead composition ... 63/37 (Sn/Pb) Finished hole diameter028" ±.002

4 • ROW Press Fit Stackable

.075"

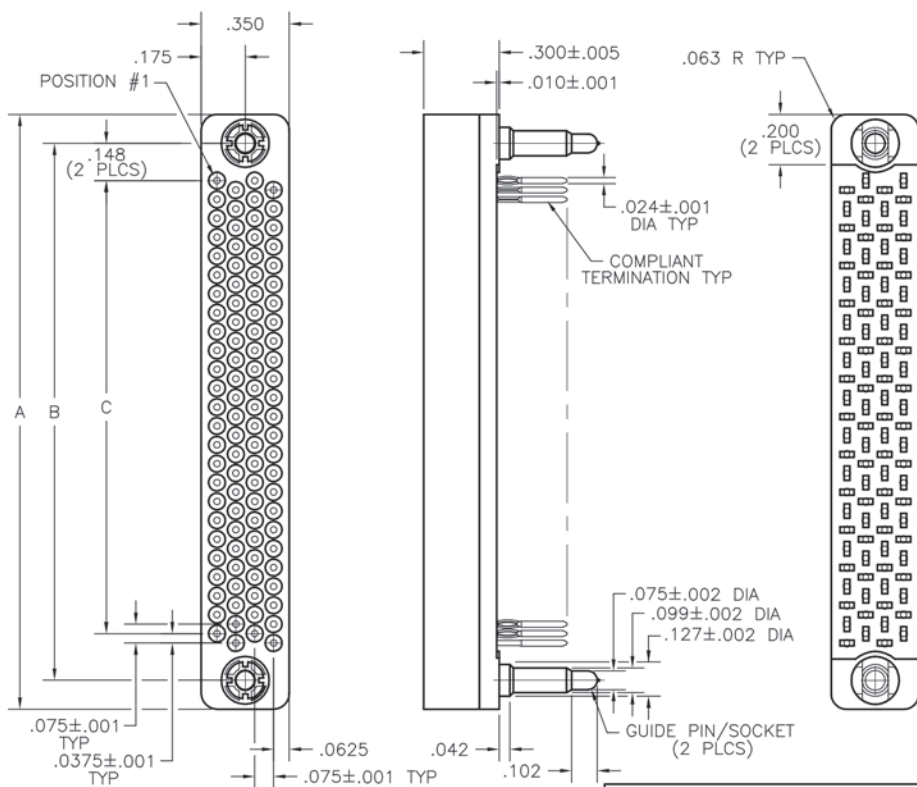
RC4

28 thru 300 Contacts

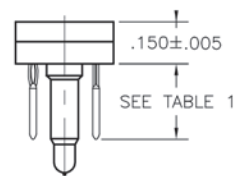
RC442-100-301-3900

RC422-100-201-3900

RC422-100-101-3000

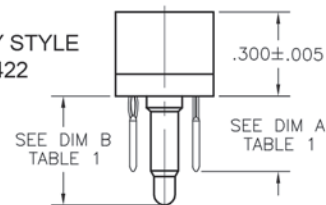


BODY STYLE
442

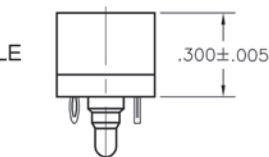


OPTIONAL INSULATOR FOR TOP
CONNECTOR TERMINATION
OPTIONS: 301, 311, 321, 331,
341, 351, 361, 371 AND 381
(W/CIRCUIT TEST POINT)

BODY STYLE
422



BODY STYLE
422



CONTACT/HARDWARE
OPTION 101
(TERMINATES CIRCUIT)

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

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

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

SERIES

RC Press fit stackable PC connector

BODY

BODY STYLE:

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

SIZE

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

CONTACTS

TYPE CONTACTS/TERMINATIONS:

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

HARDWARE

GUIDE HARDWARE

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

FIXED JACKSOCKET (to mate with RC cable only)

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

CONTACT/
TERMINATION
TYPES



101



201 251
211 261
221 271
231 281
241



301 351
311 361
321 371
331 381
341

Minimum contact engagement from mating face (.305" insulator height)114"
Maximum contact engagement from mating face (.295" insulator height)214"
Minimum PWB thickness058"

4 Row Press Fit Stackable Tools Available:

Cap Removal Tool - AirBorn part number CDG10056

Contact Removal Tool - AirBorn part number CDG10057

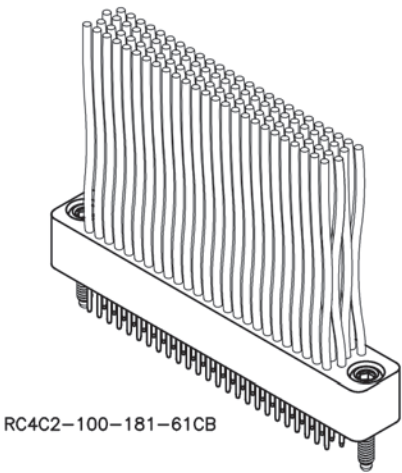


4 • ROW
Press Fit Stackable
Cable Mate

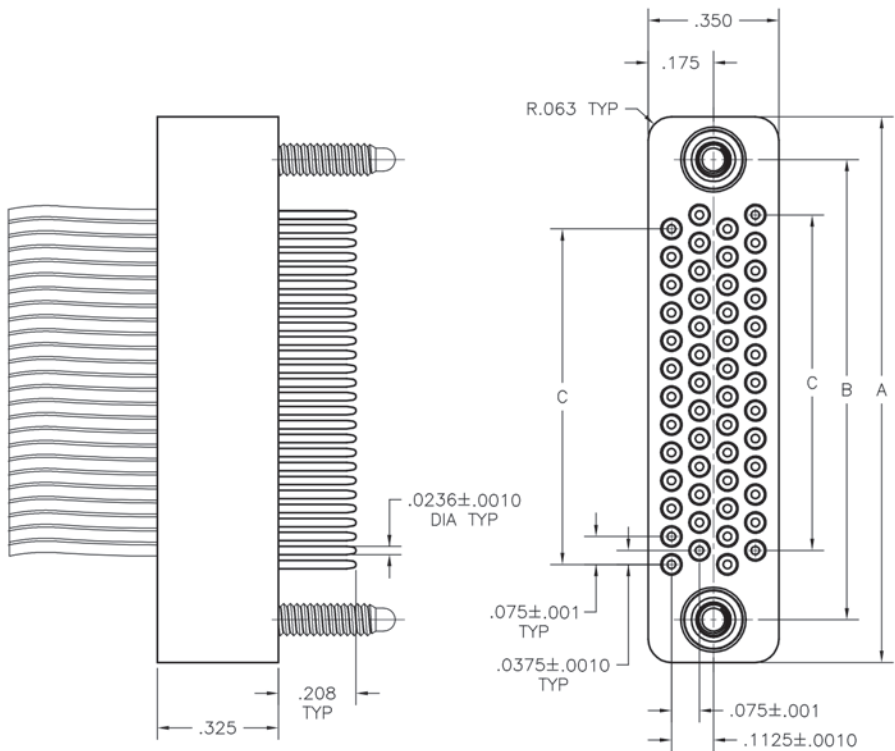
.075"

RC4

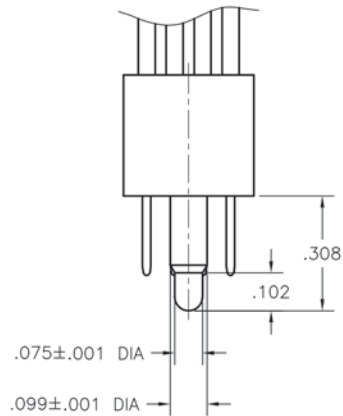
28 thru 152 Contacts



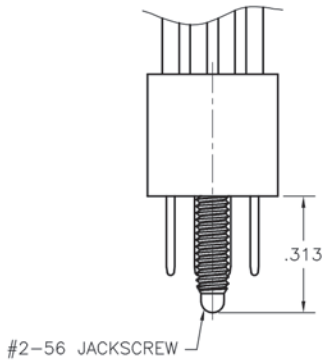
RC4C2-100-181-61CB



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



HARDWARE STYLE
61

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

SERIES

RC Press fit stackable PC connector

BODY

BODY STYLE:

4C2 4 Row plug with potting well

SIZE

028, 052, 076, 100, 128, 152

CONTACTS

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)

HARDWARE

STYLE OF HARDWARE:

00 None
57 Guide pins, non-polarized
61 Hex turning jackscrews (must have fixed jackscrew hardware on board connector)

WIRE

00 None (solder cup or flex)
XX See Wire Codes at right

WIRE CODES

TYPE and COLOR

Code	Size	Color
Mil-W-16878/4		
C	24 awg	Ten repeating
D	24 awg	White
E	26 awg	Ten repeating
F	26 awg	White
G	28 awg	Ten repeating
H	28 awg	White
J	30 awg	Ten repeating
K	30 awg	White

Mil-W-22759/33

N	24 awg	Ten repeating
P	24 awg	White
R	26 awg	Ten repeating
S	26 awg	White
T	28 awg	Ten repeating
U	28 awg	White
V	30 awg	Ten repeating
W	30 awg	White

LENGTH

Code	Length (+1"/-0")
A	6"
B	12"
C	18"
D	24"
E	30"
F	36"
G	42"
H	48"
J	54"
K	60"
L	66"
M	72"
N	84"
P	96"
R	108"
S	120"

Part number example:

RC4C2-100-181-61CB

Type and Color ———
Length ———

Ten repeating colors:

Black
Brown
Red
Orange
Yellow
Green
Blue
Violet
Grey
White



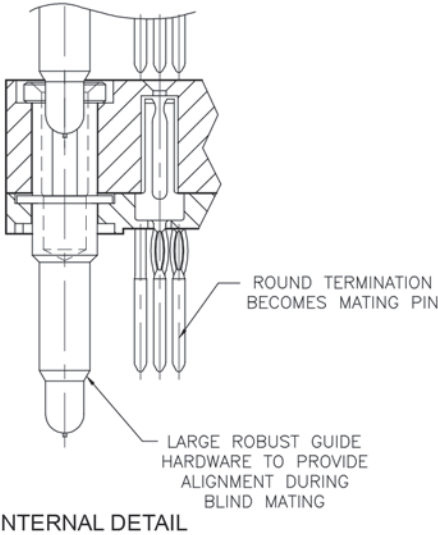
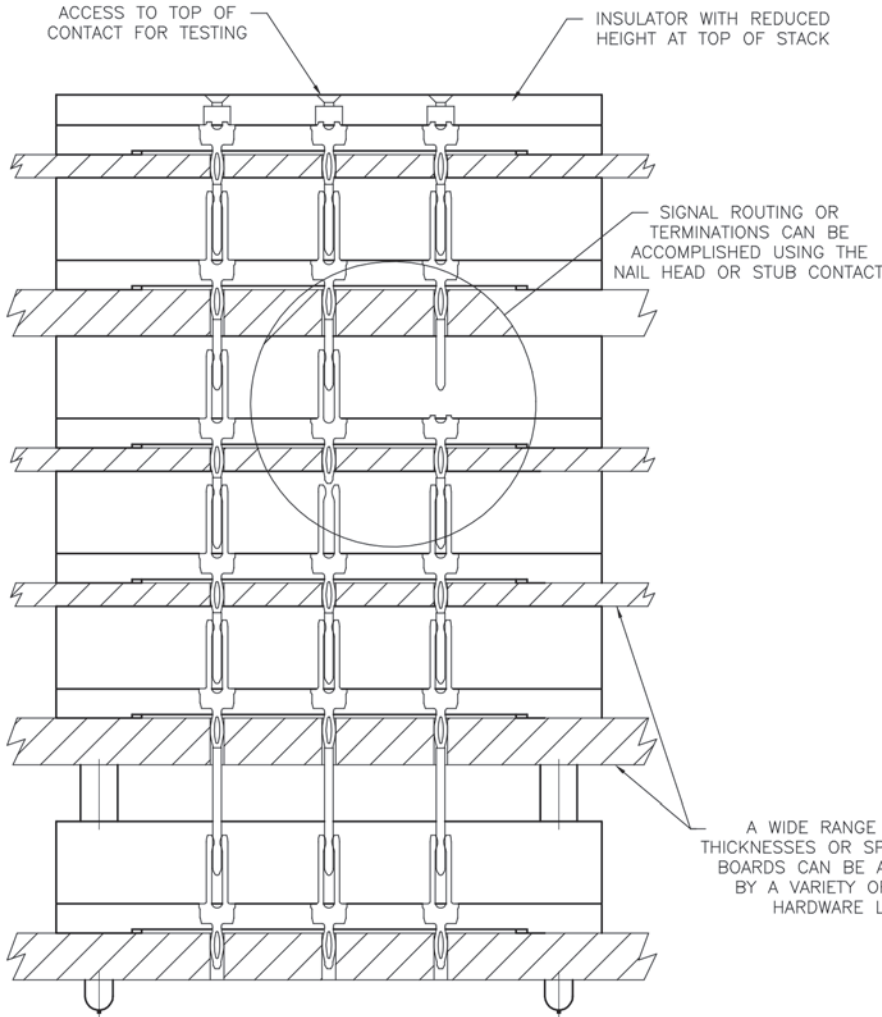
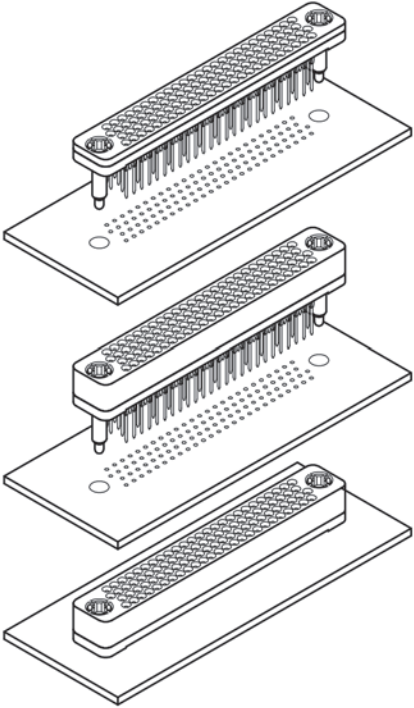
4 • ROW
Press Fit
Stackable

.075"

RC4

28 thru 300 Contacts

Typical
Applications



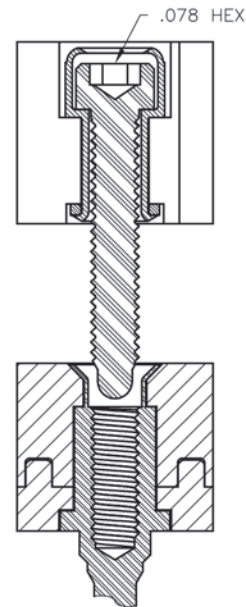
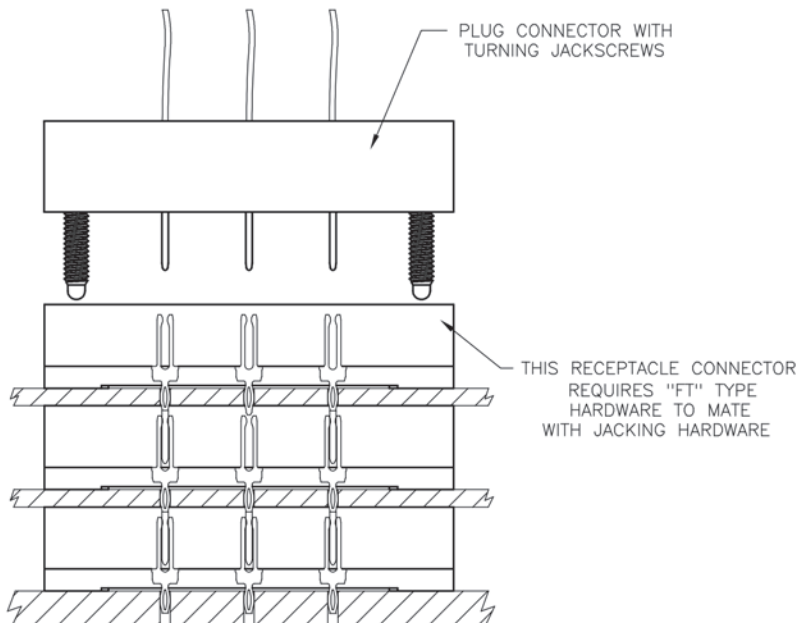
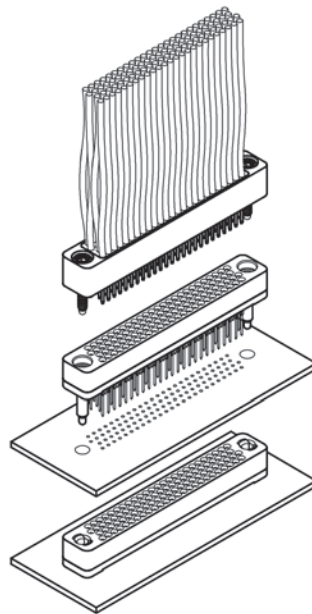
ROW • 4 Press Fit Stackable with Cable Mate

.075"

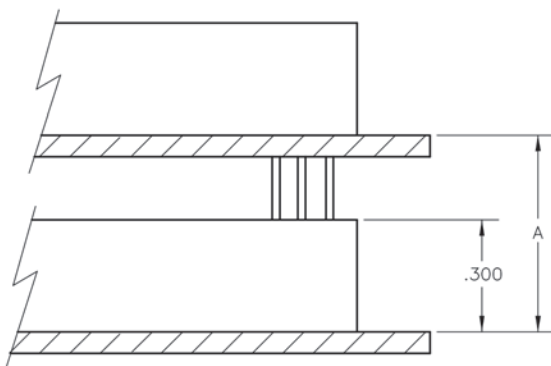
RC4

28 thru 152 Contacts

Typical
Applications



INTERNAL DETAIL



Determine Required Termination Lean Length:

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

Dimension A = .720

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

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

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

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

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

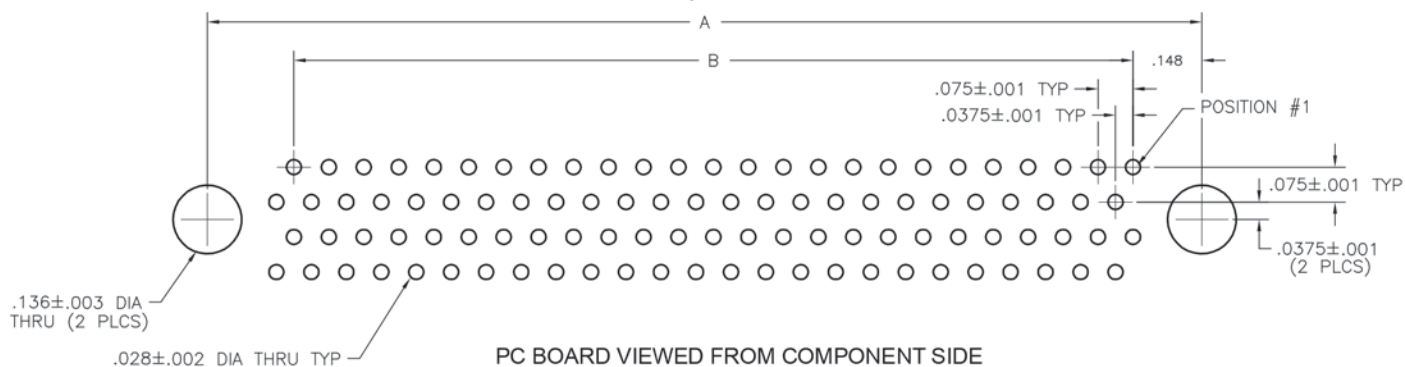
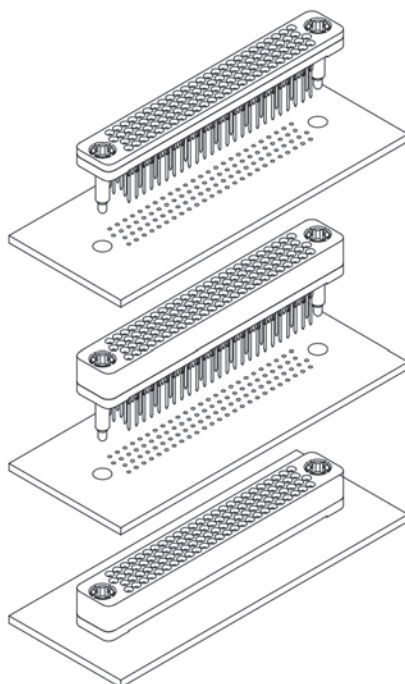
4 • ROW Press Fit Stackable

.075"

RC4

28 thru 300 Contacts

Recommended
Board Layout



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 3 2 1 50 49 48 28 27 26 75 74 73 53 52 51 100 99 98 78 77 76	200	50 49 48 3 2 1 100 99 98 53 52 51 175 174 173 103 102 101 200 199 198 178 177 176
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 3 2 1 64 63 62 35 34 33 96 95 94 67 66 65 128 127 126 99 98 97	252	63 62 61 3 2 1 126 125 124 66 65 64 189 188 187 129 128 127 252 251 250 192 191 190
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 3 2 1 76 75 74 41 40 39 114 113 112 79 78 77 152 151 150 117 116 115	300	75 74 73 3 2 1 150 149 148 78 77 76 225 224 223 153 152 151 300 299 298 228 227 226

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



Specifications

Materials and Finishes *

Pin Contacts:	Brass C26000, copper alloy C18080, or BeCu C17200
Socket Contacts:	BeCu 17200, BeCu C17410, or copper alloy C18080
Contact Finish:	Selective gold over 50 microinch minimum nickel plating in contact mating areas Option 1: 50 microinch minimum gold Option 2: 30 microinch minimum gold
Molded Insulators:	Glass filled liquid crystal polymer (LCP) per Mil-M-24519
Hardware:	Corrosion resistant steel per ASTM-A-582/A582M; Passivated per ASTM-A-967, SAE AMS-QQ-P-35
Solder Balls:	Option 1: Sn63/Pb37 Eutectic solder Option 2: Lead Free Sn96.5/Ag3.0/Cu0.5
Tolerances:	Unless otherwise specified: Fractions = $\pm 1/64$ " Decimals = ± 0.010 " Angles = $\pm 5^\circ$

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

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

The AirBorn Advantage

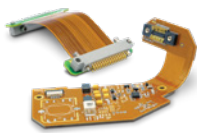
Model-To-Market
Solutions



Custom
Power
Systems



COTS VPX
Power Supply
Power Blade



Flexible
Circuit
Assemblies



Cable
Assemblies



FUZE
Assemblies



Active
Optical
Assemblies



Rectangular
W Series



Rectangular
R Series



Micro D
M Series



Nano D
N Series



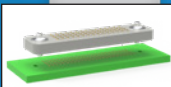
High-Speed
Rectangular
verSI



Modular Hybrid
Slnergy



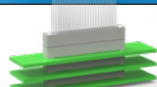
Macro D
RockT



Z Axis Interposer
Z Series



High-Speed
Micro D
microSI



Stackable
RC Series



Circulars
Series 360



Strip Connector
AirStrip



PowerAmp
13A or 23A



Rugged Circulars
TriMate

RSC-2.24

AirBorn

p. 512.863.5585
www.airborn.com

