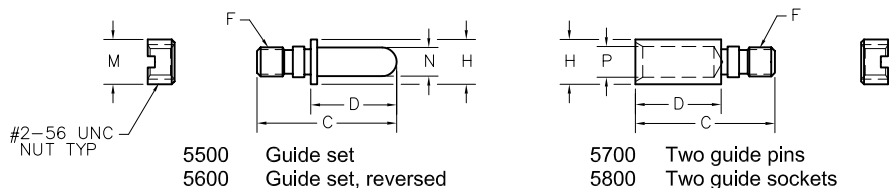
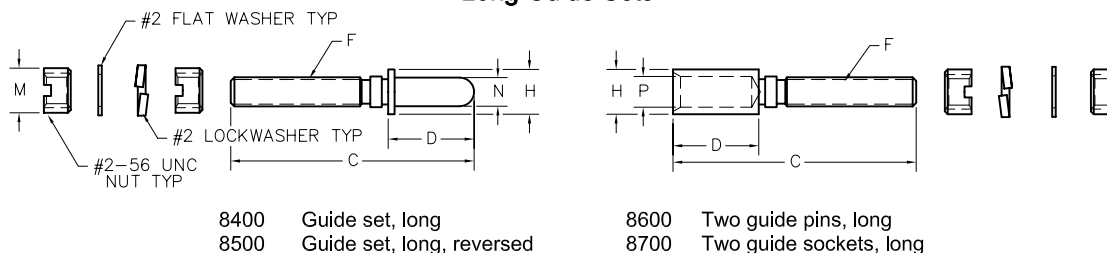


## Guide Sets

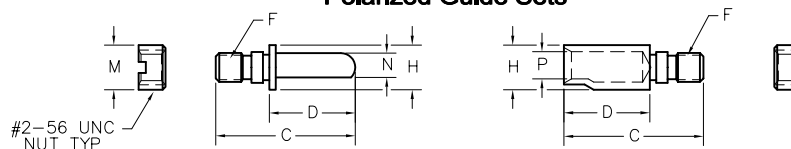
### Guide Sets



### Long Guide Sets



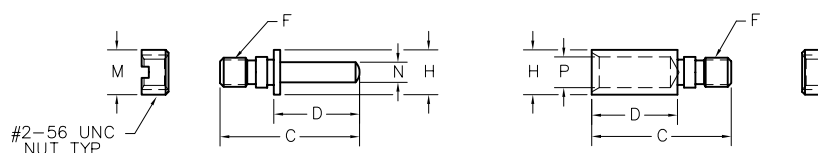
### Polarized Guide Sets



5501 thru 5564, & 5570

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

### Universal Test Guide Sets



5565 thru 5568

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

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

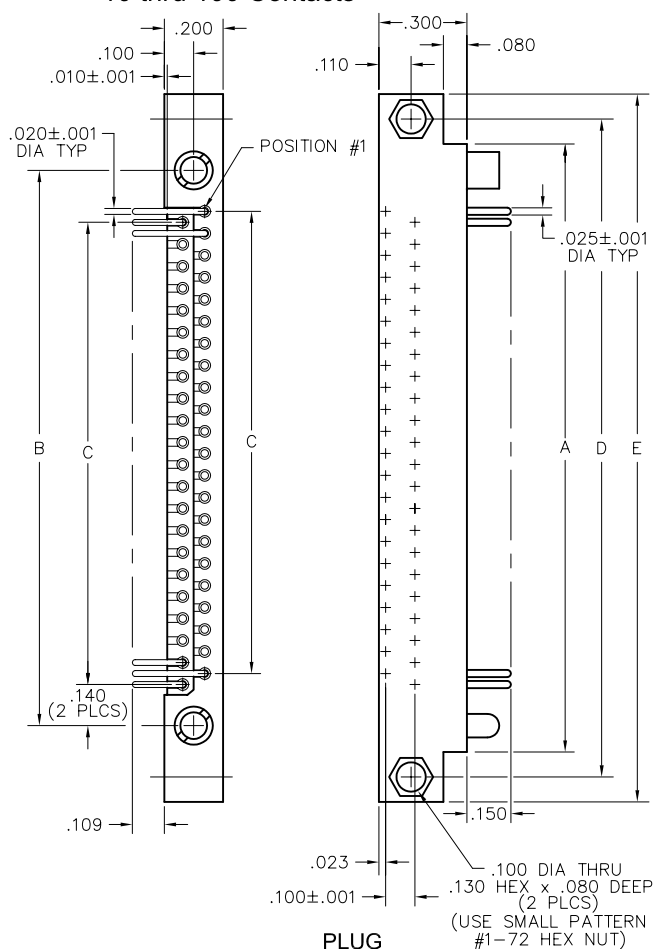
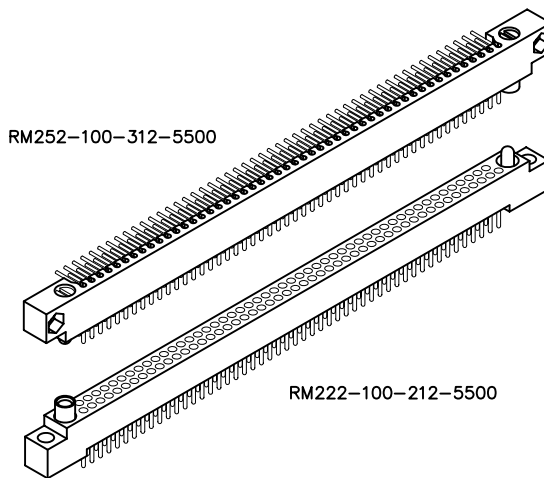


# 2 • ROW Daughterboard to Motherboard or Chassis

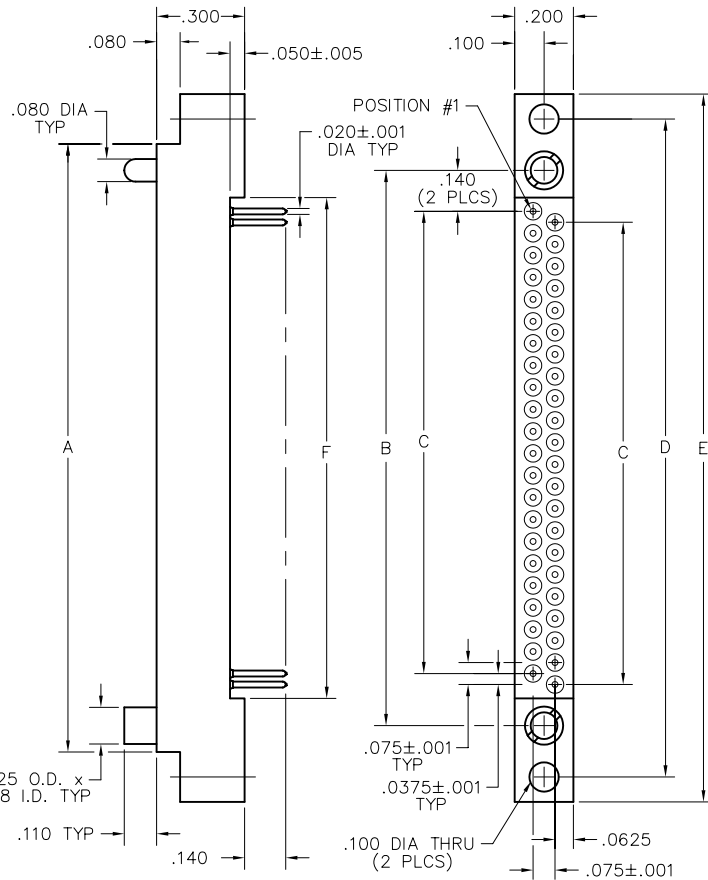
.075"

**RM2**

10 thru 100 Contacts



PLUG



RECEPTACLE

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

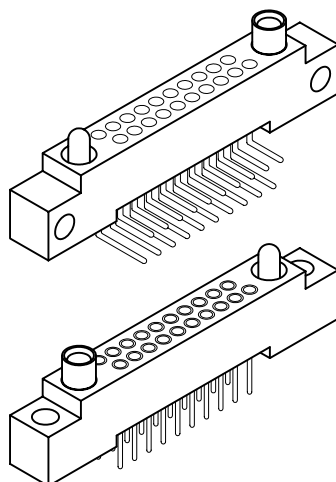


## Performance

### Reference MIL-C-55302

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

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



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

## 2 • ROW

### Right Angle PTH Rcpt

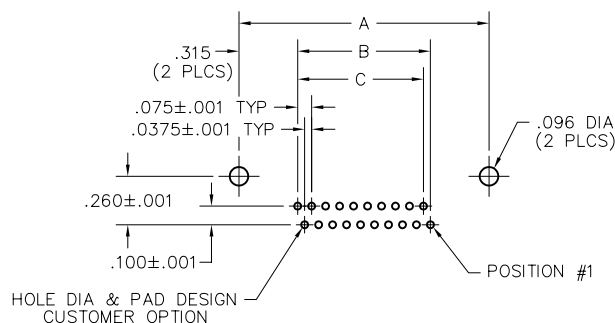
### Straight PTH Rcpt

.075"

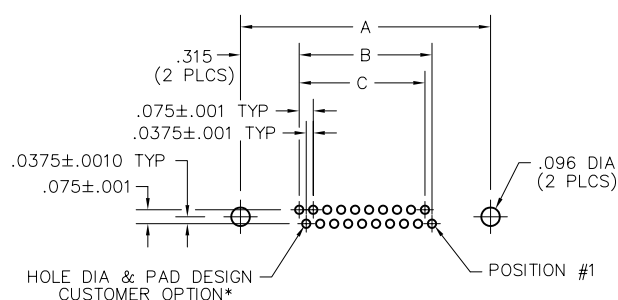
**RM2**

10 thru 100 Contacts

Recommended  
Board Layout













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



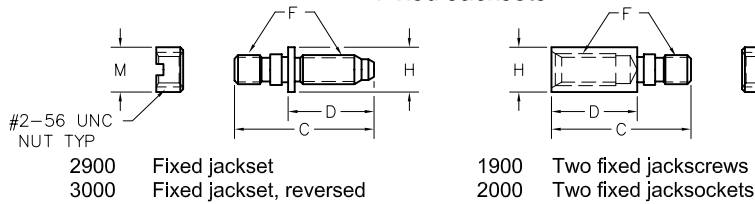
**STRAIGHT PTH RECEPTACLE**  
PC BOARD VIEWED FROM COMPONENT SIDE

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

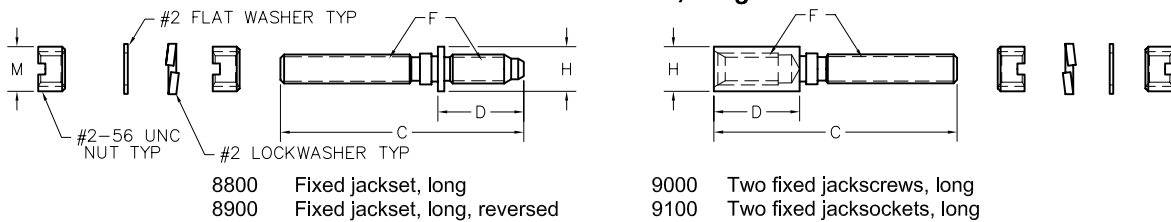
SIZE	CONTACT ID	SIZE	CONTACT ID
10		60	
20		70	
30		80	
40		90	
50		100	

## #2-56 Jacksets

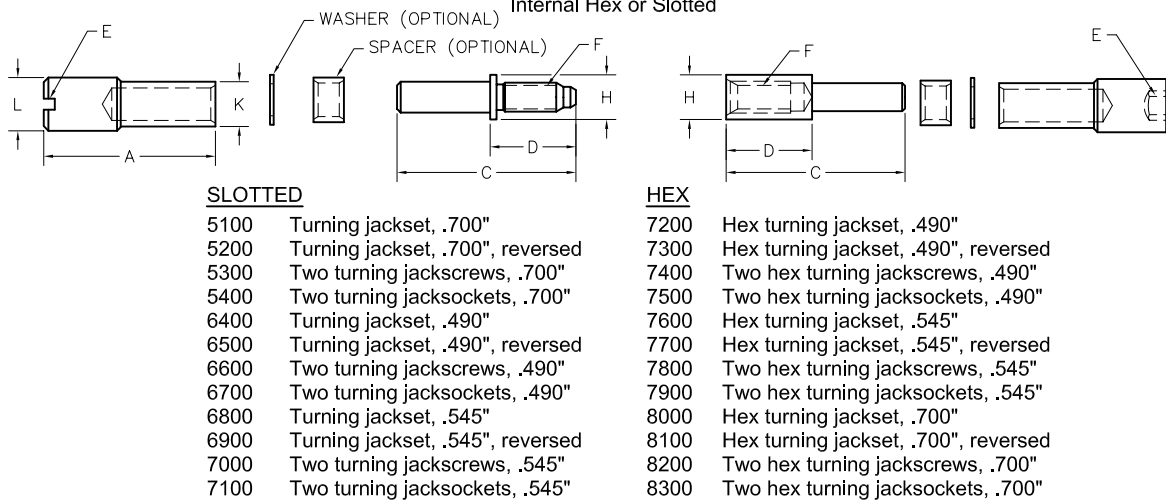
### Fixed Jacksets



### Fixed Jacksets, Long

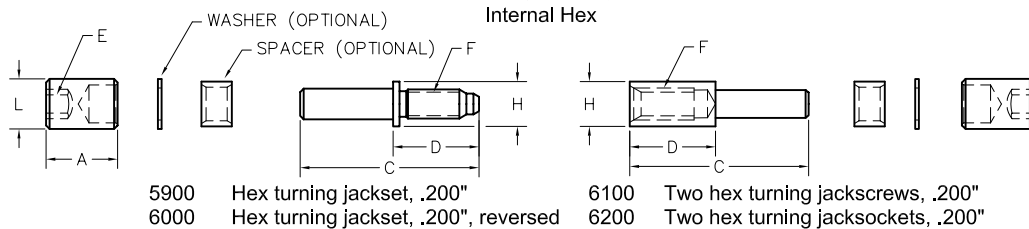


### Turning Jacksets Internal Hex or Slotted



### 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:

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

## Specifications

### Materials and Finishes \*

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

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

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

☒ Symbolizes options that are not ROHS compliant.

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

## SIZE

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

## CONTACTS

TYPE CONTACTS/TERMINATIONS: 31 Pin, right angle, dip solder, .109" x .020" dia 32 Pin, right angle, dip solder, .140" x .020" dia 33 Pin, right angle, dip solder, .172" x .020" dia 34 Pin, right angle, dip solder, .109" x .016" dia 35 Pin, right angle, dip solder, .140" x .016" dia 36 Pin, right angle, dip solder, .172" x .016" dia 37 Pin, right angle, dip solder, .250" x .020" dia	TYPE CONTACTS/TERMINATIONS: 20 Socket, straight, dip solder, .109" x .020 dia 21 Socket, straight, dip solder, .140" x .020 dia 22 Socket, straight, dip solder, .172" x .020 dia 23 Socket, straight, dip solder, .250" x .020 dia 24 Socket, straight, solder cup 25 Socket, straight, flex circuit, .093" x .017 dia 26 Socket, straight, wire wrap®, .500" x .018 square 27 Socket, straight, wire wrap®, .375" x .018 square 28 Socket, straight, wire wrap®, .625" x .018 square 29 Socket, connector saver, .150" x .025" dia 50 Socket, straight, dip solder, .140" x .016" dia 51 Socket, straight, dip solder, .172" x .016" dia 53 Socket, straight, stackable, .212" x .025" dia 54 Socket, straight, stackable, .244" x .025" dia 55 Socket, straight, stackable, .275" x .025" dia 64 Socket, straight, press fit, .203" (Board .093"- .125" thk) 65 Socket, straight, press fit, .323" (Board .156"- .200" thk) 66 Socket, straight, press fit, .403" (Board .250"+ thk)
---	---

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

## HARDWARE

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

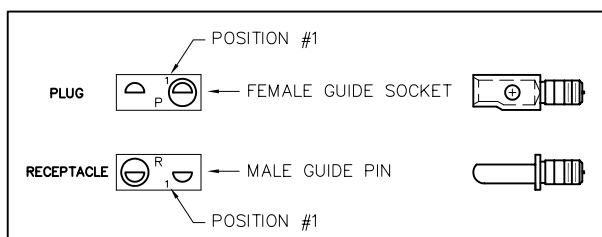
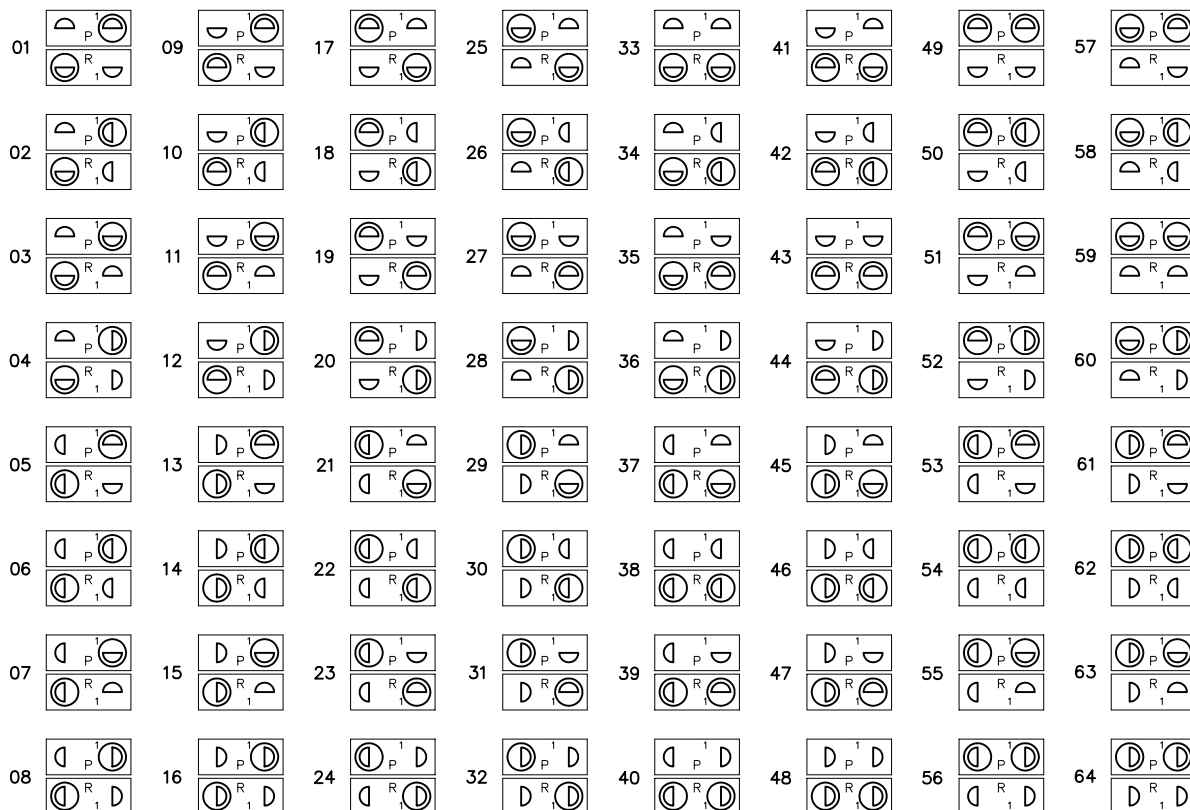
## OPTIONS

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

☒ = Option not RoHS compliant

# Polarization 2 & 3 Row

## D-Shaped Guide Sets



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

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

Example:

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

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

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

### UNIVERSAL TEST CONNECTORS

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

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

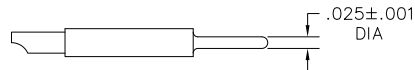
Hardware type shown above catalog order number.



# Contacts 2 & 3 Row

Pins and Sockets

## PINS



11 Pin, straight, solder cup

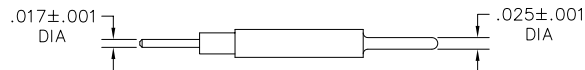


10 Pin, straight, dip solder, .109"

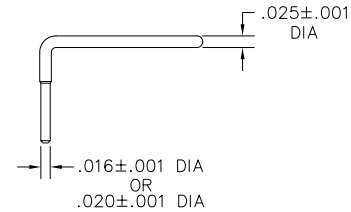
12 Pin, straight, dip solder, .140"

13 Pin, straight, dip solder, .172"

14 Pin, straight, dip solder, .250"



15 Pin, straight, flex circuit, .093"



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

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

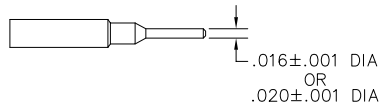
33 Pin, right angle, dip solder, .172" x .020" dia

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

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

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

## SOCKETS



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

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

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

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

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

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



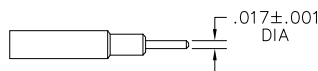
53 Socket, straight, stackable, .212" (Board: .062")

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

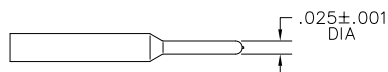
55 Socket, straight, stackable, .275" (Board: .125")



24 Socket, straight, solder cup



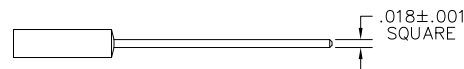
25 Socket, straight, flex circuit, .093"



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

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

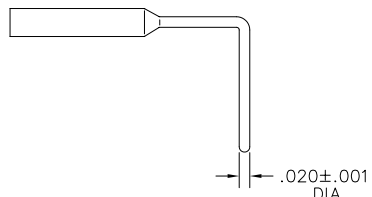
59 Socket, straight, crimp removable (28-30 awg)



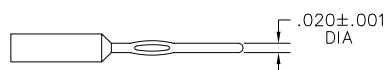
26 Socket, straight, wire-wrap®, .500"

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

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



29 Socket, connector saver, .150"



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

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

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

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

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

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

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