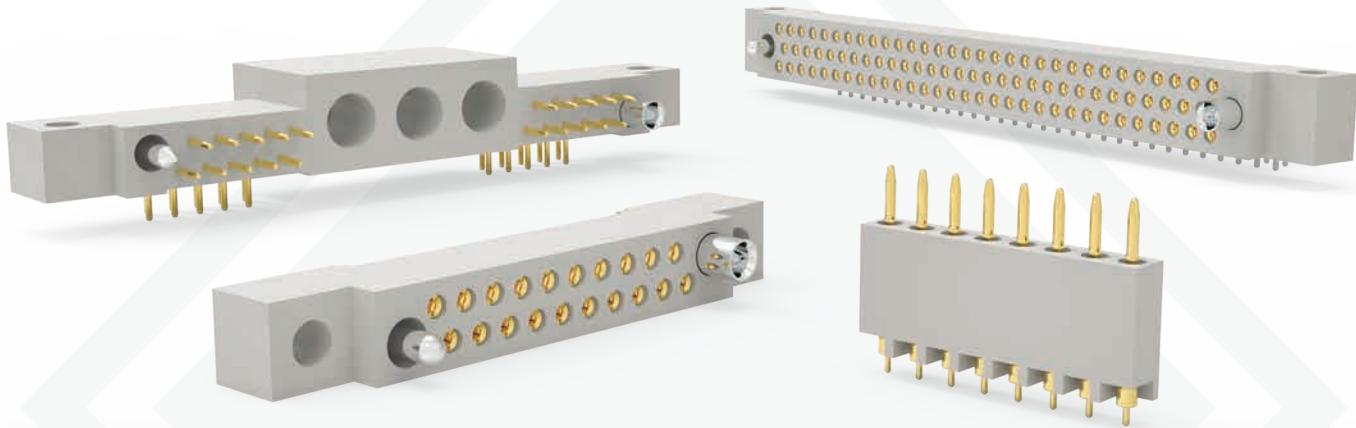


**molex**



# AirBorn W Series

Rectangular Plastic Board-Level Connectors — 0.100" (2.54mm)

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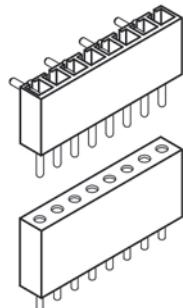
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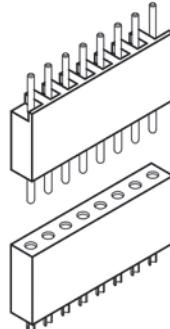
# DAUGHTERBOARD-TO-MOTHERBOARD OR CHASSIS

## RIGHT-ANGLE PLUG-TO-Straight RECEPTACLE



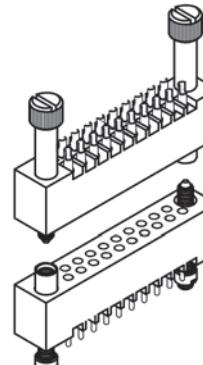
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Page: W-11

## STRAIGHT PLUG-TO-Straight RECEPTACLE



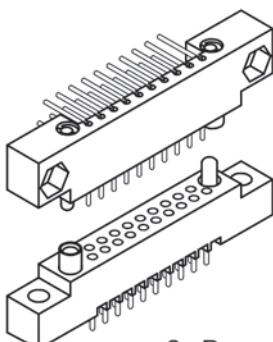
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## CABLE-TO-BOARD OR PANEL



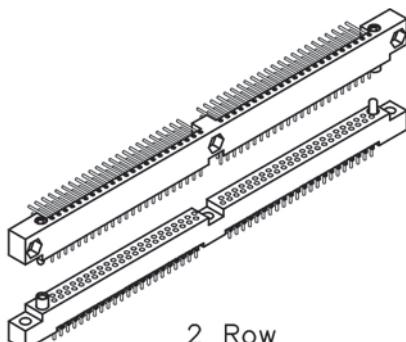
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## PC CARD-TO-BOARD OR CHASSIS



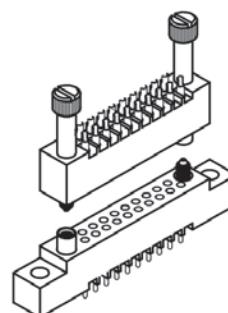
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## PC CARD-TO-BOARD OR CHASSIS



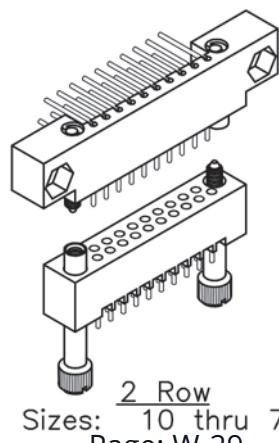
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## CABLE-TO-BOARD OR PC CARD



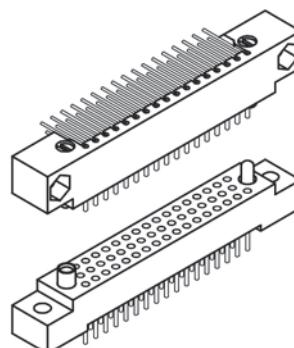
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## PC CARD-TO-BOARD OR PC CARD



2 Row  
Sizes: 10 thru 70  
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## PC CARD-TO-BOARD OR CHASSIS

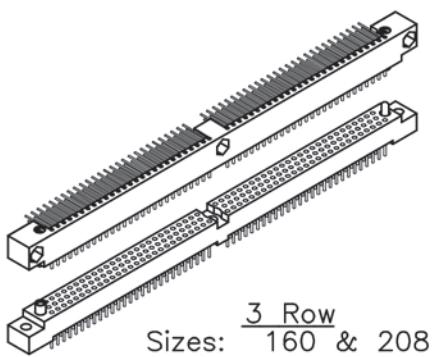


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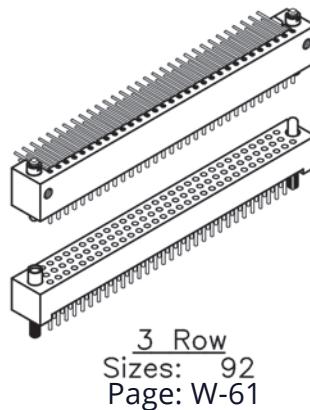
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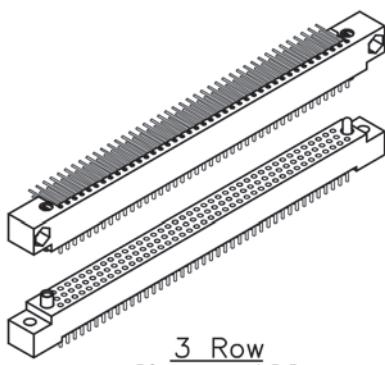
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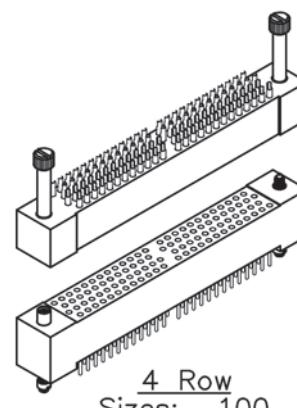
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## PC CARD-TO-BOARD OR CHASSIS



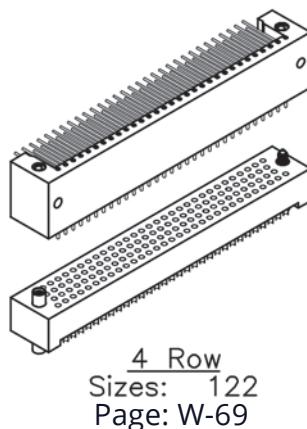
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## CABLE-TO-BOARD OR PANEL



4 Row  
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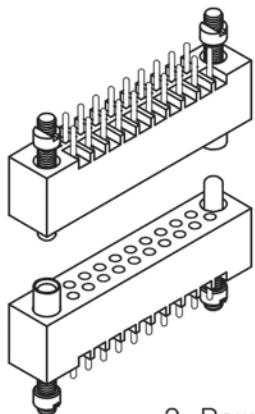
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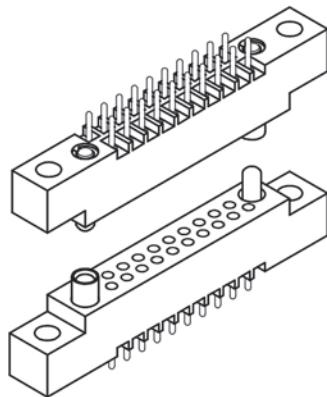
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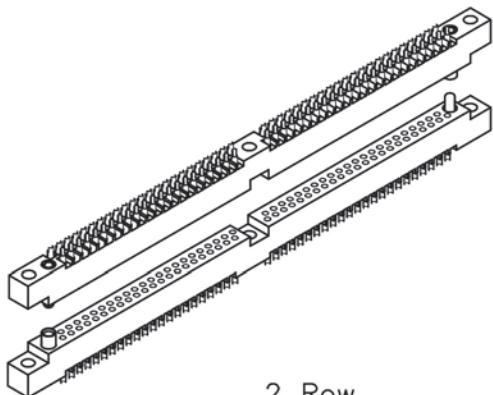
## SANDWICH BOARDS



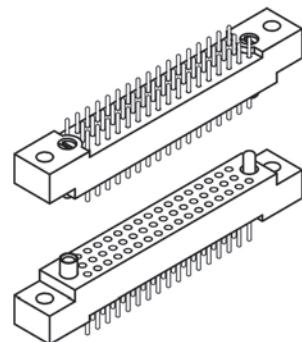
2 Row  
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Page: W-17



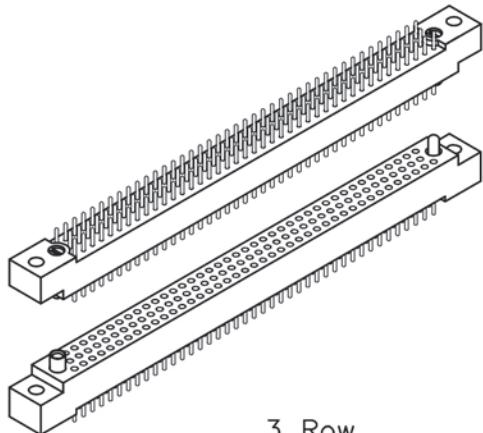
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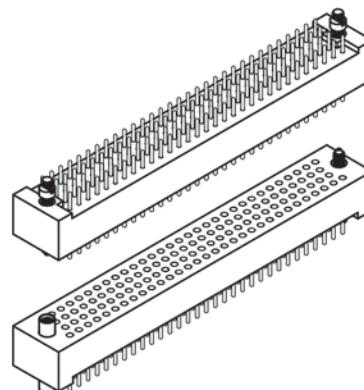
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Page: W-25



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Sizes: 50 thru 104  
Page: W-49



3 Row  
Sizes: 122  
Page: W-65

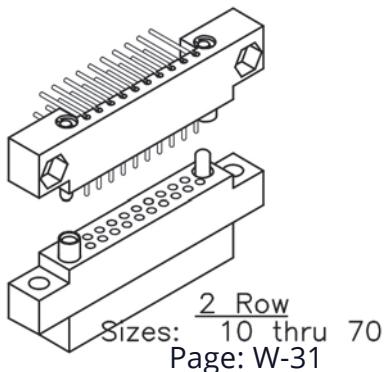


4 Row  
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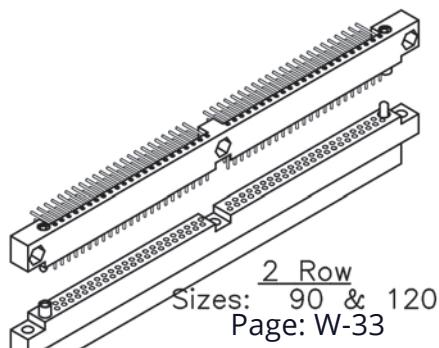
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## BOARD TO CRIMP REMOVABLE

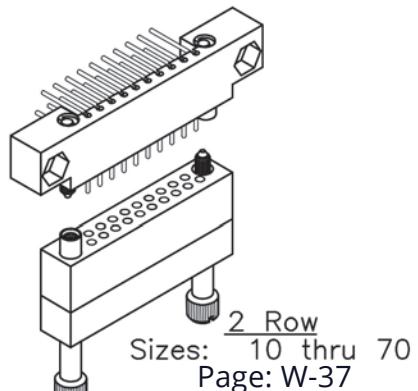
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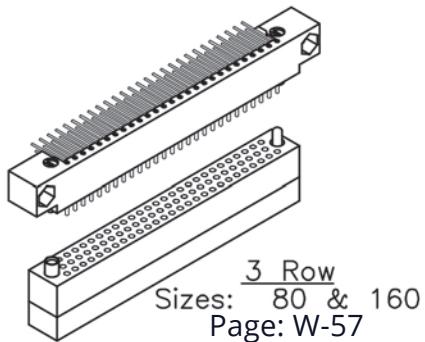
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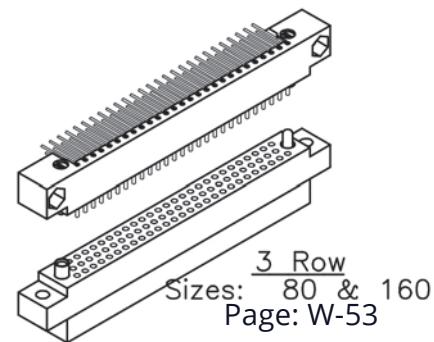
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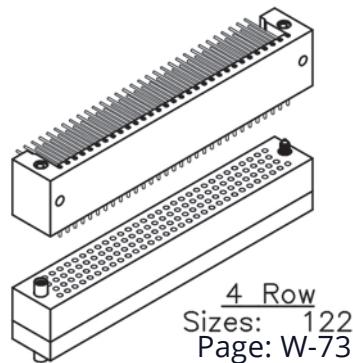
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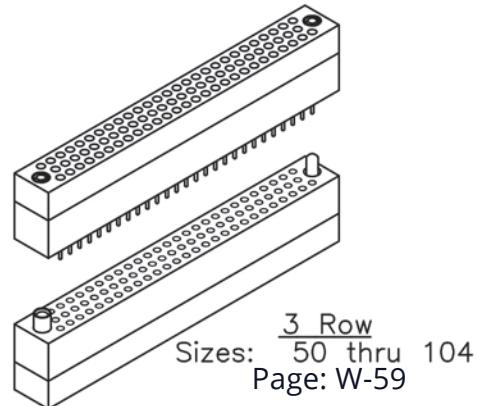
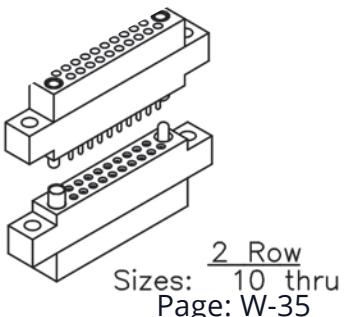
### PC CARD-TO-CHASSIS



### PC CARD-TO-CABLE

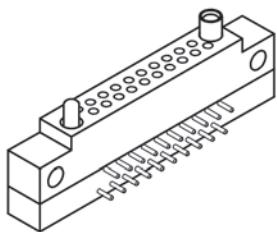


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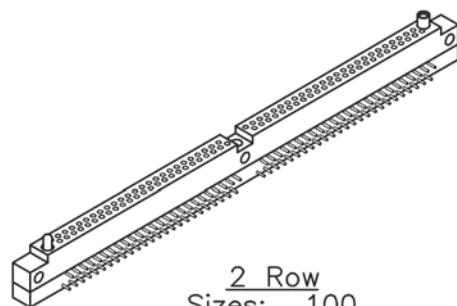


## EXTENDER BOARDS

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2 Row  
Sizes: 10 thru 70  
Page: W-43

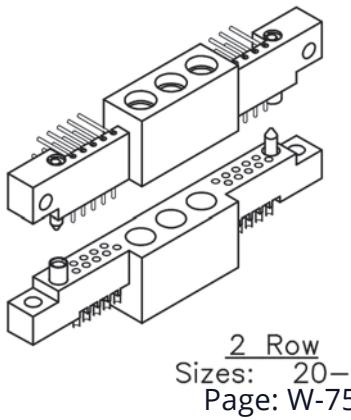


2 Row  
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## COAX CONNECTORS

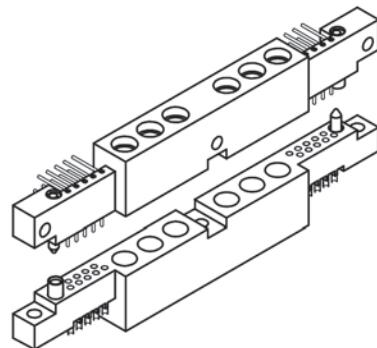
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### PC CARD-TO-BOARD OR CHASSIS



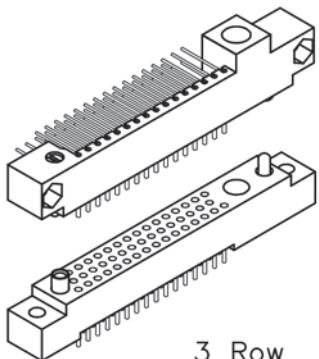
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Page: W-75

### PC CARD-TO-BOARD OR CHASSIS



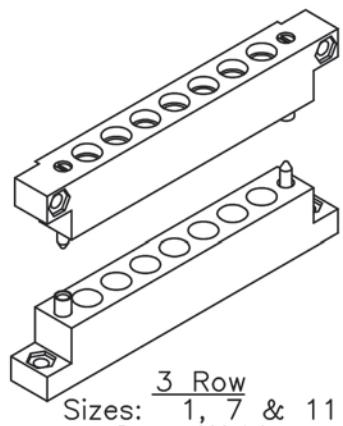
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Sizes: 20-6  
Page: W-77

### PC CARD-TO-CHASSIS OR BOARD



3 Row  
Sizes: 47-1  
Page: W-79

### PC CARD-TO-CHASSIS

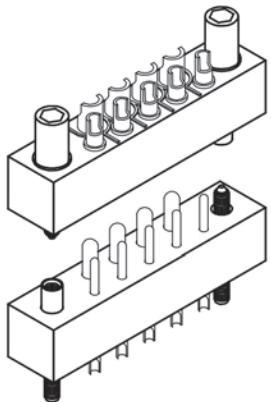


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Sizes: 1, 7 & 11  
Page: W-81

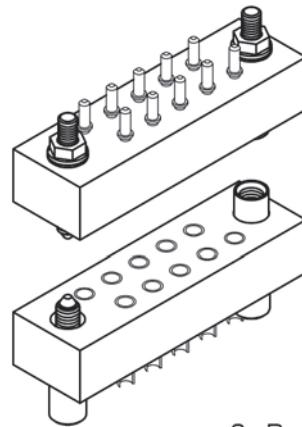
# MISCELLANEOUS CONNECTORS

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## POWER CABLE-TO-CHASSIS



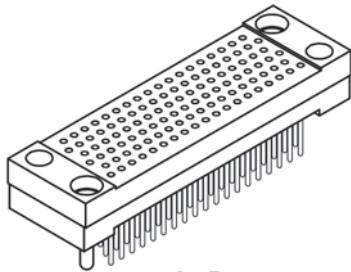
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Page: W-83



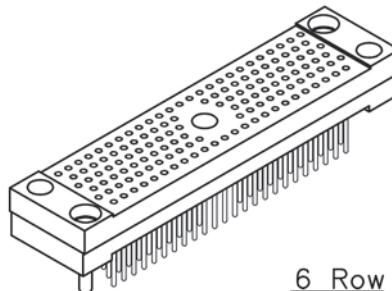
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Page: W-85

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## STACKABLE BOARD-TO-BOARD



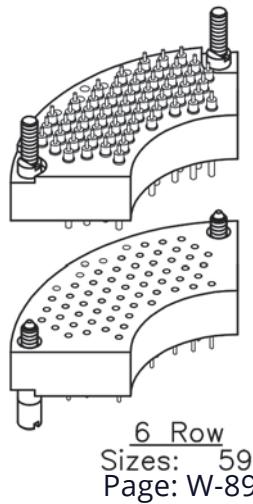
6 Row  
Sizes: 111  
Page: W-91



6 Row  
Sizes: 135  
Page: W-93

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## QUARTER ROUND SANDWICH BOARDS



6 Row  
Sizes: 59  
Page: W-89

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# MATING MATRIX FOR AIRBORN W SERIES CONNECTORS

PINS	SOCKETS														
Series	WT	WTA (F)	WTAX	WTB	WTBT	WTDX	WTK	WG	WGA	WGDX	WGK	WGR	WRD	WRDDX	WRF
WT	X														
WTA (T)		X		X	X	X	X								
WTAV			X	X	X	X	X								
WTB*P		X	X	X	X	X	X								
WTBV		X	X	X	X	X	X								
WTDV		X	X	X	X	X	X								
WTKV		X	X	X	X	X	X								
WG*P								X			X	X			
WGV								X			X	X			
WGA*P									X						
WGAV										X					
WGDV								X			X	X			
WGKV								X			X	X			
WGR													X		
WRD*P														X	X
WRDV														X	X
WRF															X

I/O CONNECTORS

WT, WTA, WTAX, WTDX, WTK, WG, WGA, WGDX, WGK, WRD, WRDDX, WRF

PC BOARD MOUNTED CONNECTORS

WT, WTA, WTAX, WTB, WTBT, WG, WGA, WRD, WRF

(T) = TURNING HARDWARE

(F) = FIXED HARDWARE

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# SPECIFICATIONS – MATERIALS AND FINISHES\*

<b>PIN CONTACTS:</b>	Copper alloy per MIL-C-55302
<b>SOCKET CONTACTS:</b>	Clipped contacts: Contact: BeCu per MIL-C-55302 Terminal: Copper alloy per MIL-C-55302
	Crimp removable contacts: Contact and terminal: Copper alloy per MIL-C-55302
<b>CONTACT FINISHES:</b>	Gold plating per ASTM B 488 OR SAE AMS 2422. Localized finish per MIL-DTL-55302 and associated slash sheet
<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 197/197/B 197M. Nickel plated as per SAE AMS-QQ-N-290
<b>FACE SEAL GASKET:</b>	Silicone rubber per A-A59588

## MISCELLANEOUS

**CONNECTOR MARKINGS:** Contact numbers are stamped on the side of the connector. Numbers are stamped on the low-numbered side only on Two-Row and Three-row right-angle connectors

**TORQUE:** Polarizing guides and floating mounts: 16 + 8/-0 inch ounces  
(*minimum of seven-inch-ounce reverse torque per Mil-C-55302*)  
Mounting and hood hardware: 24" ounces maximum  
Mating jacksets: 32" ounces maximum  
Wrap post: 2" ounce minimum per MIL-STD-1130  
Helicoil Inserts: #2-56 – 24" ounce maximum. #4-40 – 32" ounce maximum

**TOLERANCES:\*\***  
(*Unless otherwise specified*)  
Angles:  $\pm 2^\circ$   
Decimals:  $\pm 0.010"$   
Fractions:  $\pm 1/64"$

## NOTES

Molex can manufacture special configurations for your exact specifications.

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

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# PERFORMANCE REFERENCE M32139

<b>CONTACT RATING:</b>	5-amperes
<b>SOLDERABILITY:</b>	Terminals ( <i>except wire wrap® and crimp</i> ) tested in accordance with MIL-STD-202, method 208 or J-STD-002
<b>WIRE SIZE:</b>	Stranded #22 AWG ( <i>adapter sleeves available for larger sizes or twisted pairs</i> ).
<b>OPERATING TEMPERATURE:</b>	-65° to +125° C or -85° to +257° F

CATEGORY	REQUIREMENTS	TEST METHOD PER: SAE AS 13441	EIA-364 EQUIVALENT
TEST VOLTAGE	1,000V, RMS, 60 Hz at sea level 300V, RMS, 60 Hz at 70,000 feet	#3001	EIA-364-20, method A IA-364-20 method A, condition IV
INSULATION RESISTANCE	5,000 megaohms min at 500 VDC	#3003	EIA-364-21
DURABILITY	500 connector mating cycles		
VIBRATION	15Gs no interruption > 1.0 $\mu$ second	#2005	EIA-364-28, condition II
SHOCK	100 Gs, no interruption > 1.0 $\mu$ second	#2005	EIA-364-27, condition G
SALT SPRAY	PASS	#1001	EIA-364-26, condition B
HUMIDITY	PASS	#1002	EIA-364-31, method IV except steps 7A and 7B
THERMAL SHOCK	PASS	#1003	EIA-364-32, method A, condition III
CONTACT RESISTANCE	0.025 volt maximum drop at 5 amperes -0.005 Ohms (interface measurement)	#3004	EIA-364-06
CONTACT ENGAGING FORCE	0.4.00 oz. maximum with 0.031 diameter test pin per SAE AS31971 and MIL-C-55302	#2014	EIA-364-37, method A
SIZES 50 AND LARGER	Upon engagement, center area of mating faces may remain open 0.010" to 0.025" due to slight flexing of molding. Vibration or shock should provide complete closure.		
GUIDES AND JACKS	If location of pin or socket contacts is reversed, location of male and female guides or jacks is also reversed; except when using D-shaped polarized guides. When polarized positions are changed, apply Loctite® 242-12 or equivalent to threads.		

# PART NUMBER DESCRIPTION

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Each part number consists of at least four elements: series, size (number of contacts), type of contacts, and type of hardware. A fifth 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 part number is identified by a combination of letters and/or numbers of varying lengths. These elements are written together without spaces or punctuation.

## **SERIES:**

The series designator identifies the connector body style. Some body moldings are modified to accommodate right angle pins, but carry the same series number. Follow choices on each catalog page for series selections.

## **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.

## **CONTACTS:**

Each page also identifies contact options for a given connector. Please note that starting with the largest connectors, we are routinely substituting low-force sockets.

## **HARDWARE:**

Hardware options are shown on each catalog page.

## **NOTES:**

If options or modifications are available for a given connector, it will be stated on the catalog page, or you will be referred to a different page for specific instructions. Remember when adding a suffix to the part number, add it exactly as instructed.

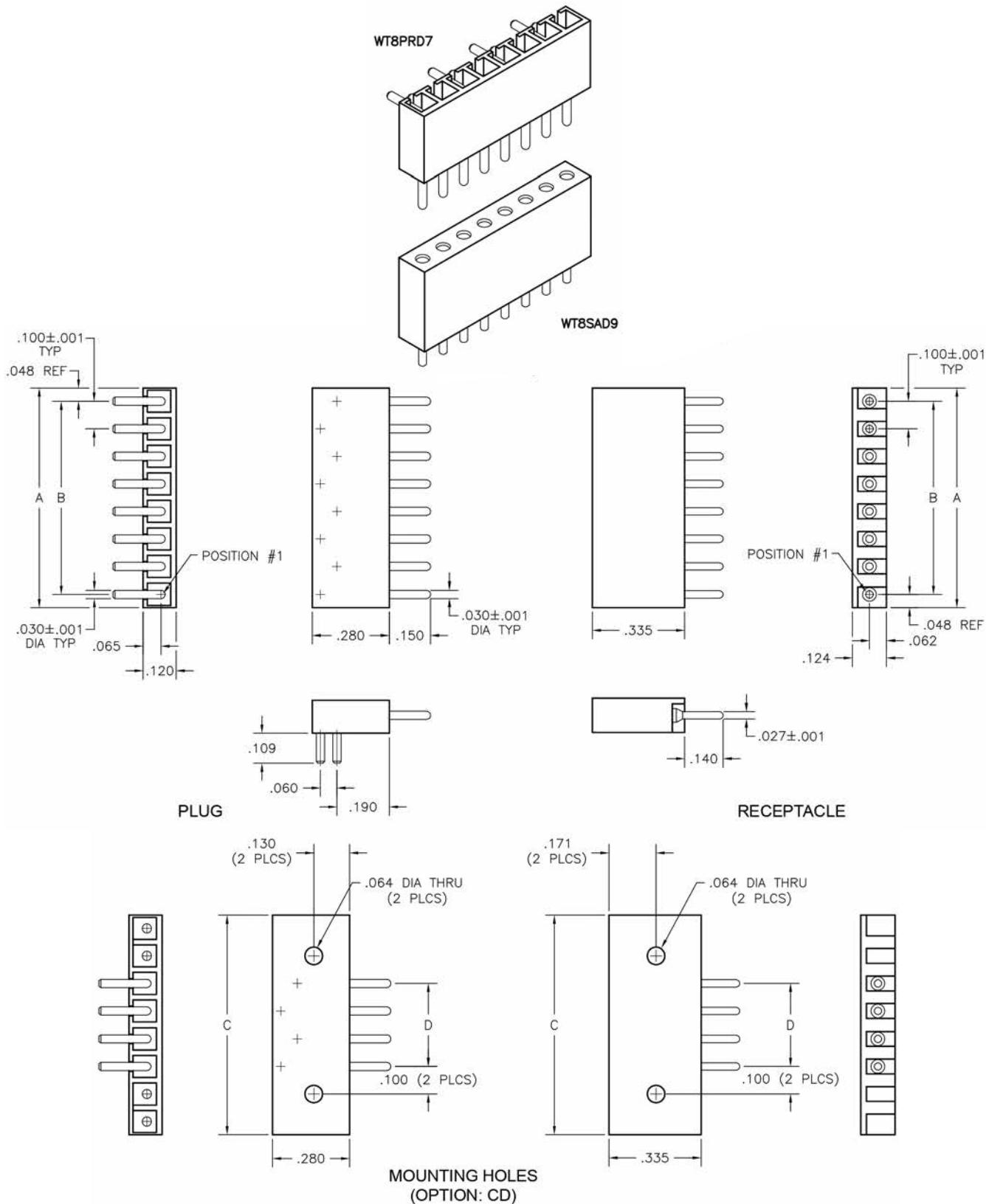
Each page is as comprehensive as possible. However, if you do not find a particular connector size or option, please contact the factory for further assistance.



# ONE ROW - RIGHT-ANGLE PLUG-TO-Straight RECEPTACLE

WT - WT

0.100" | 3 THROUGH 30 CONTACTS



## LEAD CONFIGURATION OPTIONS

PLUG: WT 8 PRD7  
 RECEPTACLE: WT 8 SAD9  
 XX X XXXX

PLUG	RECEPTACLE
SERIES	
WT	Plug, right angle, no mounting ears
SIZE	
Number of contacts (3 thru 22)	Number of contacts (3 thru 22)
CONTACTS	
TYPE CONTACTS/TERMINATIONS:	TYPE CONTACTS/TERMINATIONS:
PRD4 Pin, right angle, dip solder, .063" x .030" dia	SAC Socket, straight, solder cup (.035" I.D.)
PRD7 Pin, right angle, dip solder, .109" x .030" dia	SAD7 Socket, straight, dip solder, .109" x .027" dia
PRD8 Pin, right angle, dip solder, .125" x .030" dia	SAD9 Socket, straight, dip solder, .140" x .027" dia
	SAD11 Socket, straight, dip solder, .172" x .027" dia
	SAD15 Socket, straight, dip solder, .234" x .027" dia
	SAF3 Socket, straight, flex circuit, .050"
	SAF6 Socket, straight, flex circuit, .093"
	SAG7 Socket, straight, dip solder, .109" x .018" dia
	SAG9 Socket, straight, dip solder, .140" x .018" dia
	SAG11 Socket, straight, dip solder, .172" x .018" dia
	SAP Socket, straight, pin termination, .150" (connector saver)
	SAR4 Socket, right angle, dip solder, .062" x .025" dia
	SAR7 Socket, right angle, dip solder, .109" x .025" dia
	SAR9 Socket, right angle, dip solder, .140" x .025" dia
	SARC Socket, right angle, solder cup
	SAW40 Socket, straight, wire wrap®, .625"

### OPTIONS

- Option Codes: Add to the end of the part number. Example: WT10PC443-1. Call factory for additional codes.
- 443 Polarizing pin installed in contact position noted by dash number. See "Polarization" in Accessories section.
- 444 Contact position noted by dash number is left open (to mate with -443). See "Polarization" in Accessories section.
- B82 Termination face sealed against conformal coating
- CD Cross drilled connector for hold down screws. See page W-11. Example: WT8PRD7CD or WT8SACCD.
- D01 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with 63/37 or 60/40 solder.
- P39 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with SAC305 solder (lead free).
- D54 Combine -B82 & -D01 options
- G69 Solder cups fixed in an outward orientation (otherwise contacts will rotate)

Note: The thin outboard barriers are often removed at the factory due to their fragile nature.

= Option not RoHS compliant

DIMENSIONS		
SIZE	A	B
3	.296	.200
4	.396	.300
5	.496	.400
6	.596	.500
7	.696	.600
8	.796	.700
9	.896	.800
10	.996	.900
11	1.096	1.000
12	1.196	1.100
13	1.296	1.200
14	1.396	1.300
15	1.496	1.400
16	1.596	1.500
17	1.696	1.600
18	1.796	1.700
19	1.896	1.800
20	1.996	1.900
21	2.096	2.000
22	2.196	2.100

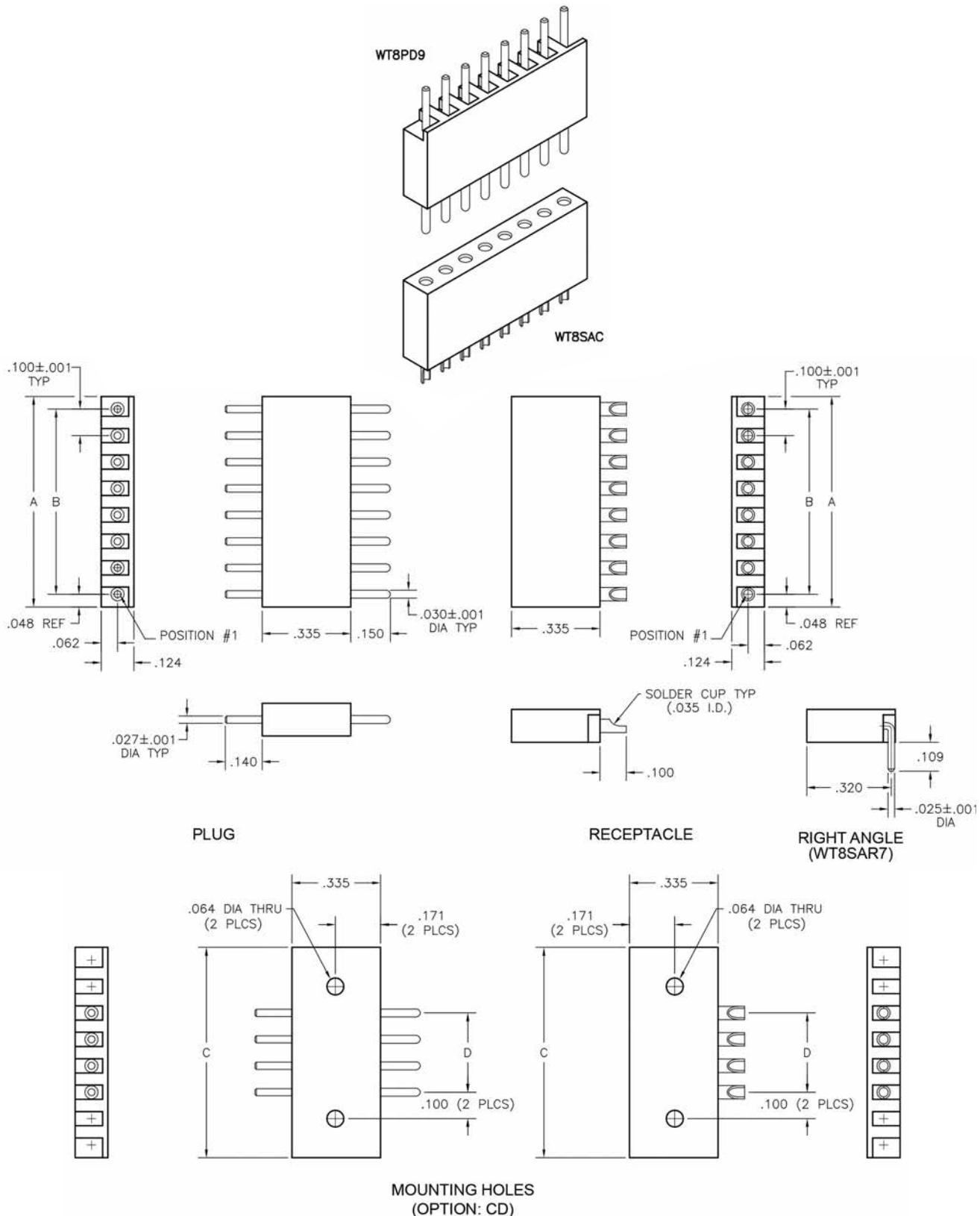
DIMENSIONS (CD)			
SIZE	# OF CONTACTS	C	D
5	1	.496	—
6	2	.596	.100
7	3	.696	.200
8	4	.796	.300
9	5	.896	.400
10	6	.996	.500
11	7	1.096	.600
12	8	1.196	.700
13	9	1.296	.800
14	10	1.396	.900
15	11	1.496	1.000
16	12	1.596	1.100
17	13	1.696	1.200
18	14	1.796	1.300
19	15	1.896	1.400
20	16	1.996	1.500
21	17	2.096	1.600
22	18	2.196	1.700

**molex**

# ONE ROW - STRAIGHT PLUG-TO-STRAIGHT RECEPTACLE

WT - WT

0.100" | 3 THROUGH 22 CONTACTS



## LEAD CONFIGURATION OPTIONS

PLUG: WT 8 PD9  
 RECEPTACLE: WT 8 SAC  
 XX X XXX

PLUG		RECEPTACLE	
SERIES			
WT	Plug, straight, no mounting ears	WT	Receptacle, straight, no mounting ears
SIZE			
Number of contacts (3 thru 22)		Number of contacts (3 thru 22)	
CONTACTS			
TYPE CONTACTS/TERMINATIONS:		TYPE CONTACTS/TERMINATIONS:	
PC	Pin, straight, solder cup (.035" I.D.)	SAC	Socket, straight, solder cup (.035" I.D.)
PD7	Pin, straight, dip solder, .109" x .027" dia	SAD7	Socket, straight, dip solder, .109" x .027" dia
PD9	Pin, straight, dip solder, .140" x .027" dia	SAD9	Socket, straight, dip solder, .140" x .027" dia
PD11	Pin, straight, dip solder, .172" x .027" dia	SAD11	Socket, straight, dip solder, .172" x .027" dia
PF3	Pin, straight, flex circuit, .050"	SAD15	Socket, straight, dip solder, .234" x .027" dia
PF6	Pin, straight, flex circuit, .093"	SAF3	Socket, straight, flex circuit, .050"
PW40	Pin, straight, wire wrap <sup>®</sup> , .625"	SAF6	Socket, straight, flex circuit, .093"
		SAG7	Socket, straight, dip solder, .109" x .018" dia
		SAG9	Socket, straight, dip solder, .140" x .018" dia
		SAG11	Socket, straight, dip solder, .172" x .018" dia
		SAP	Socket, straight, pin termination, .150" (connector saver)
		SAR4	Socket, right angle, dip solder, .062" x .025" dia
		SAR7	Socket, right angle, dip solder, .109" x .025" dia
		SAR9	Socket, right angle, dip solder, .140" x .025" dia
		SARC	Socket, right angle, solder cup
		SAW40	Socket, straight, wire wrap <sup>®</sup> , .625"

### OPTIONS

- Option Codes: Add to the end of the part number. Example: WT10PC443-1. Call factory for additional codes.
- 443 Polarizing pin installed in contact position noted by dash number. See "Polarization" in Accessories section.
- 444 Contact position noted by dash number is left open (to mate with -443). See "Polarization" in Accessories section.
- B82 Termination face sealed against conformal coating
- CD Cross drilled connector for hold down screws. See page W-13. Example: WT8PCCD or WT8SACCD.
- D01 Pretinned contact terminations (except solder cups, wire wraps<sup>®</sup> and flex contacts) with 63/37 or 60/40 solder.
- P39 Pretinned contact terminations (except solder cups, wire wraps<sup>®</sup> and flex contacts) with SAC305 solder (lead free).
- D54 Combine -B82 & -D01 options
- G69 Solder cups fixed in an outward orientation (otherwise contacts will rotate)

Note: The thin outboard barriers are often removed at the factory due to their fragile nature.

= Option not RoHS compliant

DIMENSIONS		
SIZE	A	B
3	.296	.200
4	.396	.300
5	.496	.400
6	.596	.500
7	.696	.600
8	.796	.700
9	.896	.800
10	.996	.900
11	1.096	1.000
12	1.196	1.100
13	1.296	1.200
14	1.396	1.300
15	1.496	1.400
16	1.596	1.500
17	1.696	1.600
18	1.796	1.700
19	1.896	1.800
20	1.996	1.900
21	2.096	2.000
22	2.196	2.100

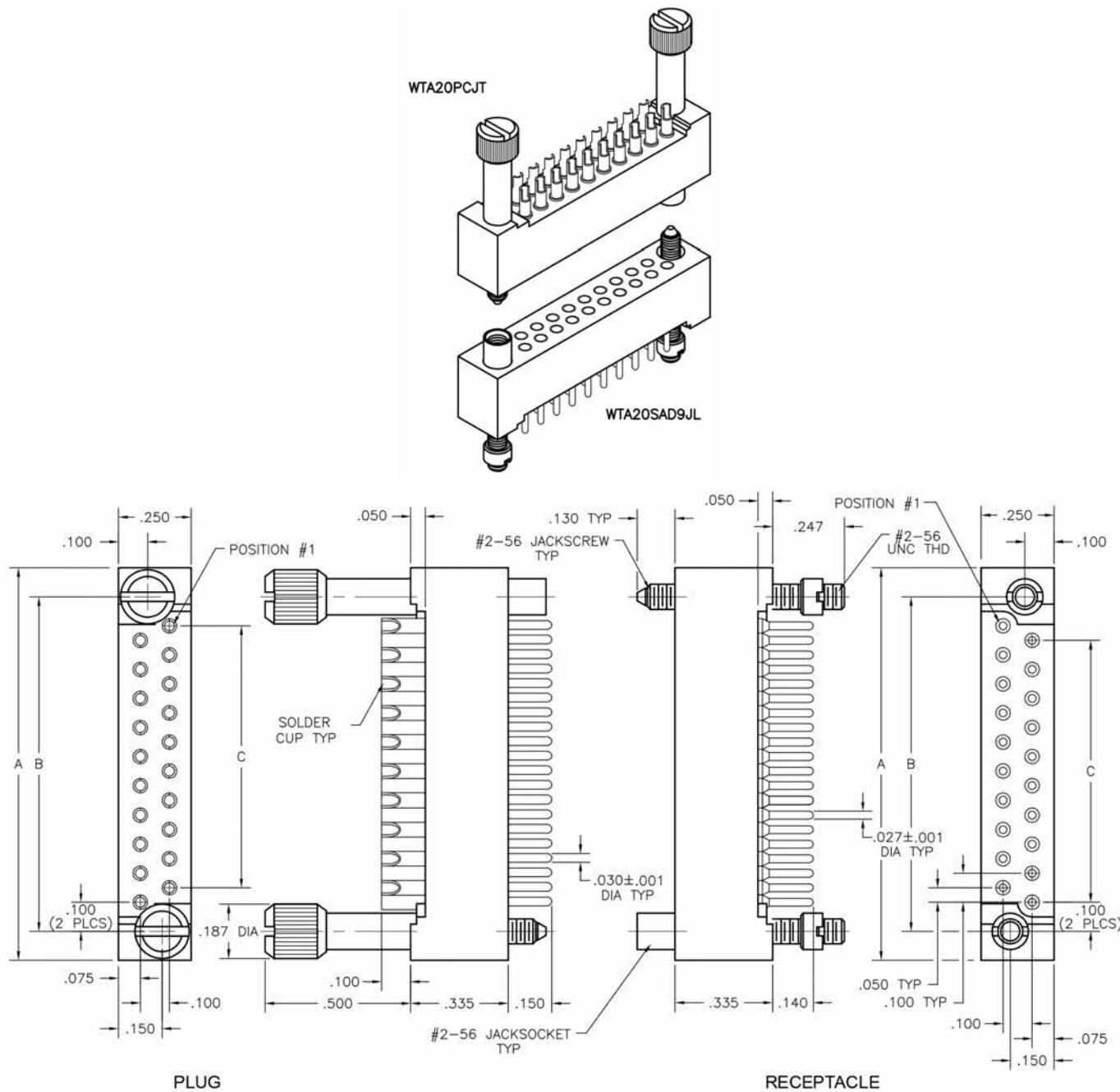
DIMENSIONS (CD)			
SIZE	# OF CONTACTS	C	D
5	1	.496	—
6	2	.596	.100
7	3	.696	.200
8	4	.796	.300
9	5	.896	.400
10	6	.996	.500
11	7	1.096	.600
12	8	1.196	.700
13	9	1.296	.800
14	10	1.396	.900
15	11	1.496	1.000
16	12	1.596	1.100
17	13	1.696	1.200
18	14	1.796	1.300
19	15	1.896	1.400
20	16	1.996	1.500
21	17	2.096	1.600
22	18	2.196	1.700

**molex**

## TWO ROW - CABLE-TO-BOARD OR PANEL

### WTA - WTA

0.100" | 10 THROUGH 70 CONTACTS



DIMENSIONS							
SIZE	A	B	C	SIZE	A	B	C
10	.850	.650	.400	44	2.550	2.350	2.100
14	1.050	.850	.600	50	2.850	2.650	2.400
20	1.350	1.150	.900	54	3.050	2.850	2.600
24	1.550	1.350	1.100	56	3.150	2.950	2.700
26	1.650	1.450	1.200	60	3.350	3.150	2.900
30	1.850	1.650	1.400	66	3.650	3.450	3.200
36	2.150	1.950	1.700	70	3.850	3.650	3.400
40	2.350	2.150	1.900				

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## LEAD CONFIGURATION OPTIONS

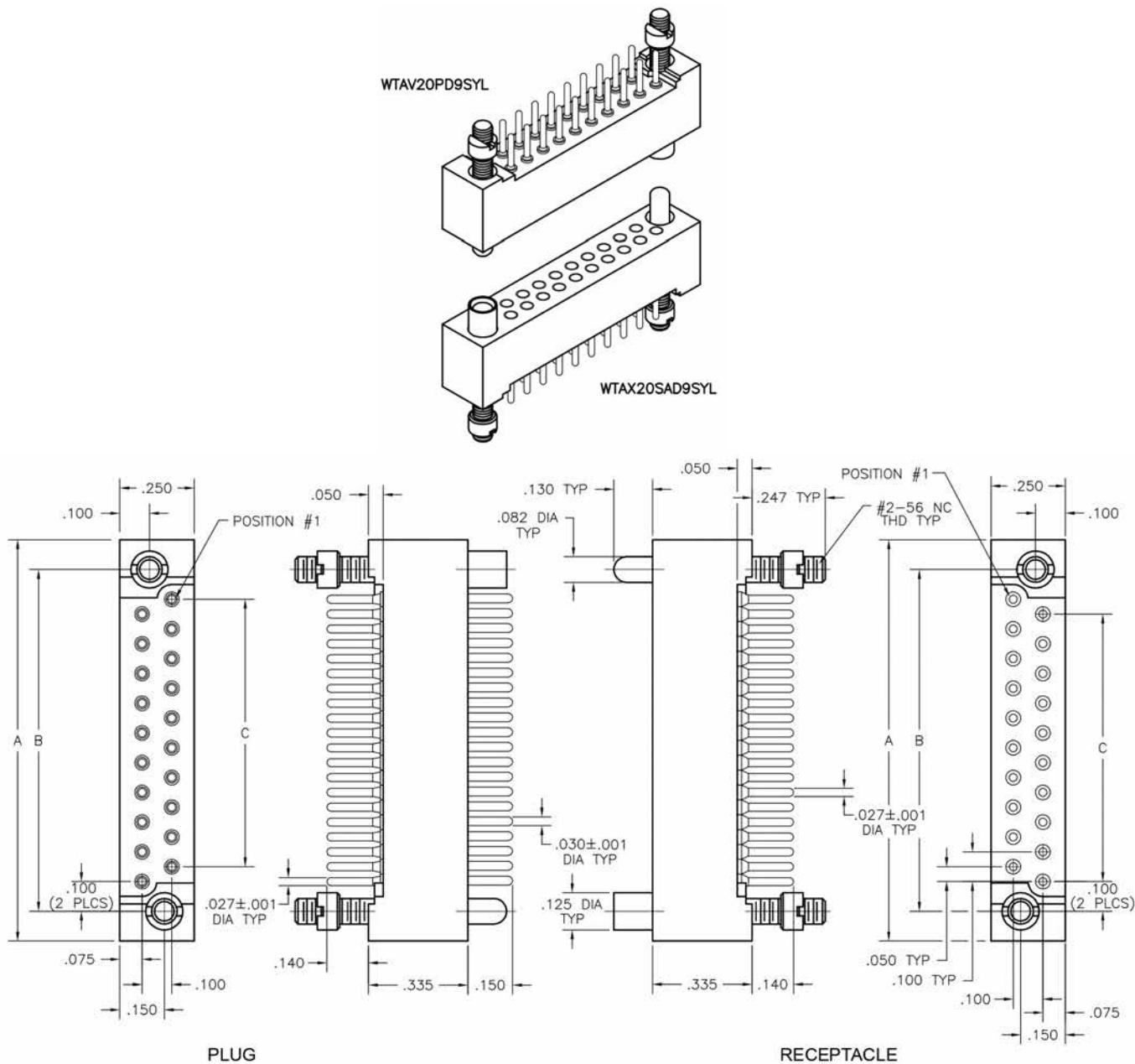
PLUG: WTA 20 PC JT  
 RECEPTACLE: WTA 20 SAD9 JL  
 XXX XX XXXX XX

PLUG	RECEPTACLE																										
SERIES																											
WTA Plug, straight, no mounting ears	WTA Receptacle, straight, no mounting ears																										
SIZE																											
XX Number of contacts (10, 14, 20, 24, 26, 30, 36, 40, 44, 50, 54, 56, 60, 66, or 70)	XX Number of contacts (10, 14, 20, 24, 26, 30, 36, 40, 44, 50, 54, 56, 60, 66, or 70)																										
CONTACTS																											
<ul style="list-style-type: none"> <li>Pin or socket contacts can be used in either plug or receptacle.</li> <li>When pin contacts are used, standard hardware orientation places the female hardware next to the #1 pin contact.</li> <li>When socket contacts are used, standard hardware orientation places the male hardware next to the #1 socket contact.</li> </ul>																											
<b>TYPE CONTACTS/TERMINATIONS:</b> <table> <tbody> <tr><td>PC</td><td>Pin, straight, solder cup (.035" I.D.)</td></tr> <tr><td>PD5</td><td>Pin, straight, dip solder, .078" x .027" dia</td></tr> <tr><td>PD7</td><td>Pin, straight, dip solder, .109" x .027" dia</td></tr> <tr><td>PD9</td><td>Pin, straight, dip solder, .140" x .027" dia</td></tr> <tr><td>PD11</td><td>Pin, straight, dip solder, .172" x .027" dia</td></tr> <tr><td>PD13</td><td>Pin, straight, dip solder, .203" x .027" dia</td></tr> <tr><td>PD15</td><td>Pin, straight, dip solder, .234" x .027" dia</td></tr> <tr><td>PD20</td><td>Pin, straight, dip solder, .312" x .027" dia</td></tr> <tr><td>PF3</td><td>Pin, straight, flex circuit, .050"</td></tr> <tr><td>PF6</td><td>Pin, straight, flex circuit, .093"</td></tr> <tr><td>PF8</td><td>Pin, straight, flex circuit, .125"</td></tr> <tr><td>PW34</td><td>Pin, straight, wire wrap®, .531"</td></tr> <tr><td>PW40</td><td>Pin, straight, wire wrap®, .625"</td></tr> </tbody> </table>		PC	Pin, straight, solder cup (.035" I.D.)	PD5	Pin, straight, dip solder, .078" x .027" dia	PD7	Pin, straight, dip solder, .109" x .027" dia	PD9	Pin, straight, dip solder, .140" x .027" dia	PD11	Pin, straight, dip solder, .172" x .027" dia	PD13	Pin, straight, dip solder, .203" x .027" dia	PD15	Pin, straight, dip solder, .234" x .027" dia	PD20	Pin, straight, dip solder, .312" x .027" dia	PF3	Pin, straight, flex circuit, .050"	PF6	Pin, straight, flex circuit, .093"	PF8	Pin, straight, flex circuit, .125"	PW34	Pin, straight, wire wrap®, .531"	PW40	Pin, straight, wire wrap®, .625"
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<b>TYPE CONTACTS/TERMINATIONS:</b> <table> <tbody> <tr><td>SAC</td><td>Socket, straight, solder cup (.035" I.D.)</td></tr> <tr><td>SAD7</td><td>Socket, straight, dip solder, .109" x .027" dia</td></tr> <tr><td>SAD9</td><td>Socket, straight, dip solder, .140" x .027" dia</td></tr> <tr><td>SAD11</td><td>Socket, straight, dip solder, .172" x .027" dia</td></tr> <tr><td>SAF3</td><td>Socket, straight, flex circuit, .050"</td></tr> <tr><td>SAF6</td><td>Socket, straight, flex circuit, .093"</td></tr> <tr><td>SAF9</td><td>Socket, straight, flex circuit, .140"</td></tr> <tr><td>SAG7</td><td>Socket, straight, dip solder, .109" x .018" dia</td></tr> <tr><td>SAG9</td><td>Socket, straight, dip solder, .140" x .018" dia</td></tr> <tr><td>SAG11</td><td>Socket, straight, dip solder, .172" x .018" dia</td></tr> <tr><td>SAP</td><td>Socket, straight, pin termination, .150" (connector saver)</td></tr> <tr><td>SAW24</td><td>Socket, straight, wire wrap®, .375"</td></tr> <tr><td>SAW40</td><td>Socket, straight, wire wrap®, .625"</td></tr> </tbody> </table>		SAC	Socket, straight, solder cup (.035" I.D.)	SAD7	Socket, straight, dip solder, .109" x .027" dia	SAD9	Socket, straight, dip solder, .140" x .027" dia	SAD11	Socket, straight, dip solder, .172" x .027" dia	SAF3	Socket, straight, flex circuit, .050"	SAF6	Socket, straight, flex circuit, .093"	SAF9	Socket, straight, flex circuit, .140"	SAG7	Socket, straight, dip solder, .109" x .018" dia	SAG9	Socket, straight, dip solder, .140" x .018" dia	SAG11	Socket, straight, dip solder, .172" x .018" dia	SAP	Socket, straight, pin termination, .150" (connector saver)	SAW24	Socket, straight, wire wrap®, .375"	SAW40	Socket, straight, wire wrap®, .625"
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HARDWARE																											
<ul style="list-style-type: none"> <li>Jackset hardware determines image of connector. Must specify image with guide set hardware.</li> <li>Plug facial seal gaskets and hoods; order separately or add "Q" in part number. Example: WTA10PD9QJ. See "Gaskets" and "Hoods" in Accessories section for instructions.</li> <li>Fixed jackset, long (JL) includes jackscrew or jacksocket, #2-56 nut, #2 flat washer &amp; #2 lockwasher.</li> </ul>																											
JT Turning jackset, .500"	J Fixed jackset																										
JTA Turning jackset, .200"	JL Fixed jackset, long																										
JTB Hex turning jackset, .200"																											
JTC Hex turning jackset, .500"																											
JTL Turning jackset, .700"																											
OPTIONS																											
<ul style="list-style-type: none"> <li>Option Codes: Add to the end of the part number. Example: WTA10SAD9J-D01. Call factory for additional codes.</li> <li>-443 Polarizing pin installed in contact position noted by dash number. See "Polarization" in Accessories section.</li> <li>-444 Contact position noted by dash number is left open (to mate with -443). See "Polarization" in Accessories section.</li> <li>-B82 Termination face sealed against conformal coating</li> <li>-D01 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with 63/37 or 60/40 solder. <input checked="" type="checkbox"/></li> <li>-P39 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with SAC305 solder (lead free).</li> <li>-D54 Combine -B82 &amp; -D01 options</li> <li>-G69 Solder cups fixed in an outward orientation (otherwise contacts will rotate)</li> </ul>																											
<input checked="" type="checkbox"/> = Option not RoHS compliant																											

## TWO ROW - SANDWICH BOARDS

### WTAV - WTAX

0.100" | 10 THROUGH 70 CONTACTS



DIMENSIONS							
SIZE	A	B	C	SIZE	A	B	C
10	.850	.650	.400	44	2.550	2.350	2.100
14	1.050	.850	.600	50	2.850	2.650	2.400
20	1.350	1.150	.900	54	3.050	2.850	2.600
24	1.550	1.350	1.100	56	3.150	2.950	2.700
26	1.650	1.450	1.200	60	3.350	3.150	2.900
30	1.850	1.650	1.400	66	3.650	3.450	3.200
36	2.150	1.950	1.700	70	3.850	3.650	3.400
40	2.350	2.150	1.900				

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## LEAD CONFIGURATION OPTIONS

PLUG: WTAV 20 PD9 SYL

RECEPTACLE: WTAV 20 SAD9 SYL

XXXX XX XXXX XXX

### PLUG

### RECEPTACLE

#### SERIES

WTAV Plug, straight, no mounting ears

WTAX Receptacle, straight, no mounting ears

WTAX Receptacle, right angle, no mounting ears

#### SIZE

XX Number of contacts (10, 14, 20, 24, 26, 30, 36, 40, 44, 50, 54, 56, 60, 66, or 70)

XX Number of contacts (10, 14, 20, 24, 26, 30, 36, 40, 44, 50, 54, 56, 60, 66, or 70)

#### CONTACTS

- Pin or socket contacts can be used in either plug or receptacle.
- When pin contacts are used, standard hardware orientation places the female hardware next to the #1 pin contact.
- When socket contacts are used, standard hardware orientation places the male hardware next to the #1 socket contact.

#### TYPE CONTACTS/TERMINATIONS:

PC Pin, straight, solder cup (.035" I.D.)  
 PD7 Pin, straight, dip solder, .109" x .027" dia  
 PD9 Pin, straight, dip solder, .140" x .027" dia  
 PD11 Pin, straight, dip solder, .172" x .027" dia  
 PF3 Pin, straight, flex circuit, .050"  
 PF6 Pin, straight, flex circuit, .093"  
 PF8 Pin, straight, flex circuit, .125"  
 PW34 Pin, straight, wire wrap®, .531"  
 PW40 Pin, straight, wire wrap®, .625"

#### TYPE CONTACTS/TERMINATIONS:

SAC Socket, straight, solder cup (.035" I.D.)  
 SAD7 Socket, straight, dip solder, .109" x .027" dia  
 SAD9 Socket, straight, dip solder, .140" x .027" dia  
 SAD11 Socket, straight, dip solder, .172" x .027" dia  
 SAF3 Socket, straight, flex circuit, .050"  
 SAF6 Socket, straight, flex circuit, .093"  
 SAF9 Socket, straight, flex circuit, .140"  
 SAG7 Socket, straight, dip solder, .109" x .018" dia  
 SAG9 Socket, straight, dip solder, .140" x .018" dia  
 SAG11 Socket, straight, dip solder, .172" x .018" dia  
 SAP Socket, straight, pin termination, .150" (connector saver)  
 SAW24 Socket, straight, wire wrap®, .375"  
 SAW40 Socket, straight, wire wrap®, .625"  
 SOR7 Socket, right angle, dip solder, .109" x .025" dia  
 SOR9 Socket, right angle, dip solder, .140" x .025" dia  
 SOR11 Socket, right angle, dip solder, .172" x .025" dia

#### HARDWARE

- Jackset hardware determines image of connector. Must specify image with guide set hardware.
- Plug facial seal gaskets and hoods; order separately or add "Q" in part number. Example: WTAV10PD9QJ. See "Gaskets" and "Hoods" in Accessories section for instructions.
- Fixed jackset, long (JL) includes jackscrew or jacksocket, #2-56 nut, #2 flat washer & #2 lockwasher

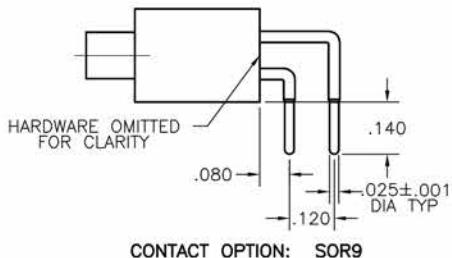
SY Guide set  
 SY# Guide set, polarized  
 SYL Guide set, long  
 SYL# Guide set, long, polarized  
 J Fixed jackset  
 JL Fixed jackset, long

SY Guide set  
 SY# Guide set, polarized  
 SYL Guide set, long  
 SYL# Guide set, long, polarized  
 JT Turning jackset, .500"  
 JTA Turning jackset, .200"  
 JTB Hex turning jackset, .200"  
 JTC Hex turning jackset, .500"  
 JTL Turning jackset, long, .700"

#### OPTIONS

- Option Codes: Add to the end of the part number. Example: WTAV10PD9J-D01. Call factory for additional codes.
- 433 Polarizing pin installed in contact position noted by dash number. See "Polarization" in Accessories section.
- 444 Contact position noted by dash number is left open (to mate with -433). See "Polarization" in Accessories section.
- B82 Termination face sealed against conformal coating
- D01 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with 63/37 or 60/40 solder.
- P39 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with SAC305 solder (lead free).
- D54 Combine -B82 & -D01 options
- G69 Solder cups fixed in an outward orientation (otherwise contacts will rotate)

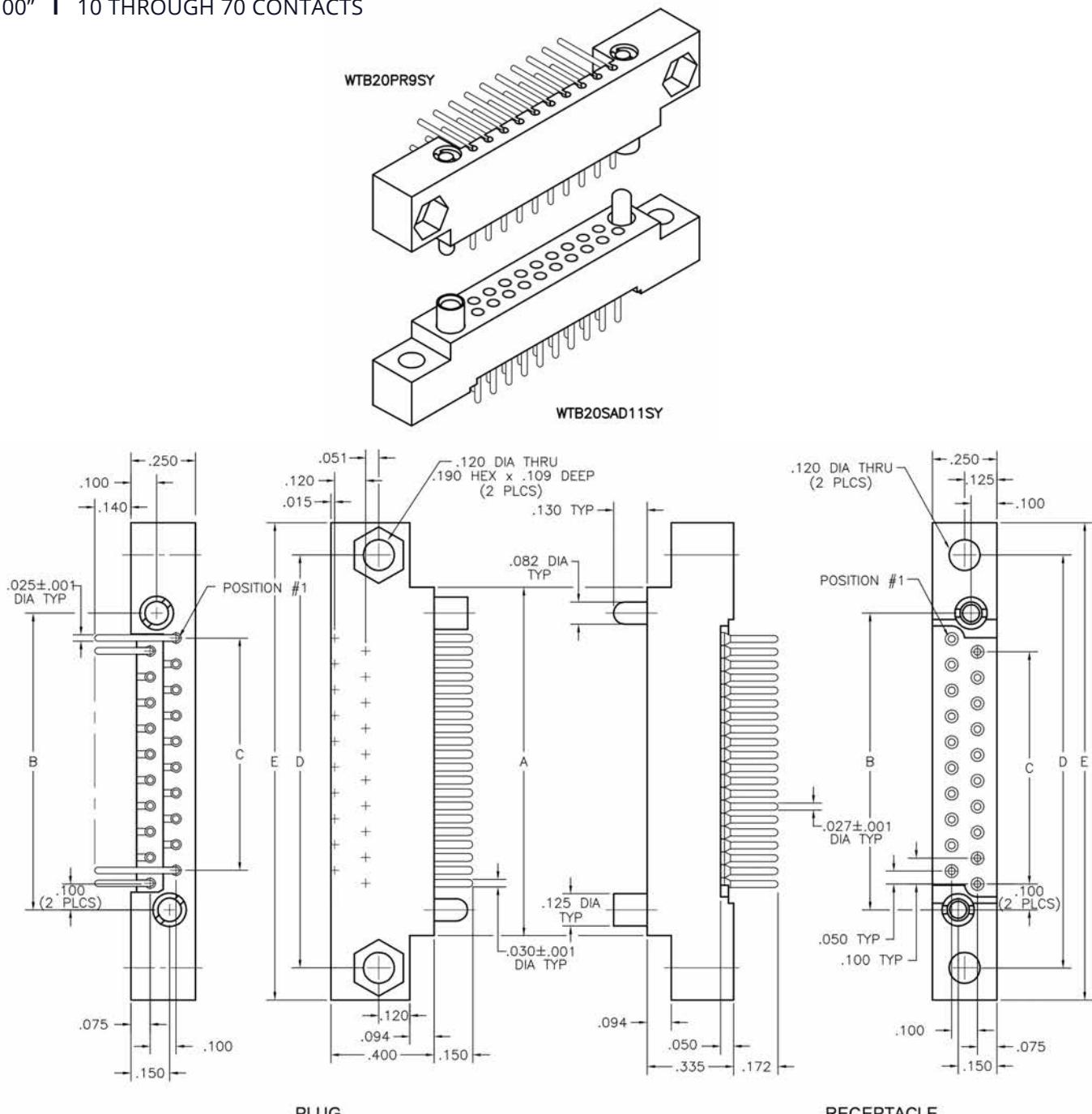
= Option not RoHS compliant



## TWO ROW - PC CARD-TO-BOARD OR CHASSIS

**WTB - WTB**

0.100" | 10 THROUGH 70 CONTACTS



DIMENSIONS											
SIZE	A	B	C	D	E	SIZE	A	B	C	D	E
10	.850	.650	.400	1.100	1.350	44	2.550	2.350	2.100	2.800	3.050
14	1.050	.850	.600	1.300	1.550	50	2.850	2.650	2.400	3.100	3.350
20	1.350	1.150	.900	1.600	1.850	54	3.050	2.850	2.600	3.300	3.550
24	1.550	1.350	1.100	1.800	2.050	56	3.150	2.950	2.700	3.400	3.650
26	1.650	1.450	1.200	1.900	2.150	60	3.350	3.150	2.900	3.600	3.850
30	1.850	1.650	1.400	2.100	2.350	66	3.650	3.450	3.200	3.900	4.150
36	2.150	1.950	1.700	2.400	2.650	70	3.850	3.650	3.400	4.100	4.350
40	2.350	2.150	1.900	2.600	2.850						

PLEASE CONSULT THE MOLEX WEBSITE FOR THE LATEST VERSION OF THIS INFORMATION PRIOR TO BEGINNING ANY DESIGN WORK.  
SOURCE: CTW019-REV A

SOURCE: CTW019-REV A

#### AIRBORNE W SERIES CONNECTORS - I, W, 10

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## LEAD CONFIGURATION OPTIONS

PLUG: WTB 20 PR9 SY  
 RECEPTACLE: WTB 20 SAD11 SY  
 XXXX XX XXXXX XX

### PLUG

### RECEPTACLE

#### SERIES

WTB	Plug, right angle, with mounting ears	WTB	Receptacle, straight, with mounting ears
		WTB	Receptacle, right angle, with mounting ears

#### SIZE

XX	Number of contacts (10, 14, 20, 24, 26, 30, 36, 40, 44, 50, 54, 56, 60, 66, or 70)	XX	Number of contacts (10, 14, 20, 24, 26, 30, 36, 40, 44, 50, 54, 56, 60, 66, or 70)
----	--	----	--

#### CONTACTS

- The contact type determines image of connector. Pin, right angle contacts are always plug image. Straight pin contacts or socket contacts are receptacle image. See page W-24 to switch the image.

##### TYPE CONTACTS/TERMINATIONS:

PRC	Pin, right angle, solder cup (.035" I.D.)
PR7	Pin, right angle, dip solder, .109" x .025" dia
PR9	Pin, right angle, dip solder, .140" x .025" dia
PR11	Pin, right angle, dip solder, .172" x .025" dia
PR13	Pin, right angle, dip solder, .203" x .025" dia
PR15	Pin, right angle, dip solder, .234" x .025" dia
PR23	Pin, right angle, dip solder, .359" x .025" dia
PR30	Pin, right angle, dip solder, .470" x .025" dia
PRW33	Pin, right angle, wire wrap®, .515"
PRW40	Pin, right angle, wire wrap®, .625"

##### TYPE CONTACTS/TERMINATIONS:

SAC	Socket, straight, solder cup (.035" I.D.)
SAD7	Socket, straight, dip solder, .109" x .027" dia
SAD9	Socket, straight, dip solder, .140" x .027" dia
SAD11	Socket, straight, dip solder, .172" x .027" dia
SAF3	Socket, straight, flex circuit, .050"
SAF6	Socket, straight, flex circuit, .093"
SAF9	Socket, straight, flex circuit, .140"
SAG7	Socket, straight, dip solder, .109" x .018" dia
SAG9	Socket, straight, dip solder, .140" x .018" dia
SAG11	Socket, straight, dip solder, .172" x .018" dia
SAW24	Socket, straight, wire wrap®, .375"
SAW40	Socket, straight, wire wrap®, .625"
SOR7	Socket, right angle, dip solder, .109" x .025" dia
SOR9	Socket, right angle, dip solder, .140" x .025" dia
SOR11	Socket, right angle, dip solder, .172" x .025" dia

#### HARDWARE

- Plug facial seal gaskets; order separately or add "Q" in part number. Example: WTB10PR9QJ  
 See "Gaskets" in Accessories section for instructions.

SY	Guide set
SY#	Guide set, polarized
SYL	Guide set, long
SYL#	Guide set, long, polarized
JT	Turning jackset, .435"
JTA	Turning jackset, .135"
JTB	Hex turning jackset, .135"
JTC	Hex turning jackset, .435"
JTL	Turning jackset, long, .635"

SY	Guide set
SY#	Guide set, polarized
SYL	Guide set, long
SYL#	Guide set, long, polarized
J	Fixed jackset
JL	Fixed jackset, long

#### OPTIONS

- Option Codes: Add to the end of the part number. Example: WTB10PR9SY342. Call factory for additional codes.
- 342 Remove mounting ears. (.250" each end)
- 443 Polarizing pin installed in contact position noted by dash number. See "Polarization" in Accessories section. Receptacle connector only.
- 515 Contact position noted by dash number is left open (to mate with -443). For right angle connectors only.
- 548 Bond #4-40 small pattern nut into mounting holes (for right angle plug connectors only).
- B82 Termination face sealed against conformal coating
- D01 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with 63/37 or 60/40 solder.
- P39 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with SAC305 solder (lead free).
- D54 Combine -B82 & -D01 options
- G69 Solder cups fixed in an outward orientation (otherwise contacts will rotate)
- 413 Straight pin contacts in right angle plug molding with solder cup terminations extending .100" from face.

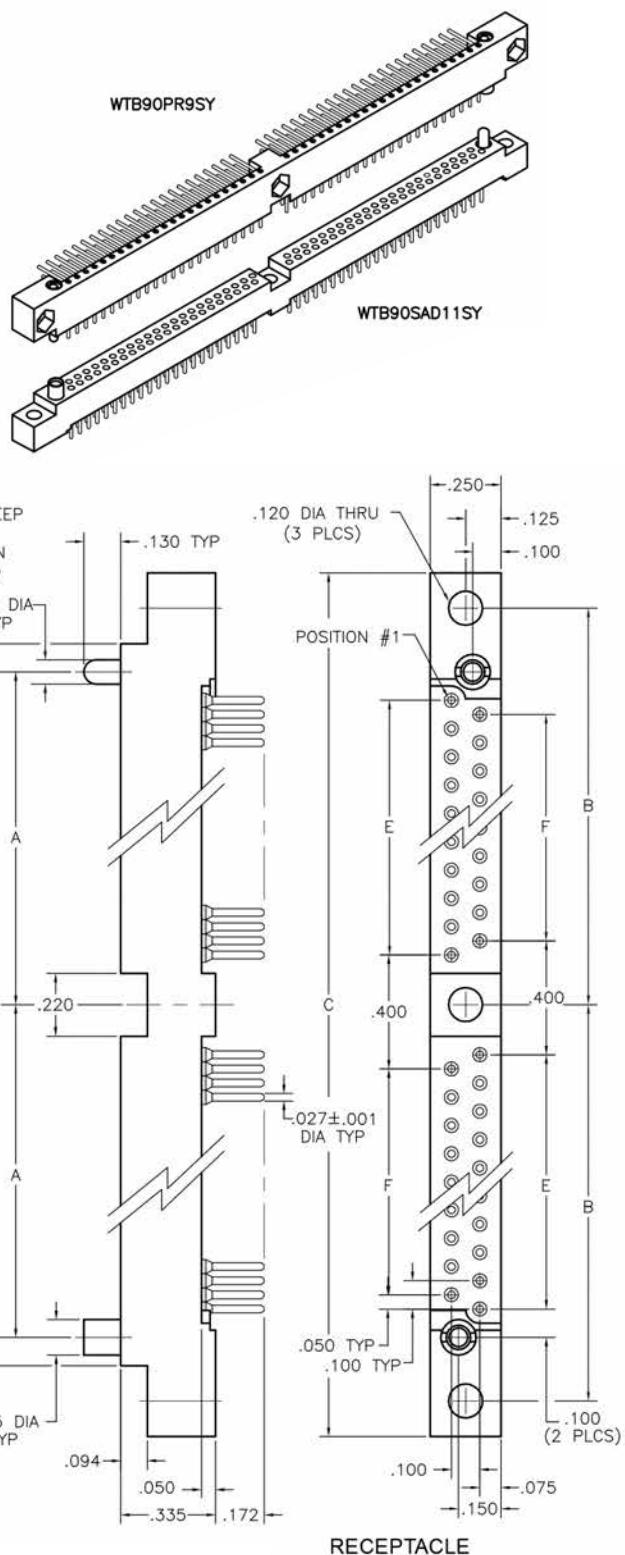
= Option not RoHS compliant

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## TWO ROW - PC CARD-TO-BOARD OR CHASSIS

### WBB - WTB

0.100" | 90, 100 AND 120 CONTACTS



DIMENSIONS					
SIZE	A	B	C	D	E
90	2.475	2.700	5.650	5.150	2.200
100	2.725	2.950	6.150	5.650	2.400
120	3.225	3.450	7.150	6.650	2.900

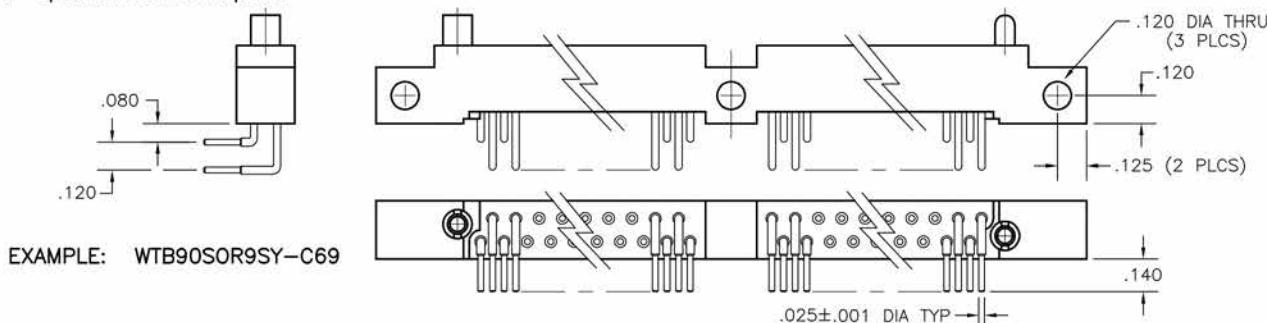
## LEAD CONFIGURATION OPTIONS

		PLUG	RECEPTACLE	PLUG: WTB 90 PR9 SY RECEPTACLE: WTB 90 SAD11 SY XXXX XX XXXXX XX
		SERIES		
WTB Plug, right angle, with mounting ears		WTB Receptacle, straight, with mounting ears	WTB Receptacle, right angle, with mounting ears	
		SIZE		
XX Number of contacts (90, 100, or 120)		XX	Number of contacts (90, 100, or 120)	
		CONTACTS		
<ul style="list-style-type: none"> <li>The contact type determines image of connector. Pin, right angle contacts are always plug image. Straight pin contacts or socket contacts are receptacle image. See page W-24 to switch the image.</li> </ul>				
TYPE CONTACTS/TERMINATIONS:		TYPE CONTACTS/TERMINATIONS:		
PRC Pin, right angle, solder cup (.035" I.D.)		SAC	Socket, straight, solder cup (.035" I.D.)	
PR7 Pin, right angle, dip solder, .109" x .025" dia		SAD7	Socket, straight, dip solder, .109" x .027" dia	
PR9 Pin, right angle, dip solder, .140" x .025" dia		SAD9	Socket, straight, dip solder, .140" x .027" dia	
PR11 Pin, right angle, dip solder, .172" x .025" dia		SAD11	Socket, straight, dip solder, .172" x .027" dia	
PR15 Pin, right angle, dip solder, .234" x .025" dia		SAF3	Socket, straight, flex circuit, .050"	
PRW33 Pin, right angle, wire wrap®, .515"		SAF6	Socket, straight, flex circuit, .093"	
PRW40 Pin, right angle, wire wrap®, .625"		SAF9	Socket, straight, flex circuit, .140"	
		SAG7	Socket, straight, dip solder, .109" x .018" dia	
		SAG9	Socket, straight, dip solder, .140" x .018" dia	
		SAG11	Socket, straight, dip solder, .172" x .018" dia	
		SAW24	Socket, straight, wire wrap®, .375"	
		SAW40	Socket, straight, wire wrap®, .625"	
		SOR7	Socket, right angle, dip solder, .109" x .025" dia	
		SOR9	Socket, right angle, dip solder, .140" x .025" dia	
		SOR11	Socket, right angle, dip solder, .172" x .025" dia	
		HARDWARE		
<ul style="list-style-type: none"> <li>Plug facial seal gaskets and hoods; order separately or add "Q" in part number. Example: WTB90PR9QJ. See "Gaskets" and "Hoods" in Accessories section for instructions.</li> </ul>				
SY	Guide set	SY	Guide set	
SY#	Guide set, polarized	SY#	Guide set, polarized	
SYL	Guide set, long	SYL	Guide set, long	
JT	Turning jackset, .435"	J	Fixed jackset	
JTA	Turning jackset, .135"	JL	Fixed jackset, long	
JTB	Hex turning jackset, .135"			
JTC	Turning jackset, .435"			
JTL	Turning jackset, long, .635"			

## OPTIONS

- Option Codes: Add to the end of the part number. Example: WTB90PR9SY-D01. Call factory for additional codes.
- 342 Remove mounting ears. (.250" each end)
- 443 Polarizing pin installed in contact position noted by dash number. See "Polarization" in Accessories section. Receptacle connector only.
- 515 Contact position noted by dash number is left open (to mate with -443). For right angle connectors only.
- 548 Bond #4-40 small pattern nut into mounting holes (for right angle plug connectors only).
- B82 Termination face sealed against conformal coating
- D01 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with 63/37 or 60/40 solder.
- P39 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with SAC305 solder (lead free).
- D54 Combine -B82 & -D01 options
- G69 Solder cups fixed in an outward orientation (otherwise contacts will rotate)
- 413 Straight pin contacts in right angle plug molding, with solder cup terminals extending .100" beyond molding.

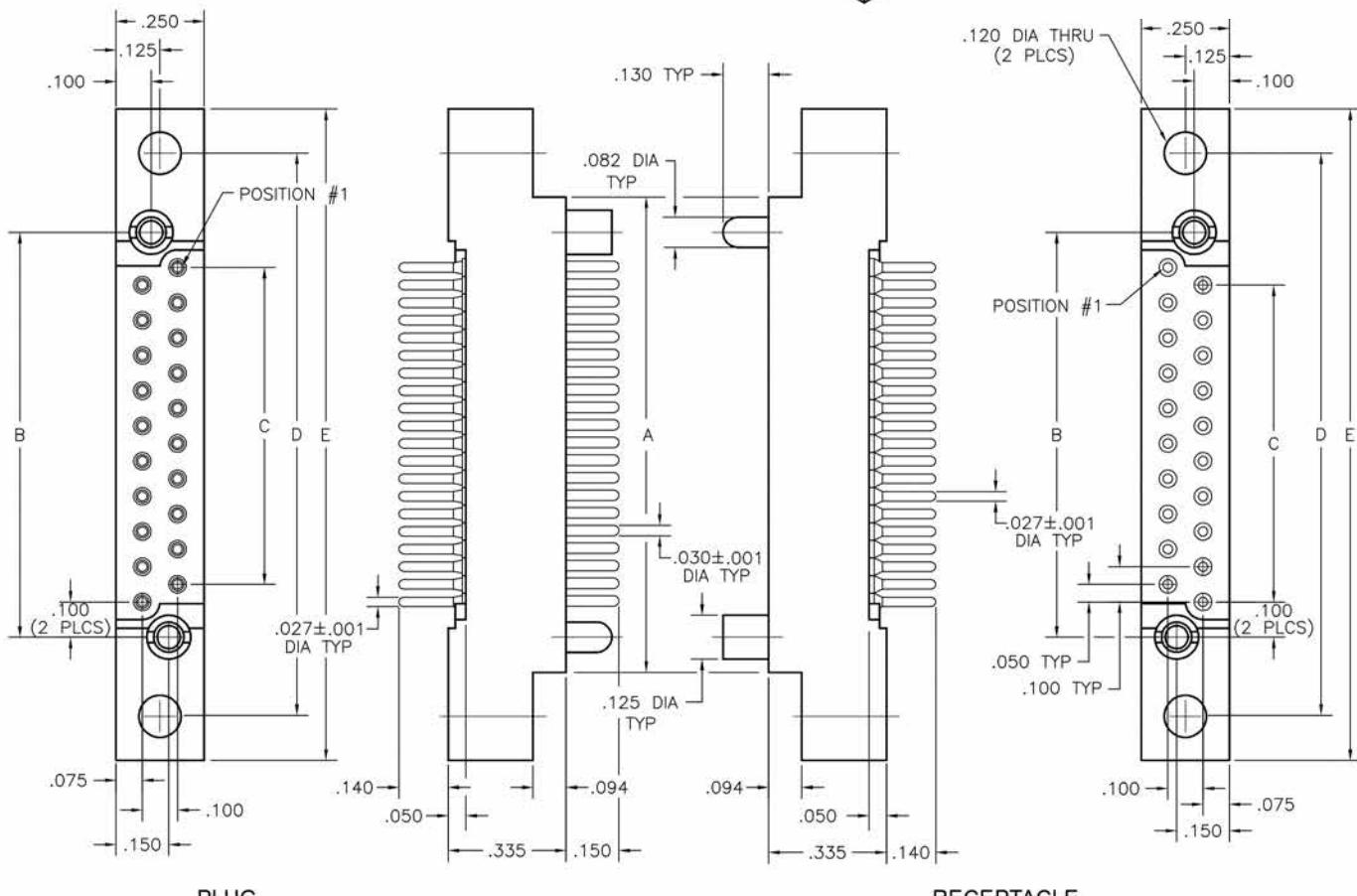
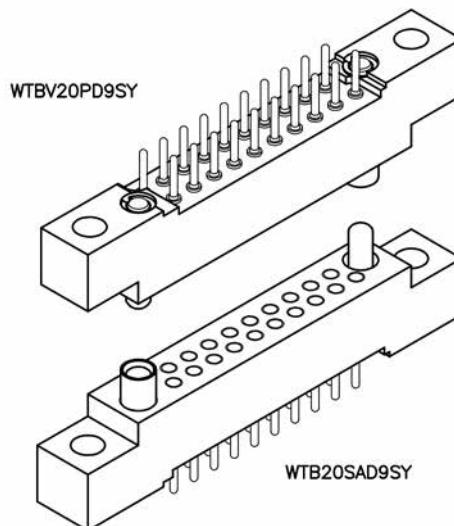
= Option not RoHS compliant



## TWO ROW - SANDWICH BOARDS

### WTBV - WTB

0.100" | 10 THROUGH 70 CONTACTS



DIMENSIONS											
SIZE	A	B	C	D	E	SIZE	A	B	C	D	E
10	.850	.650	.400	1.100	1.350	44	2.550	2.350	2.100	2.800	3.050
14	1.050	.850	.600	1.300	1.550	50	2.850	2.650	2.400	3.100	3.350
20	1.350	1.150	.900	1.600	1.850	54	3.050	2.850	2.600	3.300	3.550
24	1.550	1.350	1.100	1.800	2.050	56	3.150	2.950	2.700	3.400	3.650
26	1.650	1.450	1.200	1.900	2.150	60	3.350	3.150	2.900	3.600	3.850
30	1.850	1.650	1.400	2.100	2.350	66	3.650	3.450	3.200	3.900	4.150
36	2.150	1.950	1.700	2.400	2.650	70	3.850	3.650	3.400	4.100	4.350
40	2.350	2.150	1.900	2.600	2.850						

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## LEAD CONFIGURATION OPTIONS

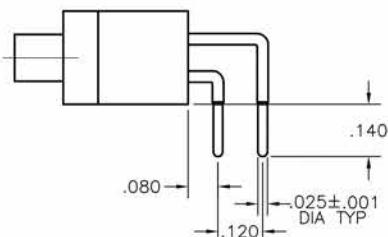
PLUG: WTBV 20 PD9 SY  
 RECEPTACLE: WTB 20 SAD9 SY  
 XXXX XX XXXX XX

PLUG		RECEPTACLE		
SERIES				
WTBV	Plug, straight, with mounting ears	WTB	Receptacle, straight, with mounting ears	
		WTB	Receptacle, right angle, with mounting ears	
SIZE				
XX	Number of contacts (10, 14, 20, 24, 26, 30, 36, 40, 44, 50, 54, 56, 60, 66, or 70)	XX	Number of contacts (10, 14, 20, 24, 26, 30, 36, 40, 44, 50, 54, 56, 60, 66, or 70)	
CONTACTS				
<ul style="list-style-type: none"> <li>Pin or socket contacts can be used in either plug or receptacle.</li> <li>When pin contacts are used, standard hardware orientation places the female hardware next to the #1 pin contact.</li> <li>When socket contacts are used, standard hardware orientation places the male hardware next to the #1 socket contact.</li> </ul>				
TYPE CONTACTS/TERMINATIONS:		TYPE CONTACTS/TERMINATIONS:		
PC	Pin, straight, solder cup (.035" I.D.)	SAC	Socket, straight, solder cup (.035" I.D.)	
PD7	Pin, straight, dip solder, .109" x .027" dia	SAD7	Socket, straight, dip solder, .109" x .027" dia	
PD9	Pin, straight, dip solder, .140" x .027" dia	SAD9	Socket, straight, dip solder, .140" x .027" dia	
PD11	Pin, straight, dip solder, .172" x .027" dia	SAD11	Socket, straight, dip solder, .172" x .027" dia	
PD13	Pin, straight, dip solder, .203" x .027" dia	SAF3	Socket, straight, flex circuit, .050"	
PF3	Pin, straight, flex circuit, .050"	SAF6	Socket, straight, flex circuit, .093"	
PF6	Pin, straight, flex circuit, .093"	SAF9	Socket, straight, flex circuit, .140"	
PF8	Pin, straight, flex circuit, .125"	SAG7	Socket, straight, dip solder, .109" x .018" dia	
PW34	Pin, straight, wire wrap®, .531"	SAG9	Socket, straight, dip solder, .140" x .018" dia	
PW40	Pin, straight, wire wrap®, .625"	SAG11	Socket, straight, dip solder, .172" x .018" dia	
		SAP	Socket, straight, pin termination, .150" (connector saver)	
		SAW24	Socket, straight, wire wrap®, .375"	
		SAW40	Socket, straight, wire wrap®, .625"	
		SOR7	Socket, right angle, dip solder, .109" x .025" dia	
		SOR9	Socket, right angle, dip solder, .140" x .025" dia	
		SOR11	Socket, right angle, dip solder, .172" x .025" dia	
HARDWARE				
<ul style="list-style-type: none"> <li>Plug facial seal gaskets and hoods; order separately or add "Q" in part number. Example: WTBV10PD9QJ. See "Gaskets" and "Hoods" in Accessories section for instructions.</li> </ul>				
SY	Guide set	SY	Guide set	
SY-#	Guide set, polarized	SY-#	Guide set, polarized	
SYL	Guide set, long	SYL	Guide set, long	
JT	Turning jackset, .500"	J	Fixed jackset	
JTA	Turning jackset, .200"	JL	Fixed jackset, long	
JTB	Hex turning jackset, .200"			
JTC	Hex turning jackset, .500"			
JTL	Turning jackset, long, .700"			

## OPTIONS

- Option Codes: Add to the end of the part number. Example: WTBV20PD9SY-D01. Call factory for additional codes.
- B82 Termination face sealed against conformal coating
- D01 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with 63/37 or 60/40 solder.
- P39 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with SAC305 solder (lead free).
- D54 Combine -B82 & -D01 options
- G69 Solder cups fixed in an outward orientation (otherwise contacts will rotate)

= Option not RoHS compliant

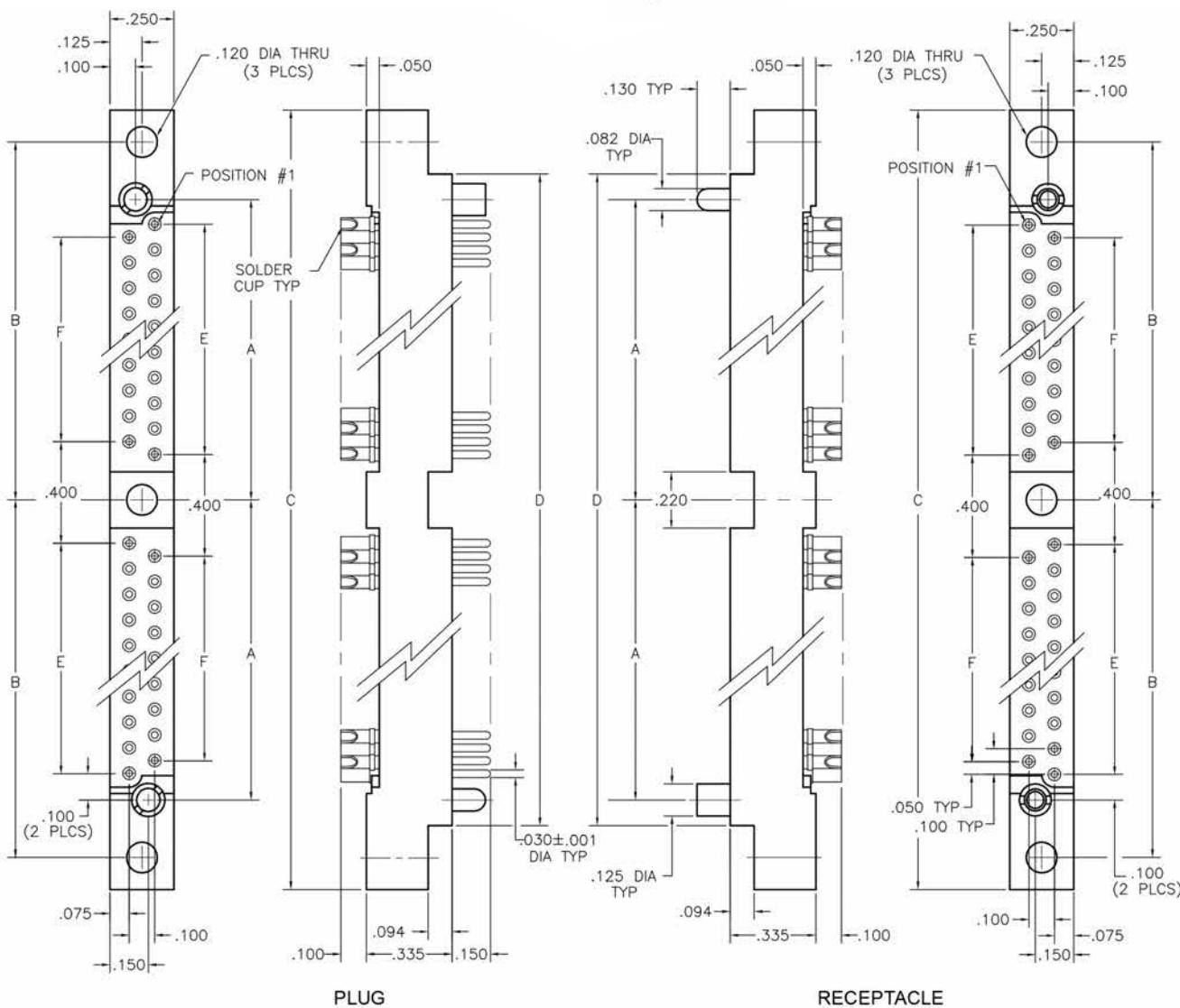
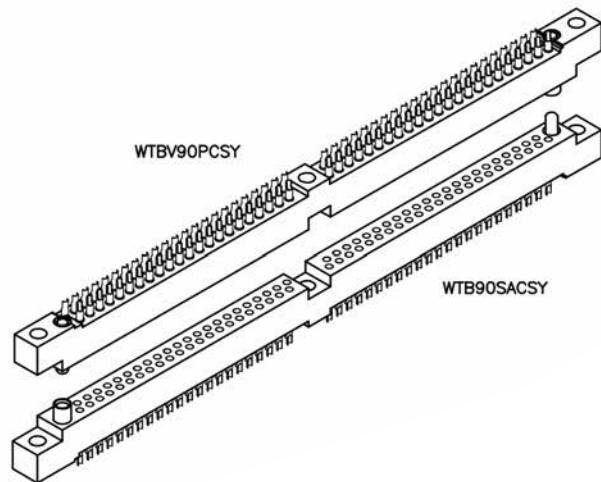


CONTACT OPTION: SOR9

## TWO ROW - SANDWICH BOARDS

### WTBV - WTB

0.100" | 90 THROUGH 100 CONTACTS



DIMENSIONS						
SIZE	A	B	C	D	E	F
90	2.475	2.700	5.650	5.150	2.200	2.100
100	2.725	2.950	6.150	5.650	2.400	2.400

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## LEAD CONFIGURATION OPTIONS

PLUG: WTBV 90 PC SY  
 RECEPTACLE: WTB 90 SAC SY  
 XXXX XX XXX XX

### PLUG

### RECEPTACLE

SERIES	
WTBV	Plug, straight, with mounting ears
	WTB
	Receptacle, straight, with mounting ears
	Receptacle, right angle, with mounting ears
SIZE	
XX	Number of contacts (90 or 100)
	XX
	Number of contacts (90 or 100)
CONTACTS	

- Pin or socket contacts can be used in either plug or receptacle.
- When pin contacts are used, standard hardware orientation places the female hardware next to the #1 pin contact.
- When socket contacts are used, standard hardware orientation places the male hardware next to the #1 socket contact.

TYPE CONTACTS/TERMINATIONS:	
PC	Pin, straight, solder cup (.035" I.D.)
PD7	Pin, straight, dip solder, .109" x .027" dia
PD9	Pin, straight, dip solder, .140" x .027" dia
PD11	Pin, straight, dip solder, .172" x .027" dia
PD13	Pin, straight, dip solder, .203" x .027" dia
PF3	Pin, straight, flex circuit, .050"
PF6	Pin, straight, flex circuit, .093"
PF8	Pin, straight, flex circuit, .125"
PW34	Pin, straight, wire wrap®, .531"
PW40	Pin, straight, wire wrap®, .625"

TYPE CONTACTS/TERMINATIONS:	
SAC	Socket, straight, solder cup (.035" I.D.)
SAD7	Socket, straight, dip solder, .109" x .027" dia
SAD9	Socket, straight, dip solder, .140" x .027" dia
SAD11	Socket, straight, dip solder, .172" x .027" dia
SAF3	Socket, straight, flex circuit, .050"
SAF6	Socket, straight, flex circuit, .093"
SAF9	Socket, straight, flex circuit, .140"
SAG7	Socket, straight, dip solder, .109" x .018" dia
SAG9	Socket, straight, dip solder, .140" x .018" dia
SAG11	Socket, straight, dip solder, .172" x .018" dia
SAP	Socket, straight, pin termination, .150" (connector saver)
SAW24	Socket, straight, wire wrap®, .375"
SAW40	Socket, straight, wire wrap®, .625"
SOR7	Socket, right angle, dip solder, .109" x .025" dia
SOR9	Socket, right angle, dip solder, .140" x .025" dia
SOR11	Socket, right angle, dip solder, .172" x .025" dia

### HARDWARE

- Plug facial seal gaskets and hoods; order separately or add "Q" in part number. Example: WTBV90PD9QJ. See "Gaskets" and "Hoods" in Accessories section for instructions.

SY	Guide set
SY-#	Guide set, polarized
SYL	Guide set, long
JT	Turning jackset, .500"
JTA	Turning jackset, .200"
JTB	Hex turning jackset, .200"
JTC	Hex turning jackset, .500"
JTL	Turning jackset, long, .700"

SY	Guide set
SY-#	Guide set, polarized
SYL	Guide set, long
J	Fixed jackset
JL	Fixed jackset, long

### OPTIONS

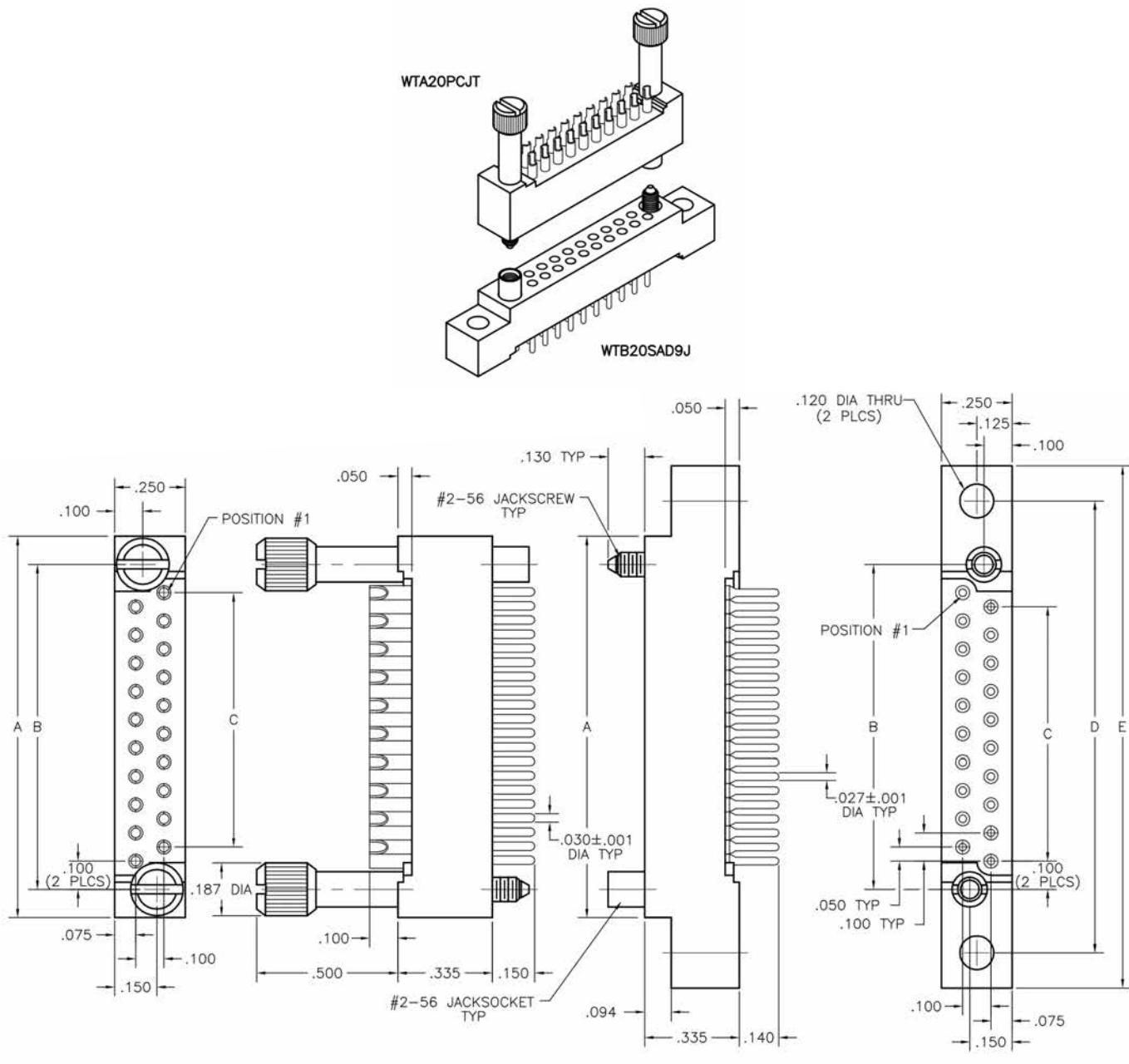
- Option Codes: Add to the end of the part number. Example: WTBV100PD9SY-D01. Call factory for additional codes.
- B82 Termination face sealed against conformal coating
- 342 Remove mounting ears (.250" each end)
- D01 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with 63/37 or 60/40 solder.
- P39 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with SAC305 solder (lead free).
- D54 Combine -B82 & -D01 options
- G69 Solder cups fixed in an outward orientation (otherwise contacts will rotate)

= Option not RoHS compliant

## TWO ROW - CABLE-TO-BOARD OR PC CARD

### WTA - WTB

0.100" | 10 THROUGH 70 CONTACTS



PLUG

RECEPTACLE

DIMENSIONS											
SIZE	A	B	C	D	E	SIZE	A	B	C	D	E
10	.850	.650	.400	1.100	1.350	44	2.550	2.350	2.100	2.800	3.050
14	1.050	.850	.600	1.300	1.550	50	2.850	2.650	2.400	3.100	3.350
20	1.350	1.150	.900	1.600	1.850	54	3.050	2.850	2.600	3.300	3.550
24	1.550	1.350	1.100	1.800	2.050	56	3.150	2.950	2.700	3.400	3.650
26	1.650	1.450	1.200	1.900	2.150	60	3.350	3.150	2.900	3.600	3.850
30	1.850	1.650	1.400	2.100	2.350	66	3.650	3.450	3.200	3.900	4.150
36	2.150	1.950	1.700	2.400	2.650	70	3.850	3.650	3.400	4.100	4.350
40	2.350	2.150	1.900	2.600	2.850						

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## LEAD CONFIGURATION OPTIONS

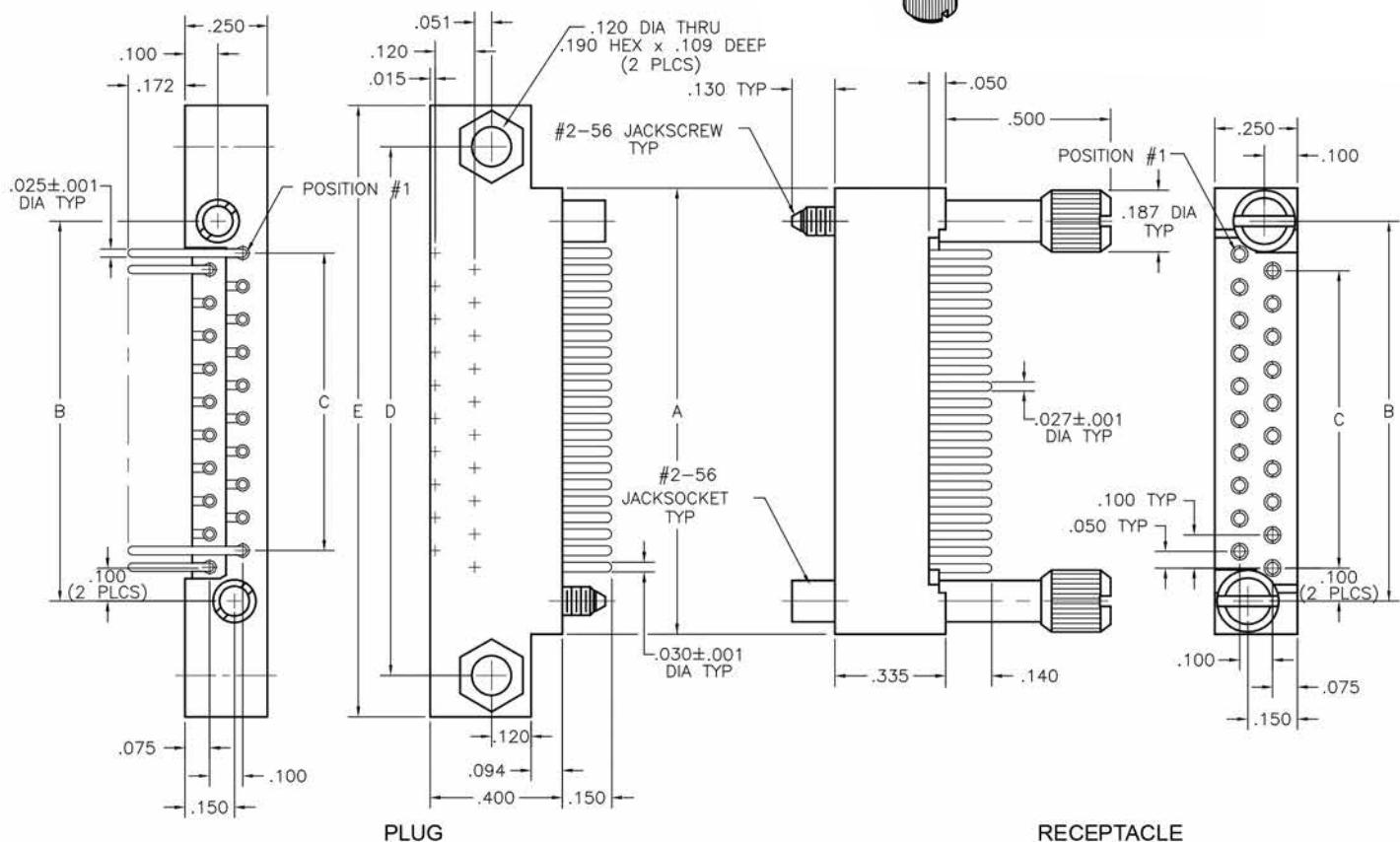
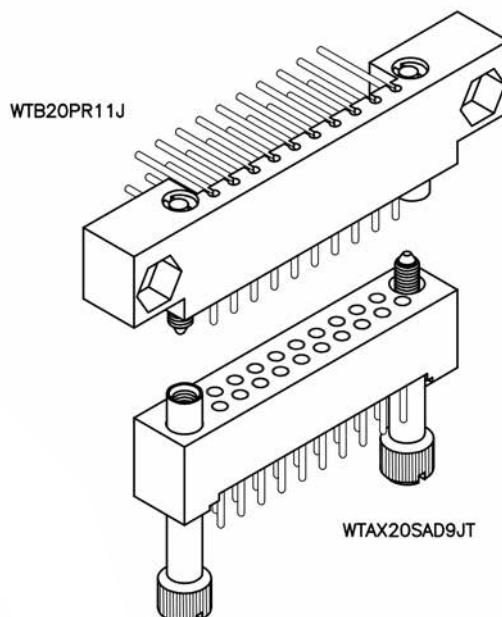
PLUG: WTA 20 PC JT  
 RECEPTACLE: WTB 20 SAD9 J  
 XXX XX XXXX XX

PLUG	RECEPTACLE	
<b>SERIES</b>		
WTA Plug, straight, without mounting ears	WTB Receptacle, straight, with mounting ears WTB Receptacle, right angle, with mounting ears	
<b>SIZE</b>		
XX Number of contacts (10, 14, 20, 24, 26, 30, 36, 40, 44, 50, 54, 56, 60, 66, or 70)	XX Number of contacts (10, 14, 20, 24, 26, 30, 36, 40, 44, 50, 54, 56, 60, 66, or 70)	
<b>CONTACTS</b>		
<ul style="list-style-type: none"> <li>Pin or socket contacts can be used in either plug or receptacle.</li> <li>WTA connectors - jackset hardware determines the image. Must specify image with guide set hardware. See page W-17.</li> <li>WTB connectors - contacts determine the image. Right angle pin contacts are always plug image, and straight pin or sockets are receptacle image.</li> <li>When pin contacts are used, standard hardware orientation places the female hardware next to the #1 pin contact.</li> <li>When socket contacts are used, standard hardware orientation places the male hardware next to the #1 socket contact.</li> </ul>		
TYPE CONTACTS/TERMINATIONS:		
PC Pin, straight, solder cup (.035" I.D.)	SAC Socket, straight, solder cup (.035" I.D.)	
PD7 Pin, straight, dip solder, .109" x .027" dia	SAD7 Socket, straight, dip solder, .109" x .027" dia	
PD9 Pin, straight, dip solder, .140" x .027" dia	SAD9 Socket, straight, dip solder, .140" x .027" dia	
PD11 Pin, straight, dip solder, .172" x .027" dia	SAD11 Socket, straight, dip solder, .172" x .027" dia	
PD13 Pin, straight, dip solder, .203" x .027" dia	SAF3 Socket, straight, flex circuit, .050"	
PF3 Pin, straight, flex circuit, .050"	SAF6 Socket, straight, flex circuit, .093"	
PF6 Pin, straight, flex circuit, .093"	SAF9 Socket, straight, flex circuit, .140"	
PF8 Pin, straight, flex circuit, .125"	SAG7 Socket, straight, dip solder, .109" x .018" dia	
PW34 Pin, straight, wire wrap®, .531"	SAG9 Socket, straight, dip solder, .140" x .018" dia	
PW40 Pin, straight, wire wrap®, .625"	SAG11 Socket, straight, dip solder, .172" x .018" dia	
	SAP Socket, straight, pin termination, .150" (connector saver)	
	SAW24 Socket, straight, wire wrap®, .375"	
	SAW40 Socket, straight, wire wrap®, .625"	
	SOR7 Socket, right angle, dip solder, .109" x .025" dia	
	SOR9 Socket, right angle, dip solder, .140" x .025" dia	
	SOR11 Socket, right angle, dip solder, .172" x .025" dia	
<b>HARDWARE</b>		
<ul style="list-style-type: none"> <li>Plug facial seal gaskets and hoods; order separately or add "Q" in part number. Example: WTA10PD9QJ. See "Gaskets" and "Hoods" in Accessories section for instructions.</li> </ul>		
JT Turning jackset, .500"	J Fixed jackset	
JTA Turning jackset, .200"	JL Fixed jackset, long	
JTB Hex turning jackset, .200"		
JTC Hex turning jackset, .500"		
JTL Turning jackset, long, .700"		
<b>OPTIONS</b>		
<ul style="list-style-type: none"> <li>Option Codes: Add to the end of the part number. Example: WTA10SAD9J-D01. Call factory for additional codes.</li> </ul>		
<ul style="list-style-type: none"> <li>-B82 Termination face sealed against conformal coating</li> <li>-342 Remove mounting ears (.250" each end)</li> <li>-D01 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with 63/37 or 60/40 solder. <input checked="" type="checkbox"/></li> <li>-P39 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with SAC305 solder (lead free).</li> <li>-D54 Combine -B82 &amp; -D01 options</li> <li>-G69 Solder cups fixed in an outward orientation (otherwise contacts will rotate)</li> </ul>		
<input checked="" type="checkbox"/> = Option not RoHS compliant		

## TWO ROW - PC CARD-TO-BOARD OR PC CARD

### WTB - WTAX

.0100" | 10 THROUGH 70 CONTACTS



DIMENSIONS											
SIZE	A	B	C	D	E	SIZE	A	B	C	D	E
10	.850	.650	.400	1.100	1.350	44	2.550	2.350	2.100	2.800	3.050
14	1.050	.850	.600	1.300	1.550	50	2.850	2.650	2.400	3.100	3.350
20	1.350	1.150	.900	1.600	1.850	54	3.050	2.850	2.600	3.300	3.550
24	1.550	1.350	1.100	1.800	2.050	56	3.150	2.950	2.700	3.400	3.650
26	1.650	1.450	1.200	1.900	2.150	60	3.350	3.150	2.900	3.600	3.850
30	1.850	1.650	1.400	2.100	2.350	66	3.650	3.450	3.200	3.900	4.150
36	2.150	1.950	1.700	2.400	2.650	70	3.850	3.650	3.400	4.100	4.350
40	2.350	2.150	1.900	2.600	2.850						

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## LEAD CONFIGURATION OPTIONS

PLUG: WTB 20 PR11 J  
 RECEPTACLE: WTAX 20 SAD9 JT  
 XXXX XX XXXX XX

### PLUG

### RECEPTACLE

#### SERIES

WTB Plug, right angle, with mounting ears | WTAX Receptacle, straight, without mounting ears

#### SIZE

XX	Number of contacts (10, 14, 20, 24, 26, 30, 36, 40, 44, 50, 54, 56, 60, 66, or 70)	XX	Number of contacts (10, 14, 20, 24, 26, 30, 36, 40, 44, 50, 54, 56, 60, 66, or 70)
----	--	----	--

#### CONTACTS

- When pin contacts are used, standard hardware orientation places the female hardware next to the #1 pin contact.
- When socket contacts are used, standard hardware orientation places the male hardware next to the #1 socket contact.

#### TYPE CONTACTS/TERMINATIONS:

PR7 Pin, right angle, dip solder, .109" x .025" dia  
 PR9 Pin, right angle, dip solder, .140" x .025" dia  
 PR11 Pin, right angle, dip solder, .172" x .025" dia  
 PR15 Pin, right angle, dip solder, .234" x .025" dia  
 PRC Pin, right angle, solder cup (.035" I.D.)  
 PRW33 Pin, right angle, wire wrap®, .515"  
 PRW40 Pin, right angle, wire wrap®, .625"

#### TYPE CONTACTS/TERMINATIONS:

SAC	Socket, straight, solder cup (.035" I.D.)
SAD7	Socket, straight, dip solder, .109" x .027" dia
SAD9	Socket, straight, dip solder, .140" x .027" dia
SAD11	Socket, straight, dip solder, .172" x .027" dia
SAD15	Socket, straight, dip solder, .234" x .027" dia
SAF3	Socket, straight, flex circuit, .050"
SAF6	Socket, straight, flex circuit, .093"
SAG7	Socket, straight, dip solder, .109" x .018" dia
SAG9	Socket, straight, dip solder, .140" x .018" dia
SAG11	Socket, straight, dip solder, .172" x .018" dia
SAP	Socket, straight, pin termination, .150" (connector saver)
SAW24	Socket, straight, wire wrap®, .375"
SAW40	Socket, straight, wire wrap®, .625"
SOR7	Socket, right angle, dip solder, .109" x .025" dia
SOR9	Socket, right angle, dip solder, .140" x .025" dia
SOR11	Socket, right angle, dip solder, .172" x .025" dia

#### HARDWARE

- Plug facial seal gaskets and hoods; order separately or add "Q" in part number. Example: WTB20PR11QJ.  
 See "Gaskets" and "Hoods" in Accessories section for instructions.

SY Guide set  
 SY-# Guide set, polarized  
 J Fixed jackset  
 JT Turning jackset, .435"  
 JTA Turning jackset, .135"  
 JTB Hex turning jackset, .135"  
 JTC Hex turning jackset, .435"  
 JTL Turning jackset, long, .635"

SY Guide set  
 SY-# Guide set, polarized  
 SYL Guide set, long  
 SYL-# Guide set, long, polarized  
 J Fixed jackset  
 JL Fixed jackset, long  
 JT Turning jackset, .500"  
 JTA Turning jackset, .200"  
 JTB Hex turning jackset, .200"  
 JTC Hex turning jackset, .500"  
 JTL Turning jackset, long, .700"

#### OPTIONS

- Option Codes: Add to the end of the part number. Example: WTB10SAD9J-D01. Call factory for additional codes.
- 342 Remove mounting ears (.250" each end)
- 548 Bond #4-40 small pattern nut into mounting holes (for right angle plug connectors only).
- D01 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with 63/37 or 60/40 solder.
- P39 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with SAC305 solder (lead free).
- D54 Combine -B82 & -D01 options
- G69 Solder cups fixed in an outward orientation (otherwise contacts will rotate)
- B82 Termination face sealed against conformal coating. Receptacle connector only.

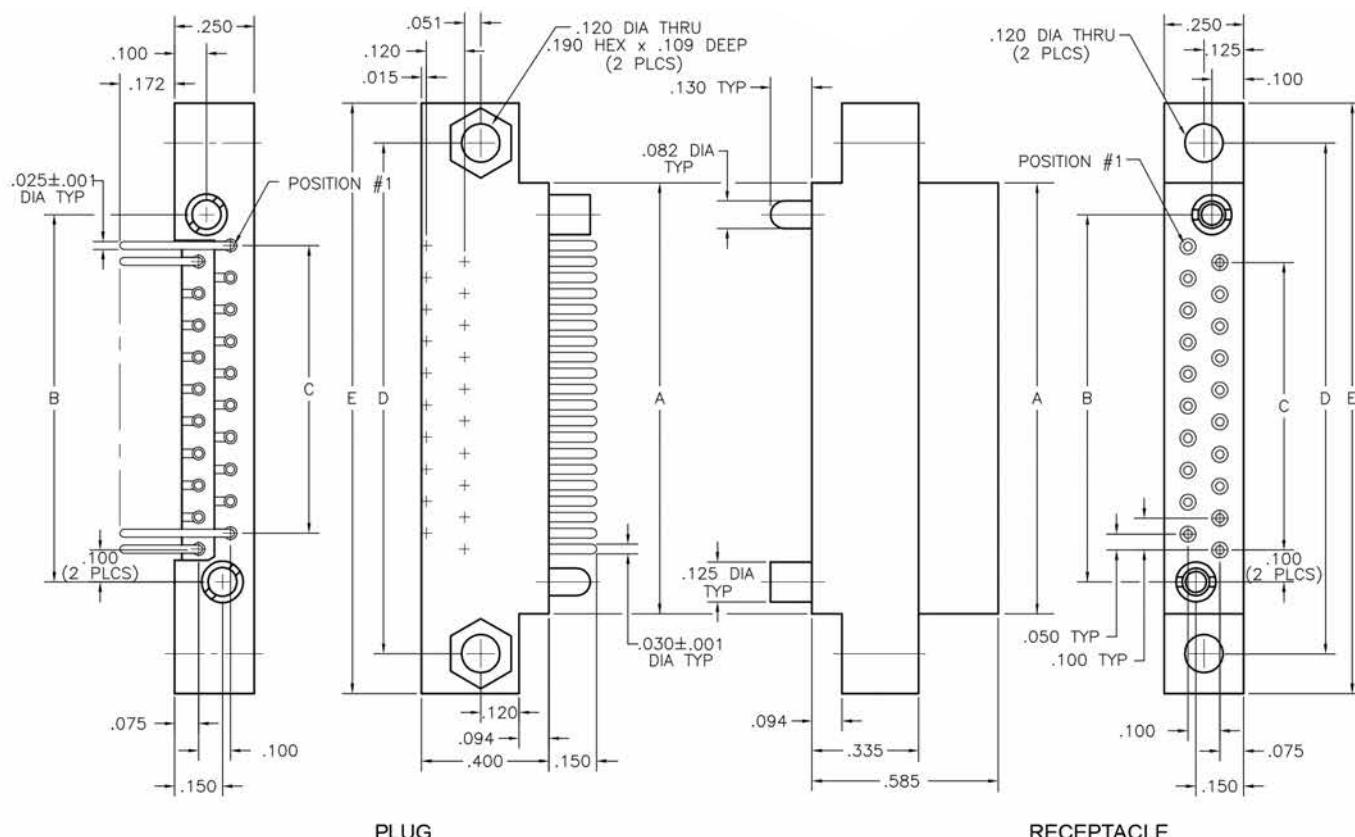
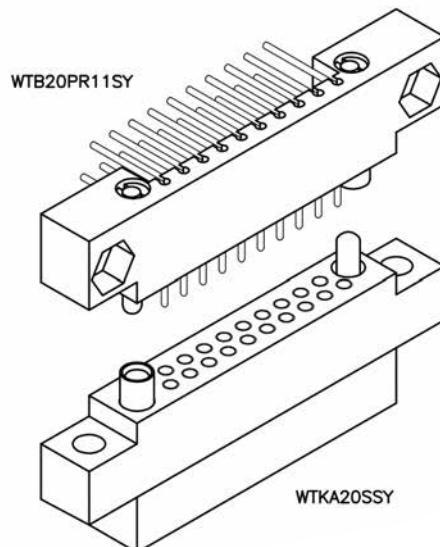
= Option not RoHS compliant

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## TWO ROW - PC CARD-TO-CHASSIS

### WTB - WTKA

0.100" | 10 THROUGH 70 CONTACTS



DIMENSIONS											
SIZE	A	B	C	D	E	SIZE	A	B	C	D	E
10	.850	.650	.400	1.100	1.350	44	2.550	2.350	2.100	2.800	3.050
14	1.050	.850	.600	1.300	1.550	50	2.850	2.650	2.400	3.100	3.350
20	1.350	1.150	.900	1.600	1.850	54	3.050	2.850	2.600	3.300	3.550
24	1.550	1.350	1.100	1.800	2.050	56	3.150	2.950	2.700	3.400	3.650
26	1.650	1.450	1.200	1.900	2.150	60	3.350	3.150	2.900	3.600	3.850
30	1.850	1.650	1.400	2.100	2.350	66	3.650	3.450	3.200	3.900	4.150
36	2.150	1.950	1.700	2.400	2.650	70	3.850	3.650	3.400	4.100	4.350
40	2.350	2.150	1.900	2.600	2.850						

## LEAD CONFIGURATION OPTIONS

PLUG: WTB 20 PR11 SY

RECEPTACLE: WTKA 20 S SY

XXXX XX XXXX XX

### PLUG

### RECEPTACLE

#### SERIES

WTB Plug, right angle, with mounting ears

WTKA Receptacle, straight, crimp removable, with mounting ears

- WTKA and WTDXA connectors will mate with WTA, WTAV, WTB, WTBV connectors. "A" means contacts are included.

#### SIZE

XX Number of contacts (10, 14, 20, 24, 26, 30, 36, 40, 44, 50, 54, 56, 60, 66, or 70)

XX Number of contacts (10, 14, 20, 24, 26, 30, 36, 40, 44, 50, 54, 56, 60, 66, or 70)

#### CONTACTS

- The use of gaskets is not recommended with crimp socket contacts.
- WTKA\*\* includes full compliment of WTK2222 (Socket or Pin) crimp removable contacts packaged with connectors. See "Contacts" in Accessories section to order separately.
- When using crimp contacts with 20 gage barrel, barrel must be cut off prior to removing contact from connector body.

##### TYPE CONTACTS/TERMINATIONS:

PR7 Pin, right angle, dip solder, .109" x .025" dia  
PR9 Pin, right angle, dip solder, .140" x .025" dia  
PR11 Pin, right angle, dip solder, .172" x .025" dia  
PRW40 Pin, right angle, wire wrap®, .625"

##### TYPE CONTACTS/TERMINATIONS:

S Socket, straight, crimp removable, 22 AWG  
SA Same as above  
P Pin, straight, crimp removable, 22 AWG

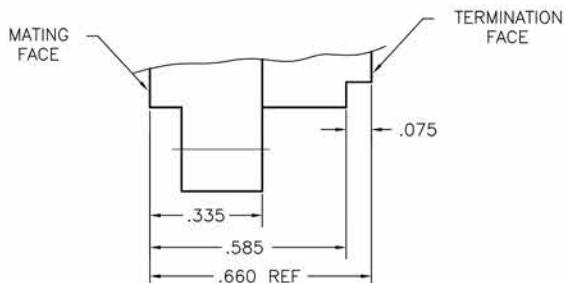
#### HARDWARE

SY Guide set  
SY# Guide set, polarized  
J Fixed jackset  
JT Turning jackset, .435"  
JTA Turning jackset, .135"  
JTB Hex turning jackset, .135"  
JTC Hex turning jackset, .435"  
JTL Turning jackset, long, .635"

SY Guide set  
SY# Guide set, polarized  
J Fixed jackset  
JT Turning jackset, .500"  
JTA Turning jackset, .200"  
JTB Hex turning jackset, .200"  
JTC Hex turning jackset, .500"  
JTL Turning jackset, long, .700"

#### OPTIONS

- Option Codes: Add to the end of the part number. Example: WTKA10SSY-C45. Call factory for additional codes.
- 443 Polarizing pin installed in contact position noted by dash number. See "Polarization" in Accessories section. Receptacle connector only.
- 444 Contact position noted by dash number is left open (to mate with -443).
- 478 Drill mating side hole diameter designated by dash number.
- 515 Polarizing pin installed in contact position noted by dash number. See "Polarization" in Accessories section. Receptacle connector only.
- 548 Bond #4-40 small pattern nut into mounting holes (for right angle plug connectors only).
- A53 Socket, straight, crimp removable, 20 AWG
- C45 Additional .075" material at termination face for strain relief of crimped wires (22 AWG only). See Detail A below.
- F68 Combine -C45 and -515 special codes.



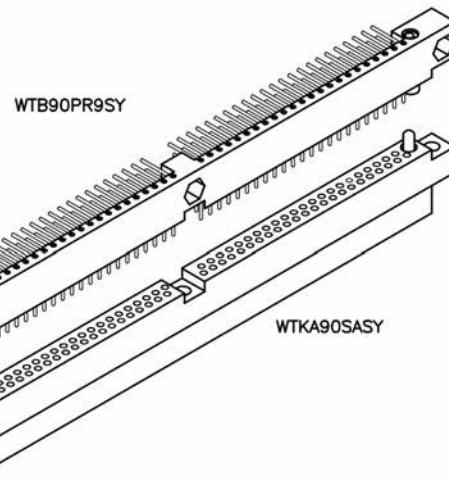
DETAIL A

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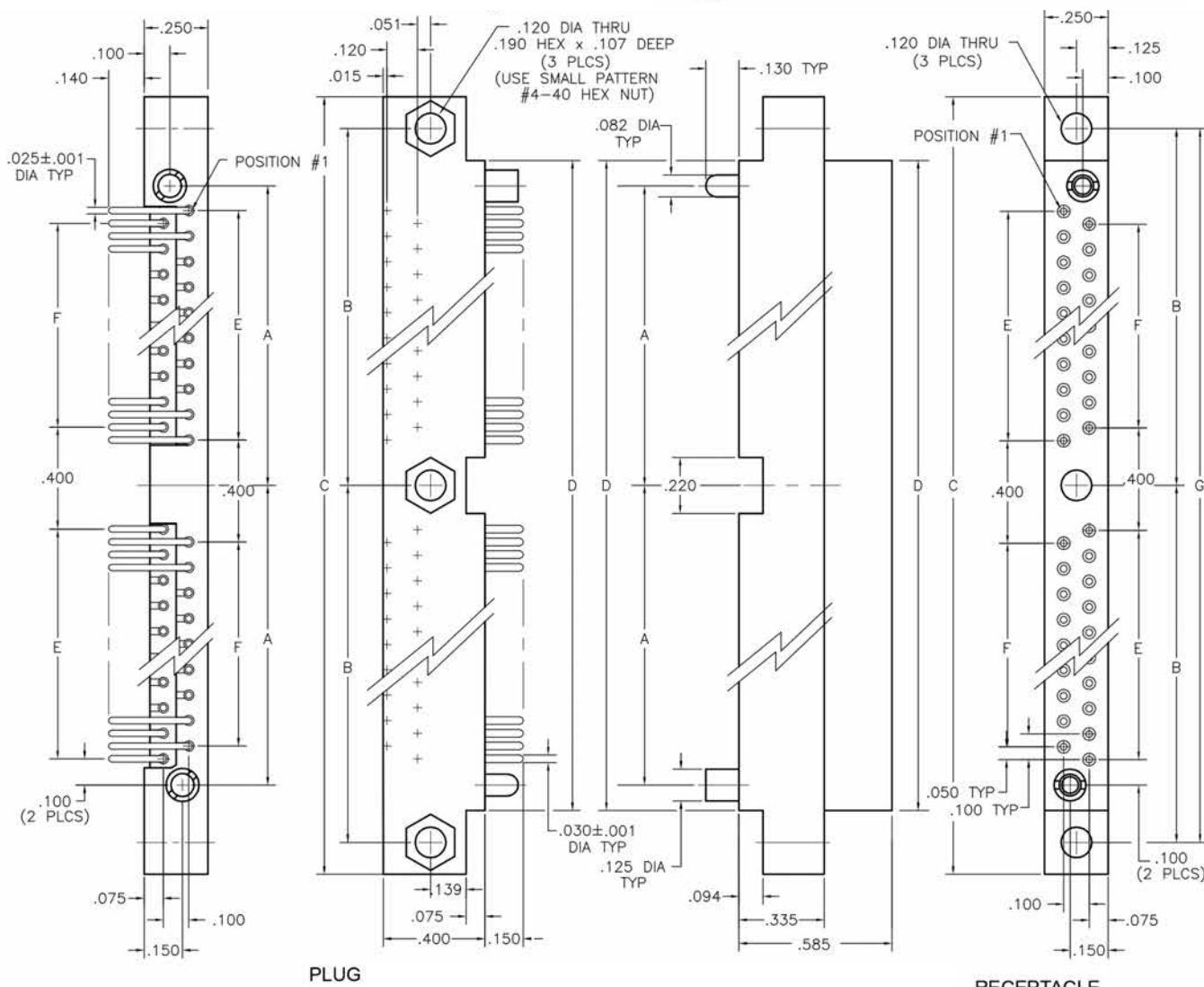
## **TWO ROW – PC CARD-TO-CHASSIS**

## WTB - WTKA

0.100" | 90 THROUGH 120 CONTACTS



WTKA90SASY



PLUG

## RECEPTACLE

DIMENSIONS							
SIZE	A	B	C	D	E	F	G
90	2.475	2.700	5.650	5.150	2.200	2.100	5.400
120	3.225	3.450	7.150	6.650	2.900	2.900	6.900

PLEASE CONSULT THE MOLEX WEBSITE FOR THE LATEST VERSION OF THIS INFORMATION PRIOR TO BEGINNING ANY DESIGN WORK.  
SOURCE: CTW033-REV B

AIRBORN W SERIES CONNECTORS | W-33

**molex**

## LEAD CONFIGURATION OPTIONS

PLUG: WTB 90 PR9 SY
RECEPTACLE: WTKA 90 SA SY
XXXX XX XXX XX

### PLUG

### RECEPTACLE

#### SERIES

WTB Plug, right angle, with mounting ears

WTKA Receptacle, straight, crimp removable, with mounting ears

- WTKA and WTDXA connectors will mate with WTA, WTAV, WTB, WTBV connectors. "A" means contacts are included.

#### SIZE

XX Number of contacts (90 or 120)

XX Number of contacts (90 or 120)

#### CONTACTS

- The use of gaskets is not recommended with crimp socket contacts.
- WTKA\*\* includes full compliment of WTK2222 (Socket or Pin) crimp removable contacts packaged with connectors. See "Contacts" in Accessories section to order separately.
- When using crimp contacts with 20 gage barrel, barrel must be cut off prior to removing contact from connector body.

#### TYPE CONTACTS/TERMINATIONS:

PR7 Pin, right angle, dip solder, .109" x .025" dia  
 PR9 Pin, right angle, dip solder, .140" x .025" dia  
 PR11 Pin, right angle, dip solder, .172" x .025" dia  
 PRW40 Pin, right angle, wire wrap®, .625"

#### TYPE CONTACTS/TERMINATIONS:

S Socket, straight, crimp removable, 22 AWG  
 SA Same as above  
 P Pin, straight, crimp removable, 22 AWG

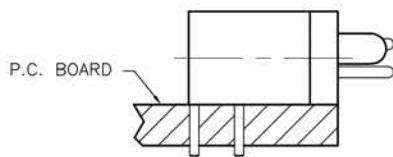
#### HARDWARE

SY	Guide set
SY#	Guide set, polarized
J	Fixed jackset
JT	Turning jackset, .435"
JTA	Turning jackset, .135"
JTB	Hex turning jackset, .135"
JTC	Hex turning jackset, .435"
JTL	Turning jackset, long, .635"

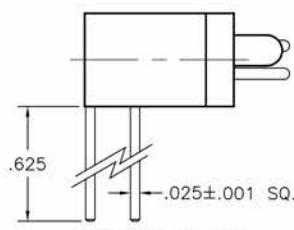
SY	Guide set
SY#	Guide set, polarized
J	Fixed jackset
JT	Turning jackset, .500"
JTA	Turning jackset, .200"
JTB	Hex turning jackset, .200"
JTC	Hex turning jackset, .500"
JTL	Turning jackset, long, .700"

#### OPTIONS

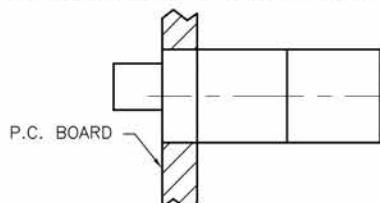
- Option Codes: Add to the end of the part number. Example: WTKA10SSY-C45. Call factory for additional codes.
- 443 Polarizing pin installed in contact position noted by dash number. See "Polarization" in Accessories section. Receptacle connector only.
- 444 Contact position noted by dash number is left open (to mate with -443). Right angle only.
- 478 Drill mating side hole diameter designated by dash number (crimp only).
- 515 Polarizing pin installed in contact position noted by dash number. See "Polarization" in Accessories section. Receptacle connector only.
- 548 Bond #4-40 small pattern nut into mounting holes (for right angle plug connectors only).
- A53 Socket, straight, crimp removable, 20 AWG
- C45 Additional .075" material at termination face for strain relief of crimped wires (22 AWG only). See Detail A below.
- F68 Combine -C45 and -515 special codes.



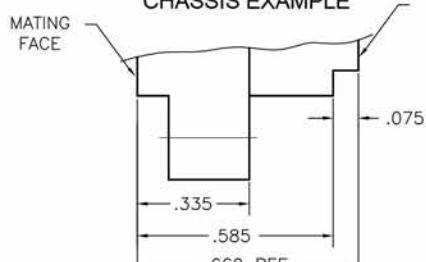
WTB90PR9SY  
P.C. BOARD EXAMPLE



WTB90PRW40SY  
WIRE WRAP EXAMPLE



WTKA90SASY  
CHASSIS EXAMPLE



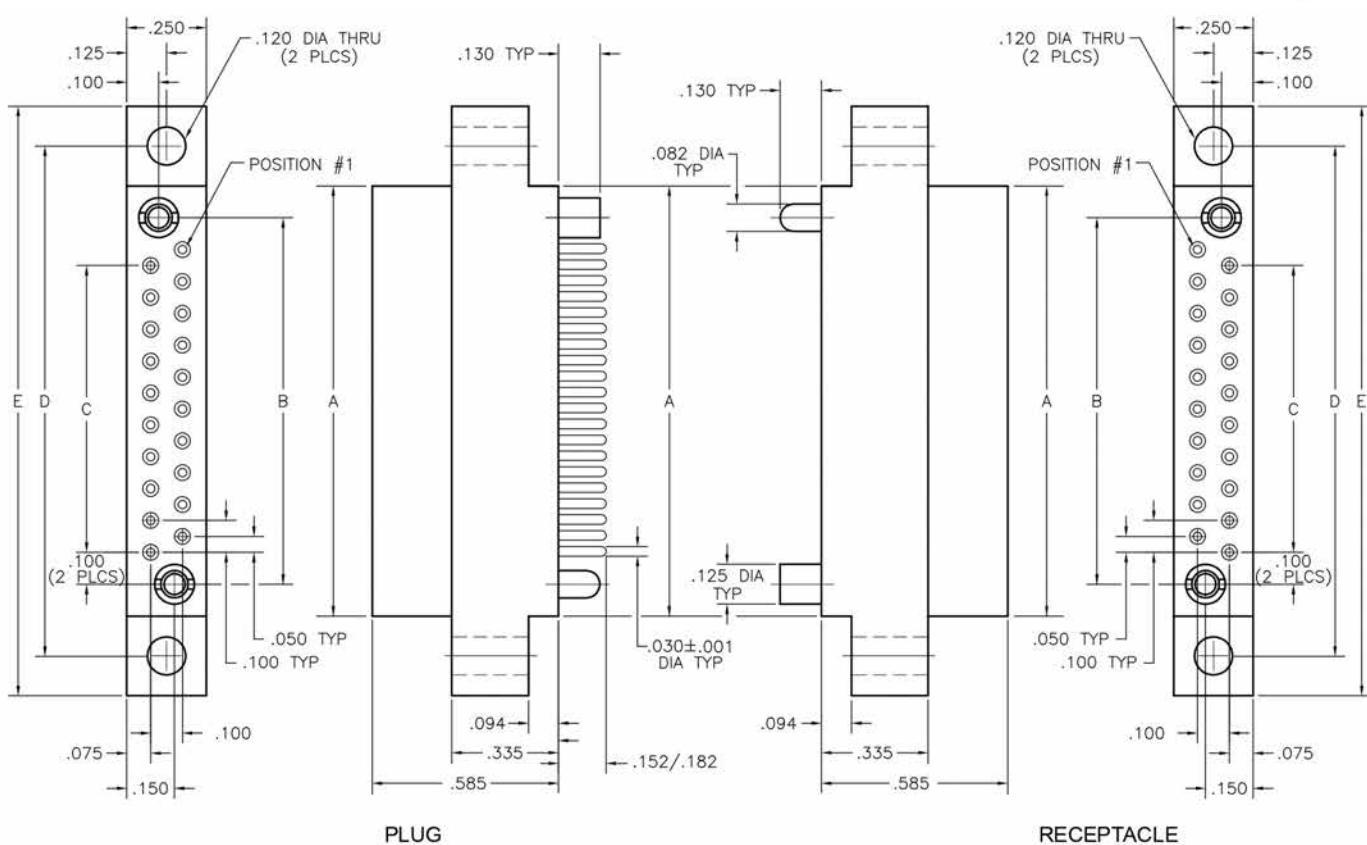
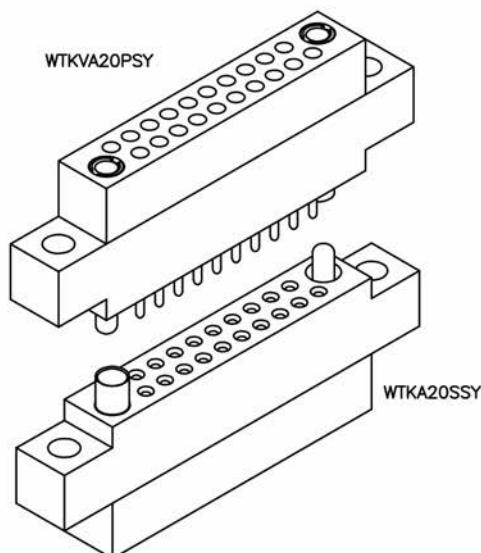
DETAIL A

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## TWO ROW - CHASSIS-TO-CHASSIS

### WTKVA - WTKA

0.100" | 10 THROUGH 70 CONTACTS



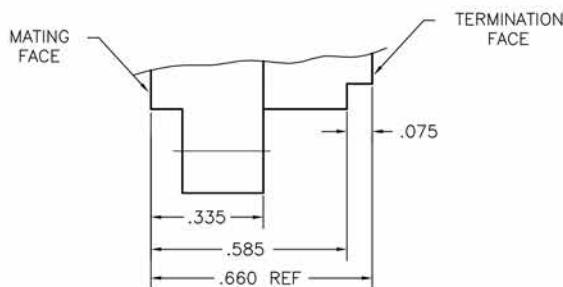
DIMENSIONS											
SIZE	A	B	C	D	E	SIZE	A	B	C	D	E
10	.850	.650	.400	1.100	1.350	44	2.550	2.350	2.100	2.800	3.050
14	1.050	.850	.600	1.300	1.550	50	2.850	2.650	2.400	3.100	3.350
20	1.350	1.150	.900	1.600	1.850	54	3.050	2.850	2.600	3.300	3.550
24	1.550	1.350	1.100	1.800	2.050	56	3.150	2.950	2.700	3.400	3.650
26	1.650	1.450	1.200	1.900	2.150	60	3.350	3.150	2.900	3.600	3.850
30	1.850	1.650	1.400	2.100	2.350	66	3.650	3.450	3.200	3.900	4.150
36	2.150	1.950	1.700	2.400	2.650	70	3.850	3.650	3.400	4.100	4.350
40	2.350	2.150	1.900	2.600	2.850						

## LEAD CONFIGURATION OPTIONS

PLUG	RECEPTACLE	PLUG: WTKVA 20 P SY RECEPTACLE: WTKA 20 S SY XXXX XX XXXX XX								
<b>SERIES</b>										
WTKVA Plug, straight, crimp removable, with mounting ears	WTKA Receptacle, straight, crimp removable, with mounting ears									
<ul style="list-style-type: none"> <li>WTKVA and WTKA connectors will mate with WTA, WTAV, WTB, WTBV connectors. "A" means contacts are included.</li> </ul>										
<b>SIZE</b>										
XX Number of contacts (10, 14, 20, 24, 26, 30, 36, 40, 44, 50, 54, 56, 60, 66, or 70)	XX Number of contacts (10, 14, 20, 24, 26, 30, 36, 40, 44, 50, 54, 56, 60, 66, or 70)									
<b>CONTACTS</b>										
<ul style="list-style-type: none"> <li>The use of gaskets is not recommended with crimp connectors.</li> <li>WTKVA** and WTKA includes full compliment of WTK222 (Socket or Pin) crimp removable contacts packaged with connectors. See "Contacts" in Accessories section to order separately.</li> <li>When using crimp contacts with 20 gage barrel, barrel must be cut off prior to removing contact from connector body.</li> </ul>										
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">TYPE CONTACTS/TERMINATIONS:</th> </tr> </thead> <tbody> <tr> <td>P Pin, straight, crimp removable, 22 AWG</td><td>S Socket, straight, crimp removable, 22 AWG</td></tr> <tr> <td>S Socket, straight, crimp removable, 22 AWG</td><td>SA Same as above</td></tr> <tr> <td>SA Same as above</td><td>P Pin, straight, crimp removable, 22 AWG</td></tr> </tbody> </table>			TYPE CONTACTS/TERMINATIONS:		P Pin, straight, crimp removable, 22 AWG	S Socket, straight, crimp removable, 22 AWG	S Socket, straight, crimp removable, 22 AWG	SA Same as above	SA Same as above	P Pin, straight, crimp removable, 22 AWG
TYPE CONTACTS/TERMINATIONS:										
P Pin, straight, crimp removable, 22 AWG	S Socket, straight, crimp removable, 22 AWG									
S Socket, straight, crimp removable, 22 AWG	SA Same as above									
SA Same as above	P Pin, straight, crimp removable, 22 AWG									
<b>HARDWARE</b>										
SY Guide set	SY Guide set									
SY# Guide set, polarized	SY# Guide set, polarized									
J Fixed jackset	J Fixed jackset									
JT Turning jackset, .500"	JT Turning jackset, .500"									
JTA Turning jackset, .200"	JTA Turning jackset, .200"									
JTB Hex turning jackset, .200"	JTB Hex turning jackset, .200"									
JTC Hex turning jackset, .500"	JTC Hex turning jackset, .500"									
JTL Turning jackset, long, .700"	JTL Turning jackset, long, .700"									

### OPTIONS

- Option Codes: Add to the end of the part number. Example: WTKA10SSY-C45. Call factory for additional codes.
- 443 Polarizing pin installed in contact position noted by dash number. See "Polarization" in Accessories section.
- 444 Contact position noted by dash number is left open (to mate with -443).
- 478 Drill mating side hole diameter designated by dash number.
- 515 Polarizing pin installed in contact position noted by dash number. See "Polarization" in Accessories section.
- A53 20 AWG, straight, crimp removable contact, pin or socket.
- C45 Additional .075" material at termination face for strain relief of crimped wires (22 AWG only). See Detail A below.
- F68 Combine -C45 and -515 special codes.



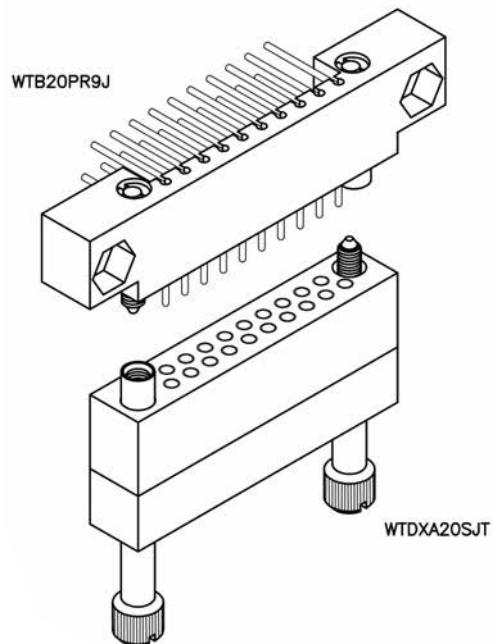
DETAIL A

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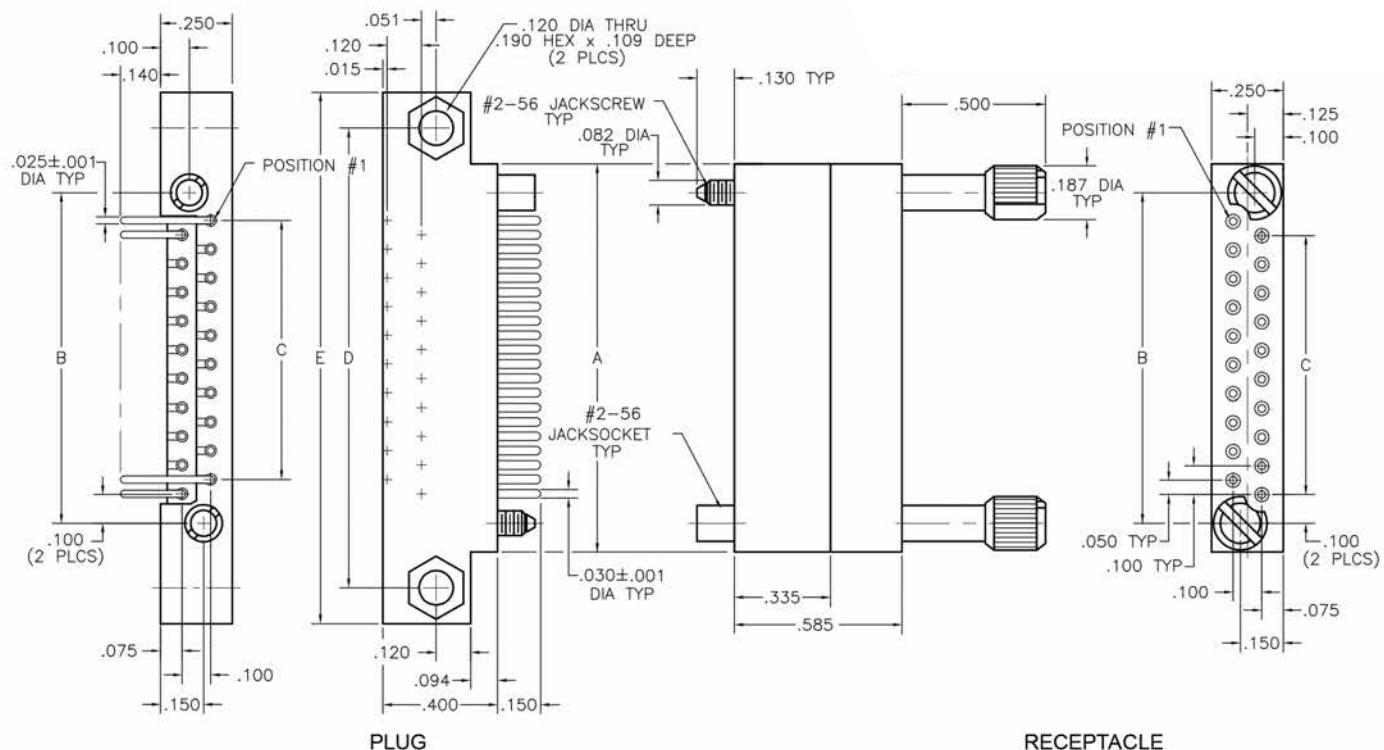
## TWO ROW - PC CARD-TO-BOARD

WTB - WTDXA

0.100" | 10 THROUGH 70 CONTACTS



WTDXA20SJT



PLUG

RECEPTACLE

DIMENSIONS											
SIZE	A	B	C	D	E	SIZE	A	B	C	D	E
10	.850	.650	.400	1.100	1.350	44	2.550	2.350	2.100	2.800	3.050
14	1.050	.850	.600	1.300	1.550	50	2.850	2.650	2.400	3.100	3.350
20	1.350	1.150	.900	1.600	1.850	54	3.050	2.850	2.600	3.300	3.550
24	1.550	1.350	1.100	1.800	2.050	56	3.150	2.950	2.700	3.400	3.650
26	1.650	1.450	1.200	1.900	2.150	60	3.350	3.150	2.900	3.600	3.850
30	1.850	1.650	1.400	2.100	2.350	66	3.650	3.450	3.200	3.900	4.150
36	2.150	1.950	1.700	2.400	2.650	70	3.850	3.650	3.400	4.100	4.350
40	2.350	2.150	1.900	2.600	2.850						

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## LEAD CONFIGURATION OPTIONS

PLUG: WTB 20 PR9 J  
 RECEPTACLE: WTDXA 20 S JT  
 XXXXX XX XXX XX

### PLUG

### RECEPTACLE

#### SERIES

WTB Plug, right angle, with mounting ears

WTDXA Receptacle, straight, crimp removable,  
 without mounting ears

- WTKA and WTDXA connectors will mate with WTA, WTAV, WTB, WTBV connectors. "A" means contacts are included.

#### SIZE

XX Number of contacts (10, 14, 20, 24, 26, 30, 36, 40,  
 44, 50, 54, 56, 60, 66, or 70)

XX Number of contacts (10, 14, 20, 24, 26, 30, 36, 40,  
 44, 50, 54, 56, 60, 66, or 70)

#### CONTACTS

- The use of gaskets is not recommended with crimp socket contacts.
- WTKA\*\* includes full compliment of WTK2222 (Socket or Pin) crimp removable contacts packaged with connectors. See "Contacts" in Accessories section to order separately.
- When using crimp contacts with 20 gage barrel, barrel must be cut off prior to removing contact from connector body.

#### TYPE CONTACTS/TERMINATIONS:

PR7 Pin, right angle, dip solder, .109" x .025" dia  
 PR9 Pin, right angle, dip solder, .140" x .025" dia  
 PR11 Pin, right angle, dip solder, .172" x .025" dia  
 PRW40 Pin, right angle, wire wrap®, .625"

#### TYPE CONTACTS/TERMINATIONS:

S Socket, straight, crimp removable, 22 AWG  
 SA Same as above  
 P Pin, straight, crimp removable, 22 AWG

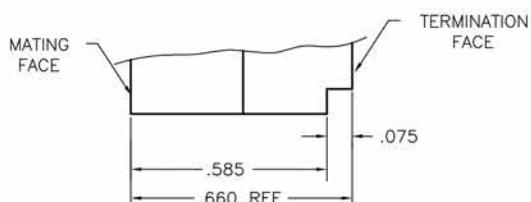
#### HARDWARE

SY Guide set  
 SY# Guide set, polarized  
 J Fixed jackset  
 JT Turning jackset, .435"  
 JTA Turning jackset, .135"  
 JTB Hex turning jackset, .135"  
 JTC Hex turning jackset, .435"  
 JTL Turning jackset, long, .635"

SY Guide set  
 SY# Guide set, polarized  
 J Fixed jackset  
 JT Turning jackset, .500"  
 JTA Turning jackset, .200"  
 JTB Hex turning jackset, .200"  
 JTC Hex turning jackset, .500"  
 JTL Turning jackset, long, .700"

#### OPTIONS

- Option Codes: Add to the end of the part number. Example: WTKA10SSY-C45. Call factory for additional codes.
- 443 Polarizing pin installed in contact position noted by dash number. See "Polarization" in Accessories section. Receptacle connector only.
- 444 Contact position noted by dash number is left open (to mate with -443). Right angle only.
- 478 Drill mating side hole diameter designated by dash number.
- 515 Polarizing pin installed in contact position noted by dash number. See "Polarization" in Accessories section. Receptacle connector only.
- 548 Bond #4-40 small pattern nut into mounting holes (for right angle plug connectors only).
- A53 Socket, straight, crimp removable, 20 AWG
- C45 Additional .075" material at termination face for strain relief of crimped wires (22 AWG only). See Detail A below.
- F68 Combine -C45 and -515 special codes.

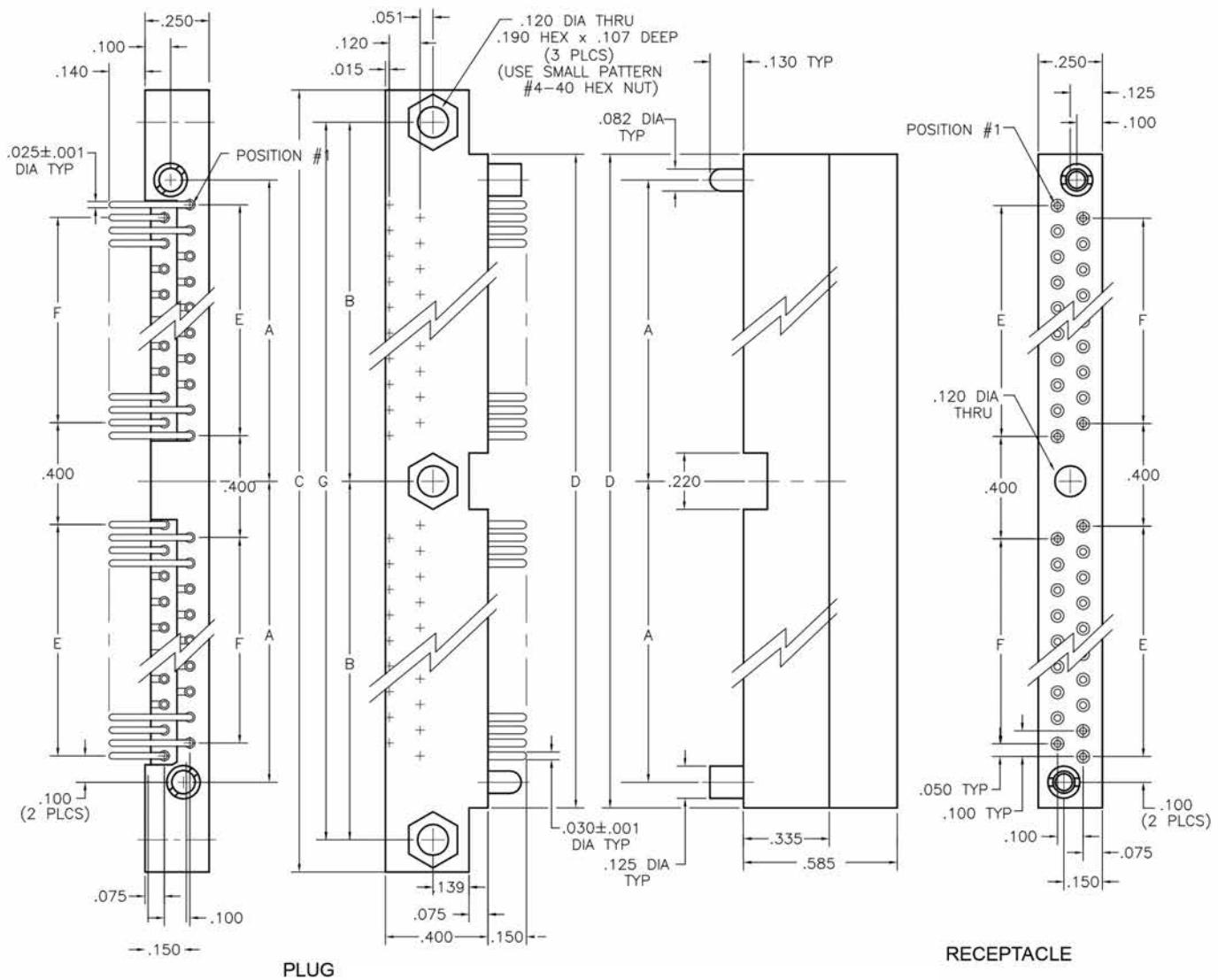
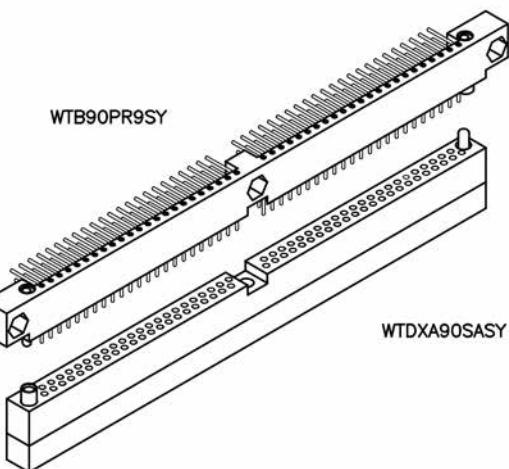


DETAIL A

## TWO ROW - PC CARD-TO-BOARD

### WTB - WTDXA

0.100" | 90 THROUGH 120 CONTACTS



## LEAD CONFIGURATION OPTIONS

PLUG: WTB 90 PR9 SY  
 RECEPTACLE: WTDXA 90 SA SY  
 XXXXX XX XXX XX

### PLUG

### RECEPTACLE

#### SERIES

WTB	Plug, right angle, with mounting ears	WTDXA	Receptacle, straight, crimp removable, without mounting ears
• WTKA and WTDXA connectors will mate with WTA, WTAV, WTB, WTBV connectors. "A" means contacts are included.			

#### SIZE

XX	Number of contacts (90 or 120)	XX	Number of contacts (90 or 120)
----	--------------------------------	----	--------------------------------

#### CONTACTS

- The use of gaskets is not recommended with crimp socket contacts.
- WTKA\*\* includes full compliment of WTK2222 (Socket or Pin) crimp removable contacts packaged with connectors. See "Contacts" in Accessories section to order separately.
- When using crimp contacts with 20 gage barrel, barrel must be cut off prior to removing contact from connector body.

#### TYPE CONTACTS/TERMINATIONS:

PR7	Pin, right angle, dip solder, .109" x .025" dia
PR9	Pin, right angle, dip solder, .140" x .025" dia
PR11	Pin, right angle, dip solder, .172" x .025" dia
PRW40	Pin, right angle, wire wrap®, .625"

#### TYPE CONTACTS/TERMINATIONS:

S	Socket, straight, crimp removable, 22 AWG
SA	Same as above
P	Pin, straight, crimp removable, 22 AWG

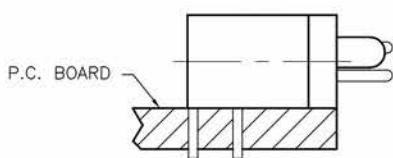
#### HARDWARE

SY	Guide set
SY-#	Guide set, polarized
J	Fixed jackset
JT	Turning jackset, .435"
JTA	Turning jackset, .135"
JTB	Hex turning jackset, .135"
JTC	Hex turning jackset, .435"
JTL	Turning jackset, long, .635"

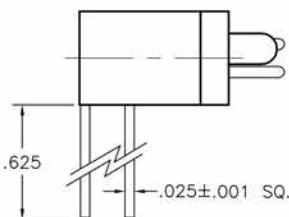
SY	Guide set
SY-#	Guide set, polarized
J	Fixed jackset
JT	Turning jackset, .500"
JTA	Turning jackset, .200"
JTB	Hex turning jackset, .200"
JTC	Hex turning jackset, .500"
JTL	Turning jackset, long, .700"

#### OPTIONS

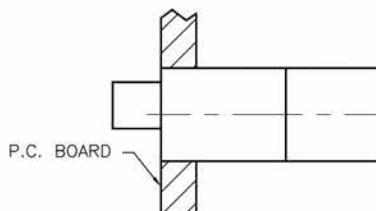
- Option Codes: Add to the end of the part number. Example: WTDXA90SSY-C45. Call factory for additional codes.
- 443 Polarizing pin installed in contact position noted by dash number. See "Polarization" in Accessories section. Receptacle connector only.
- 444 Contact position noted by dash number is left open (to mate with -443). Right angle only.
- 478 Drill mating side hole diameter designated by dash number (crimp only).
- 515 Polarizing pin installed in contact position noted by dash number. See "Polarization" in Accessories section. Receptacle connector only.
- 548 Bond #4-40 small pattern nut into mounting holes (for right angle plug connectors only).
- A53 Socket, straight, crimp removable, 20 AWG
- C45 Additional .075" material at termination face for strain relief of crimped wires (22 AWG only). See Detail A below.
- F68 Combine -C45 and -515 special codes.



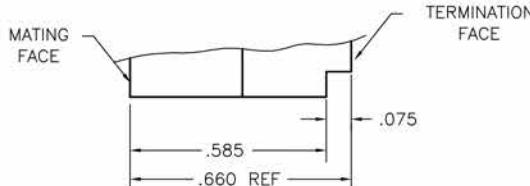
WTB90PR9SY  
P.C. BOARD EXAMPLE



WTB90PRW40SY  
WIRE WRAP EXAMPLE



WTDXA90SASY  
CHASSIS EXAMPLE



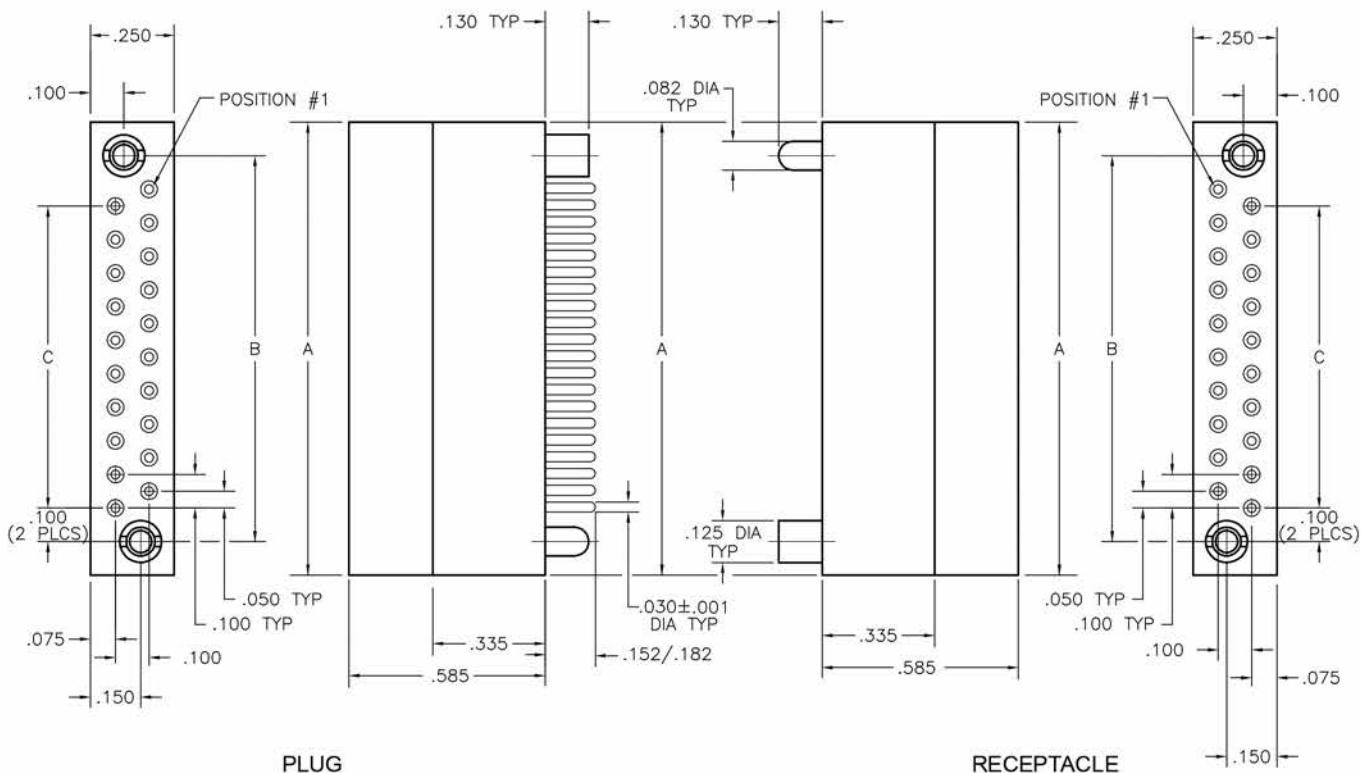
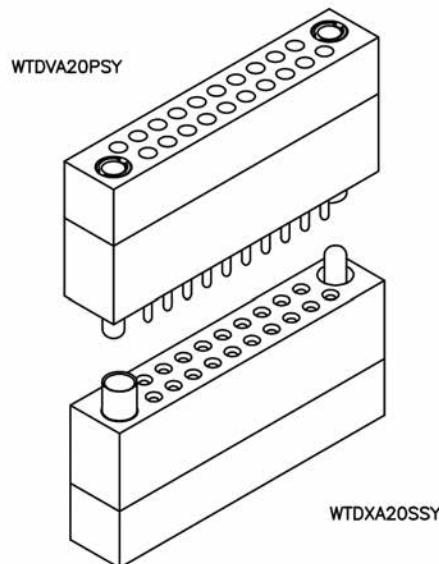
DETAIL A

**molex**

## TWO ROW - CHASSIS-TO-CHASSIS

WTDVA - WTDXA

0.100" | 10 THROUGH 70 CONTACTS



DIMENSIONS							
SIZE	A	B	C	SIZE	A	B	C
10	.850	.650	.400	44	2.550	2.350	2.100
14	1.050	.850	.600	50	2.850	2.650	2.400
20	1.350	1.150	.900	54	3.050	2.850	2.600
24	1.550	1.350	1.100	56	3.150	2.950	2.700
26	1.650	1.450	1.200	60	3.350	3.150	2.900
30	1.850	1.650	1.400	66	3.650	3.450	3.200
36	2.150	1.950	1.700	70	3.850	3.650	3.400
40	2.350	2.150	1.900				

## LEAD CONFIGURATION OPTIONS

PLUG: WTDVA 20 P SY  
 RECEPTACLE: WTDXA 20 S SY  
 XXXX XX XXXX XX

### PLUG

### RECEPTACLE

#### SERIES

WTDVA Plug, straight, crimp removable,  
 without mounting ears

WTDXA Receptacle, straight, crimp removable,  
 without mounting ears

- WTDVA and WTDXA connectors will mate with WTA, WTAV, WTB, WTBV connectors. "A" means contacts are included.

#### SIZE

XX Number of contacts (10, 14, 20, 24, 26, 30, 36, 40,  
 44, 50, 54, 56, 60, 66, or 70)

XX Number of contacts (10, 14, 20, 24, 26, 30, 36, 40,  
 44, 50, 54, 56, 60, 66, or 70)

#### CONTACTS

- The use of gaskets is not recommended with crimp connectors.
- WTDVA\*\* and WTDXA includes full compliment of WTK2222 (Socket or Pin) crimp removable contacts packaged with connectors. See "Contacts" in Accessories section to order separately.
- When using crimp contacts with 20 gage barrel, barrel must be cut off prior to removing contact from connector body.

#### TYPE CONTACTS/TERMINATIONS:

P Pin, straight, crimp removable, 22 AWG  
 S Socket, straight, crimp removable, 22 AWG  
 SA Same as above

#### TYPE CONTACTS/TERMINATIONS:

S Socket, straight, crimp removable, 22 AWG  
 SA Same as above  
 P Pin, straight, crimp removable, 22 AWG

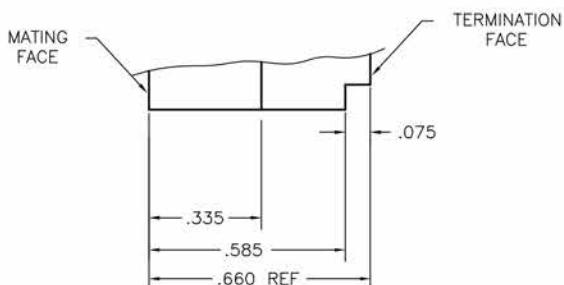
#### HARDWARE

SY Guide set  
 SY# Guide set, polarized  
 J Fixed jackset  
 JT Turning jackset, .500"  
 JTA Turning jackset, .200"  
 JTB Hex turning jackset, .200"  
 JTC Hex turning jackset, .500"  
 JTL Turning jackset, long, .700"

SY Guide set  
 SY# Guide set, polarized  
 J Fixed jackset  
 JT Turning jackset, .500"  
 JTA Turning jackset, .200"  
 JTB Hex turning jackset, .200"  
 JTC Hex turning jackset, .500"  
 JTL Turning jackset, long, .700"

#### OPTIONS

- Option Codes: Add to the end of the part number. Example: WTDXA10SSY-C45. Call factory for additional codes.
- 443 Polarizing pin installed in contact position noted by dash number. See "Polarization" in Accessories section.
- 444 Contact position noted by dash number is left open (to mate with -443).
- 478 Drill mating side hole diameter designated by dash number.
- 515 Polarizing pin installed in contact position noted by dash number. See "Polarization" in Accessories section.
- A53 20 AWG, straight, crimp removable contact, pin or socket.
- C45 Additional .075" material at termination face for strain relief of crimped wires (22 AWG only). See Detail A below.
- F68 Combine -C45 and -515 special codes.



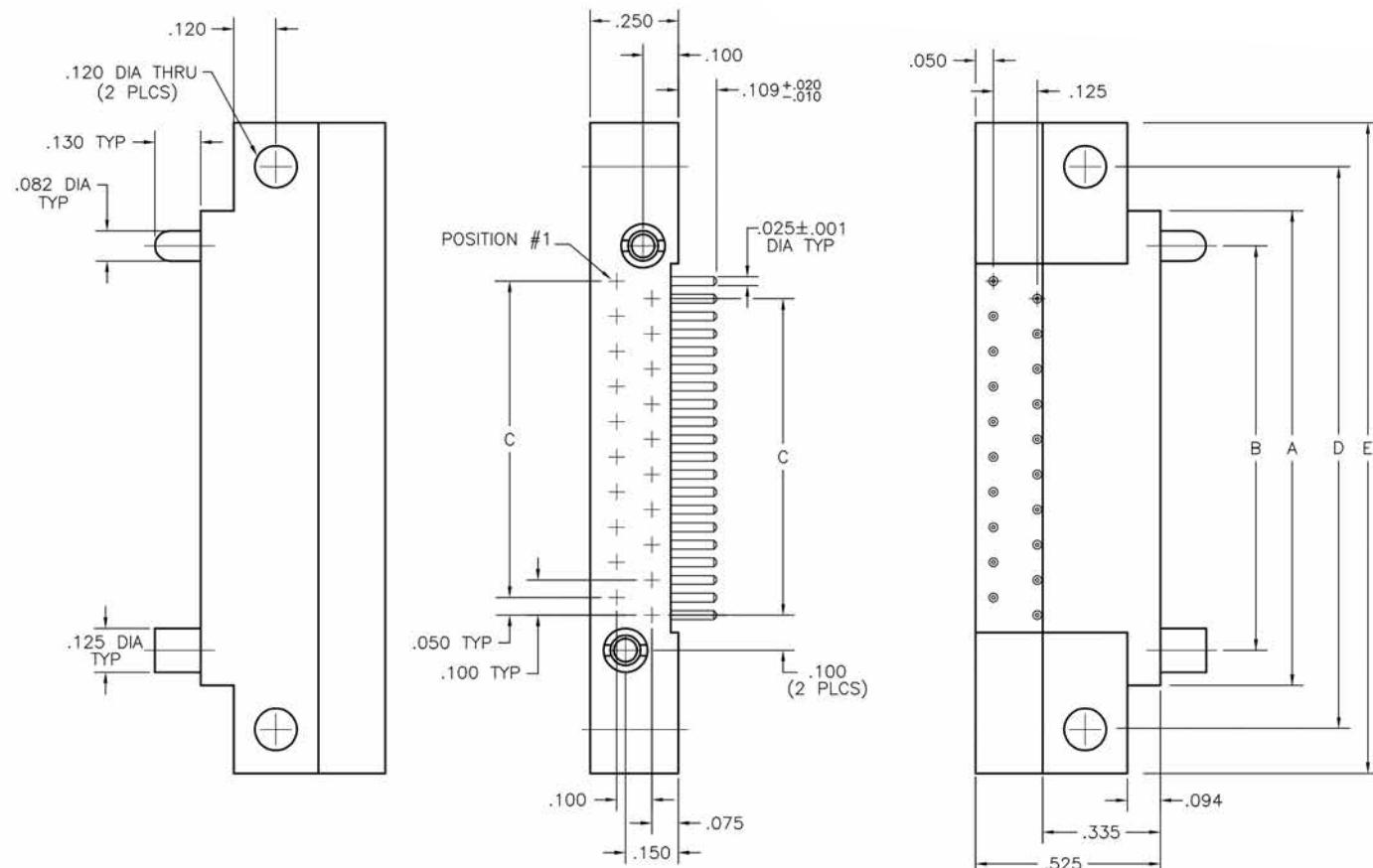
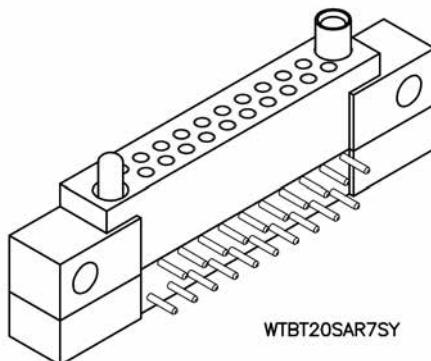
DETAIL A

**molex**

## TWO ROW - EXTENDER BOARD CONNECTOR

WTBT

0.100" | 10 THROUGH 70 CONTACTS



RECEPTACLE

DIMENSIONS											
SIZE	A	B	C	D	E	SIZE	A	B	C	D	E
10	.850	.650	.400	1.100	1.350	44	2.550	2.350	2.100	2.800	3.050
14	1.050	.850	.600	1.300	1.550	50	2.850	2.650	2.400	3.100	3.350
20	1.350	1.150	.900	1.600	1.850	54	3.050	2.850	2.600	3.300	3.550
24	1.550	1.350	1.100	1.800	2.050	56	3.150	2.950	2.700	3.400	3.650
26	1.650	1.450	1.200	1.900	2.150	60	3.350	3.150	2.900	3.600	3.850
30	1.850	1.650	1.400	2.100	2.350	66	3.650	3.450	3.200	3.900	4.150
36	2.150	1.950	1.700	2.400	2.650	70	3.850	3.650	3.400	4.100	4.350
40	2.350	2.150	1.900	2.600	2.850						

\* = FOR TEST APPLICATIONS

## LEAD CONFIGURATION OPTIONS

RECEPTACLE: WBTB 20 SAR7 SY  
XXXX XX XXXX XX

## RECEPTACLE

---

**SERIES**

### WTBT Receptacle, right angle, with mounting ears

---

**SIZE**

XX Number of contacts (10, 14, 20, 24, 26, 30, 36, 40, 44, 50, 54, 56, 60, 66, or 70)

## CONTACTS

**TYPE CONTACTS/TERMINATIONS:**

SARC      Socket, right angle, solder cup (.035" I.D.)

SAR7 Socket, right angle, dip solder, .109" x .025" dia

SAR9 Socket, right angle, dip solder, .140" x .025" dia

SAR11 Socket, right angle, dip solder, .172" x .025" dia

## HARDWARE

---

SY Guide set

### J Fixed jackset

JT Turning jackset, .475"

JTA Turning jackset, .175"

### JTB Hex turning jackset, .175"

**JTC Hex turning jackset, .475"**

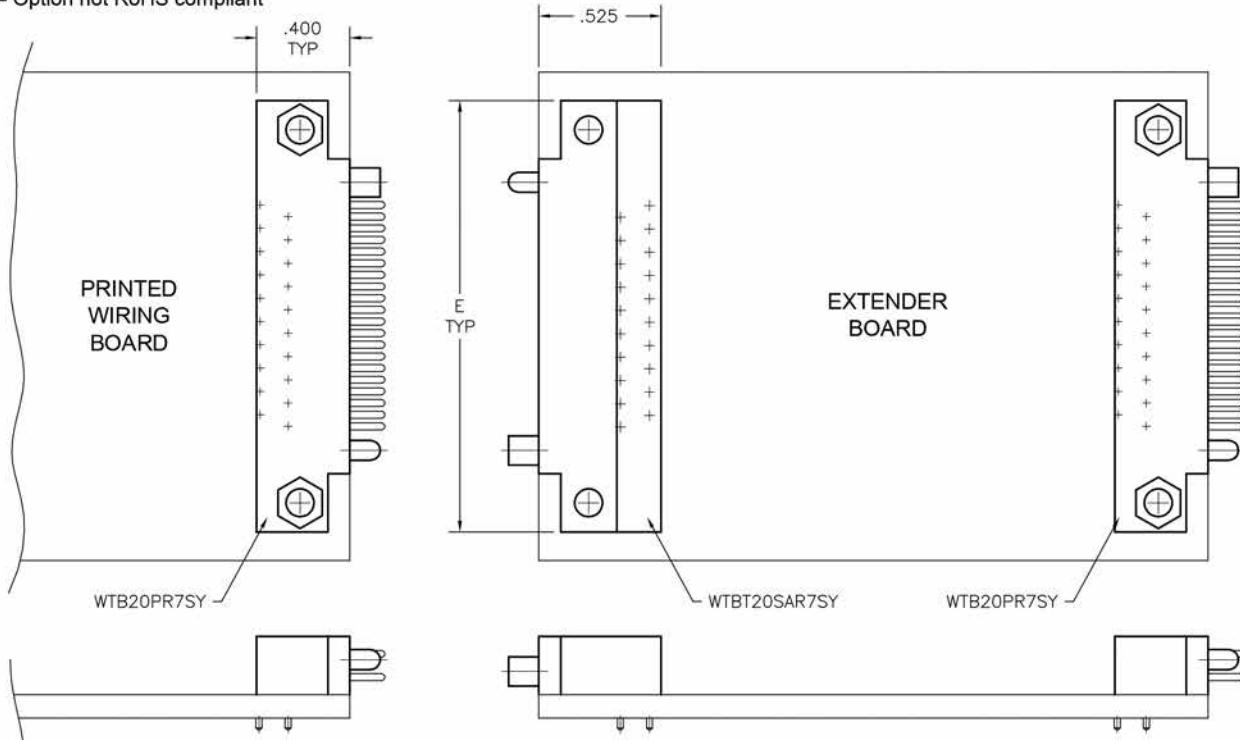
JTL Turning jackset, long, .675"

- WTBT connectors with "J" hardware will mate with: WTA\*\*\*\*JT  
WTA\*\*\*\*JTA
- WTBT connectors with "SY" hardware will mate with: WTB\*\*\*\*SY  
WTAV\*\*\*\*SY
- For polarized "D" shaped guides, add dash and code number to the part number (example: -7). See "Polarization" in Accessories section for codes.

## OPTIONS

- Option Codes: Add to the end of the part number. Example: WTBT10SAR9J-D01. Call factory for additional codes.
  - 342 Remove mounting ears (.250" each end)
  - D01 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with 63/37 or 60/40 solder.
  - P39 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with SAC305 solder (lead free).

= Option not RoHS compliant



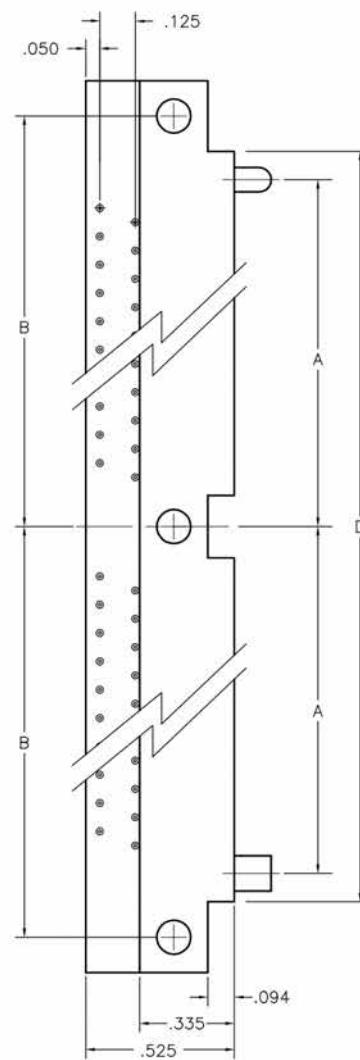
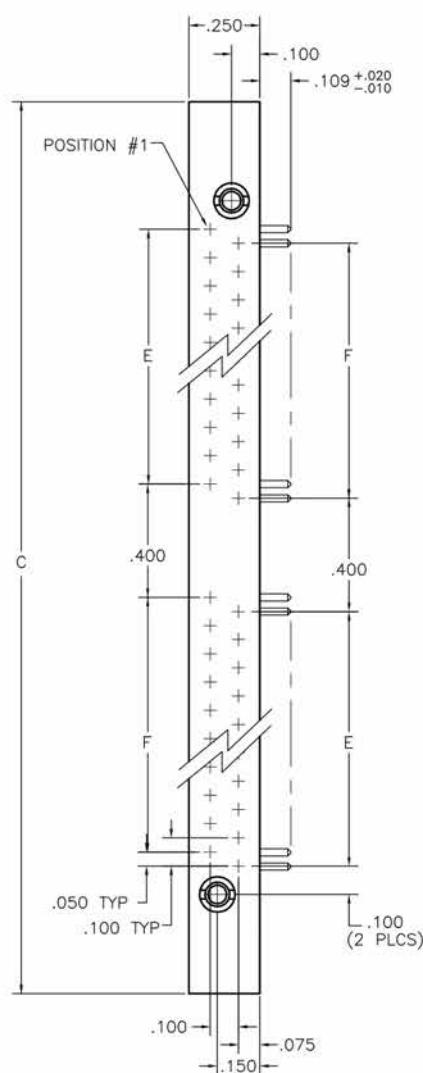
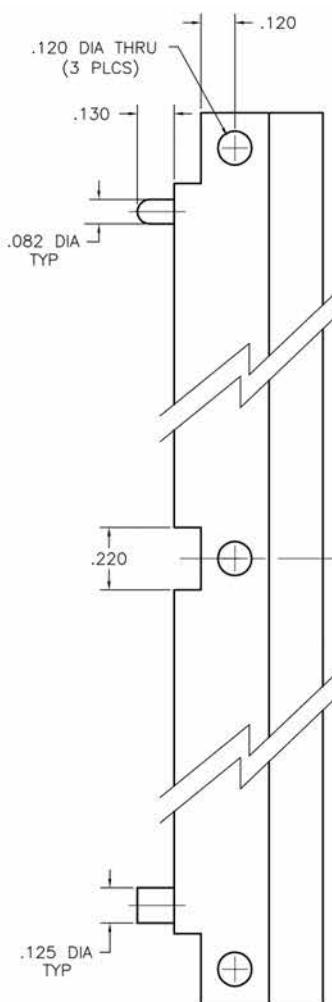
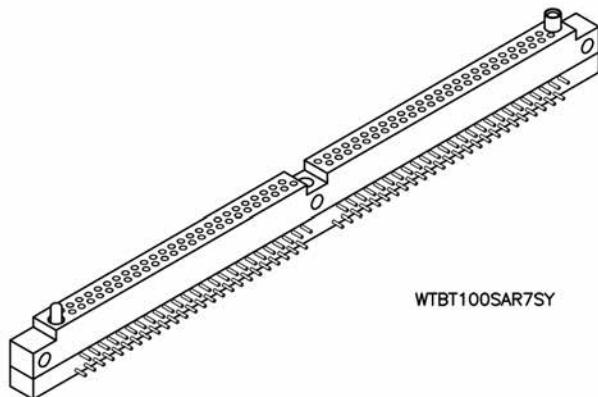
PLEASE CONSULT THE MOLEX WEBSITE FOR THE LATEST VERSION OF THIS INFORMATION PRIOR TO BEGINNING ANY DESIGN WORK.  
SOURCE: CTW040-REV D

MOLEX

## TWO ROW - EXTENDER BOARD CONNECTOR

WTBT

0.100" | 100 CONTACTS



RECEPTACLE

DIMENSIONS						
SIZE	A	B	C	D	E	F
100	2.725	2.950	6.150	5.650	2.400	2.400

\* = FOR TEST APPLICATIONS

**molex**

## LEAD CONFIGURATION OPTIONS

### RECEPTACLE

#### SERIES

WTBT Receptacle, right angle, with mounting ears

- WTBT connectors will mate with WTA, WTAV, WTB, WTBV.

#### SIZE

XXX Number of contacts (100)

#### CONTACTS

##### TYPE CONTACTS/TERMINATIONS:

- SAR7 Socket, right angle, dip solder, .109" x .025" dia
- SAR9 Socket, right angle, dip solder, .140" x .025" dia
- SAR11 Socket, right angle, dip solder, .172" x .025" dia
- SARC Socket, right angle, solder cup (.035" I.D.)

#### HARDWARE

- SY Guide set
- SY# Guide set, polarized
- J Fixed jackset
- JT Turning jackset, .475"
- JTA Turning jackset, .175"
- JTB Hex turning jackset, .175"
- JTC Hex turning jackset, .475"
- JTL Long turning jackset, .675"

#### OPTIONS

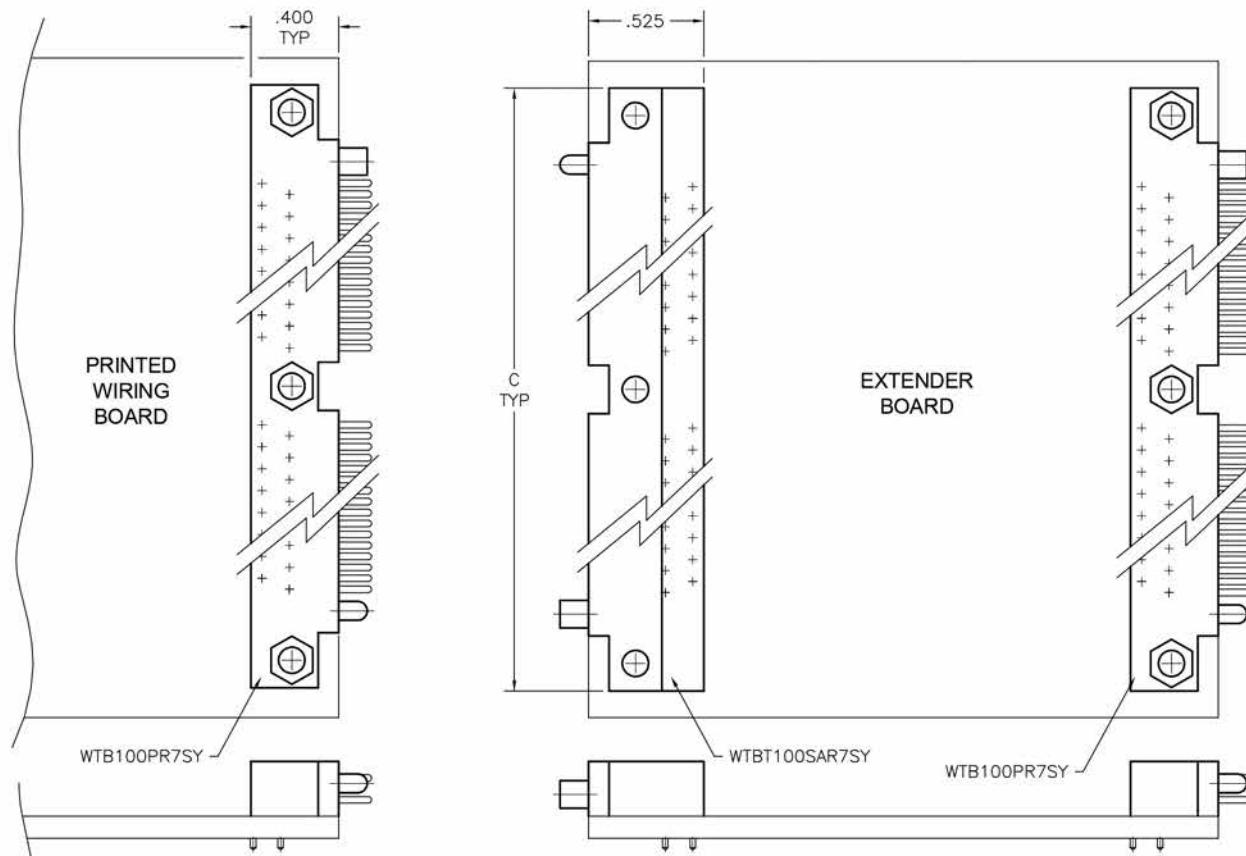
- Option Codes: Add to the end of the part number. Example: WTBT100SAR7SY342. Call factory for additional codes.

-342 Remove mounting ears (.250" each end)

-D01 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with 63/37 or 60/40 solder.

-P39 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with SAC305 solder (lead free).

= Option not RoHS compliant

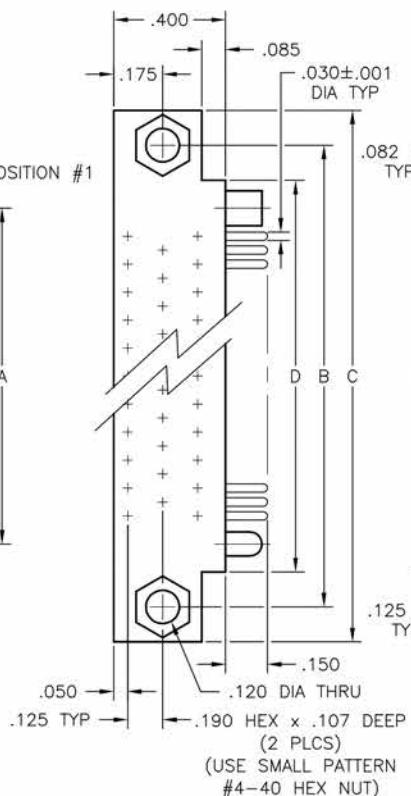
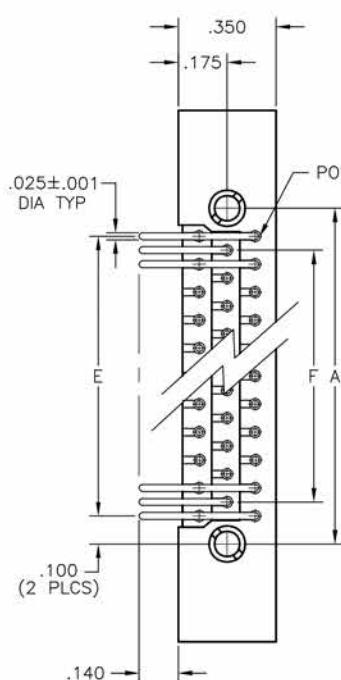
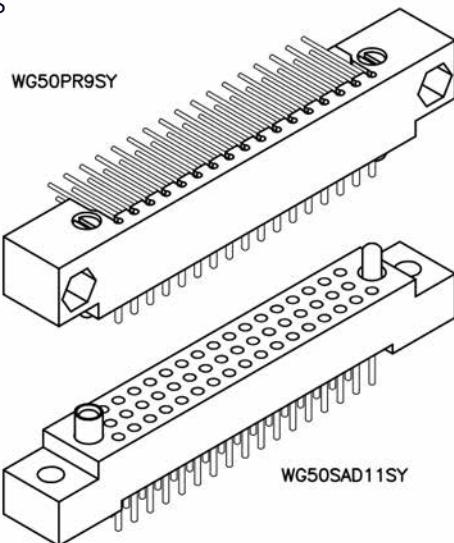


**molex**

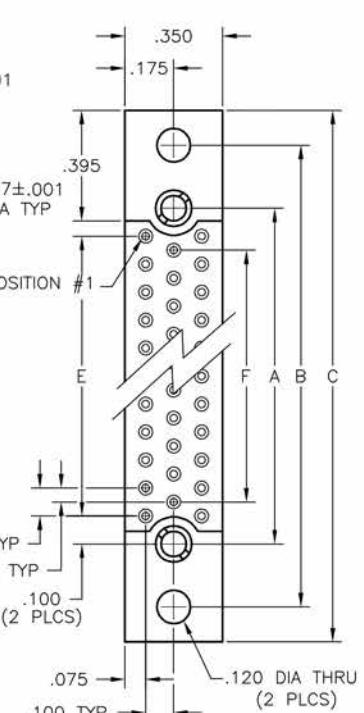
# THREE ROW - PC CARD-TO-BOARD OR CHASSIS

WG - WG

0.100" | 50 THROUGH 104 CONTACTS



PLUG

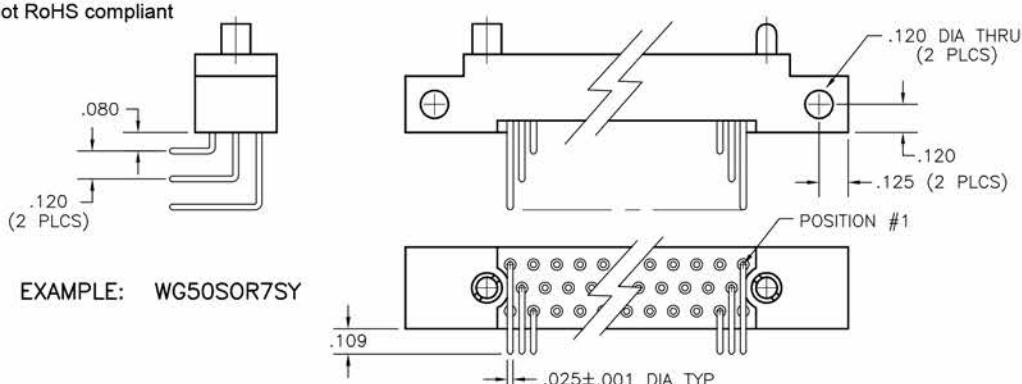


RECEPTACLE

DIMENSIONS					
SIZE	A	B	C	D	E
50	1.800	2.250	2.500	2.000	1.600
62	2.200	2.650	2.900	2.400	2.000
80	2.800	3.250	3.500	3.000	2.600
92	3.200	3.650	3.900	3.400	3.000
104	3.600	4.050	4.300	3.800	3.400

## LEAD CONFIGURATION OPTIONS

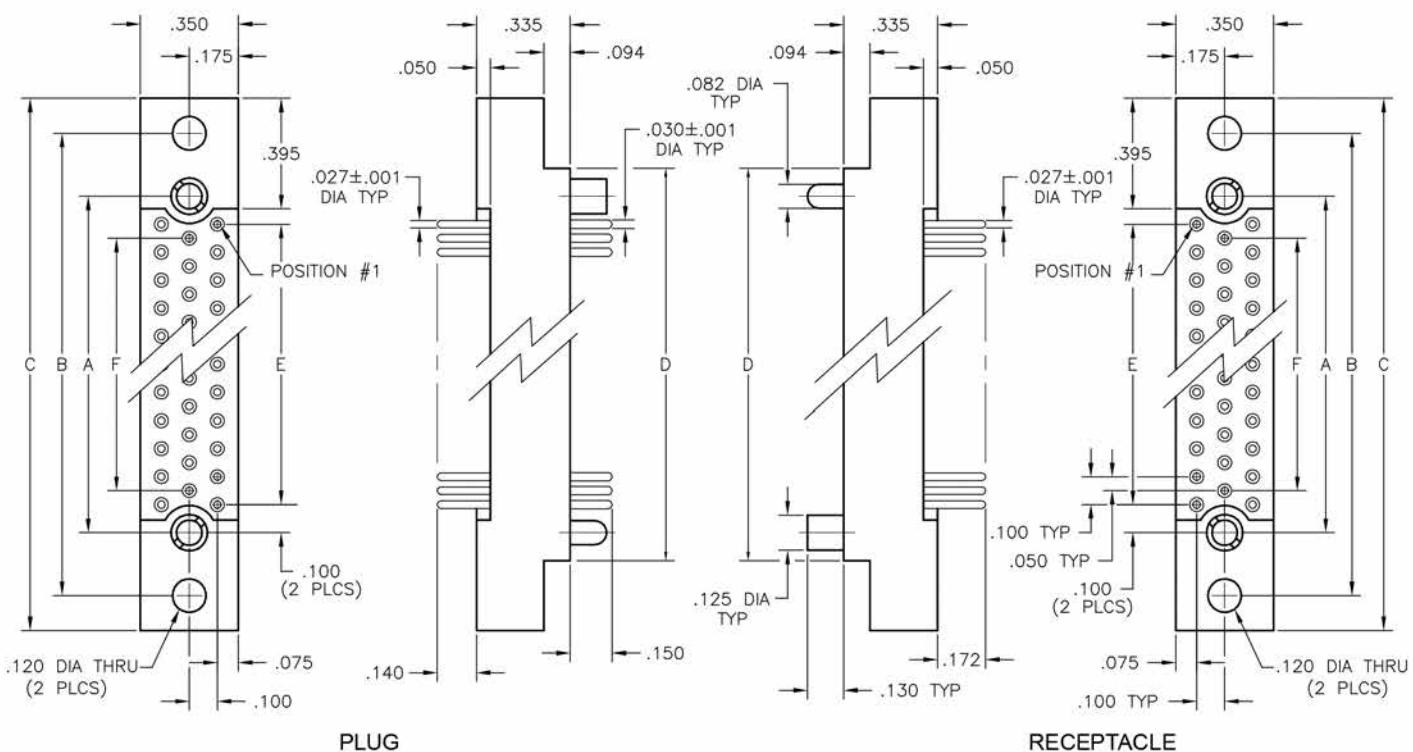
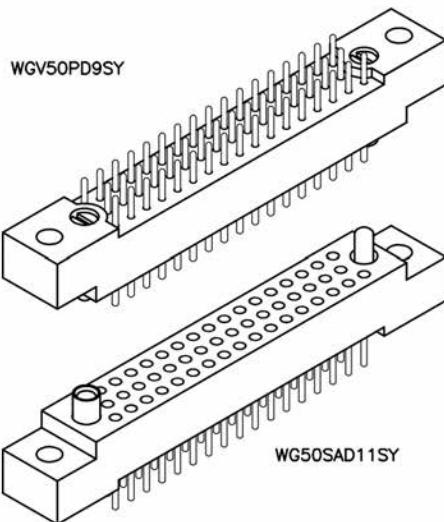
		PLUG	RECEPTACLE				
		SERIES					
WG Plug, right angle, with mounting ears				WG Receptacle, straight, with mounting ears			
WG				WG Receptacle, right angle, with mounting ears			
		SIZE					
XX Number of contacts (50, 62, 80, 92, or 104)		XX Number of contacts (50, 62, 80, 92, or 104)					
CONTACTS							
<ul style="list-style-type: none"> <li>The contact type determines image of connector. Pin, right angle contacts are always plug image. Straight pin contacts or socket contacts are receptacle image.</li> </ul>							
TYPE CONTACTS/TERMINATIONS:		TYPE CONTACTS/TERMINATIONS:					
PR7 Pin, right angle, dip solder, .109" x .025" dia		SAC Socket, straight, solder cup (.035" I.D.)					
PR9 Pin, right angle, dip solder, .140" x .025" dia		SAD7 Socket, straight, dip solder, .109" x .027" dia					
PR11 Pin, right angle, dip solder, .172" x .025" dia		SAD9 Socket, straight, dip solder, .140" x .027" dia					
PR15 Pin, right angle, dip solder, .234" x .025" dia		SAD11 Socket, straight, dip solder, .172" x .027" dia					
PRW34 Pin, right angle, wire wrap®, .531"		SAF3 Socket, straight, flex circuit, .050"					
PRW42 Pin, right angle, wire wrap®, .656"		SAF6 Socket, straight, flex circuit, .093"					
		SAF9 Socket, straight, flex circuit, .140"					
		SAG7 Socket, straight, dip solder, .109" x .018" dia					
		SAG9 Socket, straight, dip solder, .140" x .018" dia					
		SAG11 Socket, straight, dip solder, .172" x .018" dia					
		SAP Socket, straight, pin termination, .150", connector saver					
		SAW24 Socket, straight, wire wrap®, .375"					
		SAW40 Socket, straight, wire wrap®, .625"					
		SOR7 Socket, right angle, dip solder, .109" x .025" dia					
		SOR9 Socket, right angle, dip solder, .140" x .025" dia					
		SOR11 Socket, right angle, dip solder, .172" x .025" dia					
HARDWARE							
<ul style="list-style-type: none"> <li>Plug facial seal gaskets and hoods; order separately or add "Q" in part number. Example: WG50PR9QJ. See "Gaskets" and "Hoods" in Accessories section for instructions.</li> </ul>							
SY Guide set		SY Guide set					
SY# Guide set, polarized		SY# Guide set, polarized					
SYL Guide set, long		SYL Guide set, long					
JT Turning jackset, .435"		J Fixed jackset					
JTA Turning jackset, .135"		JL Fixed jackset, long					
JTB Hex turning jackset, .135"							
JTC Hex turning jackset, .435"							
JTL Turning jackset, long, .635"							
OPTIONS							
<ul style="list-style-type: none"> <li>Option Codes: Add to the end of the part number. Example: WG80PR9SY342. Call factory for additional codes.</li> </ul>							
-342 Remove mounting ears. (.250" each end)							
-548 Bond #4-40 small pattern nut into mounting holes (for right angle plug connectors only).							
-B82 Termination face sealed against conformal coating							
-D01 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with 63/37 or 60/40 solder. <input checked="" type="checkbox"/>							
-P39 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with SAC305 solder (lead free). <input checked="" type="checkbox"/>							
-D54 Combine -B82 & -D01 options							
-G69 Solder cups fixed in an outward orientation (otherwise contacts will rotate)							
<input checked="" type="checkbox"/> = Option not RoHS compliant							



# THREE ROW - SANDWICH BOARDS

## WGV - WG

0.100" | 50 THROUGH 104 CONTACTS



DIMENSIONS						
SIZE	A	B	C	D	E	F
50	1.800	2.250	2.500	2.000	1.600	1.500
62	2.200	2.650	2.900	2.400	2.000	1.900
80	2.800	3.250	3.500	3.000	2.600	2.500
92	3.200	3.650	3.900	3.400	3.000	2.900
104	3.600	4.050	4.300	3.800	3.400	3.300

## LEAD CONFIGURATION OPTIONS

PLUG: WGV 50 PD9 SY  
 RECEPTACLE: WG 50 SAD11 SY  
 XXX XX XXXXX XX

PLUG	RECEPTACLE	
SERIES		
WGV Plug, with mounting ears	WG WG	Receptacle, straight, with mounting ears Receptacle, right angle, with mounting ears
SIZE		
XX Number of contacts (50, 62, 80, 92, or 104)	XX	Number of contacts (50, 62, 80, 92, or 104)
CONTACTS		
<ul style="list-style-type: none"> <li>Pin or socket contacts can be used in either plug or receptacle.</li> <li>When pin contacts are used, standard hardware orientation places the female hardware next to the #1 pin contact.</li> <li>When socket contacts are used, standard hardware orientation places the male hardware next to the #1 socket contact.</li> </ul>		
<b>TYPE CONTACTS/TERMINATIONS:</b> PC Pin, straight, solder cup (.035" I.D.) PD7 Pin, straight, dip solder, .109" x .027" dia PD9 Pin, straight, dip solder, .140" x .027" dia PD11 Pin, straight, dip solder, .172" x .027" dia PD13 Pin, straight, dip solder, .203" x .027" dia PF3 Pin, straight, flex circuit, .050" PF6 Pin, straight, flex circuit, .093" PF8 Pin, straight, flex circuit, .125" PW34 Pin, straight, wire wrap <sup>®</sup> , .531" PW40 Pin, straight, wire wrap <sup>®</sup> , .625"		
<b>TYPE CONTACTS/TERMINATIONS:</b> SAC Socket, straight, solder cup (.035" I.D.) SAD7 Socket, straight, dip solder, .109" x .027" dia SAD9 Socket, straight, dip solder, .140" x .027" dia SAD11 Socket, straight, dip solder, .172" x .027" dia SAF3 Socket, straight, flex circuit, .050" SAF6 Socket, straight, flex circuit, .093" SAF9 Socket, straight, flex circuit, .140" SAG7 Socket, straight, dip solder, .109" x .018" dia SAG9 Socket, straight, dip solder, .140" x .018" dia SAG11 Socket, straight, dip solder, .172" x .018" dia SAP Socket, straight, pin termination .150", connector saver SAW24 Socket, straight, wire wrap <sup>®</sup> , .375" SAW40 Socket, straight, wire wrap <sup>®</sup> , .625" SOR7 Socket, right angle, dip solder, .109" x .025" dia SOR9 Socket, right angle, dip solder, .140" x .025" dia SOR11 Socket, right angle, dip solder, .172" x .025" dia		
HARDWARE		
<ul style="list-style-type: none"> <li>Plug facial seal gaskets and hoods; order separately or add "Q" in part number. Example: WGV50PD9QJ.            See "Gaskets" and "Hoods" in Accessories section for instructions.</li> </ul>		
SY Guide set	SY Guide set	
SY-# Guide set, polarized	SY-# Guide set, polarized	
SYL Guide set, long	SYL Guide set, long	
J Fixed jackset	J Fixed jackset	
JL Fixed jackset, long	JL Fixed jackset, long	
JT Turning jackset, .500"	JT Turning jackset, .500"	
JTA Turning jackset, .200"	JTA Turning jackset, .200"	
JTB Hex turning jackset, .200"	JTB Hex turning jackset, .200"	
JTC Turning jackset, .500"	JTC Turning jackset, .500"	
JTL Turning jackset, long, .700"	JTL Turning jackset, long, .700"	

## OPTIONS

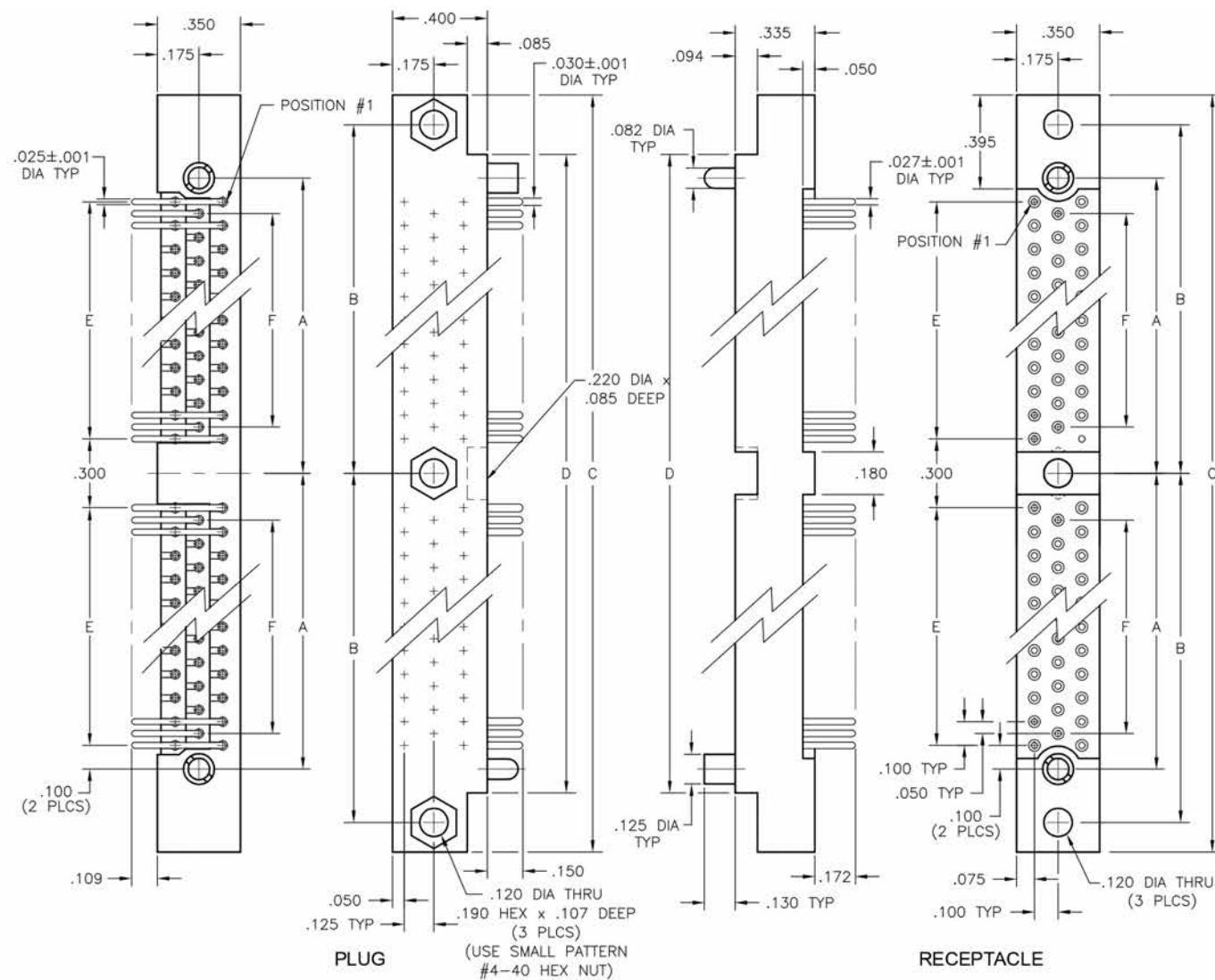
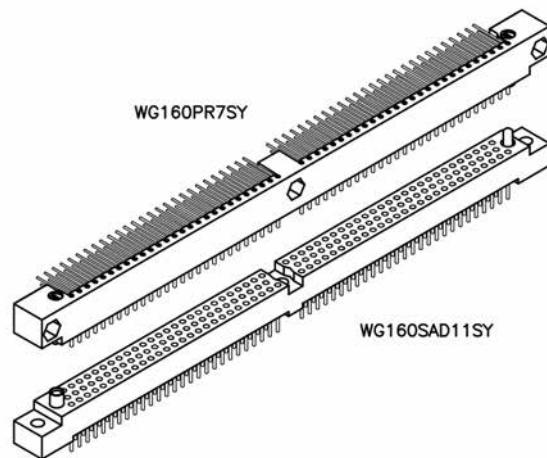
- Option Codes: Add to the end of the part number. Example: WG80PR9SY342. Call factory for additional codes.
- 342 Remove mounting ears. (.250" each end)
- D01 Pretinned contact terminations (except solder cups, wire wraps<sup>®</sup> and flex contacts) with 63/37 or 60/40 solder.
- P39 Pretinned contact terminations (except solder cups, wire wraps<sup>®</sup> and flex contacts) with SAC305 solder (lead free).
- G69 Solder cups fixed in an outward orientation (otherwise contacts will rotate)

= Option not RoHS compliant

# THREE ROW - PC CARD-TO-BOARD OR PC CARD

WG - WG

0.100" | 160 THROUGH 208 CONTACTS



DIMENSIONS						
SIZE	A	B	C	D	E	F
160	2.850	3.075	6.400	5.900	2.600	2.500
208	3.650	3.875	8.000	7.500	3.400	3.300

## LEAD CONFIGURATION OPTIONS

PLUG: WG 160 PR7 SY

RECEPTACLE: WG 160 SAD11 SY

XX XXX XXXXX XX

### PLUG

### RECEPTACLE

#### SERIES

WG Plug, right angle, with mounting ears

WG Receptacle, straight, with mounting ears

WG Receptacle, right angle, with mounting ears

#### SIZE

XX Number of contacts (160 or 208)

XX Number of contacts (160 or 208)

#### CONTACTS

- The contact type determines image of connector. Pin, right angle contacts are always plug image. Straight pin contacts or socket contacts are receptacle image.

##### TYPE CONTACTS/TERMINATIONS:

PR7 Pin, right angle, dip solder, .109" x .025" dia  
PR9 Pin, right angle, dip solder, .140" x .025" dia  
PR11 Pin, right angle, dip solder, .172" x .025" dia

##### TYPE CONTACTS/TERMINATIONS:

SAC Socket, straight, solder cup (.035" I.D.)  
SAD7 Socket, straight, dip solder, .109" x .027" dia  
SAD9 Socket, straight, dip solder, .140" x .027" dia  
SAD11 Socket, straight, dip solder, .172" x .027" dia  
SAF3 Socket, straight, flex circuit, .050"  
SAF6 Socket, straight, flex circuit, .093"  
SAF9 Socket, straight, flex circuit, .140"  
SAG7 Socket, straight, dip solder, .109" x .018" dia  
SAG9 Socket, straight, dip solder, .140" x .018" dia  
SAG11 Socket, straight, dip solder, .172" x .018" dia  
SAP Socket, straight, pin termination .150", connector saver  
SAW24 Socket, straight, wire wrap®, .375"  
SAW40 Socket, straight, wire wrap®, .625"  
SOR7 Socket, right angle, dip solder, .109" x .025" dia  
SOR9 Socket, right angle, dip solder, .140" x .025" dia  
SOR11 Socket, right angle, dip solder, .172" x .025" dia

#### HARDWARE

- Plug facial seal gaskets and hoods; order separately or add "O" in part number. Example: WG160PR9QJ.  
See "Gaskets" and "Hoods" in Accessories section for instructions.

SY Guide set  
SY# Guide set, polarized  
SYL Guide set, long  
JT Turning jackset, .435"  
JTA Turning jackset, .135"  
JTB Hex turning jackset, .135"  
JTC Hex turning jackset, .435"  
JTL Turning jackset, long, .635"

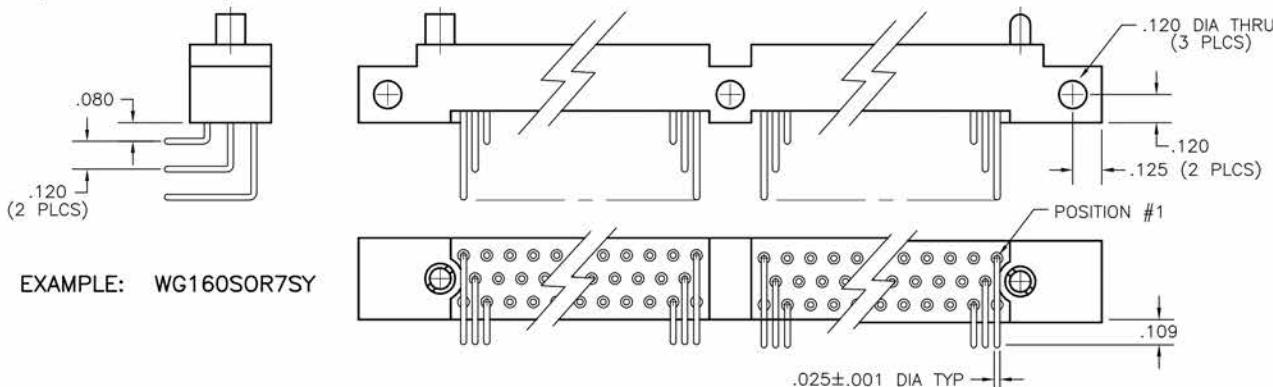
SY Guide set  
SY# Guide set, polarized  
SYL Guide set, long  
J Fixed jackset  
JL Fixed jackset, long

#### OPTIONS

- Option Codes: Add to the end of the part number. Example: WG160PR9SY548. Call factory for additional codes.

-342 Remove mounting ears. (.250" each end)  
-548 Bond #4-40 small pattern nut into mounting holes (for right angle plug connectors only).  
-B82 Termination face sealed against conformal coating  
-D01 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with 63/37 or 60/40 solder.   
-P39 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with SAC305 solder (lead free).  
-G69 Solder cups fixed in an outward orientation (otherwise contacts will rotate)

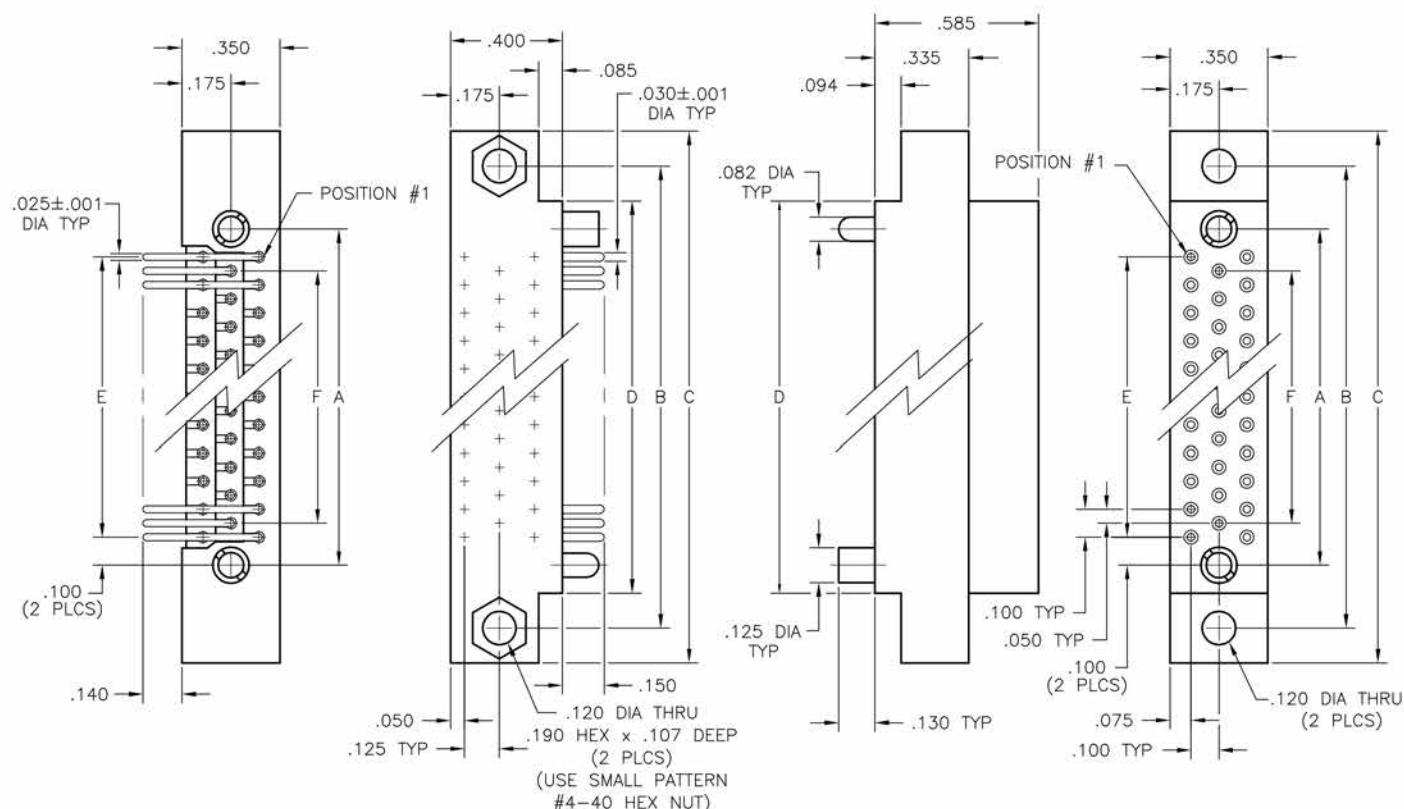
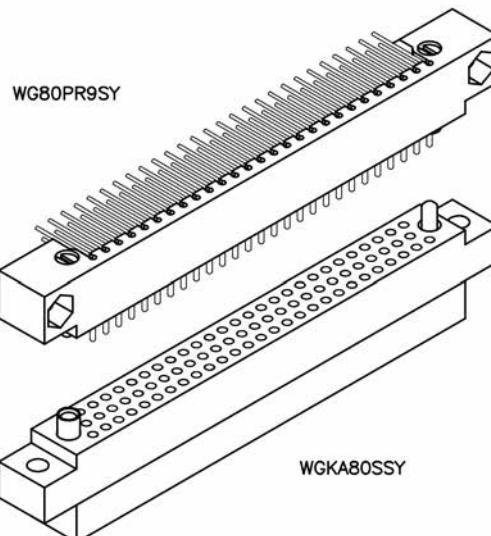
= Option not RoHS compliant



# THREE ROW - PC CARD-TO-CHASSIS

## WG - WGKA

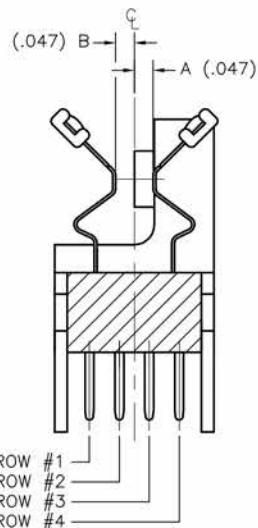
0.100" | 50 THROUGH 160 CONTACTS



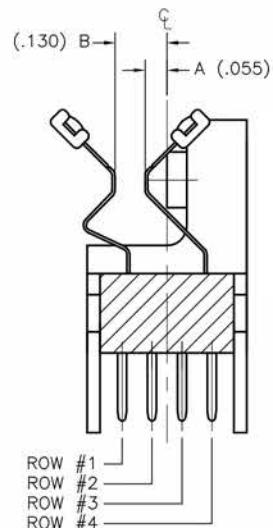
DIMENSIONS					
SIZE	A	B	C	D	E
50	1.800	2.250	2.500	2.000	1.600
62	2.200	2.650	2.900	2.400	2.000
80	2.800	3.250	3.500	3.000	2.600
92	3.200	3.650	3.900	3.400	3.000
104	3.600	4.050	4.300	3.800	3.400
160*	2.850	3.075	6.400	5.900	2.600

\* = SEE OPPOSITE PAGE FOR 160 POSITION CONFIGURATION

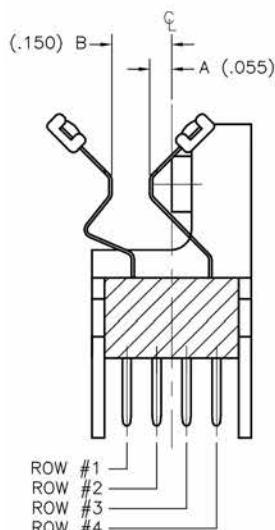
# SMT CONFIGURATION OPTIONS



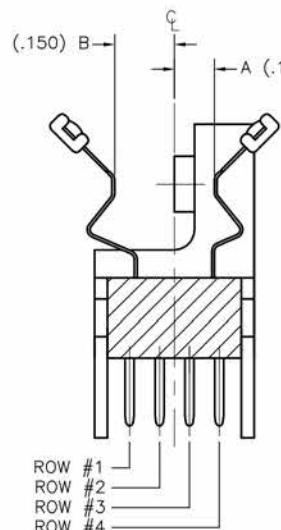
STYLE 933



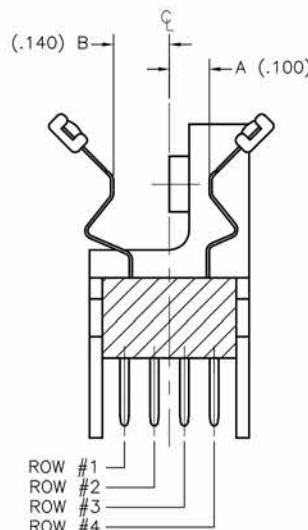
STYLE 925



STYLE 927



STYLE 947



STYLE 946

DISTANCE FROM  $\frac{C}{2}$  (A)

1 .005  
2 .055

DISTANCE FROM  $\frac{C}{2}$  (A OR B)

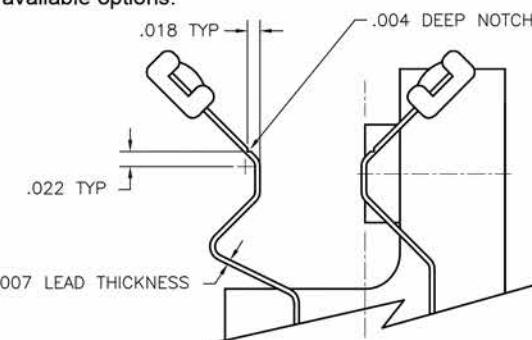
3 .047  
4 .100  
5 .130  
6 .140

DISTANCE FROM  $\frac{C}{2}$  (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.



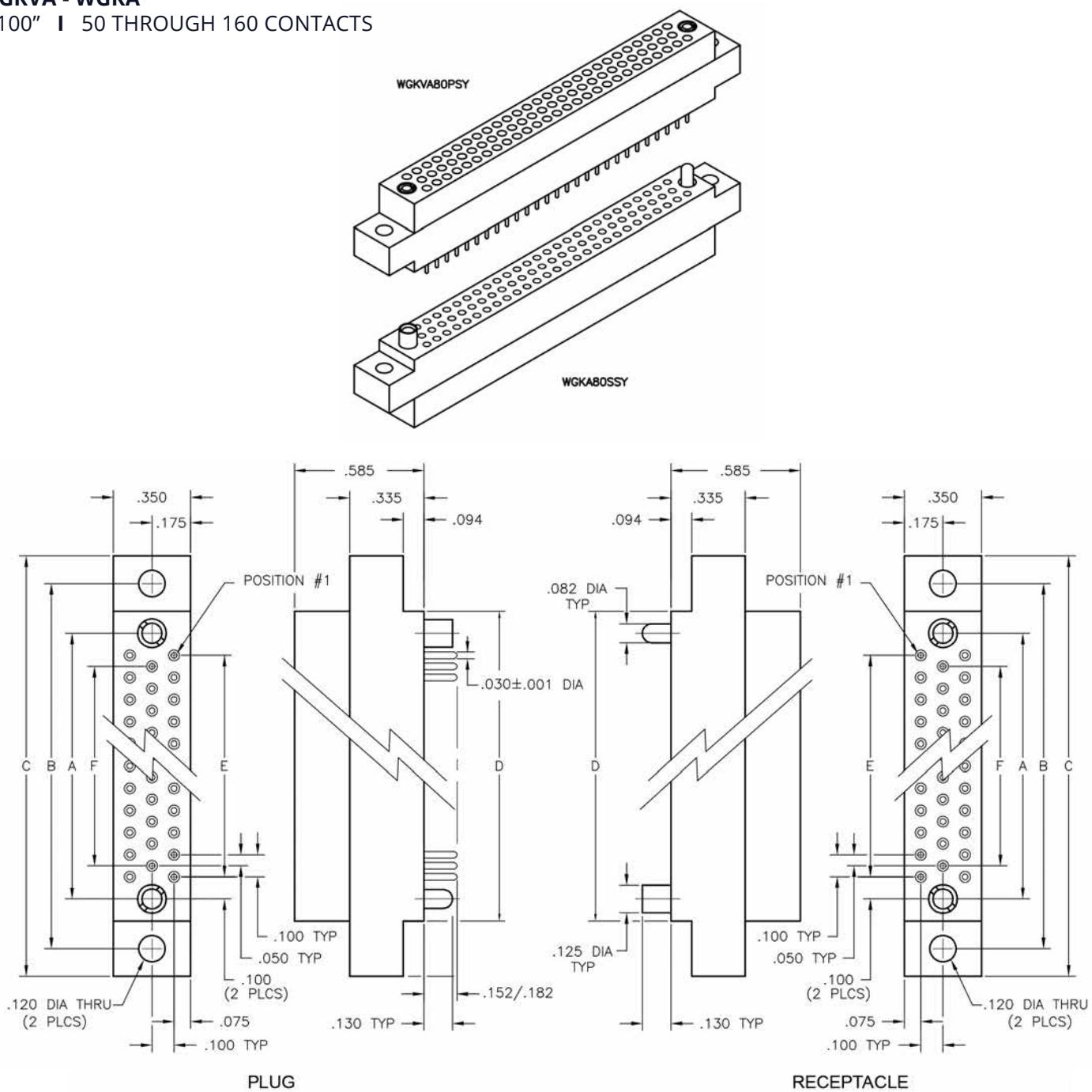
CONTACT NOTCH DETAIL

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# THREE ROW - CHASSIS-TO-CHASSIS

## WGKVA - WGKA

0.100" | 50 THROUGH 160 CONTACTS



## LEAD CONFIGURATION OPTIONS

PLUG: WGKVA 80 P SY  
 RECEPTACLE: WGKA 80 S SY  
 XXXXX XX XXXX XX

### PLUG

### RECEPTACLE

#### SERIES

WGKVA Plug, straight, crimp removable,  
 with mounting ears  
 • WGKVA and WGKA also mate with WG or WGV connectors. "A" means contacts are included.

#### SIZE

XX Number of contacts (50, 62, 80, 92, 104 or 160) | XX Number of contacts (50, 62, 80, 92, 104 or 160)

#### CONTACTS

- The use of gaskets is not recommended with crimp socket contacts.
- When using crimp contacts with 20 gage barrel, barrel must be cut off prior to removing contact from connector body.

#### TYPE CONTACTS/TERMINATIONS:

P Pin, straight, crimp removable, 22 AWG  
 S Socket, straight, crimp removable, 22 AWG  
 SA Same as above

#### TYPE CONTACTS/TERMINATIONS:

S Socket, straight, crimp removable, 22 AWG  
 SA Same as above  
 P Pin, straight, crimp removable, 22 AWG

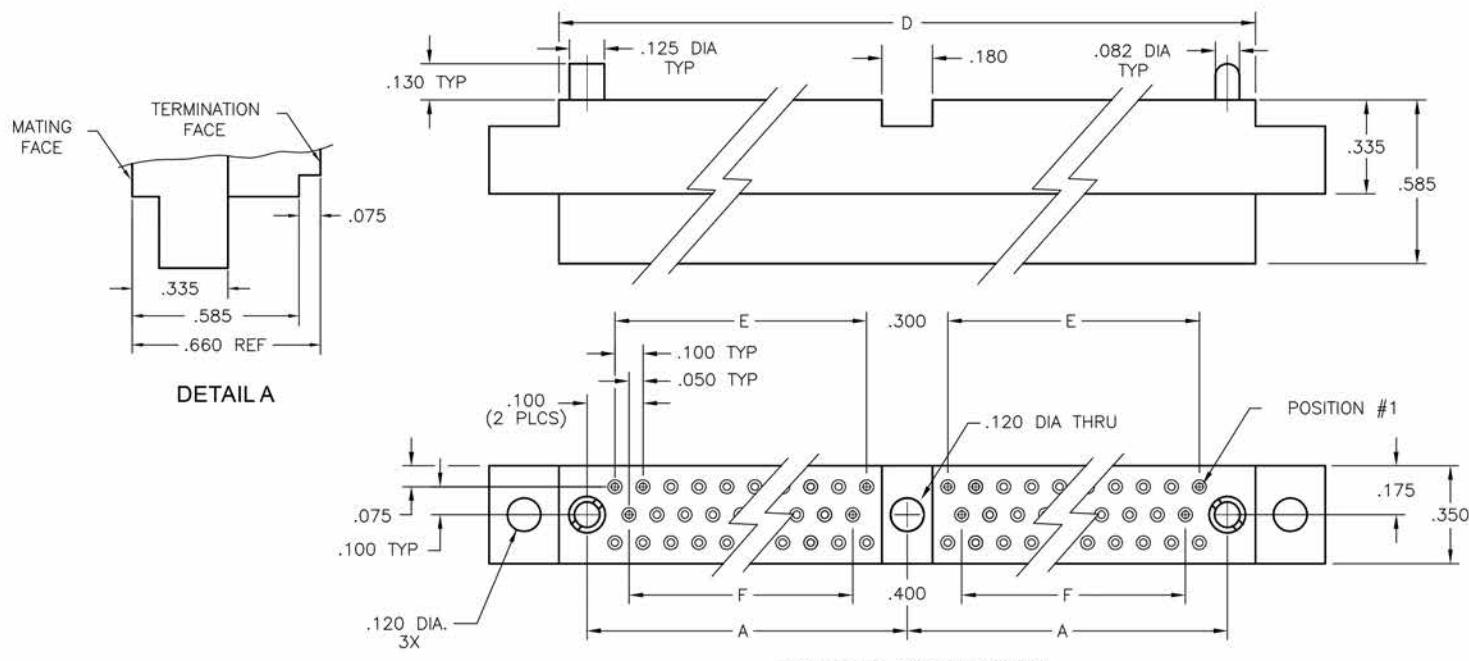
#### HARDWARE

SY Guide set  
 SY-# Guide set, polarized  
 J Fixed jackset  
 JT Turning jackset, .500"  
 JTA Turning jackset, .200"  
 JTB Hex turning jackset, .200"  
 JTC Hex turning jackset, .500"  
 JTL Turning jackset, long, .700"

SY Guide set  
 SY-# Guide set, polarized  
 J Fixed jackset  
 JT Turning jackset, .500"  
 JTA Turning jackset, .200"  
 JTB Hex turning jackset, .200"  
 JTC Hex turning jackset, .500"  
 JTL Turning jackset, long, .700"

#### OPTIONS

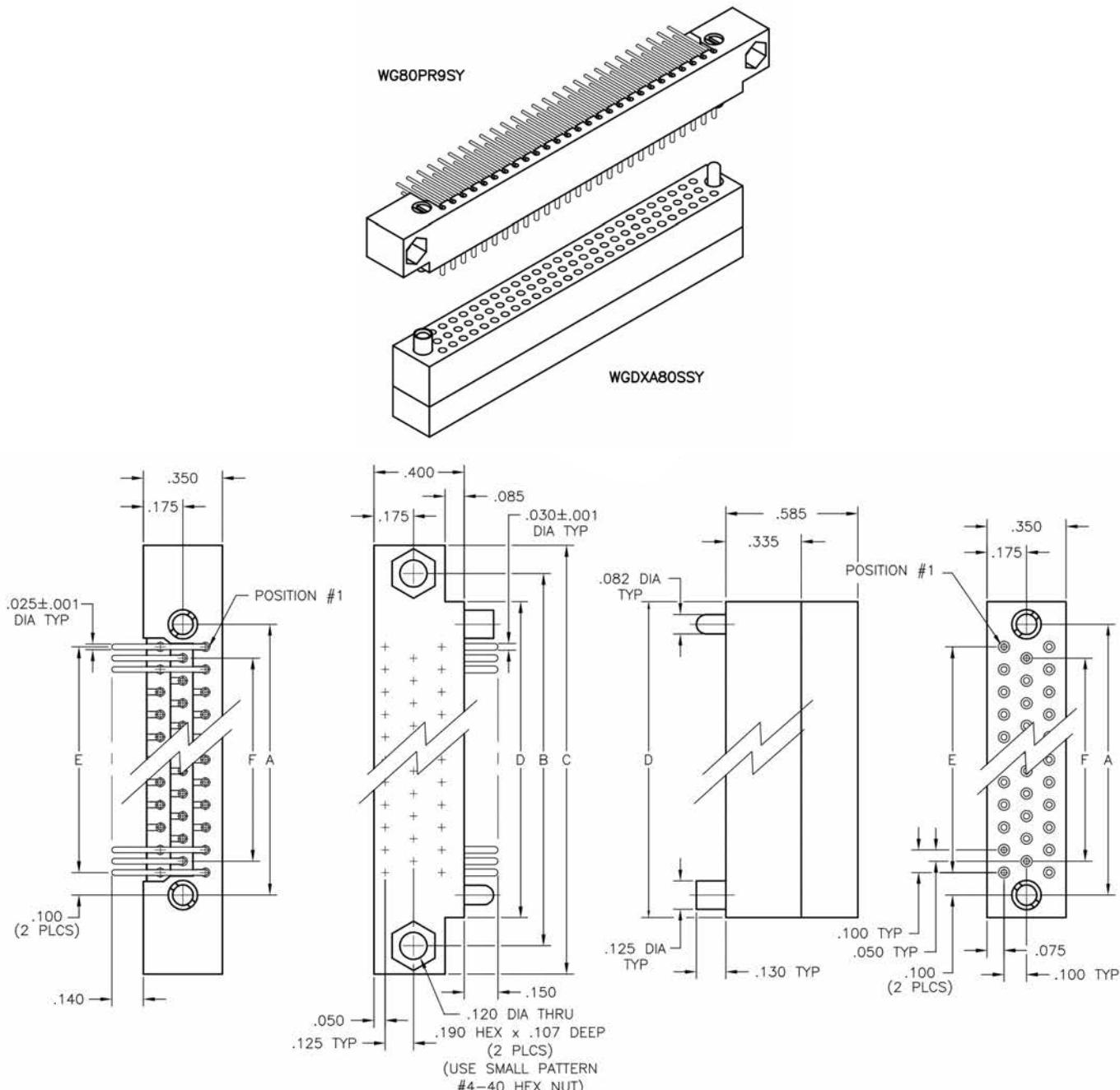
- Option Codes: Add to the end of the part number. Example: WGDXA80SSY-C45. Call factory for additional codes.
- A53 Socket, straight, crimp removable, 20 AWG
- C45 Additional .075" material at termination face for strain relief of crimped wires (22 AWG only). See Detail A below.



# THREE ROW - PC CARD-TO-CHASSIS

WG - WGDXA

0.100" | 50 THROUGH 160 CONTACTS



PLUG

RECEPTACLE

DIMENSIONS						
SIZE	A	B	C	D	E	F
50	1.800	2.250	2.500	2.000	1.600	1.500
62	2.200	2.650	2.900	2.400	2.000	1.900
80	2.800	3.250	3.500	3.000	2.600	2.500
92	3.200	3.650	3.900	3.400	3.000	2.900
104	3.600	4.050	4.300	3.800	3.400	3.300
160*	2.850	3.075	6.400	5.900	2.600	2.500

\* = SEE OPPOSITE PAGE FOR 160 POSITION CONFIGURATION

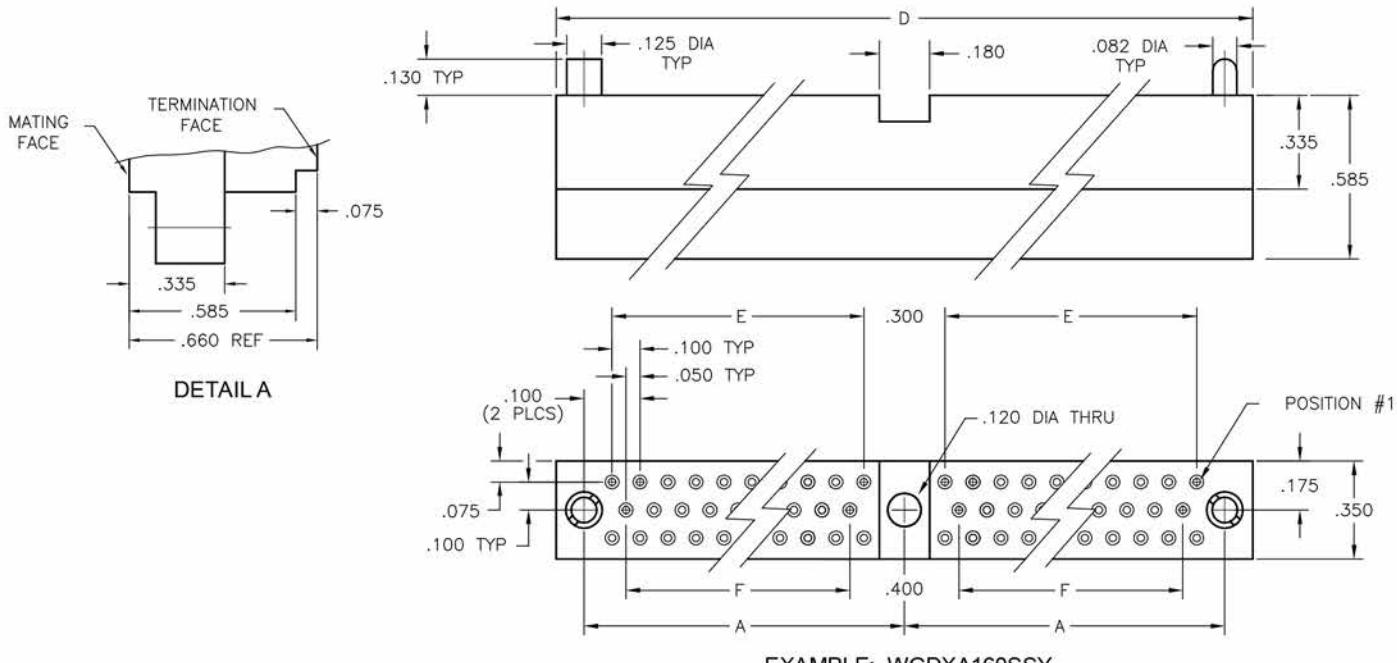
**molex**

## LEAD CONFIGURATION OPTIONS

PLUG: WG 80 PR9 SY  
RECEPTACLE: WGDXA 80 S SY  
XXXXXX XX XXX XX

PLUG		RECEPTACLE		XXXXXX	XX	XXX					
SERIES											
WG	Plug, right angle, with mounting ears	WGDXA Receptacle, straight, crimp removable, without mounting ears									
• WGKA and WGDXA also mate with WGV connectors. "A" means contacts are included.											
SIZE											
XX	Number of contacts (50, 62, 80, 92, 104 or 160)	XX Number of contacts (50, 62, 80, 92, 104 or 160)									
CONTACTS											
<ul style="list-style-type: none"> <li>The use of gaskets is not recommended with crimp socket contacts.</li> <li>The contact type determines the image of the connector. Pin, right angle contacts are always plug image. Straight pin or sockets are receptacle image.</li> <li>When using crimp contacts with 20 gage barrel, barrel must be cut off prior to removing contact from connector body.</li> </ul>											
TYPE CONTACTS/TERMINATIONS:				TYPE CONTACTS/TERMINATIONS:							
PR7	Pin, right angle, dip solder, .109" x .025" dia	S      Socket, straight, crimp removable, 22 AWG									
PR9	Pin, right angle, dip solder, .140" x .025" dia	SA     Same as above									
PR11	Pin, right angle, dip solder, .172" x .025" dia	P      Pin, straight, crimp removable, 22 AWG									
PRW40	Pin, right angle, wire wrap®, .625"										
HARDWARE											
SY	Guide set	SY     Guide set									
SY-#	Guide set, polarized	SY-#   Guide set, polarized									
J	Fixed jackset	J      Fixed jackset									
		JT     Turning jackset, .500"									
		JTA    Turning jackset, .200"									
		JTB    Hex turning jackset, .200"									
		JTC    Hex turning jackset, .500"									
		JTL    Turning jackset, long, .700"									

- Option Codes: Add to the end of the part number. Example: WGDXA80SSY-C45. Call factory for additional codes.
  - 548 Bond #4-40 small pattern nut into mounting holes (for right angle plug connectors only).
  - A53 Socket, straight, crimp removable, 20 AWG
  - C45 Additional .075" material at termination face for strain relief of crimped wires (22 AWG only). See Detail A below.

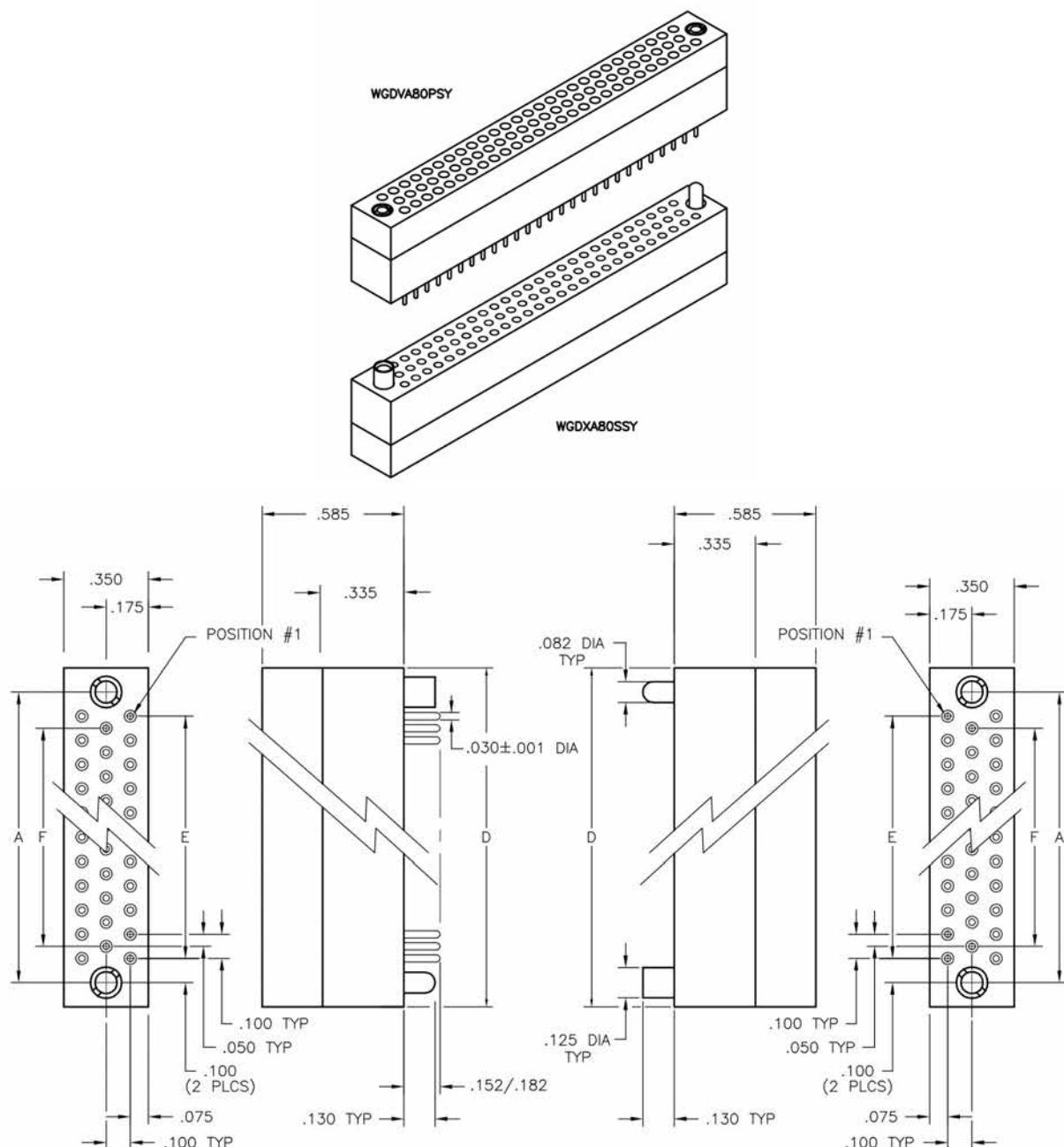


EXAMPLE: WGDXA160SSY

# THREE ROW - CHASSIS-TO-CHASSIS

## WGDVA - WGDXA

0.100" | 50 THROUGH 160 CONTACTS



PLUG

RECEPTACLE

DIMENSIONS				
SIZE	A	D	E	F
50	1.800	2.000	1.600	1.500
62	2.200	2.400	2.000	1.900
80	2.800	3.000	2.600	2.500
92	3.200	3.400	3.000	2.900
104	3.600	3.800	3.400	3.300
160*	2.850	5.900	2.600	2.500

\* = SEE OPPOSITE PAGE FOR 160 POSITION CONFIGURATION

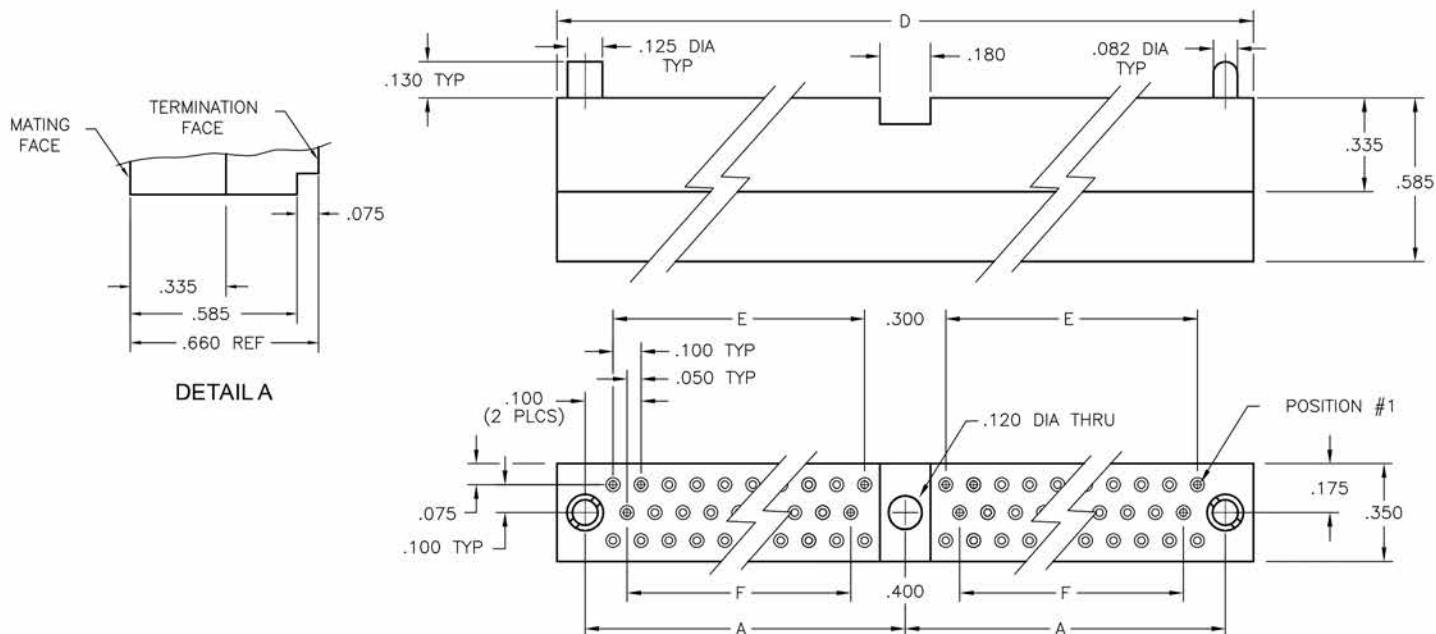
## LEAD CONFIGURATION OPTIONS

PLUG: WGDVA 80 P SY  
RECEPTACLE: WGDXA 80 S SY  
XXXXXX XX XXX XX

PLUG	RECEPTACLE	XXXXX XX XXX	
SERIES			
SIZE	CONTACTS	HARDWARE	
WGDVA	Plug, straight, crimp removable, without mounting ears	WGDXA	Receptacle, straight, crimp removable, without mounting ears
• WGDVA and WGDXA also mate with WG or WGV connectors. "A" means contacts are included.			
XX	Number of contacts (50, 62, 80, 92, 104 or 160)	XX	Number of contacts (50, 62, 80, 92, 104 or 160)
P	TYPE CONTACTS/TERMINATIONS: Pin, straight, crimp removable, 22 AWG	S	TYPE CONTACTS/TERMINATIONS: Socket, straight, crimp removable, 22 AWG
S	Socket, straight, crimp removable, 22 AWG	SA	Same as above
SA	Same as above	P	Pin, straight, crimp removable, 22 AWG
SY	Guide set	SY	Guide set
SY-#	Guide set, polarized	SY-#	Guide set, polarized
J	Fixed jackset	J	Fixed jackset
JT	Turning jackset, .500"	JT	Turning jackset, .500"
JTA	Turning jackset, .200"	JTA	Turning jackset, .200"
JTB	Hex turning jackset, .200"	JTB	Hex turning jackset, .200"
JTC	Hex turning jackset, .500"	JTC	Hex turning jackset, .500"
JTL	Turning jackset, long, .700"	JTL	Turning jackset, long, .700"

## OPTIONS

- Option Codes: Add to the end of the part number. Example: WGDXA80SSY-C45. Call factory for additional codes.  
-A53    Socket, straight, crimp removable, 20 AWG  
-C45    Additional .075" material at termination face for strain relief of crimped wires (22 AWG only). See Detail A below.

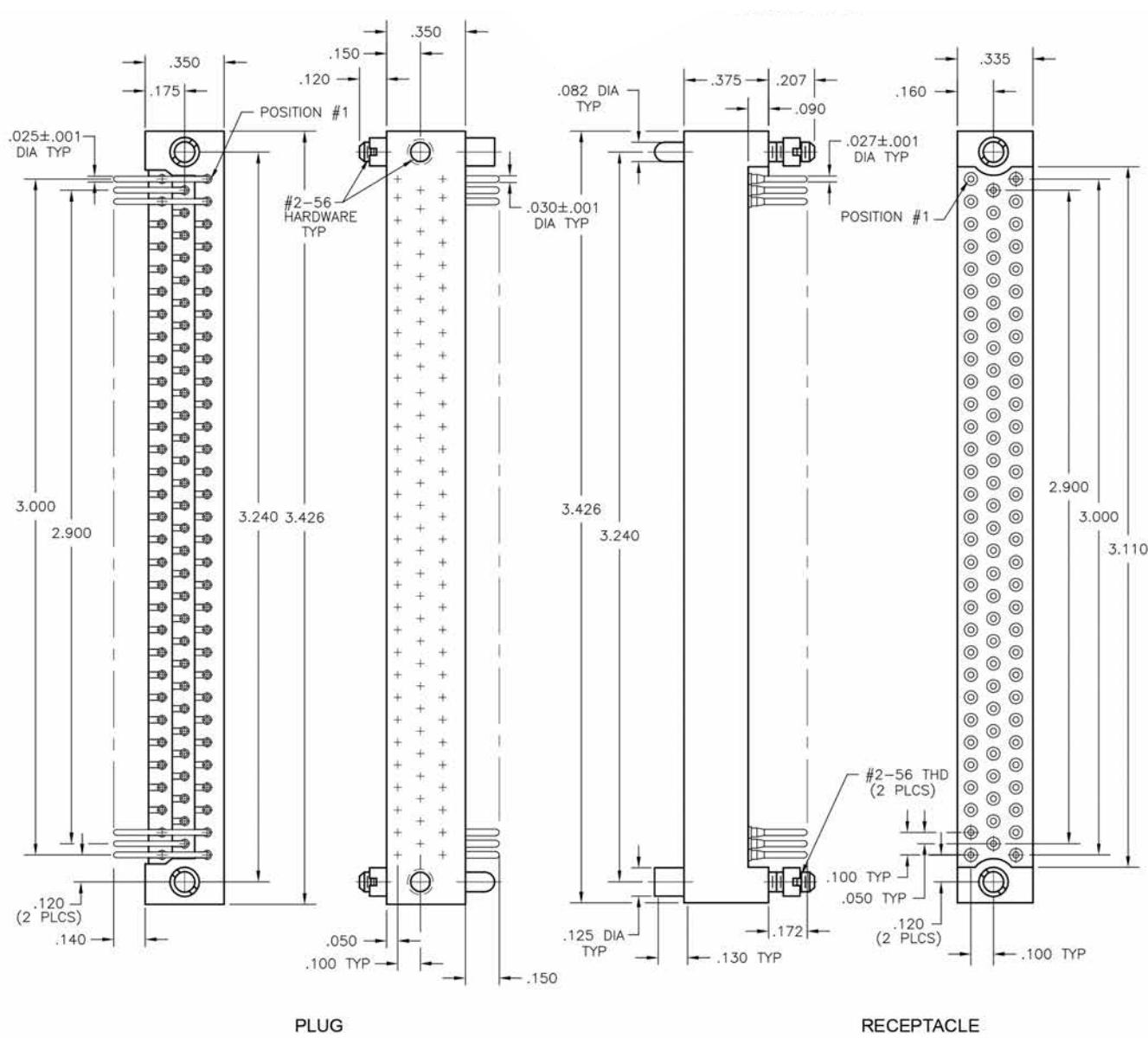
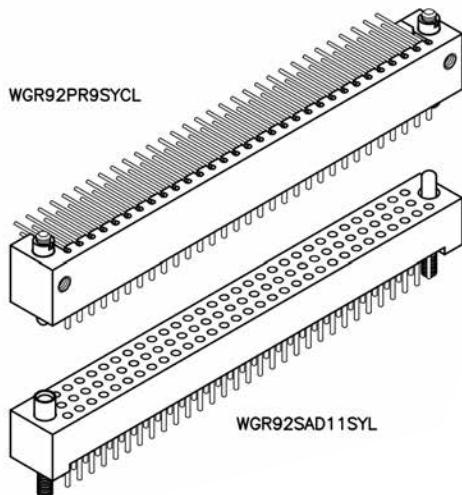


EXAMPLE: WGDXA160SSY

# THREE ROW - PC CARD-TO-BOARD OR CHASSIS

WGR - WGR

0.100" | 92 CONTACTS



PLUG

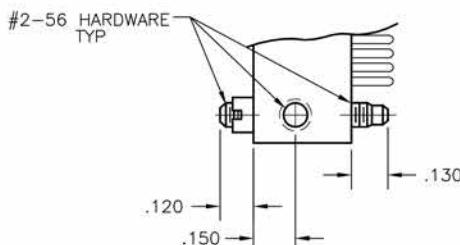
RECEPTACLE

## LEAD CONFIGURATION OPTIONS

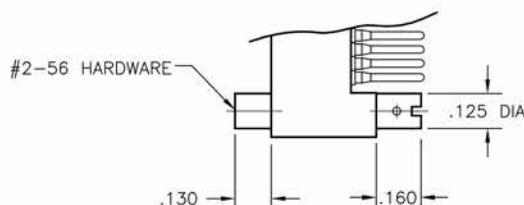
PLUG		RECEPTACLE	
WGR		SERIES	
WGR Plug, right angle, without mounting ears		WGR Receptacle, straight, without mounting ears	
92		SIZE	
92 Number of contacts		92 Number of contacts	
CONTACTS			
<ul style="list-style-type: none"> <li>When pin contacts are used, standard hardware orientation places the female hardware next to the #1 pin contact.</li> <li>When socket contacts are used, standard hardware orientation places the male hardware next to the #1 socket contact.</li> </ul>			
TYPE CONTACTS/TERMINATIONS:		TYPE CONTACTS/TERMINATIONS:	
PR7	Pin, right angle, dip solder, .109" x .025" dia	SAC	Socket, straight, solder cup (.035" I.D.)
PR9	Pin, right angle, dip solder, .140" x .025" dia	SAD7	Socket, straight, dip solder, .109" x .027" dia
PR11	Pin, right angle, dip solder, .172" x .025" dia	SAD9	Socket, straight, dip solder, .140" x .027" dia
		SAD11	Socket, straight, dip solder, .172" x .027" dia
		SAD16	Socket, straight, dip solder, .250" x .027" dia
		SAG7	Socket, straight, dip solder, .109" x .018" dia
		SAG9	Socket, straight, dip solder, .140" x .018" dia
		SAG11	Socket, straight, dip solder, .172" x .018" dia
		SAP	Socket, straight, pin termination .150", connector saver
		SAW40	Socket, straight, wire wrap®, .625"
		SAF6	Socket, straight, flex circuit, .093"
HARDWARE			
SYCL	Guide set, cross hole mount	SYL	Guide set, long
JCL	Fixed jackset, cross hole mount	JT	Turning jackset, .460"
		JTA	Turning jackset, .160"
OPTIONS			

- Option Codes: Add to the end of the part number. Example: WGR92PR9JCL-D01. Call factory for additional codes.
- D01 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with 63/37 or 60/40 solder.
- P39 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with SAC305 solder (lead free).

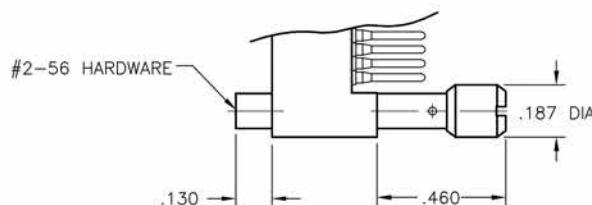
= Option not RoHS compliant



EXAMPLE: -JCL HARDWARE  
(PLUG)



EXAMPLE: -JTA HARDWARE  
(RECEPTACLE)

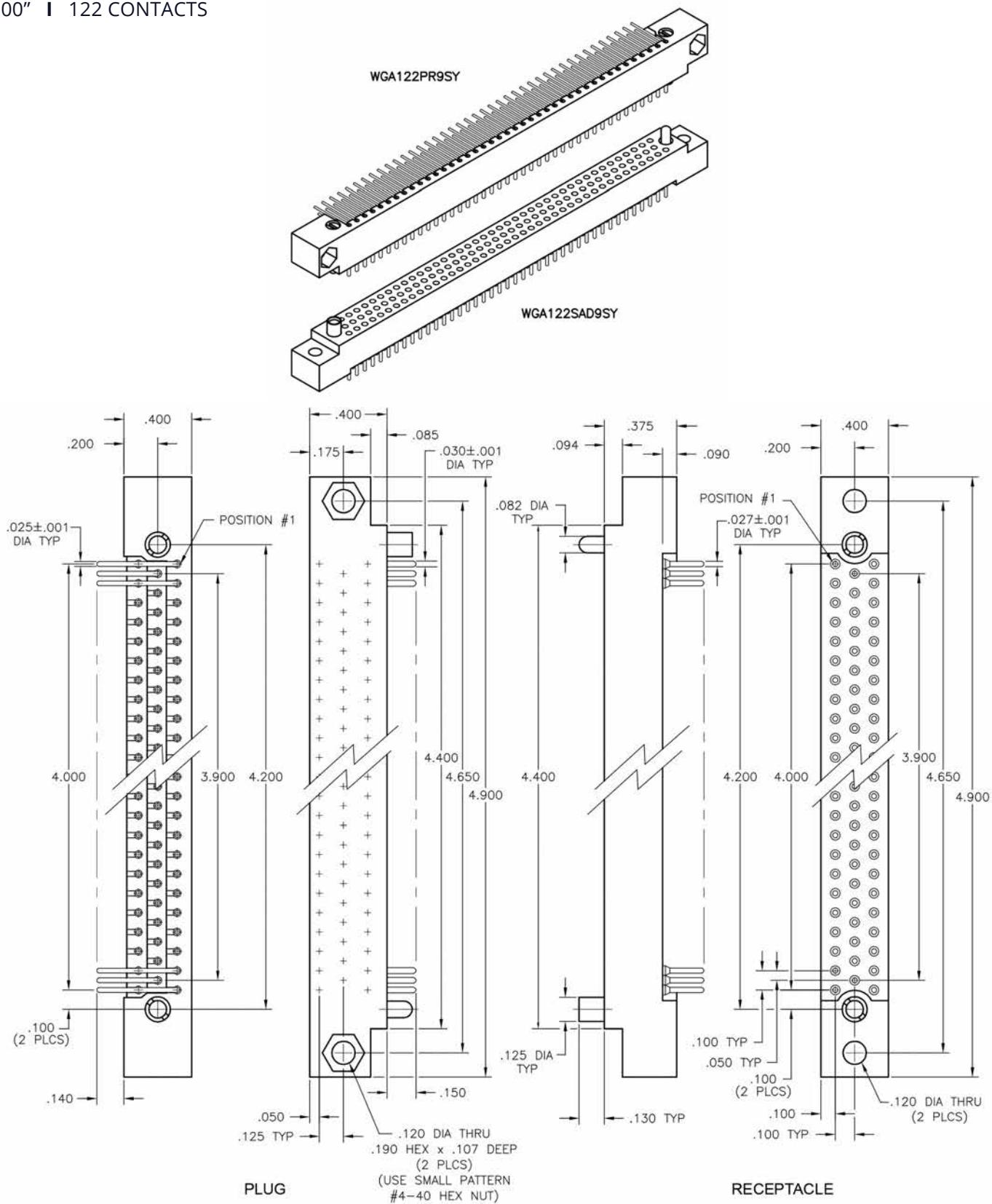


EXAMPLE: -JT HARDWARE  
(RECEPTACLE)

## THREE ROW - PC CARD-TO-BOARD OR CHASSIS

## WGA - WGA

0.100" | 122 CONTACTS



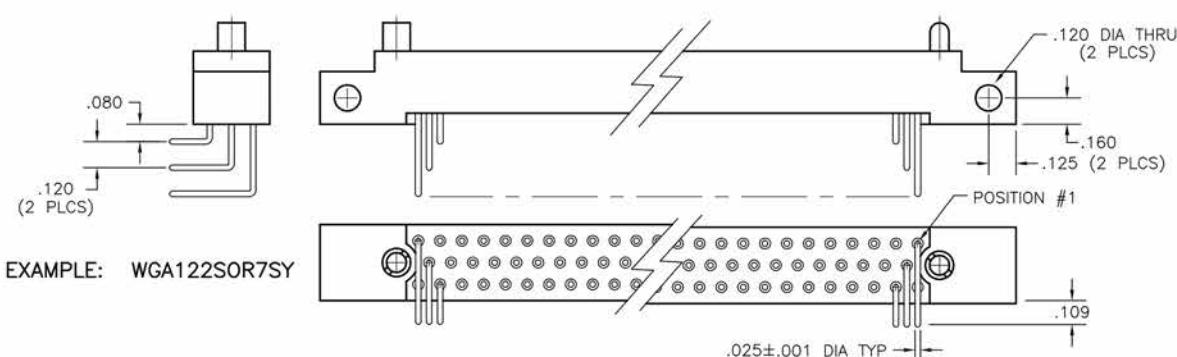
PLEASE CONSULT THE MOLEX WEBSITE FOR THE LATEST VERSION OF THIS INFORMATION PRIOR TO BEGINNING ANY DESIGN WORK.  
SOURCE: CTW055-REV A

AIRBORN W SERIES CONNECTORS | W-63

**molex**

## LEAD CONFIGURATION OPTIONS

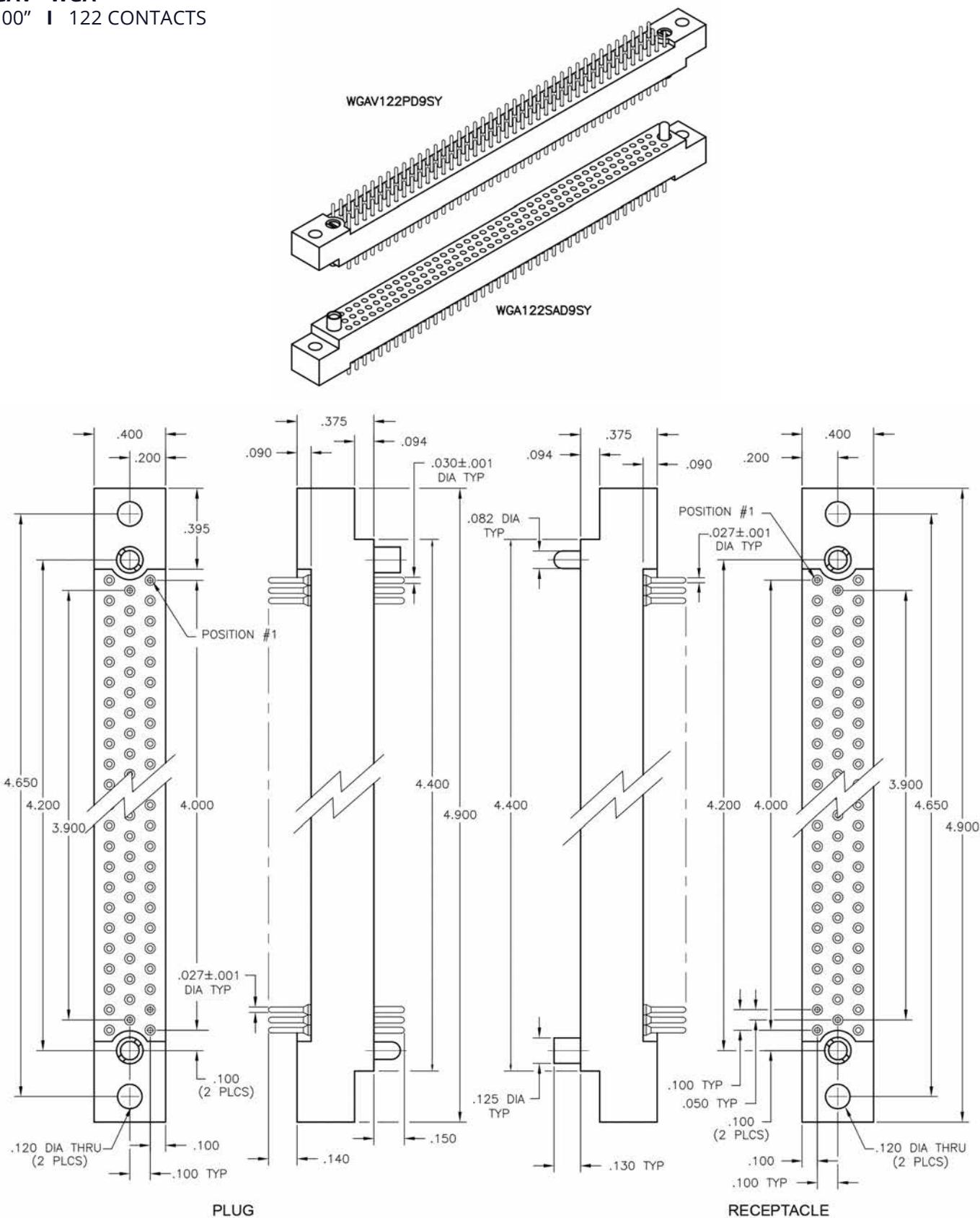
PLUG		RECEPTACLE			
SERIES		SERIES			
WGA Plug, right angle, with mounting ears		WGA Receptacle, straight, with mounting ears WGA Receptacle, right angle, with mounting ears			
SIZE		SIZE			
122 Number of contacts		122 Number of contacts			
CONTACTS					
<ul style="list-style-type: none"> <li>The contact type determines image of connector. Pin, right angle contacts are always plug image. Straight pin contacts or socket contacts are receptacle image.</li> </ul>					
TYPE CONTACTS/TERMINATIONS:		TYPE CONTACTS/TERMINATIONS:			
PR7 Pin, right angle, dip solder, .109" x .025" dia		SAC Socket, straight, solder cup (.035" I.D.)			
PR9 Pin, right angle, dip solder, .140" x .025" dia		SAD7 Socket, straight, dip solder, .109" x .027" dia			
PR11 Pin, right angle, dip solder, .172" x .025" dia		SAD9 Socket, straight, dip solder, .140" x .027" dia			
PRW32 Pin, right angle, wire wrap®, .500"		SAD11 Socket, straight, dip solder, .172" x .027" dia			
SAF3 Socket, straight, flex circuit, .050"		SAF6 Socket, straight, flex circuit, .093"			
SAF9 Socket, straight, flex circuit, .140"		SAF9 Socket, straight, flex circuit, .140"			
SAG7 Socket, straight, dip solder, .109" x .018" dia		SAG9 Socket, straight, dip solder, .140" x .018" dia			
SAG11 Socket, straight, dip solder, .172" x .018" dia		SAG11 Socket, straight, dip solder, .172" x .018" dia			
SAP Socket, straight, pin termination .150", connector saver		SAP Socket, straight, pin termination .150", connector saver			
SAW24 Socket, straight, wire wrap®, .375"		SAW40 Socket, straight, wire wrap®, .625"			
SOR7 Socket, right angle, dip solder, .109" x .025" dia		SOR7 Socket, right angle, dip solder, .109" x .025" dia			
SOR9 Socket, right angle, dip solder, .140" x .025" dia		SOR9 Socket, right angle, dip solder, .140" x .025" dia			
SOR11 Socket, right angle, dip solder, .172" x .025" dia		SOR11 Socket, right angle, dip solder, .172" x .025" dia			
HARDWARE					
SY Guide set		SY Guide set			
SY-# Guide set, polarized		SY-# Guide set, polarized			
SYL Guide set, long		SYL Guide set, long			
J Fixed jackset		J Fixed jackset			
JT Turning jackset, .435"		JT Turning jackset, .460"			
JTA Turning jackset, .135"		JTA Turning jackset, .160"			
JTB Hex turning jackset, .135"		JTB Hex turning jackset, .160"			
JTC Turning jackset, .435"		JTC Turning jackset, .460"			
JTL Turning jackset, long, .635"		JTL Turning jackset, long, .660"			
OPTIONS					
<ul style="list-style-type: none"> <li>Option Codes: Add to the end of the part number. Example: WGA122PR9SY548. Call factory for additional codes.</li> </ul>					
<ul style="list-style-type: none"> <li>-342 Remove mounting ears. (.250" each end)</li> <li>-548 Bond #4-40 small pattern nut into mounting holes (for right angle plug connectors only).</li> <li>-B82 Termination face sealed against conformal coating</li> <li>-D01 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with 63/37 or 60/40 solder. <input checked="" type="checkbox"/></li> <li>-P39 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with SAC305 solder (lead free)</li> <li>-G69 Solder cups fixed in an outward orientation (otherwise contacts will rotate)</li> <li>-413 Straight pin contacts in right angle plug molding with solder cup terminals extending .100" beyond molding.</li> <li>-D54 Combine -B82 and -D01 special codes.</li> </ul>					
<input checked="" type="checkbox"/> = Option not RoHS compliant					



# THREE ROW - SANDWICH BOARDS

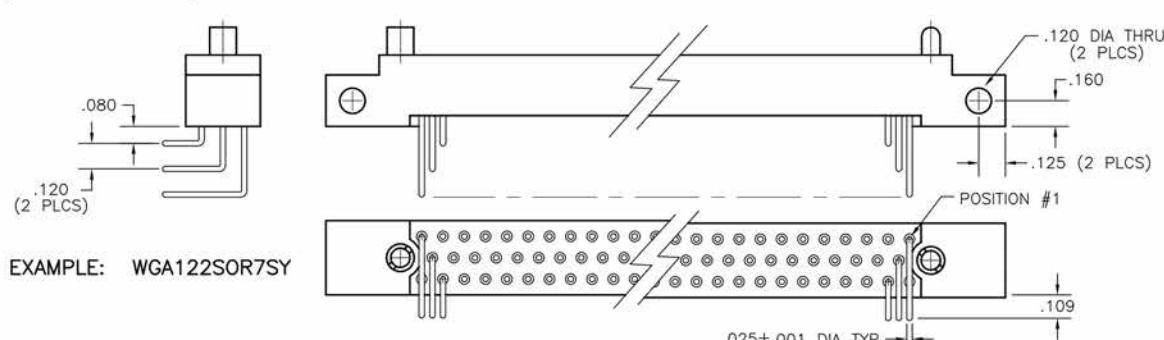
## WGAV - WGA

0.100" | 122 CONTACTS



## LEAD CONFIGURATION OPTIONS

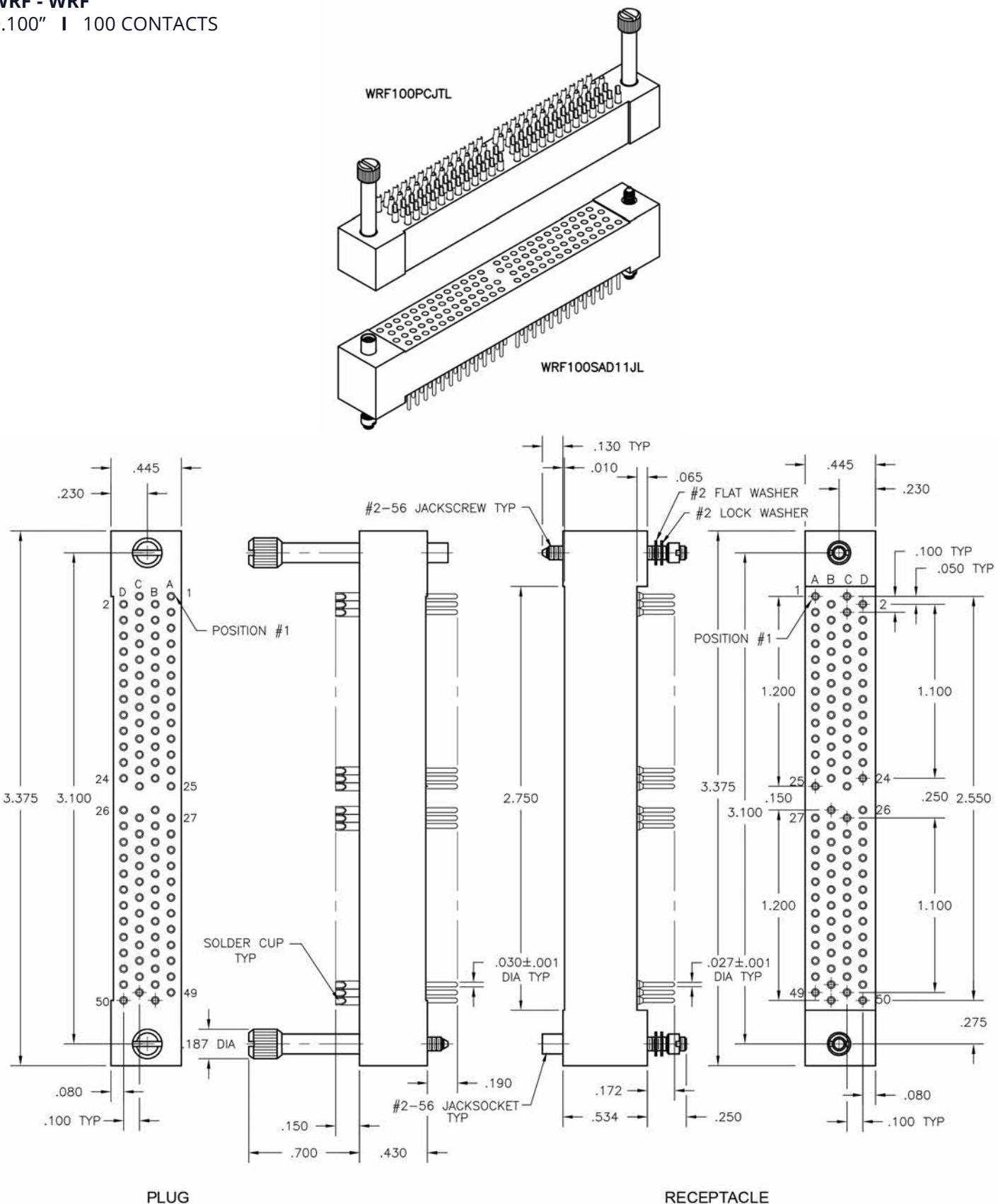
PLUG		RECEPTACLE		PLUG: WGAV 122 PD9 SY RECEPTACLE: WGA 122 SAD9 SY XXXX XXX XXXX XX		
SERIES						
WGAV Plug, straight, with mounting ears		WGA Receptacle, straight, with mounting ears WGA Receptacle, right angle, with mounting ears				
SIZE						
122 Number of contacts		122 Number of contacts				
CONTACTS						
<ul style="list-style-type: none"> <li>Pin or socket contacts can be used in either plug or receptacle.</li> <li>When pin contacts are used, standard hardware orientation places the female hardware next to the #1 pin contact.</li> <li>When socket contacts are used, standard hardware orientation places the male hardware next to the #1 socket contact.</li> </ul>						
TYPE CONTACTS/TERMINATIONS:		TYPE CONTACTS/TERMINATIONS:				
PC Pin, straight, solder cup (.035" I.D.)		SAC Socket, straight, solder cup (.035" I.D.)				
PD7 Pin, straight, dip solder, .109" x .027" dia		SAD7 Socket, straight, dip solder, .109" x .027" dia				
PD9 Pin, straight, dip solder, .140" x .027" dia		SAD9 Socket, straight, dip solder, .140" x .027" dia				
PD11 Pin, straight, dip solder, .172" x .027" dia		SAD11 Socket, straight, dip solder, .172" x .027" dia				
PD15 Pin, straight, dip solder, .234" x .027" dia		SAF3 Socket, straight, flex circuit, .050"				
PF6 Pin, straight, flex circuit, .093"		SAF6 Socket, straight, flex circuit, .093"				
		SAF9 Socket, straight, flex circuit, .140"				
		SAG7 Socket, straight, dip solder, .109" x .018" dia				
		SAG9 Socket, straight, dip solder, .140" x .018" dia				
		SAG11 Socket, straight, dip solder, .172" x .018" dia				
		SAP Socket, straight, pin termination, .150", connector saver				
		SAW24 Socket, straight, wire wrap®, .375"				
		SAW40 Socket, straight, wire wrap®, .625"				
		SOR7 Socket, right angle, dip solder, .109" x .025" dia				
		SOR9 Socket, right angle, dip solder, .140" x .025" dia				
		SOR11 Socket, right angle, dip solder, .172" x .025" dia				
HARDWARE						
<ul style="list-style-type: none"> <li>Plug facial seal gaskets and hoods; order separately or add "Q" in part number. Example: WGAV122PD9QJ. See "Gaskets" and "Hoods" in Accessories section for instructions.</li> </ul>						
SY Guide set		SY Guide set				
SY-# Guide set, polarized		SY-# Guide set, polarized				
SYL Guide set, long		SYL Guide set, long				
J Fixed jackset		J Fixed jackset				
JL Fixed jackset, long		JL Fixed jackset, long				
JT Turning jackset, .460"		JT Turning jackset, .460"				
JTA Turning jackset, .160"		JTA Turning jackset, .160"				
JTB Hex turning jackset, .160"		JTB Hex turning jackset, .160"				
JTC Hex turning jackset, .460"		JTC Hex turning jackset, .460"				
JTL Turning jackset, long, .660"		JTL Turning jackset, long, .660"				
OPTIONS						
<ul style="list-style-type: none"> <li>Option Codes: Add to the end of the part number. Example: WGAV122PD9SY-D01. Call factory for additional codes.</li> </ul>						
<ul style="list-style-type: none"> <li>-342 Remove mounting ears. (.250" each end)</li> <li>-B82 Termination face sealed against conformal coating</li> <li>-D01 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with 63/37 or 60/40 solder. <input checked="" type="checkbox"/></li> <li>-P39 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with SAC305 solder (lead free).</li> <li>-G69 Solder cups fixed in an outward orientation (otherwise contacts will rotate)</li> </ul>						
<input checked="" type="checkbox"/> = Option not RoHS compliant						



## FOUR ROW – CABLE-TO-BOARD OR PANEL

## WRF - WRF

0.100" | 100 CONTACTS



PLEASE CONSULT THE MOLEX WEBSITE FOR THE LATEST VERSION OF THIS INFORMATION PRIOR TO BEGINNING ANY DESIGN WORK.  
SOURCE: CTW059-REV A

AIRBORN W SERIES CONNECTORS | W-67

**molex**

## LEAD CONFIGURATION OPTIONS

PLUG: WRF 100 PC JTL  
 RECEPTACLE: WRF 100 SAD11 JL  
 XXX XXX XXXXX XXX

### PLUG

### RECEPTACLE

#### SERIES

WRF Plug, straight, without mounting ears

| WRF Receptacle, straight, without mounting ears

#### SIZE

100 Number of contacts

| 100 Number of contacts

#### CONTACTS

- Contact identification: Looking at the mating face of the connector, each contact has a double indicator designation, including a row letter and a position number. Rows "A" & "C" contain odd numbers 1 thru 49; rows "B" & "D" contain even numbers 2 thru 50.

#### TYPE CONTACTS/TERMINATIONS:

PC Pin, straight, solder cup  
 PD11 Pin, straight, dip solder, .172" x .027" dia  
 PF6 Pin, straight, flex circuit, .093"

#### TYPE CONTACTS/TERMINATIONS:

SAC Socket, straight, solder cup (.035" I.D.)  
 SAD9 Socket, straight, dip solder, .140" x .027" dia  
 SAD11 Socket, straight, dip solder, .172" x .027" dia  
 SAP Socket, straight, pin termination .150", connector saver

#### HARDWARE

JTB Hex turning jackset, .200"  
 JTL Long turning jackset, .700"

| J Fixed jackset  
 JL Fixed jackset, long

#### OPTIONS

- Option Codes: Add to the end of the part number. Example: WRF100SAD11JL-D54. Call factory for additional codes.

-B82 Termination face sealed against conformal coating

-D01 Pretinned contact terminations (except solder cups, wire wraps <sup>®</sup> and flex contacts) with 63/37 or 60/40 solder.

-P39 Pretinned contact terminations (except solder cups, wire wraps <sup>®</sup> and flex contacts) with SAC305 solder (lead free).

-D54 Combine -B82 & -D01 special codes

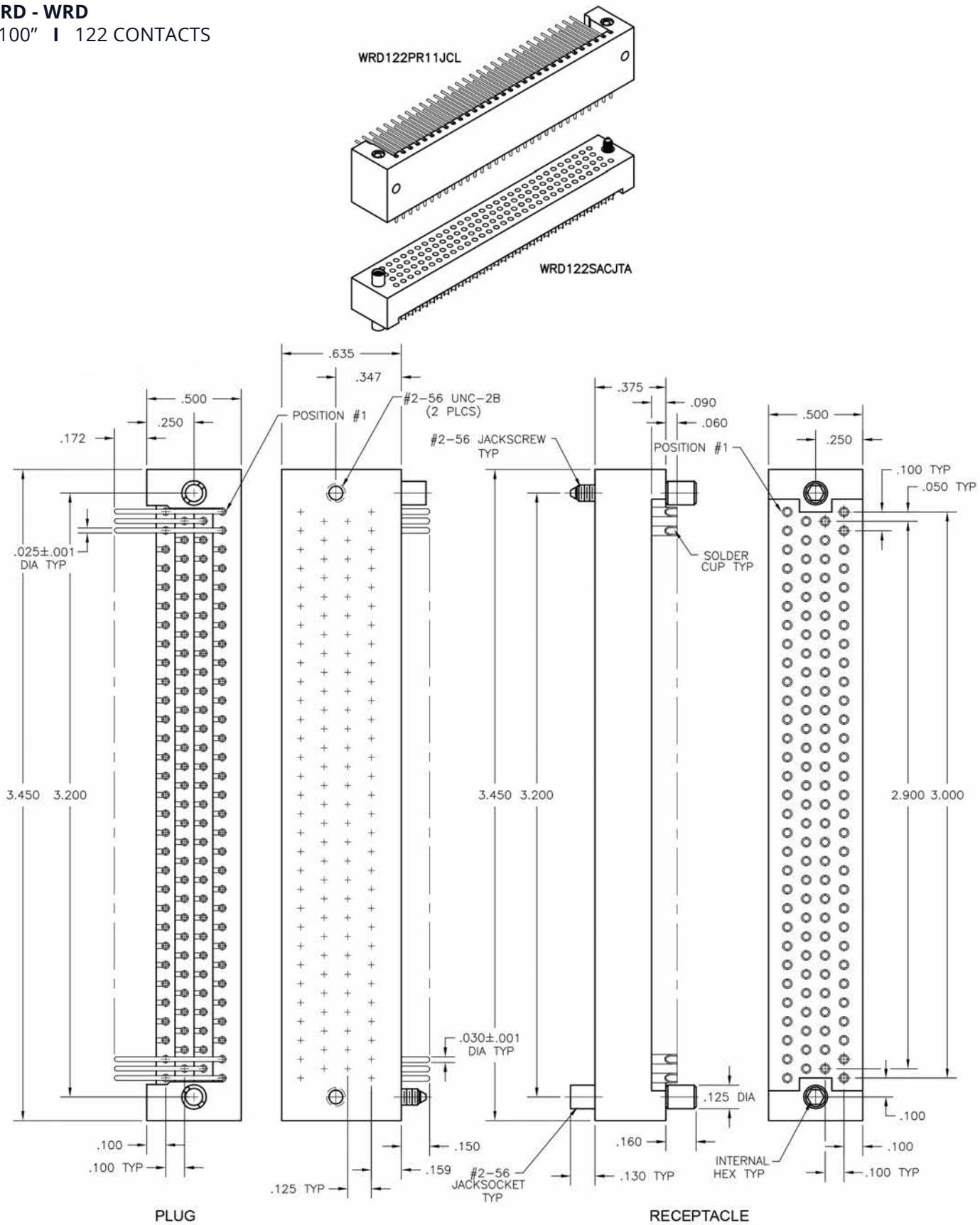
= Option not RoHS compliant

**molex**

## FOUR ROW - PC CARD-TO-BOARD OR CHASSIS

**WRD - WRD**

0.100" | 122 CONTACTS



**molex**

## LEAD CONFIGURATION OPTIONS

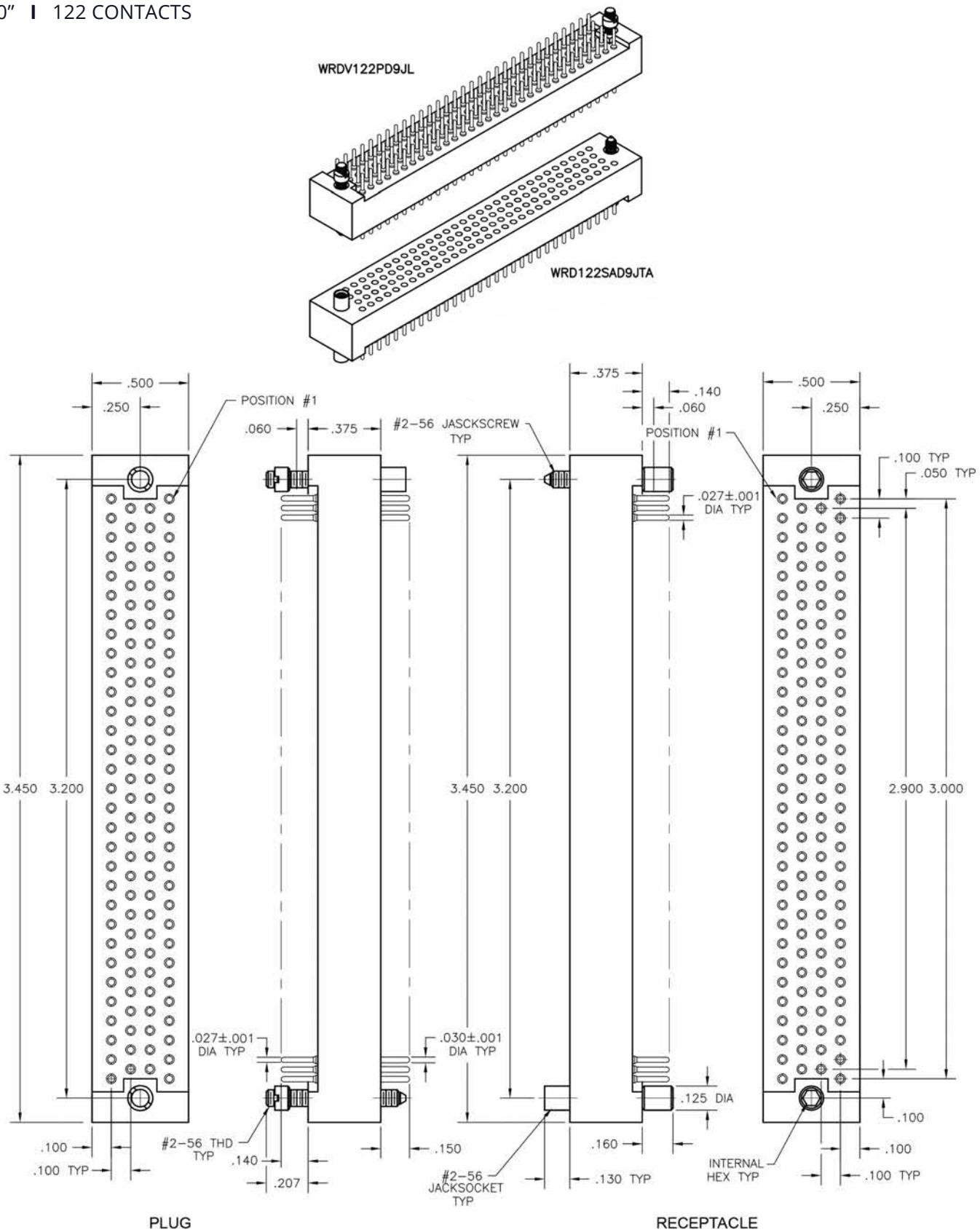
PLUG: WRD 122 PR11 JCL  
 RECEPTACLE: WRD 122 SAC JTA  
 XXX XXX XXXX XXX

PLUG	RECEPTACLE	
<b>SERIES</b>		
WRD Plug, right angle, without mounting ears	WRD Receptacle, straight, without mounting ears WRD Receptacle, right angle, without mounting ears	
<b>SIZE</b>		
122 Number of contacts	122 Number of contacts	
<b>CONTACTS</b>		
<b>TYPE CONTACTS/TERMINATIONS:</b> PR5 Pin, right angle, dip solder, .078" x .025" dia PR7 Pin, right angle, dip solder, .109" x .025" dia PR9 Pin, right angle, dip solder, .140" x .025" dia PR11 Pin, right angle, dip solder, .172" x .025" dia		
<b>TYPE CONTACTS/TERMINATIONS:</b> SAC Socket, straight, solder cup (.035" I.D.) SAD7 Socket, straight, dip solder, .109" x .027" dia SAD9 Socket, straight, dip solder, .140" x .027" dia SAD11 Socket, straight, dip solder, .172" x .027" dia SAD15 Socket, straight, dip solder, .234" x .027" dia SAF3 Socket, straight, flex circuit, .050" SAF6 Socket, straight, flex circuit, .093" SAG7 Socket, straight, dip solder, .109" x .018" dia SAG9 Socket, straight, dip solder, .140" x .018" dia SAG11 Socket, straight, dip solder, .172" x .018" dia SAP Socket, straight, pin termination .150", connector saver SOR9 Socket, right angle, dip solder, .140"		
<b>HARDWARE</b>		
SYCL Guide set, cross hole mount SYCL-# Guide set, cross hole mount, polarized JCL Fixed jackset, cross hole mount JTB Turning jackset, no cross hole	J Fixed Jackset JTA Turning jackset, .160" JTB Hex turning jackset, .160" JTL Long turning jackset, .640" SY Guide set SY-# Guide set, polarized	
<b>OPTIONS</b>		
<ul style="list-style-type: none"> <li>● Option Codes: Add to the end of the part number. Example: WRD122SAD9SY-D54. Call factory for additional codes.</li> </ul>		
<ul style="list-style-type: none"> <li>-B82 Termination face sealed against conformal coating</li> <li>-D01 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with 63/37 or 60/40 solder. <input checked="" type="checkbox"/></li> <li>-P39 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with SAC305 solder (lead free).</li> <li>-D54 Combine -B82 &amp; -D01 special codes</li> </ul>		
<input checked="" type="checkbox"/> = Option not RoHS compliant		

## FOUR ROW – SANDWICH BOARDS

## WRDV - WRD

0.100" | 122 CONTACTS



PLEASE CONSULT THE MOLEX WEBSITE FOR THE LATEST VERSION OF THIS INFORMATION PRIOR TO BEGINNING ANY DESIGN WORK.  
SOURCE: CTW063-REV A

AIRBORN W SERIES CONNECTORS | W-71

**molex**

## LEAD CONFIGURATION OPTIONS

PLUG: WRDV 122 PD9 JL

RECEPTACLE: WRD 122 SAD9 JTA

XXXX XXX XXXX XXX

### PLUG

### RECEPTACLE

#### SERIES

WRDV Plug, straight, without mounting ears

WRD	Receptacle, straight, without mounting ears
WRD	Receptacle, right angle, without mounting ears

#### SIZE

122 Number of contacts

122 Number of contacts

#### CONTACTS

- Pin or socket contacts can be used in either plug or receptacle.
- When pin contacts are used, standard hardware orientation places the female hardware next to the #1 pin contact.
- When socket contacts are used, standard hardware orientation places the male hardware next to the #1 socket contact.

#### TYPE CONTACTS/TERMINATIONS:

PC	Pin, straight, solder cup (.035" I.D.)
PD7	Pin, straight, dip solder, .109" x .027" dia
PD9	Pin, straight, dip solder, .140" x .027" dia
PD11	Pin, straight, dip solder, .172" x .027" dia
PD15	Pin, straight, dip solder, .234" x .027" dia

#### TYPE CONTACTS/TERMINATIONS:

SAC	Socket, straight, solder cup (.035" I.D.)
SAD7	Socket, straight, dip solder, .109" x .027" dia
SAD9	Socket, straight, dip solder, .140" x .027" dia
SAD11	Socket, straight, dip solder, .172" x .027" dia
SAD15	Socket, straight, dip solder, .234" x .027" dia
SAF3	Socket, straight, flex circuit, .050"
SAF6	Socket, straight, flex circuit, .093"
SAG7	Socket, straight, dip solder, .109" x .018" dia
SAG9	Socket, straight, dip solder, .140" x .018" dia
SAG11	Socket, straight, dip solder, .172" x .018" dia
SAP	Socket, straight, pin termination .150", connector saver
SOR9	Socket, right angle, dip solder, .140" x .025" dia

#### HARDWARE

J	Fixed jackset
JL	Fixed jackset, long
JTA	Turning jackset, .160"
JTB	Hex turning jackset, .160"
JTL	Long turning jackset, .660"
SY	Guide set
SY#	Guide set, polarized

J	Fixed jackset
JL	Fixed jackset, long
JTA	Turning jackset, .160"
JTB	Hex turning jackset, .160"
JTL	Long turning jackset, .660"
SY	Guide set
SY#	Guide set, polarized

#### OPTIONS

- Option Codes: Add to the end of the part number. Example: WRD122SAD9SY-D01. Call factory for additional codes.

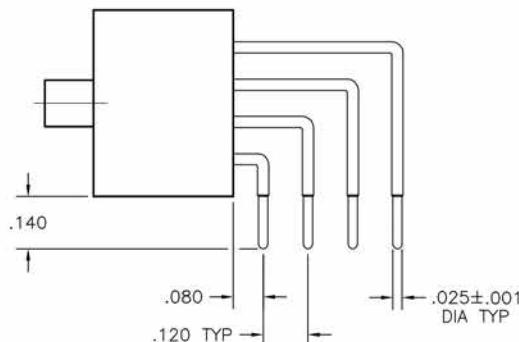
-B82 Termination face sealed against conformal coating

-D01 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with 63/37 or 60/40 solder.

-P39 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with SAC305 solder (lead free).

-D54 Combine -B82 & -D01 special codes

= Option not RoHS compliant



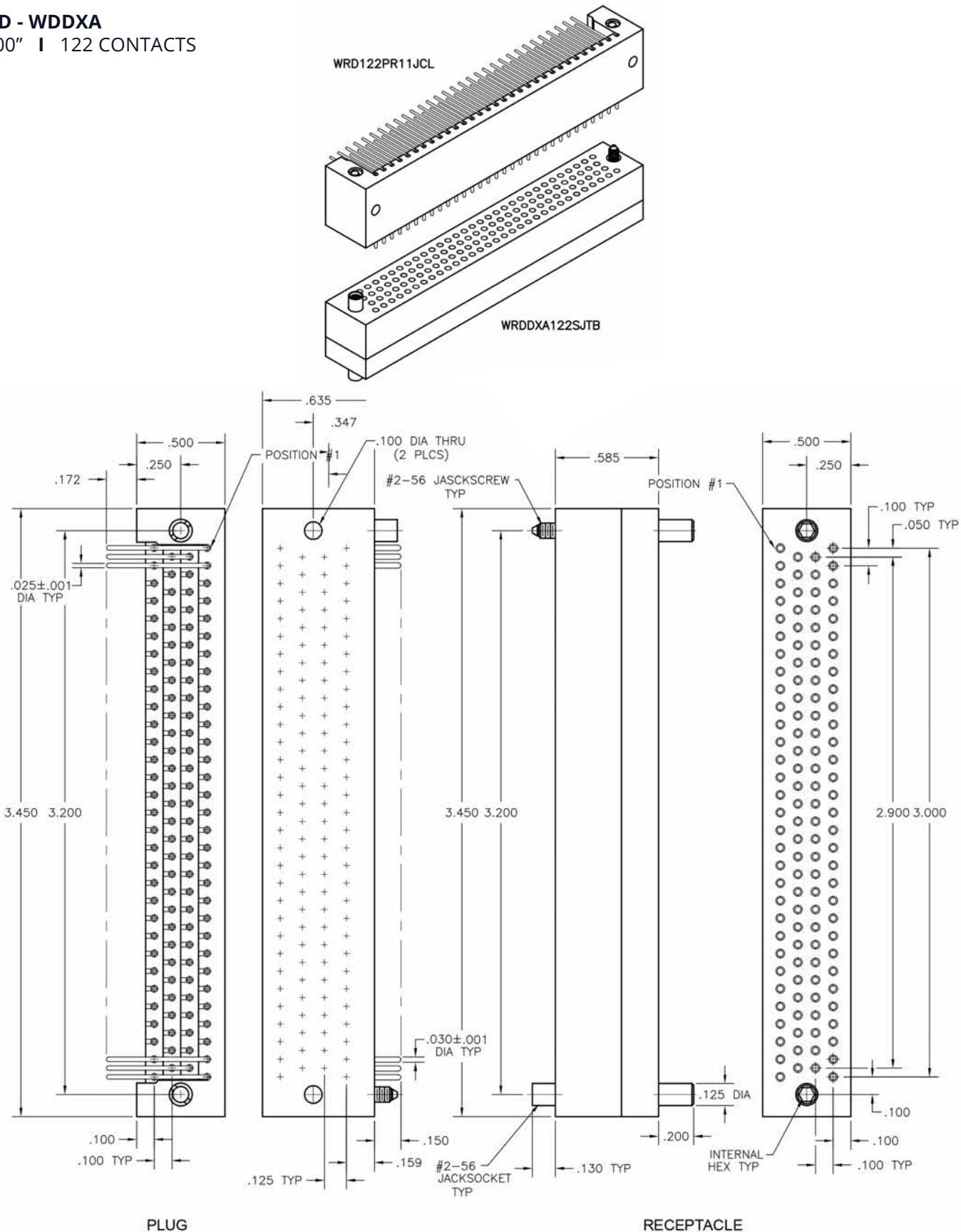
EXAMPLE: WRD122SOR9J

**molex**

## FOUR ROW – PC CARD-TO-CABLE

## WRD - WDDXA

0.100" | 122 CONTACTS



PLEASE CONSULT THE MOLEX WEBSITE FOR THE LATEST VERSION OF THIS INFORMATION PRIOR TO BEGINNING ANY DESIGN WORK.  
SOURCE: CTW065-REV A

AIRBORN W SERIES CONNECTORS | W-73

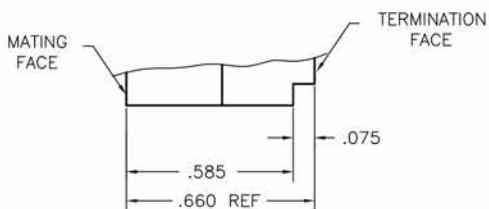
**molex**

## LEAD CONFIGURATION OPTIONS

PLUG: WRD 122 PR11 JCL  
 RECEPTACLE: WRDDXA 122 S JTB  
 XXXXX XX XXX XX

PLUG	RECEPTACLE	
SERIES		
SIZE		
122 Number of contacts	122 Number of contacts	
CONTACTS		
<ul style="list-style-type: none"> <li>The use of gaskets is not recommended with crimp socket contacts.</li> <li>WRDDXA** includes full complement of WTK2222 (S or PA) crimp removable contacts packaged with connectors. See "Contacts" in Accessories section to order separately.</li> <li>When using crimp contacts with 20 gage barrel, barrel must be cut off prior to removing contact from connector body.</li> </ul>	TYPE CONTACTS/TERMINATIONS: S Socket, straight, crimp removable, 22 AWG SA Same as above P Pin, straight, crimp removable, 22 AWG	
JCL Fixed jackset, cross hole mount SYCL Guide set, cross hole mount SYCL-# Guide set, cross hole mount, polarized	SY Guide set SY-# Guide set, polarized JTA Turning jackset, .200" JTB Hex turning jackset, .200" JTL Long turning jackset, .700"	

OPTIONS	
● Option Codes: Add to the end of the part number. Example: WRDDXA122SSY-C45. Call factory for additional codes.	
-A53 Socket, straight, crimp removable, 20 AWG	
-C45 Additional .075" material at termination face for strain relief of crimped wires (22 AWG only). See Detail A below.	

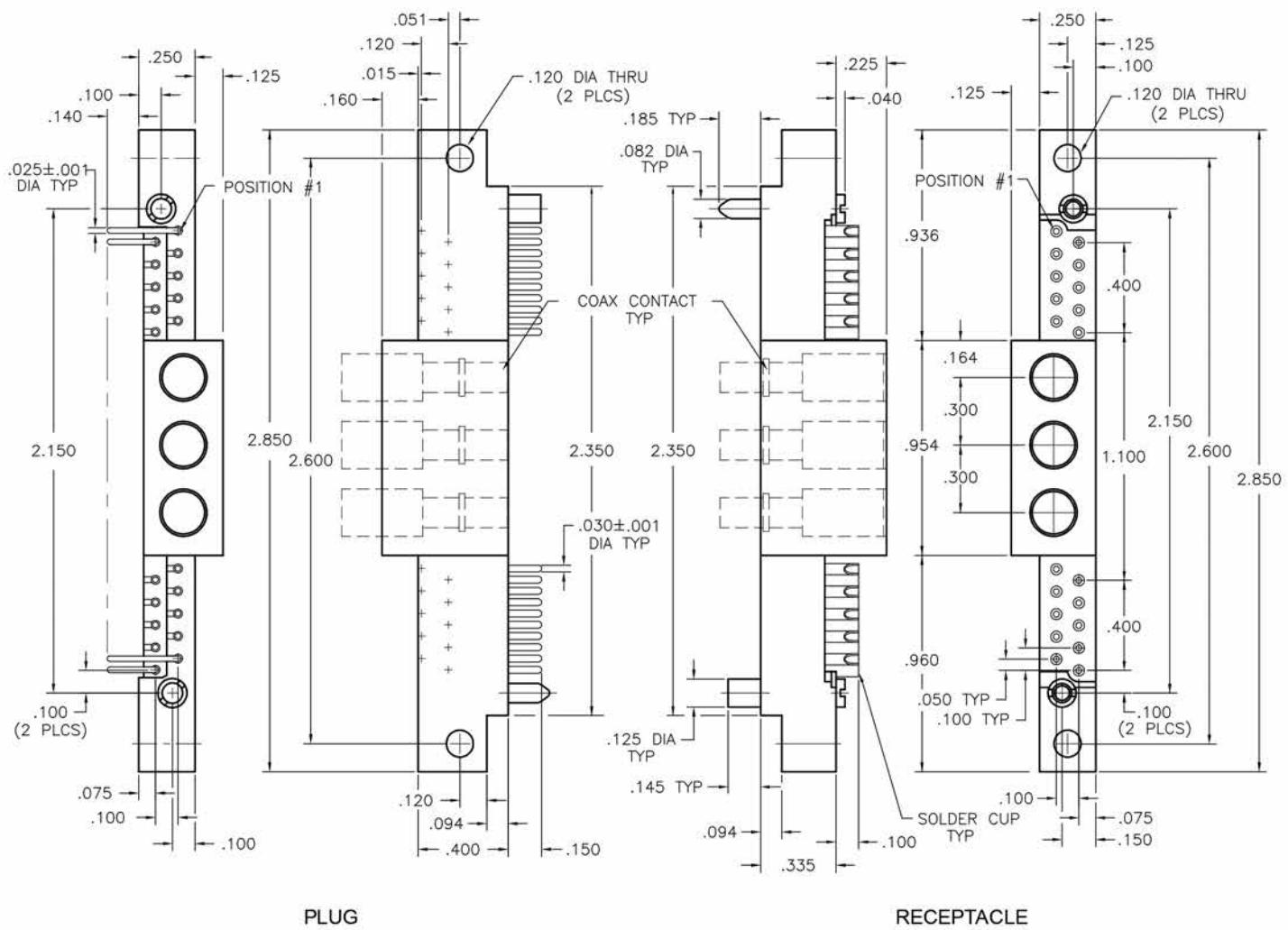
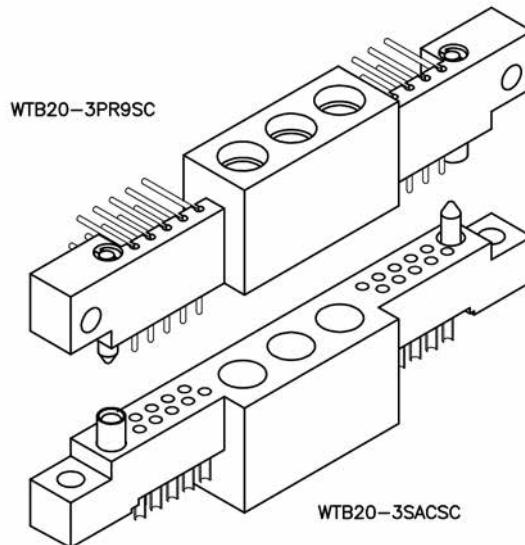


DETAIL A

## **TWO ROW - COAX CONNECTORS - PC CARD-TO-BOARD OR CHASSIS**

**WTB - WTB**

0.100" | 20-3 CONTACTS



PLEASE CONSULT THE MOLEX WEBSITE FOR THE LATEST VERSION OF THIS INFORMATION PRIOR TO BEGINNING ANY DESIGN WORK.  
SOURCE: CTW067-REV A

AIRBORN W SERIES CONNECTORS | W-75

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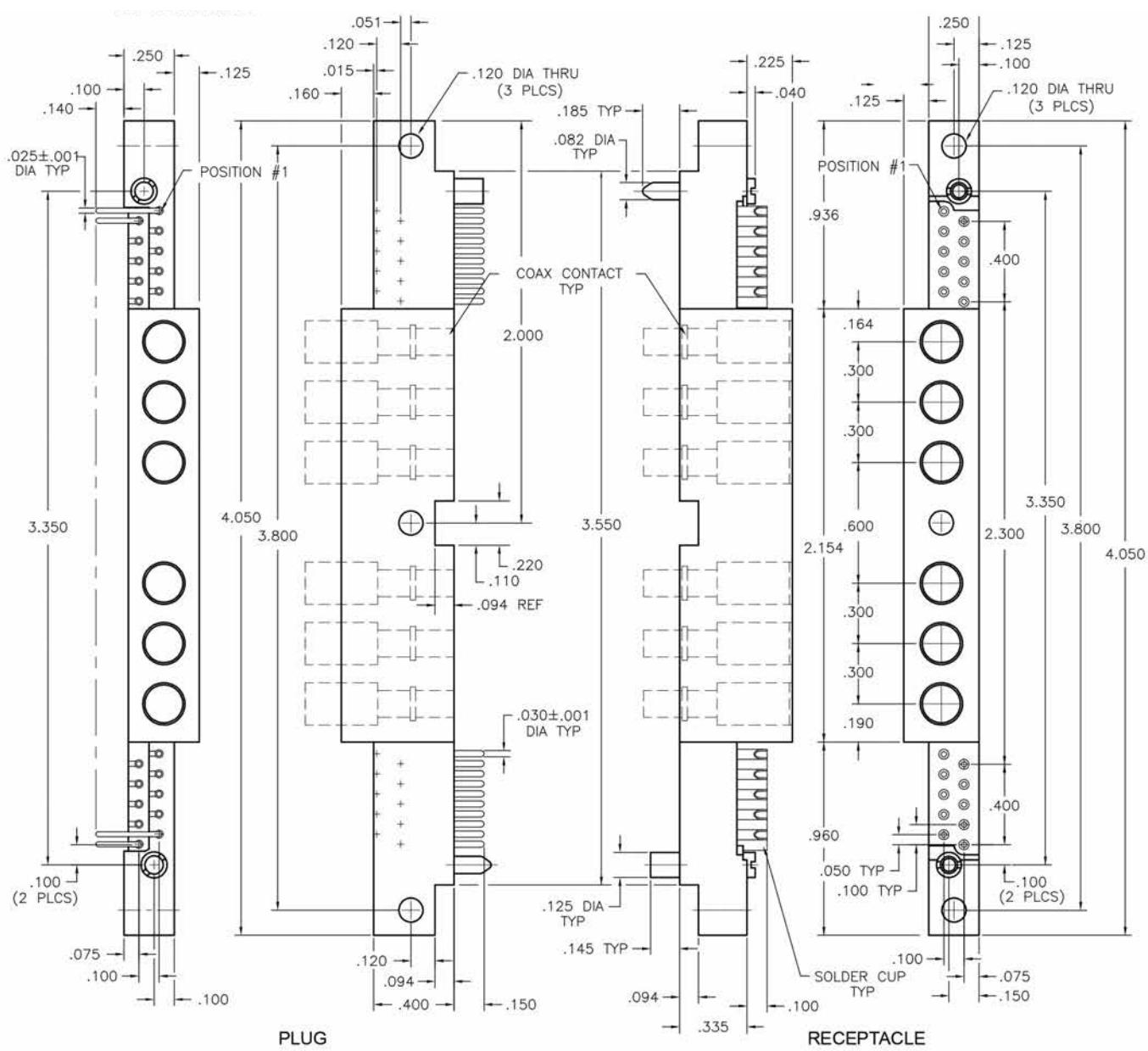
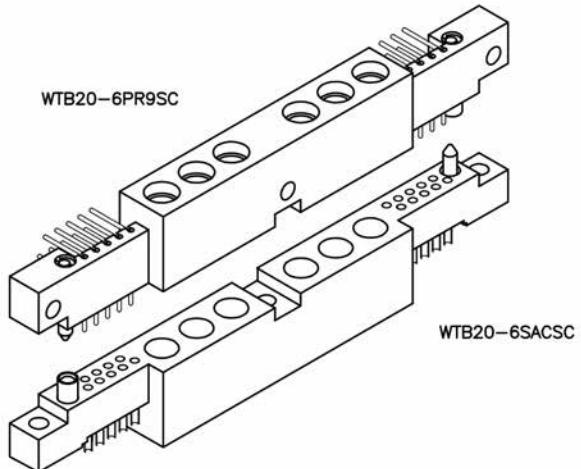
## LEAD CONFIGURATION OPTIONS

PLUG	RECEPTACLE	PLUG: WTB 20-3 PR9 SC RECEPTACLE: WTB 20-3 SAC SC XXX XXXX XXX XX								
<b>SERIES</b>										
WTB Plug, right angle, with mounting ears	WTB Receptacle, straight, with mounting ears									
<b>SIZE</b>										
20-3 20 right angle signal pins, plus 3 straight or right angle removable coax sockets	20-3 20 straight signal pins, plus 3 straight removable coax pins									
<b>CONTACTS</b>										
<table border="0"> <tr> <td colspan="2">TYPE CONTACTS/TERMINATIONS:</td> </tr> <tr> <td>PR7 Pin, right angle, dip solder, .109" x .025" dia</td><td>SAC Socket, straight, solder cup (.035" I.D.)</td> </tr> <tr> <td>PR9 Pin, right angle, dip solder, .140" x .025" dia</td><td>SAD9 Socket, straight, dip solder, .140" x .027" dia</td> </tr> <tr> <td>PR11 Pin, right angle, dip solder, .172" x .025" dia</td><td>SAD11 Socket, straight, dip solder, .172" x .027" dia</td> </tr> </table>			TYPE CONTACTS/TERMINATIONS:		PR7 Pin, right angle, dip solder, .109" x .025" dia	SAC Socket, straight, solder cup (.035" I.D.)	PR9 Pin, right angle, dip solder, .140" x .025" dia	SAD9 Socket, straight, dip solder, .140" x .027" dia	PR11 Pin, right angle, dip solder, .172" x .025" dia	SAD11 Socket, straight, dip solder, .172" x .027" dia
TYPE CONTACTS/TERMINATIONS:										
PR7 Pin, right angle, dip solder, .109" x .025" dia	SAC Socket, straight, solder cup (.035" I.D.)									
PR9 Pin, right angle, dip solder, .140" x .025" dia	SAD9 Socket, straight, dip solder, .140" x .027" dia									
PR11 Pin, right angle, dip solder, .172" x .025" dia	SAD11 Socket, straight, dip solder, .172" x .027" dia									
<table border="0"> <tr> <td colspan="2">TYPE CONTACTS/TERMINATIONS:</td> </tr> <tr> <td>SAD15 Socket, straight, dip solder, .234" x .027" dia</td><td>SAG7 Socket, straight, dip solder, .109" x .018" dia</td> </tr> <tr> <td>SAG9 Socket, straight, dip solder, .140" x .018" dia</td><td>SAG11 Socket, straight, dip solder, .172" x .018" dia</td> </tr> </table>			TYPE CONTACTS/TERMINATIONS:		SAD15 Socket, straight, dip solder, .234" x .027" dia	SAG7 Socket, straight, dip solder, .109" x .018" dia	SAG9 Socket, straight, dip solder, .140" x .018" dia	SAG11 Socket, straight, dip solder, .172" x .018" dia		
TYPE CONTACTS/TERMINATIONS:										
SAD15 Socket, straight, dip solder, .234" x .027" dia	SAG7 Socket, straight, dip solder, .109" x .018" dia									
SAG9 Socket, straight, dip solder, .140" x .018" dia	SAG11 Socket, straight, dip solder, .172" x .018" dia									
<b>HARDWARE</b>										
SC Guide set	SC Guide set									
SC# Guide set, polarized	SC# Guide set, polarized									
<b>OPTIONS</b>										
<ul style="list-style-type: none"> <li>● Molded insulator: Diallyl Phthalate per ASTM-D5948 (GDI-30F or SDG-F)</li> <li>● Removable type coax contacts sold separately. See "Coax Contacts" in Accessories section for instructions.</li> <li>● Coax Contacts:      WTC188P = straight pin (to be installed in receptacle insulator only)            WTC196P = straight pin (to be installed in receptacle insulator only)            WTC085P = straight pin (to be installed in receptacle insulator only)            WTC188S = straight socket (to be installed in plug insulator only)            WTC196S = straight socket (to be installed in plug insulator only)            WTC085S = straight socket (to be installed in plug insulator only)            WTC10SRD9 = right angle socket (to be installed in plug insulator only)</li> </ul>										
<ul style="list-style-type: none"> <li>● Option Codes: Add to the end of the part number. Example: WTB20-3SAD11SC-C34. Call factory for additional codes.</li> </ul>										
<ul style="list-style-type: none"> <li>-342 Remove mounting ears. (.250" each end)</li> <li>-C34 Remove .225" standoff so connector is flush to board (receptacle only).</li> <li>-G69 Solder cups are fixed in an outward orientation, otherwise contacts can rotate.</li> <li>-D01 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with 63/37 or 60/40 solder. <input checked="" type="checkbox"/></li> <li>-P39 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with SAC305 solder (lead free). <input checked="" type="checkbox"/></li> </ul>										
<p><input checked="" type="checkbox"/> = Option not RoHS compliant</p>										

## **TWO ROW - COAX CONNECTORS - PC CARD-TO-BOARD OR CHASSIS**

**WTB - WTB**

0.100" | 20-6 CONTACTS



PLEASE CONSULT THE MOLEX WEBSITE FOR THE LATEST VERSION OF THIS INFORMATION PRIOR TO BEGINNING ANY DESIGN WORK.  
SOURCE: CTW069-REV A

SOURCE: CTW069-REV A

## AIRBORN W SERIES CONNECTORS | W-//

**molex**

## LEAD CONFIGURATION OPTIONS

PLUG: WTB	20-6	PR9	SC
RECEPTACLE: WTB	20-6	SAC	SC
XXX	XXXX	XXX	XX

### PLUG

### RECEPTACLE

#### SERIES

WTB Plug, right angle, with mounting ears

| WTB Receptacle, straight, with mounting ears

#### SIZE

20-6 20 right angle signal pins, plus 6 straight or right angle removable coax sockets

20-6 20 straight signal pins, plus 6 straight removable coax pins

#### CONTACTS

##### TYPE CONTACTS/TERMINATIONS:

PR7 Pin, right angle, dip solder, .109" x .025" dia  
PR9 Pin, right angle, dip solder, .140" x .025" dia  
PR11 Pin, right angle, dip solder, .172" x .025" dia

##### TYPE CONTACTS/TERMINATIONS:

SAC Socket, straight, solder cup (.035" I.D.)  
SAD9 Socket, straight, dip solder, .140" x .027" dia  
SAD11 Socket, straight, dip solder, .172" x .027" dia  
SAD15 Socket, straight, dip solder, .234" x .027" dia  
SAG7 Socket, straight, dip solder, .109" x .018" dia  
SAG9 Socket, straight, dip solder, .140" x .018" dia  
SAG11 Socket, straight, dip solder, .172" x .018" dia

#### HARDWARE

SC Guide set  
SC-# Guide set, polarized

SC Guide set  
SC-# Guide set, polarized

#### OPTIONS

- Molded insulator: Diallyl Phthalate per ASTM-D5948 (GDI-30F or SDG-F)
- Removable type coax contacts sold separately. See "Coax Contacts" in Accessories section for instructions.
- Coax Contacts: WTC188P = straight pin (to be installed in receptacle insulator only)  
WTC196P = straight pin (to be installed in receptacle insulator only)  
WTC085P = straight pin (to be installed in receptacle insulator only)  
WTC188S = straight socket (to be installed in plug insulator only)  
WTC196S = straight socket (to be installed in plug insulator only)  
WTC085S = straight socket (to be installed in plug insulator only)  
WTC10SRD9 = right angle socket (to be installed in plug insulator only)
- Option Codes: Add to the end of the part number. Example: WTB20-6SAD9SC342. Call factory for additional codes.

-342 Remove mounting ears. (.250" each end)  
-C34 Remove .225" standoff so connector is flush to board (receptacle only).  
-G69 Solder cups are fixed in an outward orientation, otherwise contacts can rotate.  
-D01 Pretinned contact terminations (except solder cups, wire wraps ® and flex contacts) with 63/37 or 60/40 solder.   
-P39 Pretinned contact terminations (except solder cups, wire wraps ® and flex contacts) with SAC305 solder (lead free).

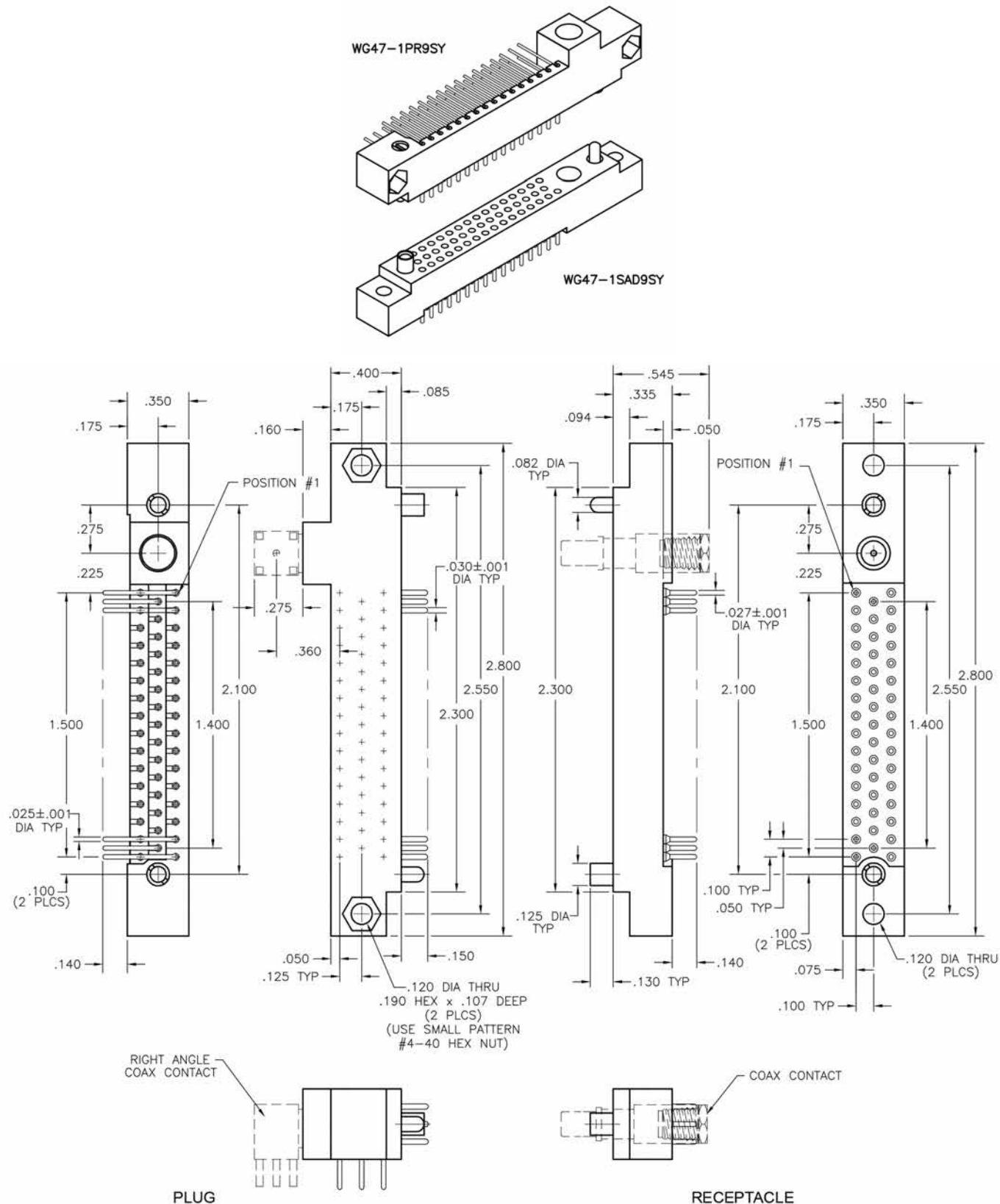
= Option not RoHS compliant

**molex**

## THREE ROW - COAX CONNECTORS - PC CARD-TO-CHASSIS OR BOARD

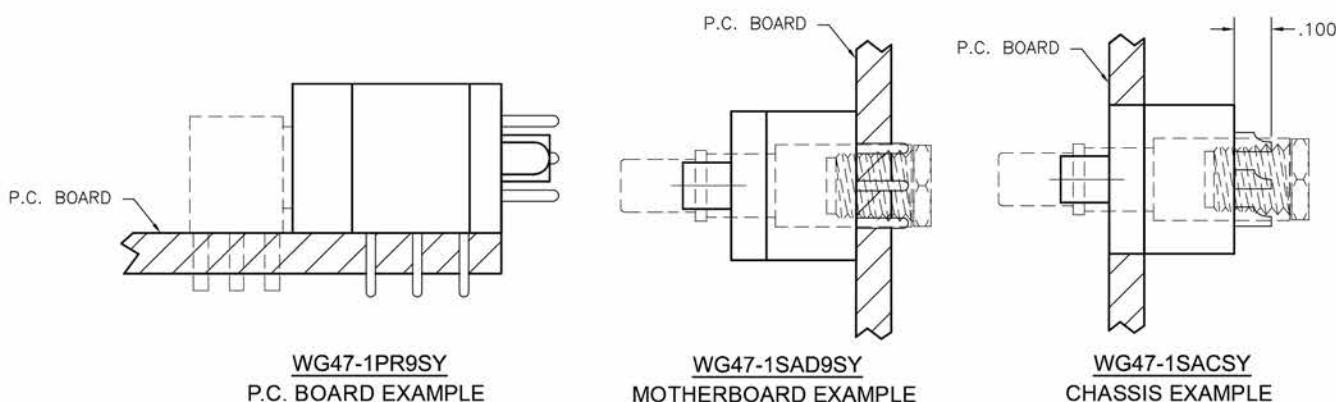
**WG - WG**

0.100" | 47-1 CONTACTS



## LEAD CONFIGURATION OPTIONS

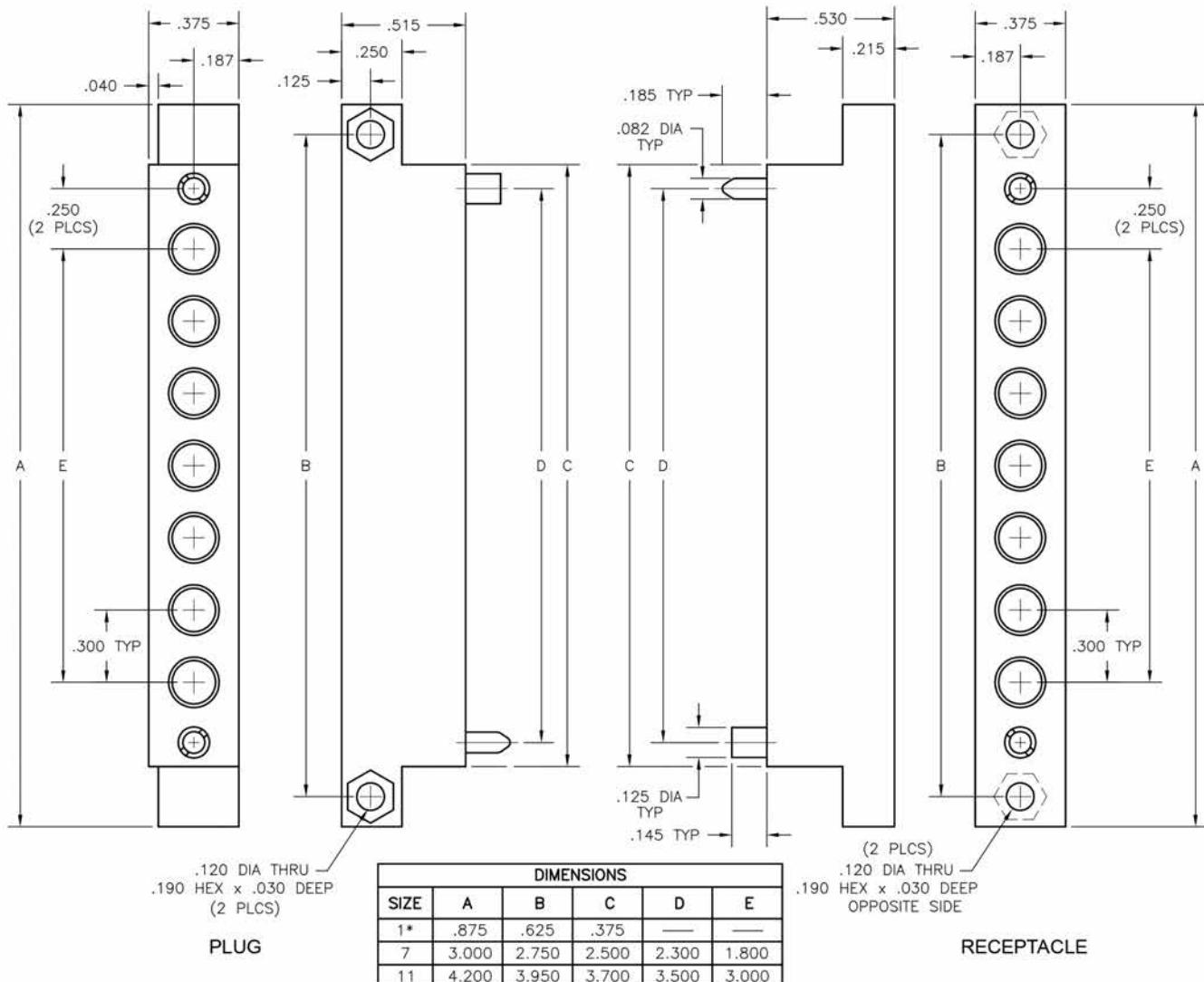
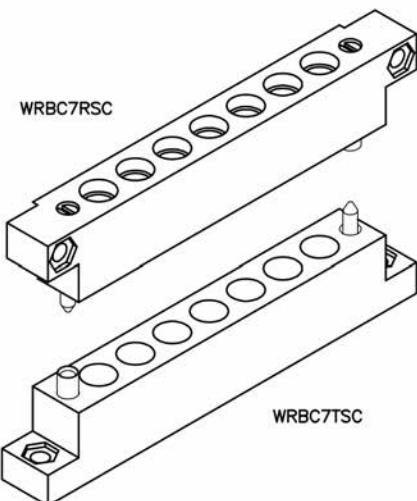
		PLUG	RECEPTACLE	PLUG: WG 47-1 PR11 SY RECEPTACLE: WG 47-1 SAD9 SY XX 47-1 XXXX XX		
		SERIES				
WG Plug, right angle, with mounting ears		WG Receptacle, straight, with mounting ears				
		SIZE				
47-1 47 right angle signal pins, plus 1 right angle or straight removable coax socket		47-1 47 straight signal pins, plus 1 straight removable coax pin				
		CONTACTS				
TYPE CONTACTS/TERMINATIONS:		TYPE CONTACTS/TERMINATIONS:				
PR7 Pin, right angle, dip solder, .109" x .025" dia		SAC Socket, straight, solder cup (.035" I.D.)				
PR9 Pin, right angle, dip solder, .140" x .025" dia		SAD9 Socket, straight, dip solder, .140" x .027" dia				
PR11 Pin, right angle, dip solder, .172" x .025" dia		SAD11 Socket, straight, dip solder, .172" x .027" dia				
		SAD15 Socket, straight, dip solder, .234" x .027" dia				
		SAG7 Socket, straight, dip solder, .109" x .018" dia				
		SAG9 Socket, straight, dip solder, .140" x .018" dia				
		SAG11 Socket, straight, dip solder, .172" x .018" dia				
		HARDWARE				
SY Guide set		SY Guide set				
SY# Guide set, polarized		SY# Guide set, polarized				
		OPTIONS				
<ul style="list-style-type: none"> <li>Molded insulator (plug only): Diallyl Phthalate per ASTM-D5948 (GDI-30F or SDG-F)</li> <li>Removable type coax contacts sold separately. See "Coax Contacts" in Accessories section for instructions.</li> <li>Coax Contacts: WTC188P = straight pin (to be installed in receptacle insulator only) WTC196P = straight pin (to be installed in receptacle insulator only) WTC085P = straight pin (to be installed in receptacle insulator only) WTC188S = straight socket (to be installed in plug insulator only) WTC196S = straight socket (to be installed in plug insulator only) WTC085S = straight socket (to be installed in plug insulator only) WTC10SRD9 = right angle socket (to be installed in plug insulator only)</li> </ul>						
<ul style="list-style-type: none"> <li>Option Codes: Add to the end of the part number. Example: WG47-1SACSY-C34. Call factory for additional codes.</li> </ul>						
<ul style="list-style-type: none"> <li>-342 Remove mounting ears. (.250" each end)</li> <li>-548 Bond #4-40 small pattern nut into mounting holes (for right angle plug connectors only).</li> <li>-C34 Remove .225" standoff so connector is flush to board (receptacle only).</li> <li>-G69 Solder cups are fixed in an outward orientation, otherwise contacts can rotate.</li> <li>-D01 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with 63/37 or 60/40 solder. <input checked="" type="checkbox"/></li> <li>-P39 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with SAC 305 solder (lead free).</li> </ul>						
<p><input checked="" type="checkbox"/> = Option not RoHS compliant</p>						



# ONE ROW - COAX CONNECTORS - PC CARD-TO-CHASSIS

## WRBC - WRBC

0.300" | 1, 7 AND 11 CONTACTS



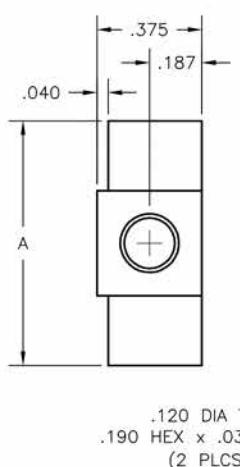
\* = SEE OPPOSITE PAGE FOR 1 POSITION  
CONFIGURATION

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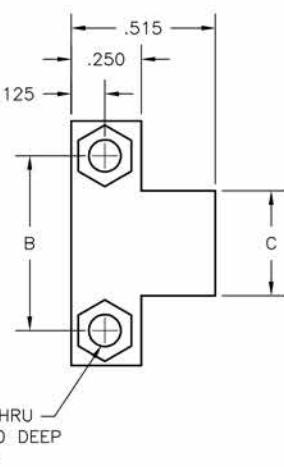
## LEAD CONFIGURATION OPTIONS

PLUG	RECEPTACLE	PLUG: WRBC 7 R SC
<b>SERIES</b>		
WRBC Plug, right angle, with mounting ears		
<b>SIZE</b>		
XX Number of coax contacts (1, 7 or 11)	XX Number of coax contacts (1, 7 or 11)	
<b>CONTACTS</b>		
R Sockets, straight or right angle, removable coax contacts	T Pins, straight, removable coax contacts	TYPE CONTACTS/TERMINATIONS:
<b>HARDWARE</b>		
SC Guide set	SC Guide set	SC
SC-# Guide set, polarized	SC-# Guide set, polarized	SC-#
<b>OPTIONS</b>		

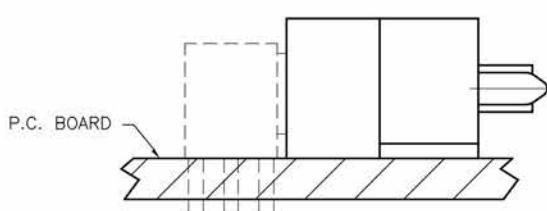
- Removable type coax contacts sold separately. See "Coax Contacts" in Accessories section for instructions.
- Coax Contacts: WTC188P = straight pin (to be installed in receptacle insulator only)  
WTC196P = straight pin (to be installed in receptacle insulator only)  
WTC085P = straight pin (to be installed in receptacle insulator only)  
WTC188S = straight socket (to be installed in plug insulator only)  
WTC196S = straight socket (to be installed in plug insulator only)  
WTC085S = straight socket (to be installed in plug insulator only)  
WTC10SRD9 = right angle socket (to be installed in plug insulator only)



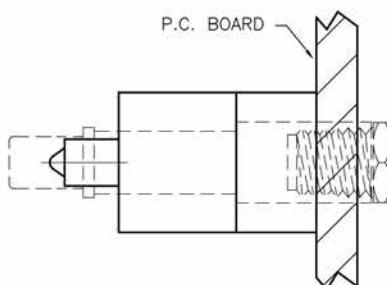
WRBC1R



WRBC1T



WRBC7RSC  
P.C. BOARD EXAMPLE

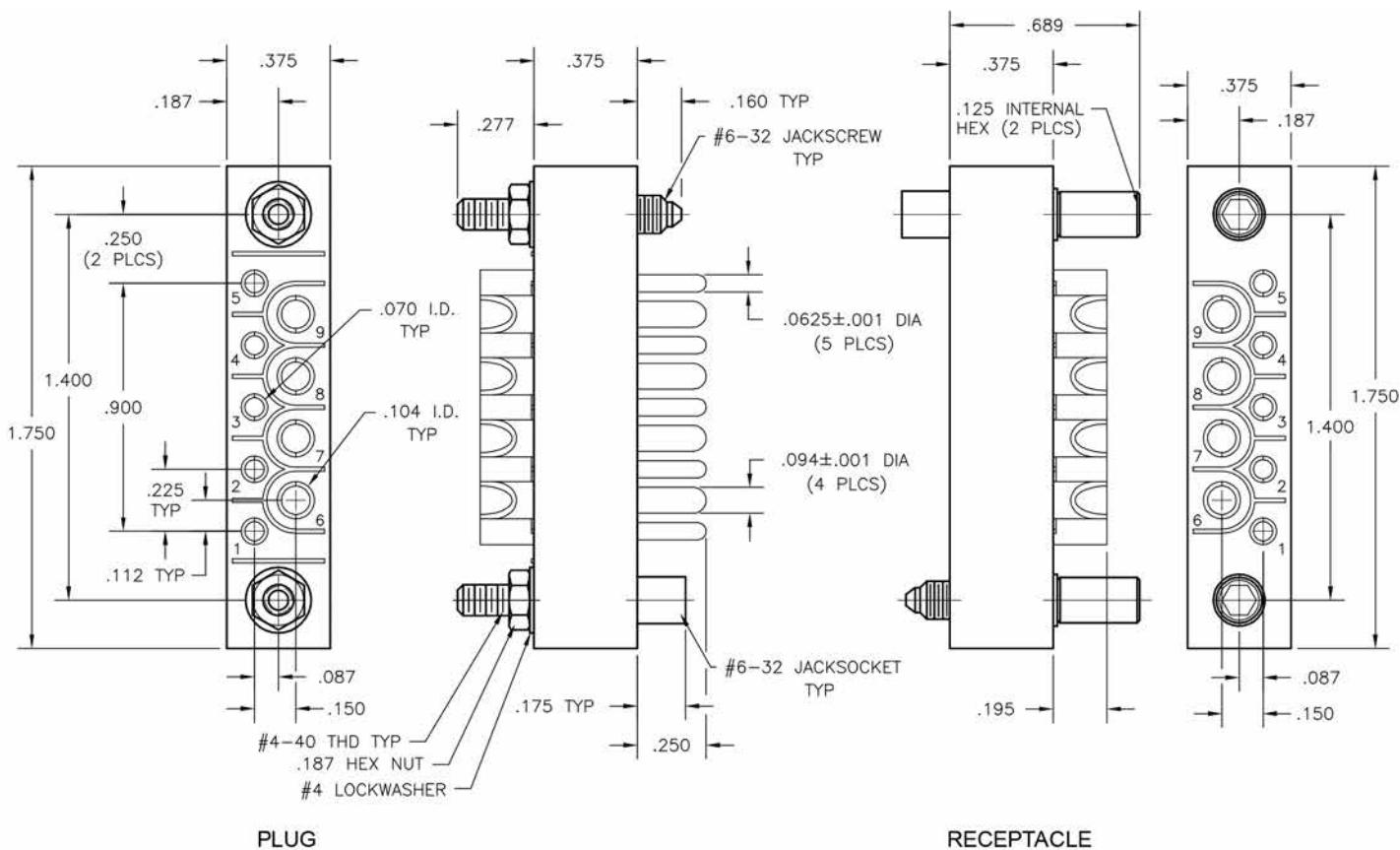
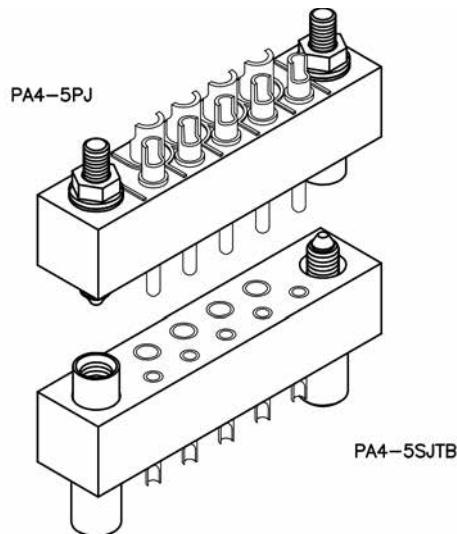


WRBC7TSC  
MOTHERBOARD EXAMPLE

# MISCELLANEOUS CONNECTORS – POWER CABLE-TO-CHASSIS

## PA - PA

0.225" | 5 AND 4-5 CONTACTS

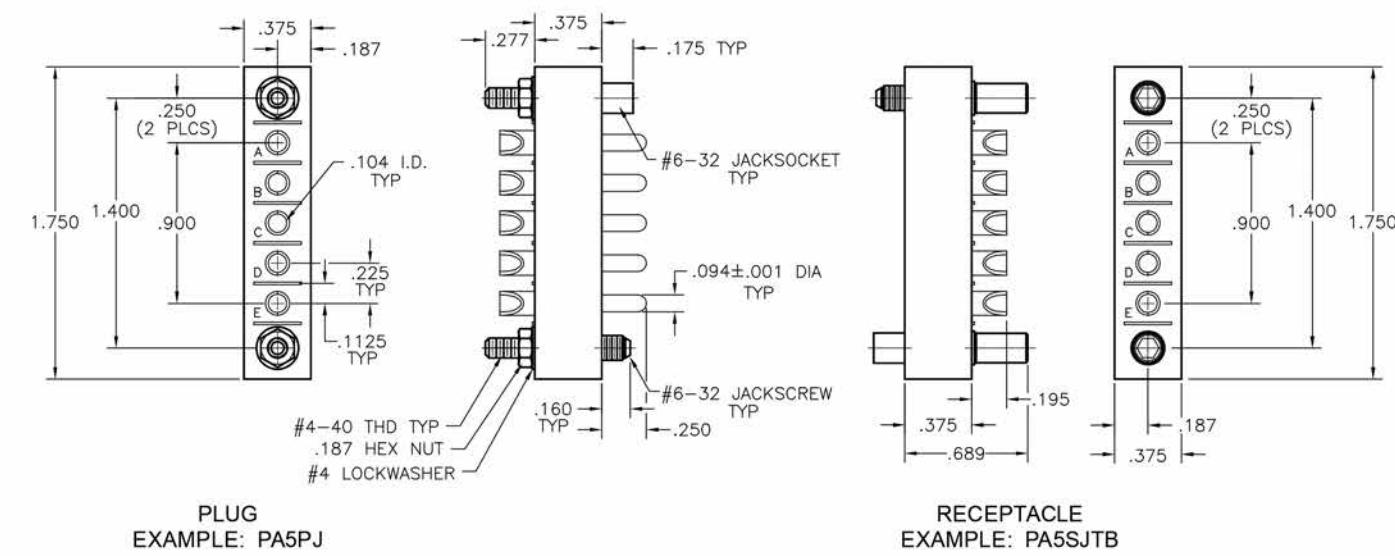


SEE OPPOSITE PAGE FOR 5 POSITION CONFIGURATION.  
SEE PAGE W-86 & W-87 FOR 10 POSITION CONFIGURATION.

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## LEAD CONFIGURATION OPTIONS

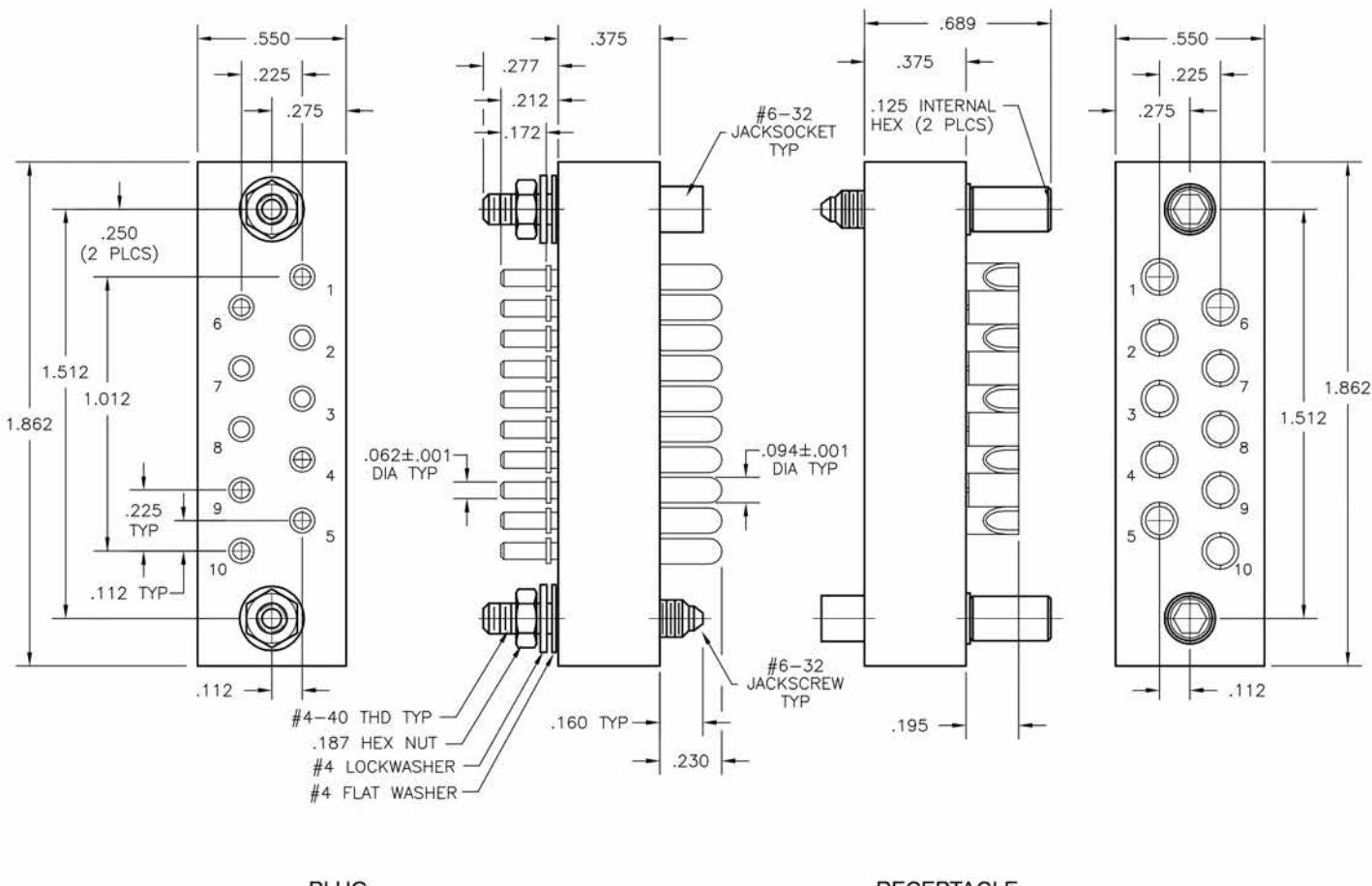
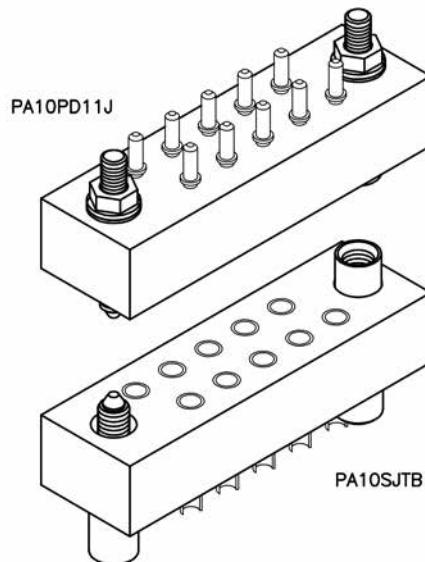
PLUG	RECEPTACLE	PLUG: PA 4-5 S JTB
RECEPTACLE	RECEPTACLE: PA 4-5 P J	RECEPTACLE: XX XXX X XXX
<b>SERIES</b>		
<b>SIZE</b>		
PA Power connectors	PA Power connectors	
5 5 #12 contacts 4-5 4 #12 contacts & 5 #16 contacts	5 5 #12 contacts 4-5 4 #12 contacts & 5 #16 contacts	
<b>CONTACTS</b>		
P Pin, straight, solder cup PD11 Pin, straight, dip solder, .172" x .062" dia	S Socket, straight, solder cup SD11 Socket, straight, dip solder, .172" x .062" dia	TYPE CONTACTS/TERMINATIONS:
SY Guide set J Fixed jackset JT Turning jackset, 1.054" JTB Hex turning jackset, .314" JTL Long turning jackset, 1.175"	SY Guide set J Fixed jackset JT Turning jackset, 1.054" JTB Hex turning jackset, .314" JTL Long turning jackset, 1.175"	TYPE CONTACTS/TERMINATIONS:
<b>HARDWARE</b>		
NOTES:	NOTES:	
Molded bodies: Diallyl phthalate per ASTM-D5948 (GDI-30F or SDG-F)		
Contact rating: #12 contacts = 23 amps		
#16 contacts = 13 amps		
Contact material: Socket - Beryllium copper, gold plated		
Pin - Brass gold plated		
Contact plating: Nominal Au plating thickness is 20 microinches on mating surfaces		
Test voltage: 2000 VRMS @ sea level; 460 VRMS @ 70,000 feet		
Contact resistance: #12 contacts=.023 volt maximum drop @ 23 amps (.001 ohms)		
#16 contacts=.023 volt maximum drop @ 13 amps (.002 ohms)		
Engagement force: 24 ounces maximum average per contact		



## MISCELLANEOUS CONNECTORS – POWER CABLE-TO-CHASSIS

**PA - PA**

0.225" | 10 CONTACTS



SEE OPPOSITE PAGE FOR 10 POSITION RIGHT ANGLE PLUG CONFIGURATION.

## LEAD CONFIGURATION OPTIONS

PLUG	RECEPTACLE	PLUG: PA 10 S JTB
RECEPTACLE	RECEPTACLE: PA 10 P J	RECEPTACLE: XX XX X XXX
<b>SERIES</b>		
PA Power connectors	PA Power connectors	
<b>SIZE</b>		
10 10 #12 contacts	10 10 #12 contacts	
<b>CONTACTS</b>		
<b>TYPE CONTACTS/TERMINATIONS:</b> P Pin, straight, solder cup PD11 Pin, straight, dip solder, .172" x .062" dia PR7 Pin, right angle, dip solder, .109" x .082" dia PR8 Pin, right angle, dip solder, .125" x .082" dia	<b>TYPE CONTACTS/TERMINATIONS:</b> S Socket, straight, solder cup SD11 Socket, straight, dip solder, .172" x .062"	
<b>HARDWARE</b>		
SY Guide set J Fixed jacket JT Turning jackset, 1.054" (straight plug only) JTB Hex turning jackset, .314" (straight plug only) JTL Long turning jackset, 1.175"	SY Guide set J Fixed jackset JT Turning jackset, 1.054" JTB Hex turning jackset, .314" JTL Long turning jackset, 1.175"	
<b>OPTIONS</b>		
<ul style="list-style-type: none"> <li>Option Codes: Add to the end of the part number. Example: PA10PD11SY-P39. Call factory for additional codes.</li> </ul>		
<input checked="" type="checkbox"/> -D01 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with 63/37 or 60/40 solder.		
<input checked="" type="checkbox"/> -P39 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with SAC305 solder (lead free).		
<input checked="" type="checkbox"/> = Option not RoHS compliant		

### NOTES:

Molded bodies: Polyphenylene sulfide

Contact rating: #12 contacts = 23 amps

Contact material: Socket - Beryllium copper, gold plated

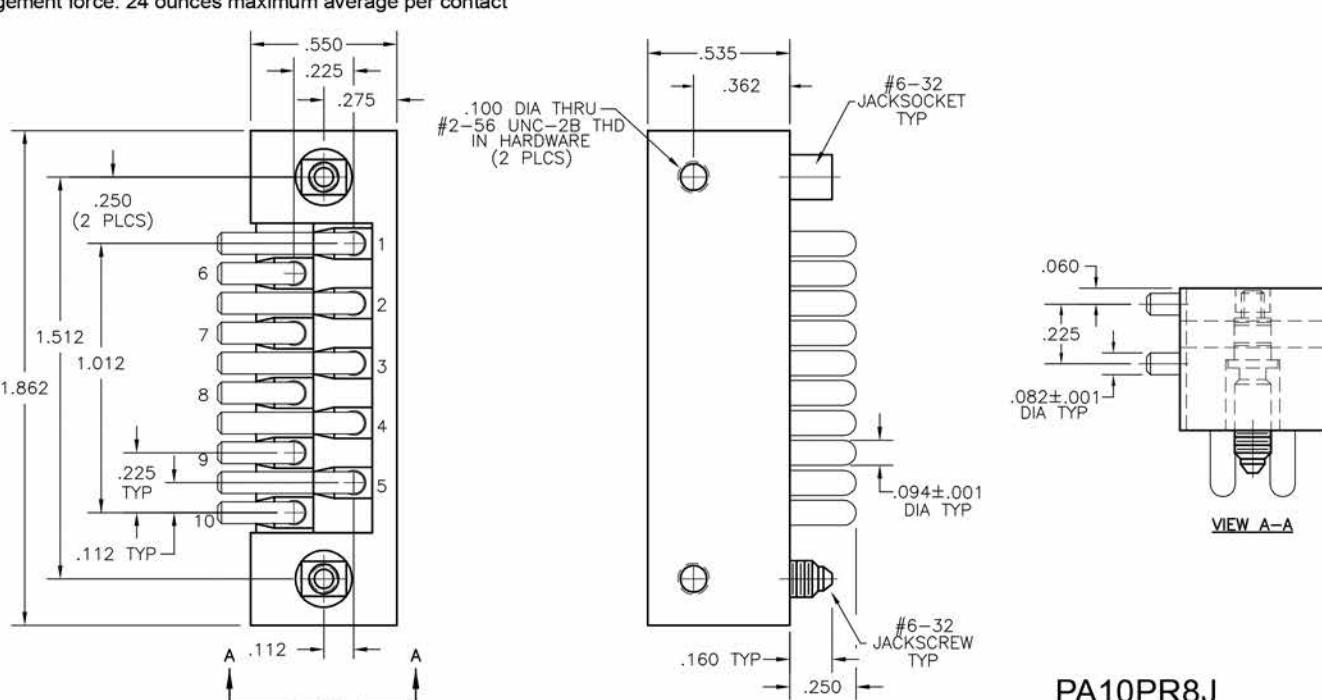
Pin - Brass gold plated

Contact plating: Nominal Au plating thickness is 20 microinches on mating surfaces

Test voltage: 2000 VRMS @ sea level; 460 VRMS @ 70,000 feet

Contact resistance: .023 volt maximum drop @ 23 amps (.001 ohm)

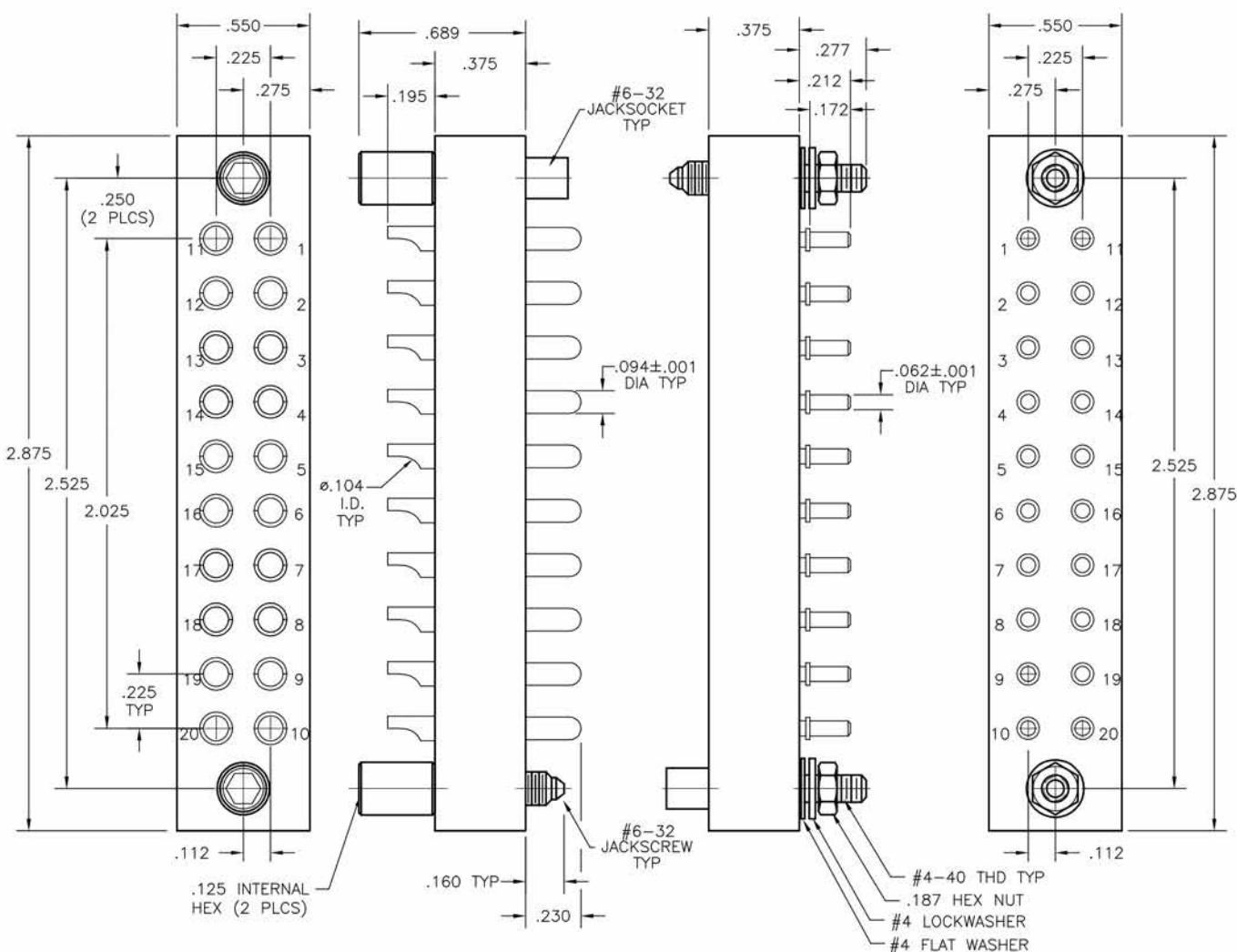
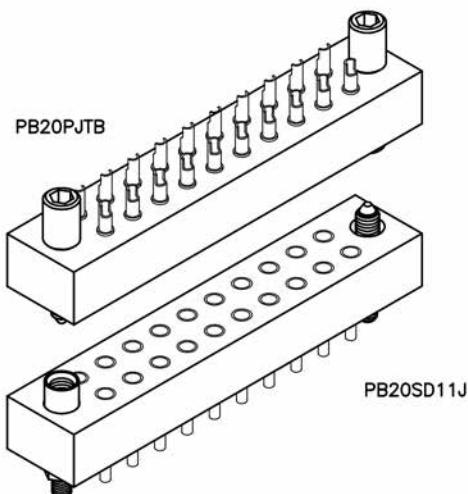
Engagement force: 24 ounces maximum average per contact



# MISCELLANEOUS CONNECTORS – POWER CABLE-TO-CHASSIS

PB - PB

0.225" | 20 CONTACTS



## LEAD CONFIGURATION OPTIONS

PLUG	RECEPTACLE	PLUG: PB 20 S JTB
SERIES		RECEPTACLE: PB 20 P J
PB Power connectors	PB Power connectors	XX XX X XXX
SIZE		
20 20 #12 contacts	20 20 #12 contacts	
CONTACTS		
TYPE CONTACTS/TERMINATIONS:		TYPE CONTACTS/TERMINATIONS:
P Pin, straight, solder cup	S	Socket, straight, solder cup
PD11 Pin, straight, dip solder, .172" x .062" dia	SD11	Socket, straight, dip solder, .172" x .062"
PR7 Pin, right angle, dip solder, .109" x .082" dia		
PR8 Pin, right angle, dip solder, .125" x .082" dia		
HARDWARE		
SY Guide set	SY Guide set	
J Fixed jackset	J Fixed jackset	
JT Turning jackset, 1.054" (straight plug only)	JT Turning jackset, 1.054"	
JTB Hex turning jackset, .314" (straight plug only)	JTB Hex turning jackset, .314"	
JTL Long turning jackset, 1.175"	JTL Long turning jackset, 1.175"	
OPTIONS		

- Option Codes: Add to the end of the part number. Example: PA5PD11SY-P39. Call factory for additional codes.
- D01 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with 63/37 or 60/40 solder.
- P39 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with SAC305 solder (lead free).

= Option not RoHS compliant

### NOTES:

Molded bodies: Polyphenylene sulfide

Contact rating: #12 contacts = 23 amps

Contact material: Socket - Beryllium copper, gold plated

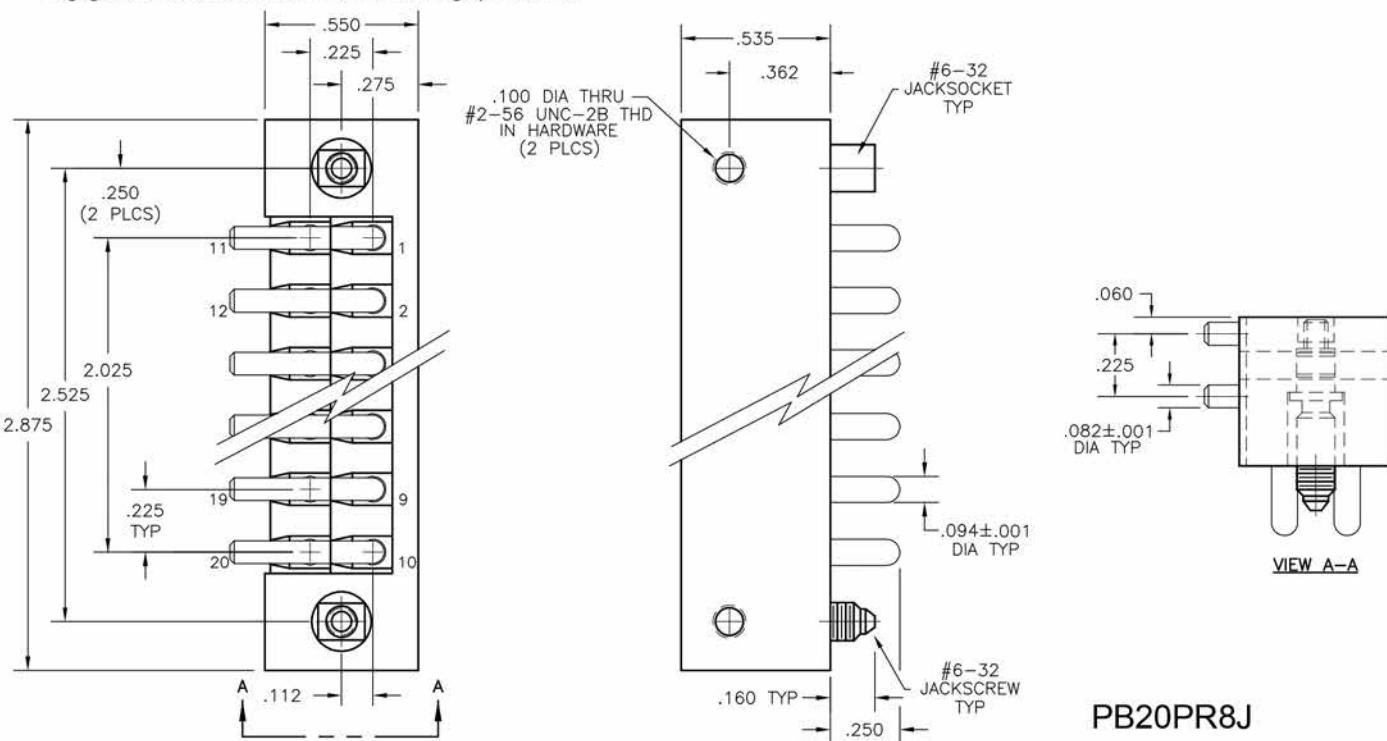
Pin - Brass gold plated

Contact plating: Nominal Au plating thickness is 20 microinches on mating surfaces

Test voltage: 2000 VRMS @ sea level; 460 VRMS @ 70,000 feet

Contact resistance: .023 volt maximum drop @ 23 amps (.001 ohm)

Engagement force: 24 ounces maximum average per contact

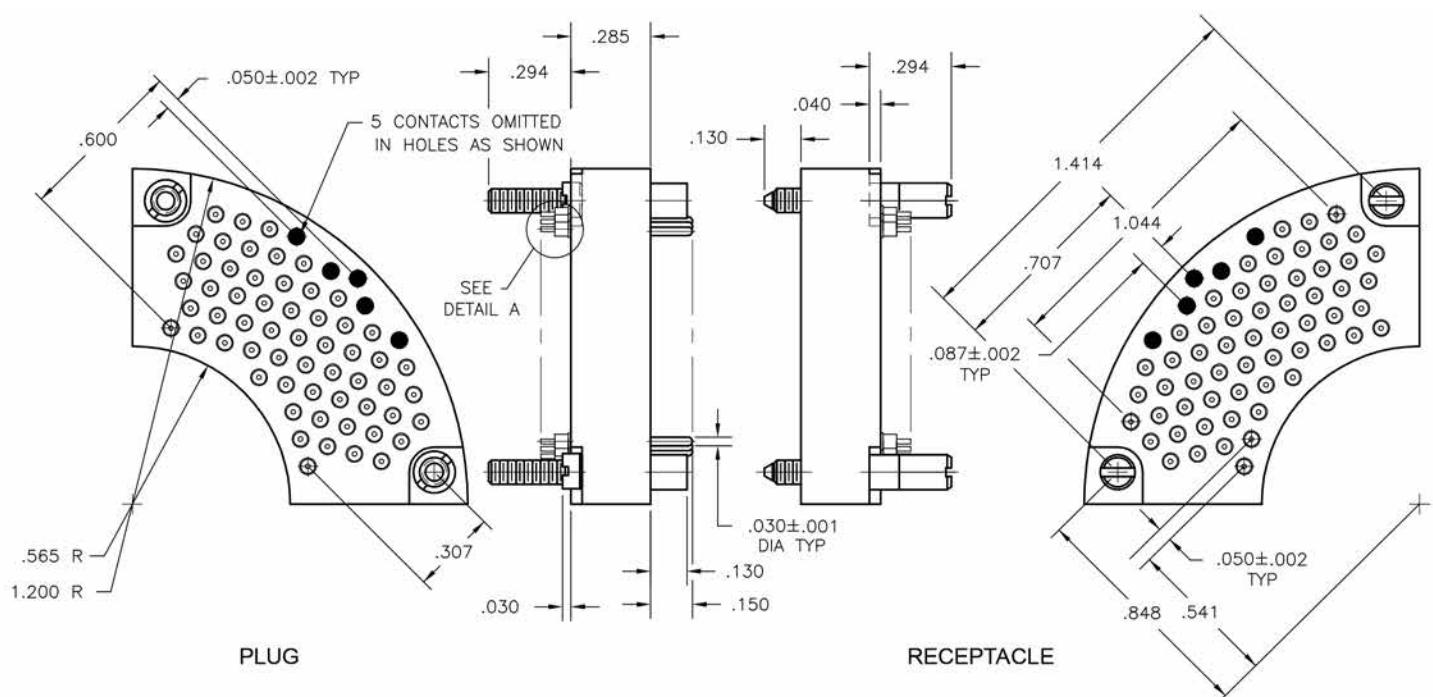
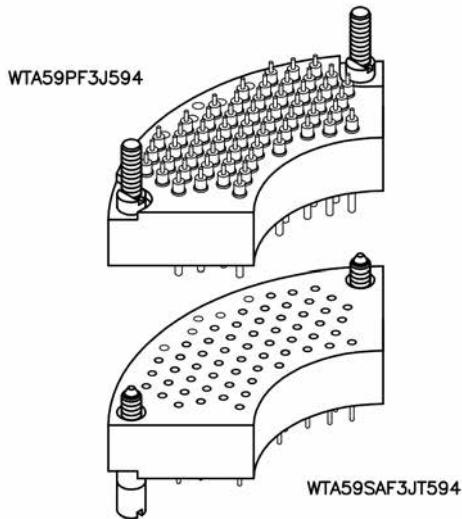


PB20PR8J

# MISCELLANEOUS CONNECTORS – QUARTER ROUND SANDWICH BOARDS

## WTA - WTA

0.087" BY 0.050" | 59 CONTACTS



DETAIL A

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## LEAD CONFIGURATION OPTIONS

PLUG: WTA 59 PF3 J594  
 RECEPTACLE: WTA 59 SAF3 JT594  
 XXX XX XXXX XXXXX

### PLUG

### RECEPTACLE

#### SERIES

WTA Plug, straight

| WTA Receptacle, straight

#### SIZE

59 Number of contacts

| 59 Number of contacts

#### CONTACTS

TYPE CONTACTS/TERMINATIONS:

PC Pin, straight, solder cup (.035" I.D.)  
 PF3 Pin, straight, flex circuit, .050"  
 PF6 Pin, straight, flex circuit, .093"

TYPE CONTACTS/TERMINATIONS:

SAC Socket, straight, solder cup (.035" I.D.)  
 SAF3 Socket, straight, flex circuit, .050"  
 SAF6 Socket, straight, flex circuit, .093"

#### HARDWARE

J594 Fixed jacksockets

| JT594 Turning jackscrews, slot head

| JTB594 Turning jackscrews, 5/64" internal hex head

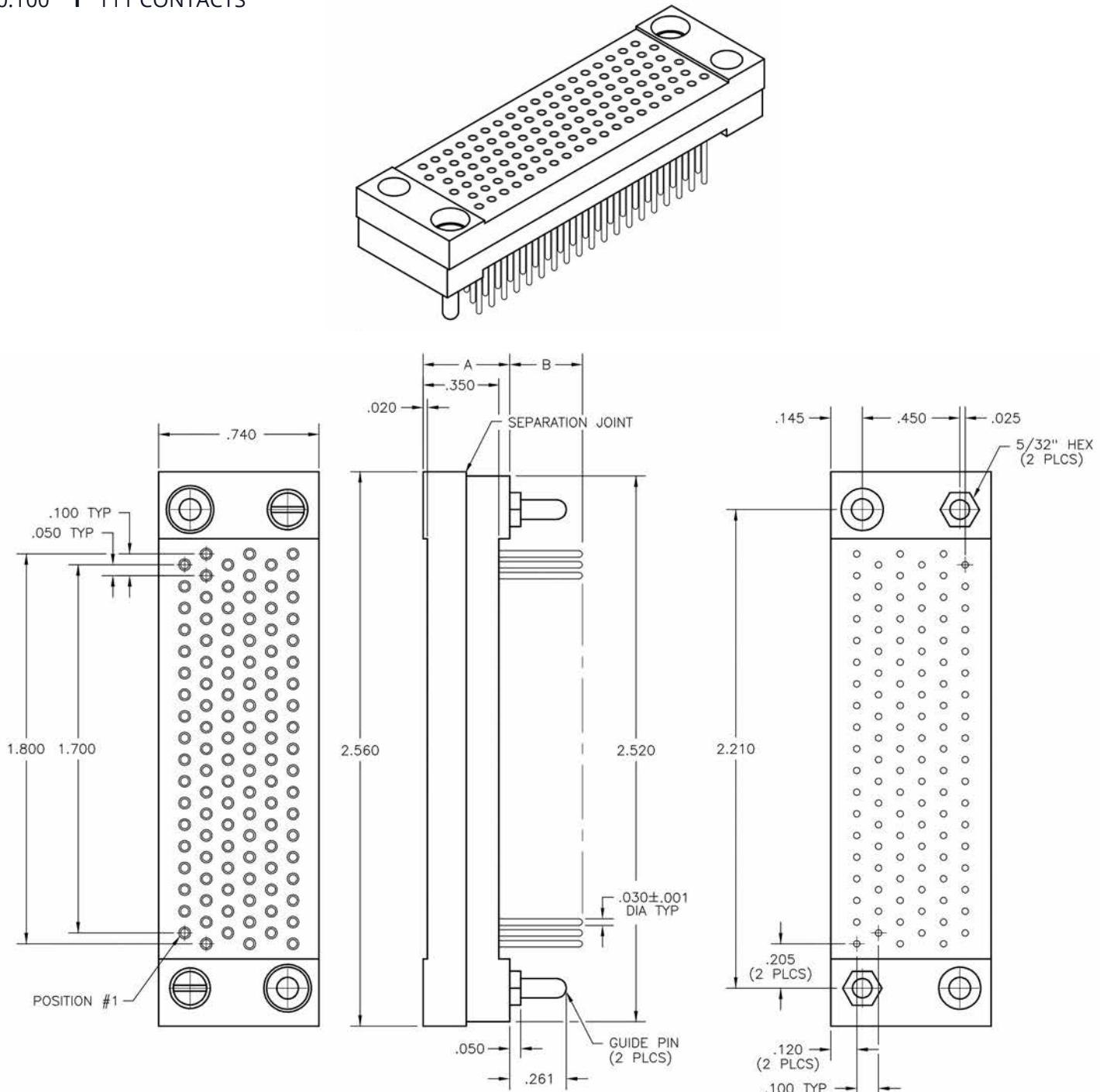
#### OPTIONS

- The connector is loaded with 59 contacts in a 64 position quarter round insulator (-594).
- Insulator: glass filled nylon per ASTM-D4066.
- Not recommended for use with lead free solder process.
- To order connector without hardware, leave hardware designator out of part number. Example: WTA59SAF3-594.

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# MISCELLANEOUS CONNECTORS – STACKABLE BOARD-TO-BOARD

**WE**  
0.100" | 111 CONTACTS



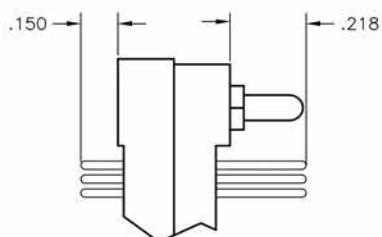
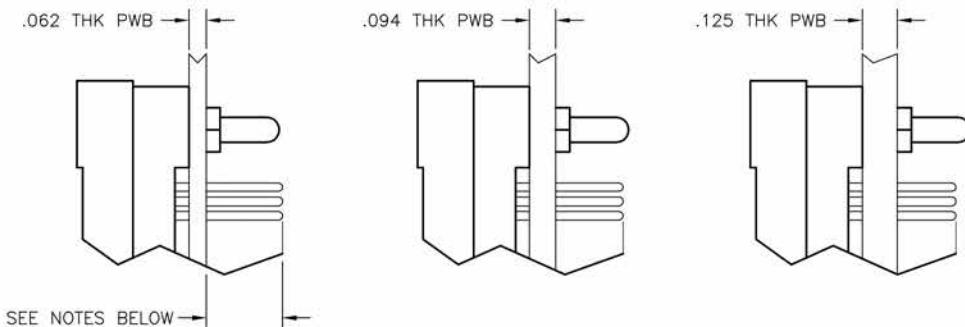
DIMENSIONS			
STYLE	A	B $\pm$ .015	TYPE
WEA	.400	.335	STACKABLE
WEB	.450	.130	MOTHER BOARD
WEB	.450	.335	STACKABLE
WEC	.495	.335	STACKABLE

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## LEAD CONFIGURATION OPTIONS

WEA	111	111A	SP21	GB
XXX	XXX	XXXX	XXXX	XX

SERIES					
WEA	Molding height .400"				
WEB	Molding height .450"				
WEC	Molding height .495"				
SIZE					
111	Number of positions				
LOADING					
111A	Fully loaded				
CONTACTS					
TYPE CONTACTS/TERMINATIONS:					
SP21	Socket, stackable, .335" termination length				
SP9	Socket, dip solder, .130" termination length				
PP14	Pin, stackable, .218" termination length (WEB Only)				
HARDWARE					
GA	Guide set, motherboard				
GB	Guide set, stackable				



WEB111-111APP14GB

Notes:

Dimensions "A" & "B" represent current configurations. Board thickness information is for reference only. Contacts are individually replaced by removing the guide pins and screws. Molding halves will separate at the designated joint.

For Stackable Applications:

Minimum contact termination length to be .190" beyond PWB for minimum recommended mating in this series. Maximum contact termination length to be .250" beyond PWB.

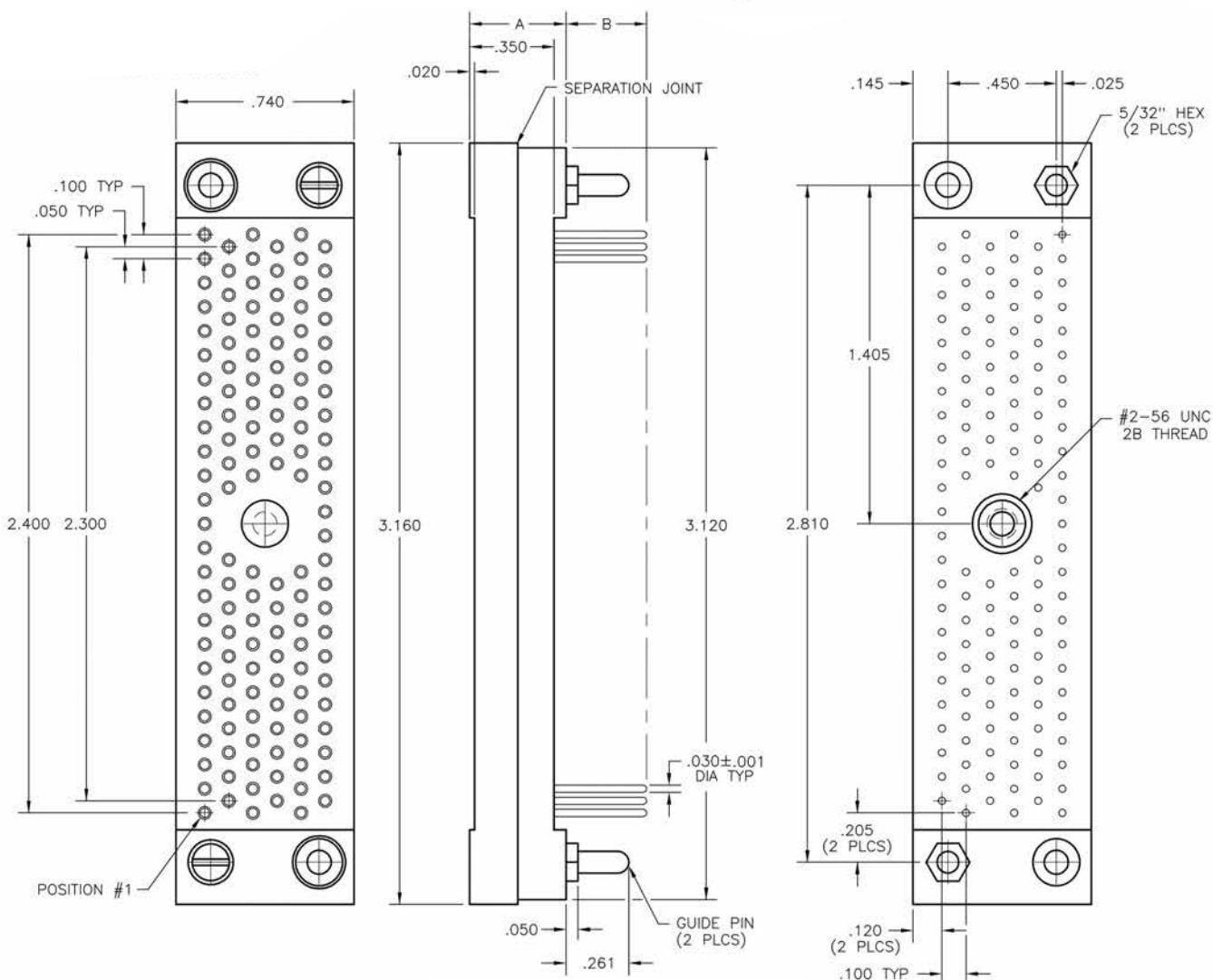
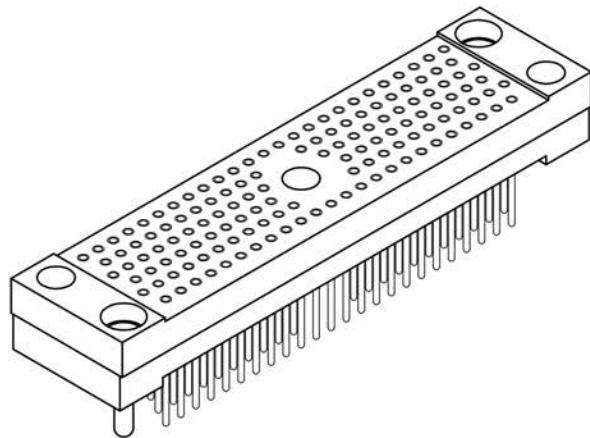
For Mother Board Applications:

Termination lengths typically extend .047" beyond PWB (example: a .062" board would typically require a .109" termination length, dimension "B").

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## MISCELLANEOUS CONNECTORS – STACKABLE BOARD-TO-BOARD

**WE**  
0.100" | 135 CONTACTS



DIMENSIONS			
STYLE	A	B±.015	TYPE
WEA	.465	.335	STACKABLE
WEA	.465	.130	MOTHER BOARD
WEB	.500	.335	STACKABLE
WEB	.500	.130	MOTHER BOARD
WEC	.740	.335	STACKABLE
WEC	.740	.130	MOTHER BOARD

PLEASE CONSULT THE MOLEX WEBSITE FOR THE LATEST VERSION OF THIS INFORMATION PRIOR TO BEGINNING ANY DESIGN WORK.  
SOURCE: CTW085-REV C

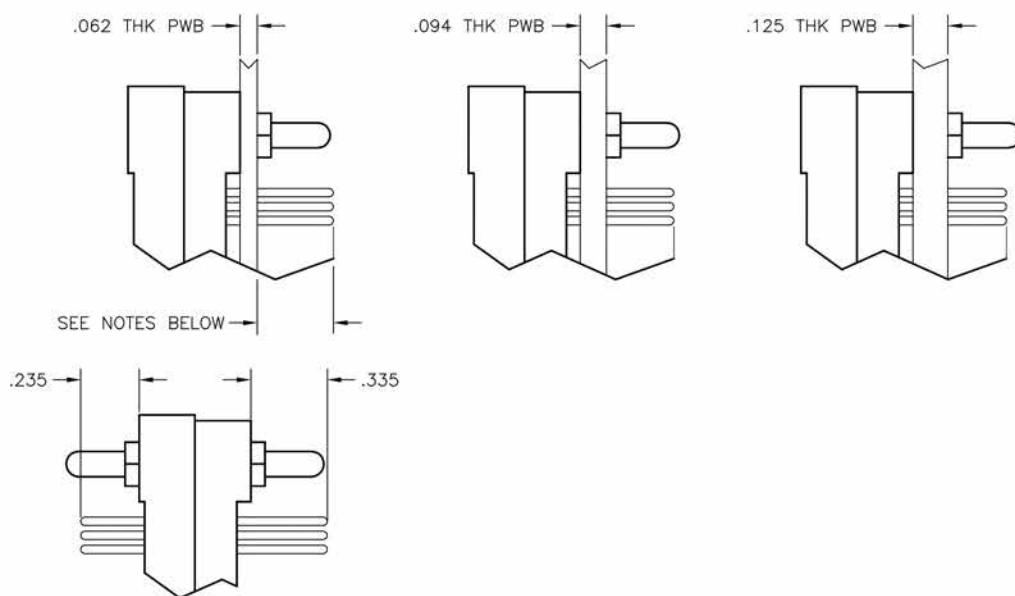
AIRBORN W SERIES CONNECTORS - J - W-93

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## LEAD CONFIGURATION OPTIONS

WEA	135	135A	SP21	GB
XXX	XXX	XXXX	XXXX	XX

SERIES					
WEA	Molding height .465"				
WEB	Molding height .500"				
WEC	Molding height .740"				
SIZE					
135	Number of positions				
LOADING					
135A	Fully loaded				
CONTACTS					
TYPE CONTACTS/TERMINATIONS:					
SP21	Socket, stackable, .335" termination length				
SP9	Socket, dip solder, .130" termination length				
PP21	Pin, stackable, .335" termination length (WEC only)				
HARDWARE					
GA	Guide set, motherboard				
GB	Guide set, stackable				
GC	Guide set, stackable (Both sides, WEC only)				



WEC135-135APP21GC

Notes:

Dimensions "A" & "B" represent current configurations. Board thickness information is for reference only. Contacts are individually replaced by removing the guide pins and screws. Molding halves will separate at the designated joint.

For Stackable Applications:

Minimum contact termination length to be .190" beyond PWB for minimum recommended mating in this series. Maximum contact termination length to be .250" beyond PWB.

For Mother Board Applications:

Termination lengths typically extend .047" beyond PWB (example: a .062" board would typically require a .109" termination length, dimension "B").

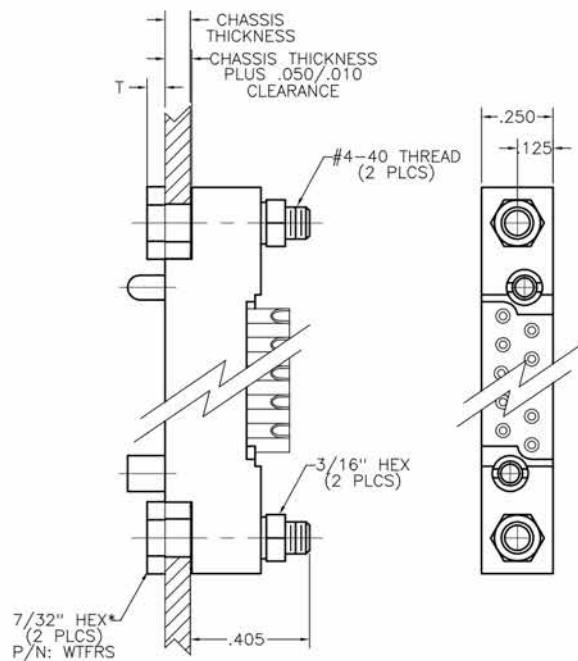
**molex**

# AIRBORN W SERIES ACCESSORIES

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# ACCESSORIES

## FLOATING MOUNTS FOR WTB-WTK RECEPTACLES



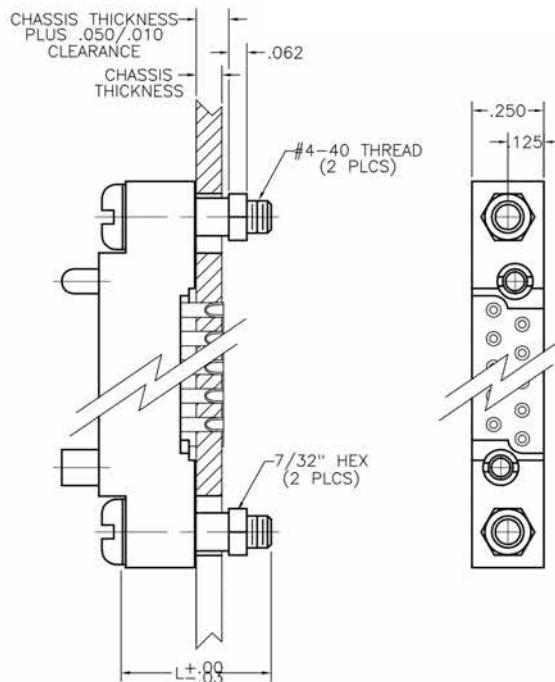
FLOATING MOUNT  
REAR

DIMENSIONS			
CHASSIS THICKNESS	MOUNTING SCREW HEX HEAD	MOUNTING SCREW ROUND HEAD	T
.062	WTRFS062	WTFRAS062	.062
.093	WTRFS093	WTFRAS093	.062
.125	WTRFS125	WTFRAS125	.050

CONNECTOR SIZES 10-70 REQUIRE 2 WTRFS SCREW ASSEMBLIES.

CONNECTOR SIZES OVER 70 REQUIRE 2 WTRFS ASSEMBLIES AND ONE WTRFA SCREW ASSEMBLY.

\* - 7/32 DIA ROUND HEAD - WTFRAS CENTER POSITION ON SIZES OVER 70



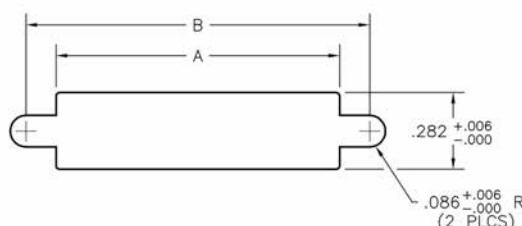
FLOATING MOUNT  
FRONT

DIMENSIONS			
CHASSIS THICKNESS	BUSHING	QTY. REQ. FOR SIZES 10-70	L
.062	WTFFS062		.50
.093	WTFFS093	2	.50
.125	WTFFS125		.56

## CHASSIS CUTOUT WTB - WTK

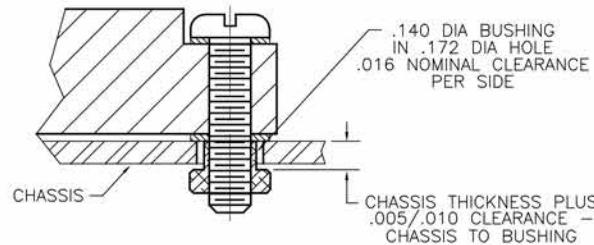
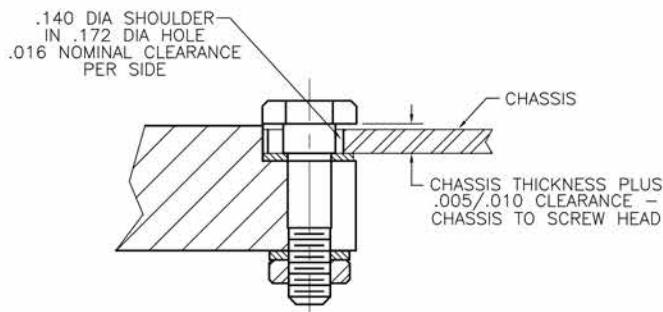
SIZES 10-70

DIMENSIONS					
SIZE	A +.006 -.000	B ±.003	SIZE	A +.006 -.000	B ±.003
10	.882	1.100	44	2.582	2.800
14	1.082	1.300	50	2.882	3.100
20	1.382	1.600	54	3.082	3.300
24	1.582	1.800	56	3.182	3.400
26	1.682	1.900	60	3.382	3.600
30	1.882	2.100	66	3.682	3.900
36	2.182	2.400	70	3.882	4.100
40	2.382	2.600			

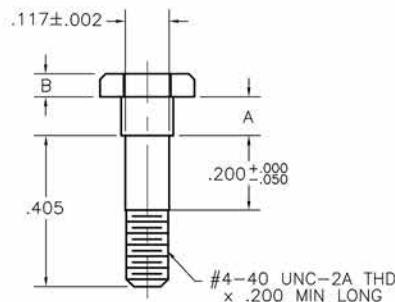


# ACCESSORIES

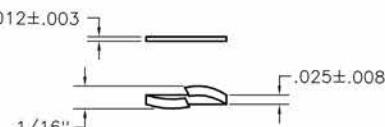
## FLOATING MOUNTS FOR WTB - WTK RECEPTACLES



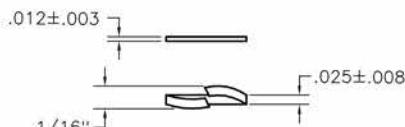
FLOATING STUD,  
HEX HEAD  
7/32±.005 HEX HEAD



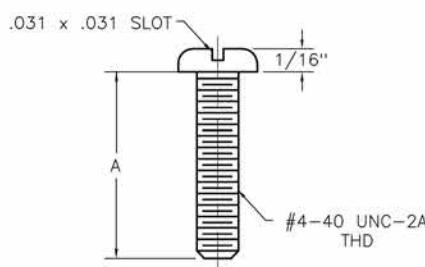
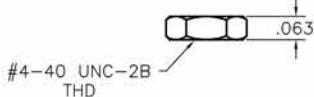
FLAT WASHER  
.215 O.D. x .120 I.D.



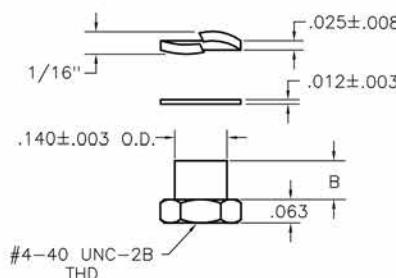
SPLIT LOCKWASHER  
.212±.015 O.D. x .115 I.D.



HEX NUT  
3/16±.005



FLOATING STUD,  
ROUND HEAD  
.212±.007 DIA HEAD



SPLIT LOCKWASHER  
.212±.015 O.D. x .115 I.D.

FLAT WASHER  
.215 O.D. x .120 I.D.

FLOATING BUSHING  
7/32" HEX

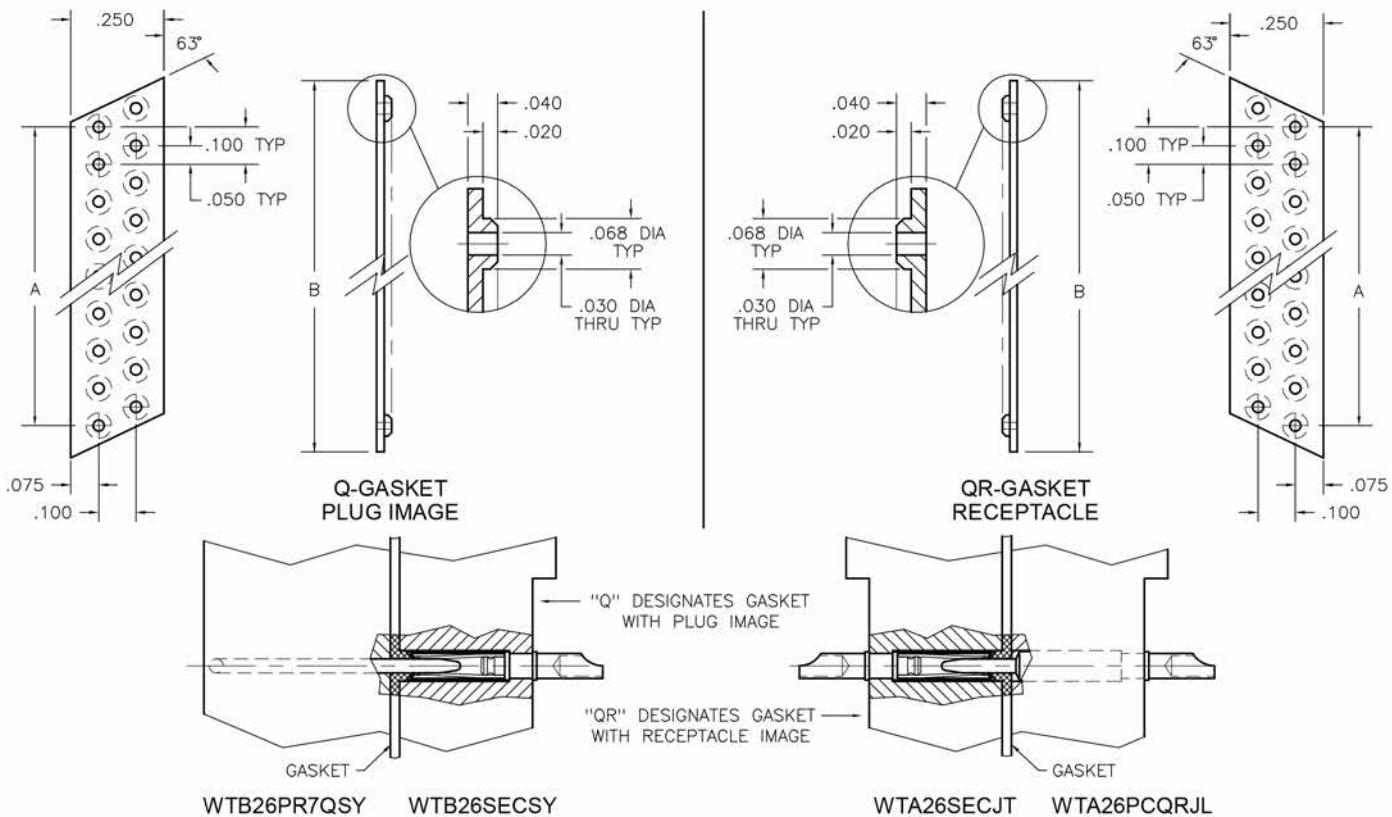
PART NUMBER	A <sup>+.000</sup> <sub>-.005</sub>	B <sup>+.000</sup> <sub>-.005</sub>	CHASSIS THICKNESS
WTFRS062	.073	.062	.062
WTFRS093	.104	.062	.093
WTFRS125	.135	.050	.125

PART NUMBER	A <sup>+.000</sup> <sub>-.030</sub>	B±.003	CHASSIS THICKNESS
WTFFS040	.439	.051	.040
WTFFS062	.500	.073	.062
WTFFS093	.500	.104	.093
WTFFS125	.562	.135	.125
WTFFS200	.625	.210	.200

PART DESCRIPTION	MATERIAL SPECIFICATION	FINISH SPECIFICATION	WTFRS	WTFRAS	WTFFS
FLOATING STUD 7/32" DIA, ROUND HEAD			X		
FLOATING STUD 7/32" HEX HEAD			X		
FLOATING BUSHING 7/32" HEX HEAD					X
MOUNTING SCREW 7/32" DIA, ROUND HEAD	SST SERIES 300 PER ASTM-A582 AND/OR QQ-S-763/766	PASSIVATE PER SAE AMS- QQ-P-35 OR ASTM-A967			X
#4 LOCKWASHER			X	X	X
#4 FLAT WASHER			X	X	X
HEX NUT #4-40			X	X	

# ACCESSORIES

## FACE SEAL GASKETS FOR WTA - WTB SERIES



FOR CONNECTOR CODE	USE TWO GASKETS CODE NUMBER
WTB90PR	WTB45Q
WTB100PR	WTB50Q
WTB120PR	WTB60Q

### NOTES:

1. DUE TO THE ELASTICITY OF SILICONE RUBBER, A & B DIMENSIONS ARE FOR REFERENCE ONLY. THE ACCUMULATIVE TOLERANCE FOR LINEAR HOLE CENTERS SHALL BE NO MORE THAN  $\pm .030$  FOR EACH INCH OF SPACE BETWEEN END HOLES.
2. MATERIAL: SILICONE RUBBER, CLASS 2A OR 2B, GRADE 50 PER A-A-59588.
3. FOR USE WITH MALE (PIN) CONNECTORS ONLY.
4. CHECK SALES DEPARTMENT FOR COMBINATION CONNECTOR AND GASKET CODES. EXAMPLE: WTB26PR7QSY-1.

CODE CHART						
NO. OF CONTACTS	A	B	GASKET CODE (PLUG IMAGE)	FOR USE WITH	GASKET CODE (RCPT IMAGE)	FOR USE WITH
10	.400	.625	WTB10Q		WTB10QR	
14	.600	.825	WTB14Q		WTB14QR	
20	.900	1.125	WTB20Q		WTB20QR	
24	1.100	1.325	WTB24Q		WTB24QR	
26	1.200	1.425	WTB26Q	WTB-P-JT	WTB26QR	WTB-P-J
30	1.400	1.625	WTB30Q	JTA	WTB30QR	JL
36	1.700	1.925	WTB36Q	JTL	WTB36QR	
40	1.900	2.125	WTB40Q	WTAV-P-SY	WTB40QR	WTAX-P-SY
44	2.100	2.325	WTB44Q	SYL	WTB44QR	SYL
50	2.400	2.625	WTB50Q	WTB-PR-SY	WTB50QR	
54	2.600	2.825	WTB54Q	WTBV-P-SY	WTB54QR	
56	2.700	2.925	WTB56Q		WTB56QR	
60	2.900	3.125	WTB60Q		WTB60QR	
66	3.200	3.425	WTB66Q		WTB66QR	
70	3.400	3.625	WTB70Q		_____	

# ACCESSORIES

## FACE SEAL GASKETS FOR WG - WGA - WGE SERIES

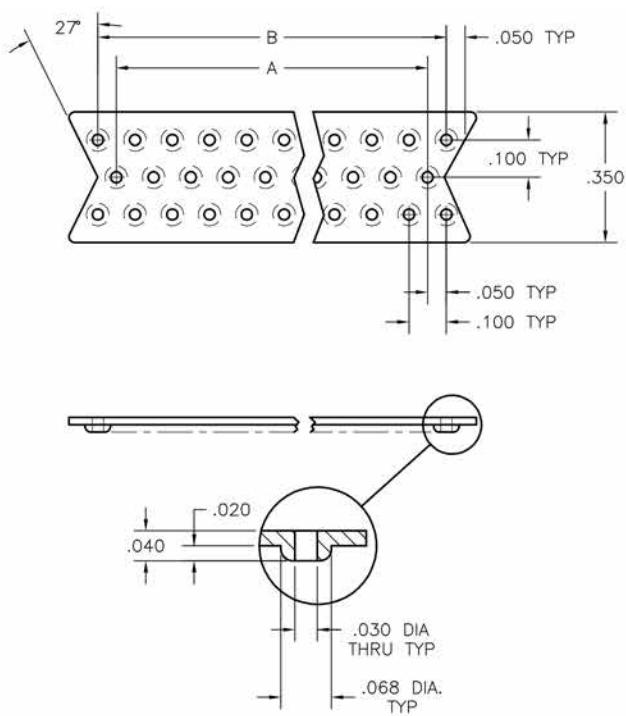


FIGURE 1

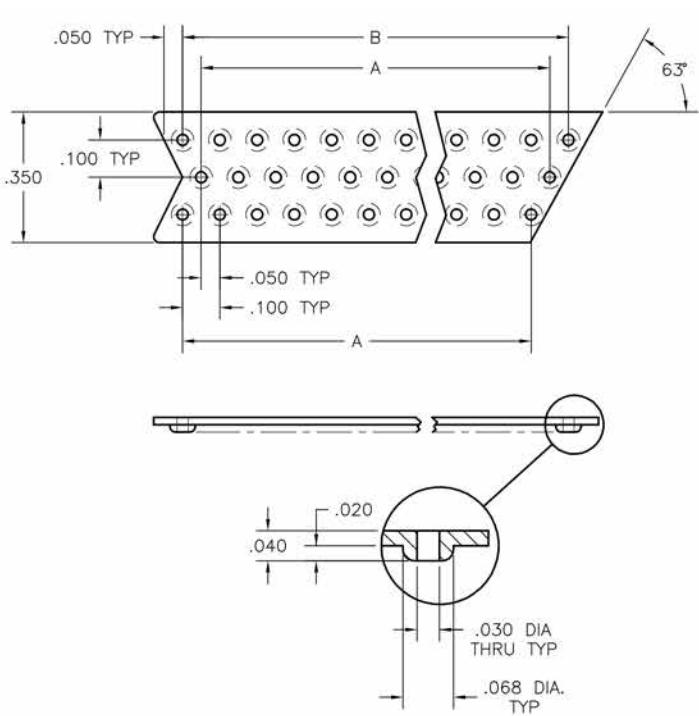


FIGURE 2

NOTES:

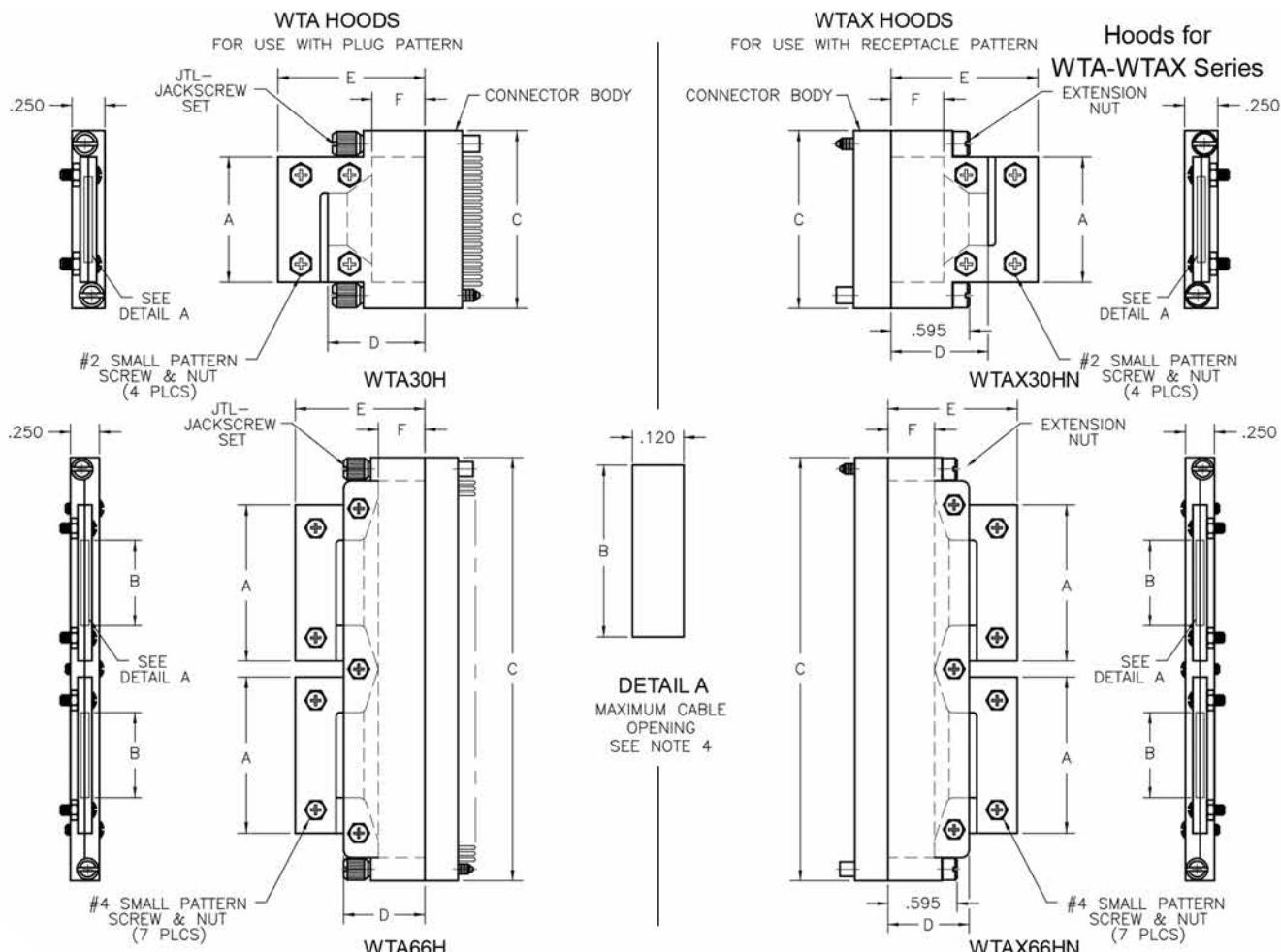
1. DUE TO THE ELASTICITY OF SILICONE RUBBER, A & B DIMENSIONS ARE FOR REFERENCE ONLY. THE ACCUMULATIVE TOLERANCE FOR LINEAR HOLE CENTERS SHALL BE NO MORE THAN  $\pm .030$  FOR EACH INCH OF SPACE BETWEEN END HOLES.
2. MATERIAL: SILICONE RUBBER, CLASS 2A OR 2B, GRADE 50 PER A-A-59588.
3. FOR USE WITH MALE (PIN) CONNECTORS ONLY.
4. CHECK SALES DEPARTMENT FOR COMBINATION CONNECTOR AND GASKET CODES. EXAMPLE: WG80PR7QSY-1.

CODE CHART					
NO. OF CONTACTS	A	B	FIGURE	GASKET CODE	FOR USE WITH
50	1.500	1.600	1	WG50Q	WG-P-JT
80	2.500	2.600	1	WG80Q	JTA
92	2.900	3.000	1	WG92Q	JTL
61	1.900	2.000	2	WG61Q	WGV-P-SY
52	1.600	1.700	2	WG52Q	SYL
62	1.900	2.000	1	WG62Q	WG-PR-SY
70	2.200	2.300	1	WG70Q	

FOR CONNECTOR CODE	USE TWO GASKETS CODE NUMBER
WGA122PR	WG61Q
WG104PR	WG52Q
WG160PR	WG80Q

# ACCESSORIES

## HOODS FOR WTA - WTAX SERIES



CODE CHART												PART NO. DESIGNATION						
WTA HOODS, PLUG IMAGE						WTAX HOODS, RECEPTACLE IMAGE						PART NO. DESIGNATION						
PART NO.	A	B <sup>+.015</sup> -.025	C	D	E	F	PART NO.	A	B <sup>+.015</sup> -.025	C	D	E	F	SERIES	SIZE	HOOD DESIGNATION	FOR HARDWARE TYPE	
WTA20H	.950	.400	1.350				WTAX30H	1.450	.800	1.850								JTL - LONG TURNING JACKSCREW SET
WTA30H	1.450	.800	1.850				WTAX36H	1.300	.750	2.150								
WTA36H	1.300	.750	2.150				WTAX40H	1.500	.950	2.350								
WTA40H	1.500	.950	2.350				WTAX44H	1.700	1.150	2.550								
WTA44H	1.700	1.150	2.550				WTAX50H	2.000	1.450	2.850								
WTA50H	2.000	1.450	2.850				WTAX54H	1.950	1.400	3.050								
WTAS4H	2.200	1.650	3.050				WTAX56H	2.060	1.500	3.150								
WTAS5H	2.060	1.500	3.150				WTAX60H	1.240	.700	3.350								
WTAS6H	1.240	.700	3.350				WTAX66H	1.345	.735	3.650								
WTAS7H	1.350	.735	3.650				WTAX70H	1.445	.885	3.850								

### NOTES:

1. DIMENSIONS ARE SYMMETRICAL ABOUT CENTER LINE.
2. HOODS ARE SUPPLIED UNASSEMBLED.
3. HOOD MATERIAL: POLYETHYLENE, HIGH DENSITY
4. CLAMPING SCREWS AND NUTS: STAINLESS STEEL
5. THE TOP CLAMPS ARE FLEXIBLE TO ACCOMMODATE MAXIMUM CABLE BUNDLE.
6. CHECK WITH SALES DEPARTMENT FOR SIZES NOT LISTED.
7. SCREWS SUPPLIED ARE CROSS-RECESS ONLY.
8. TOLERANCES:  $\pm .015$
9. SIZES 20-30 USE #2 SMALL PATTERN SCREW & NUT.
10. SIZES 36-70 USE #4 SMALL PATTERN SCREW & NUT.
11. HOODS CANNOT BE USED ON CONNECTORS SPECIFYING THE -C45 OPTION CODE.

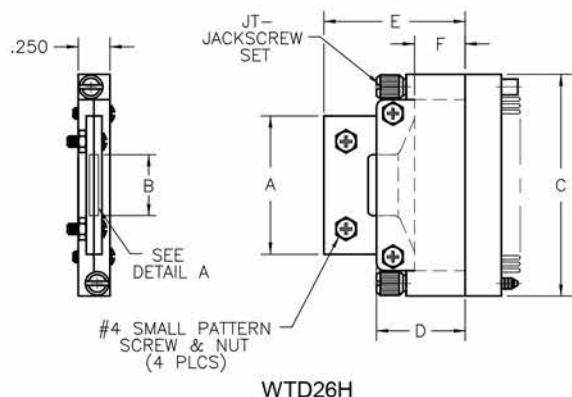
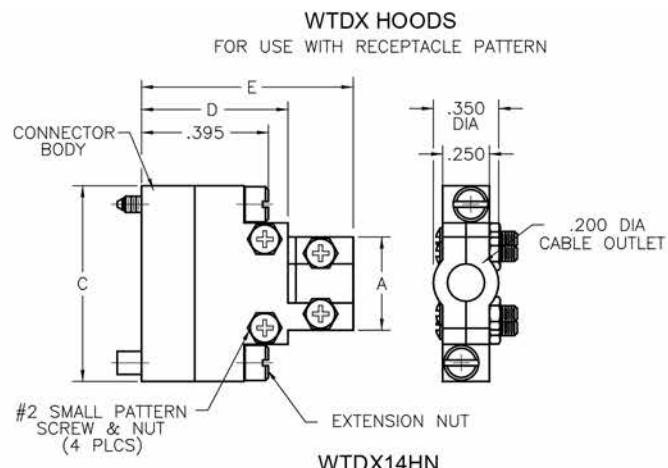
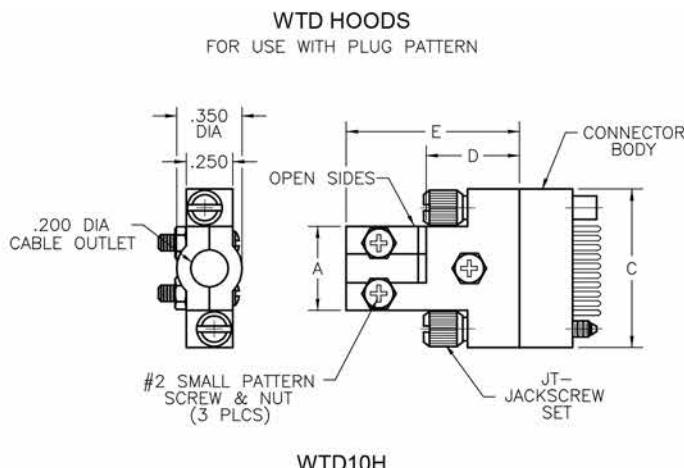
### EXAMPLES:

WTA\*\*H = DESIGNATES HOOD USED WITH JTL HARDWARE  
 WTA\*\*HN = DESIGNATES HOOD USED WITH J OR SY HARDWARE (INCLUDES EXTENSION NUTS).  
 WTAHN = DESIGNATES EXTENSION NUTS ONLY.

\*\* = DESIGNATES CONNECTOR SIZE. SEE PAGE WA-7 FOR ADDITIONAL INFORMATION ON EXTENSION NUTS.

# ACCESSORIES

## HOODS FOR WTD - WTDX SERIES



**DETAIL A**  
MAXIMUM CABLE  
OPENING  
SEE NOTE 4

PART NO. DESIGNATION			
SERIES	SIZE	HOOD DESIGNATION	FOR HARDWARE TYPE
WTD		H	JT - TURNING JACKSCREW SET
WTDX	10, 14 & 26	HN	J - FIXED JACKSCREW SET SY - GUIDE SET

CODE CHART							WTD HOODS, PLUG IMAGE							WTDX HOODS, RECEPTACLE IMAGE						
PART NO.	A	B $^{+.015}_{-.025}$	C	D	E	F	PART NO.	A	B $^{+.015}_{-.025}$	C	D	E	F							
WTD10H	.450	—	.850		.850	.200	WTDX10H	.450	—	.850		.850	—							
WTD14H	.500	—	1.050	.500	.915		WTDX14H	.500	—	1.050	.500	.915	.200							
WTD26H	1.090	.540	1.650				WTDX26H	1.250	.600	1.650										

### NOTES:

1. DIMENSIONS ARE SYMMETRICAL ABOUT CENTER LINE.
2. HOODS ARE SUPPLIED UNASSEMBLED.
3. HOOD MATERIAL: POLYETHYLENE, HIGH DENSITY
4. THE TOP CLAMPS ARE FLEXIBLE TO ACCOMMODATE MAXIMUM
5. CHECK WITH SALES DEPARTMENT FOR SIZES NOT LISTED.
6. SEE PAGE W-114 FOR WTA-WTAX SERIES HOODS
7. IF USED WITH WTA OR WTAX CONNECTORS IS DESIRED, LEAD
8. SCREWS SUPPLIED ARE CROSS-RECESS ONLY.
9. TOLERANCES:  $\pm .015$
10. SIZES 10 & 14 USE #2 SMALL PATTERN SCREW & NUT.
11. HOODS CANNOT BE USED ON CONNECTORS SPECIFYING THE

—C45 OPTION CODE.

### EXAMPLES:

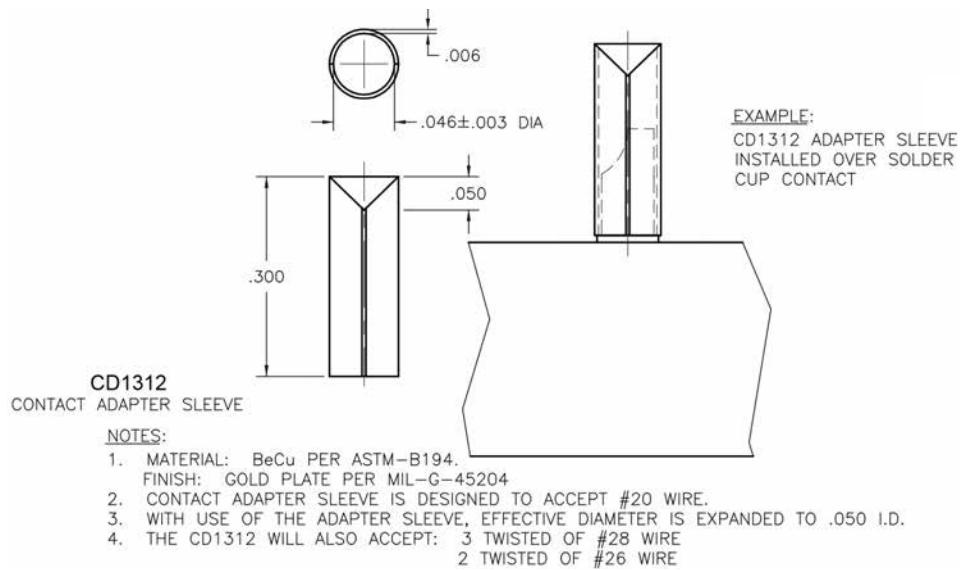
WTD\*\*H = DESIGNATES HOOD USED WITH JT HARDWARE  
WTD\*\*HN = DESIGNATES HOOD USED WITH J OR SY HARDWARE  
(INCLUDES EXTENSION NUTS).  
WTDHN = DESIGNATES EXTENSION NUTS ONLY.

\*\* = DESIGNATES CONNECTOR SIZE. SEE PAGE WA-7 FOR  
ADDITIONAL INFORMATION ON EXTENSION NUTS.

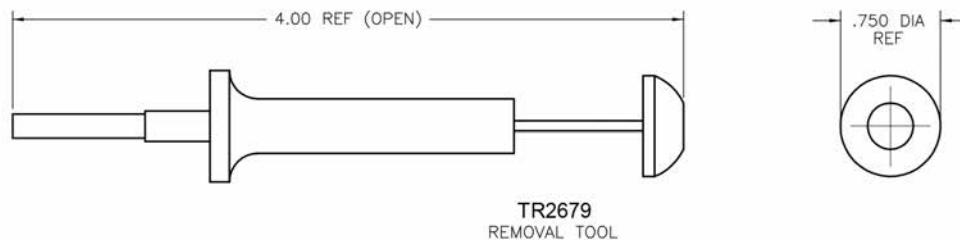
**molex**

# ACCESSORIES

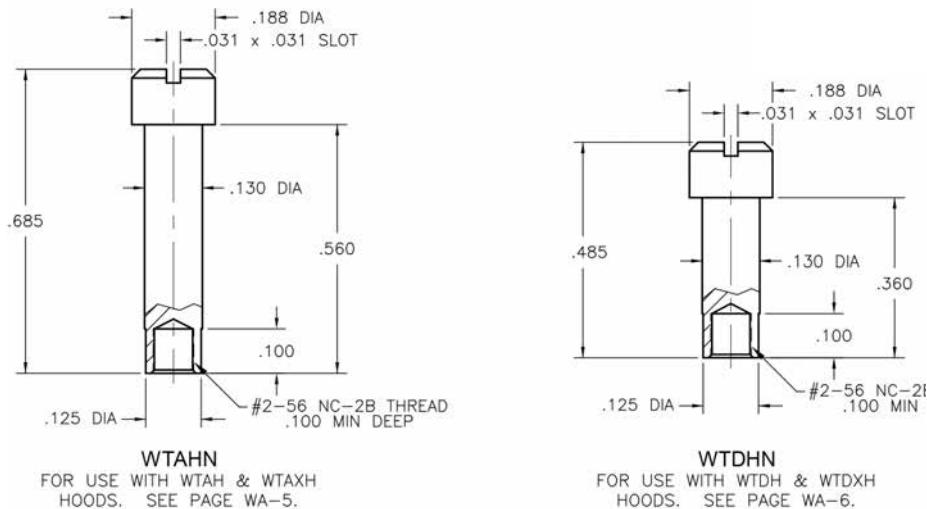
## ADAPTER SLEEVE FOR SOLDER CUP CONTACTS



## COAX REMOVAL TOOL FOR WTC CONTACTS



## EXTENSION NUTS



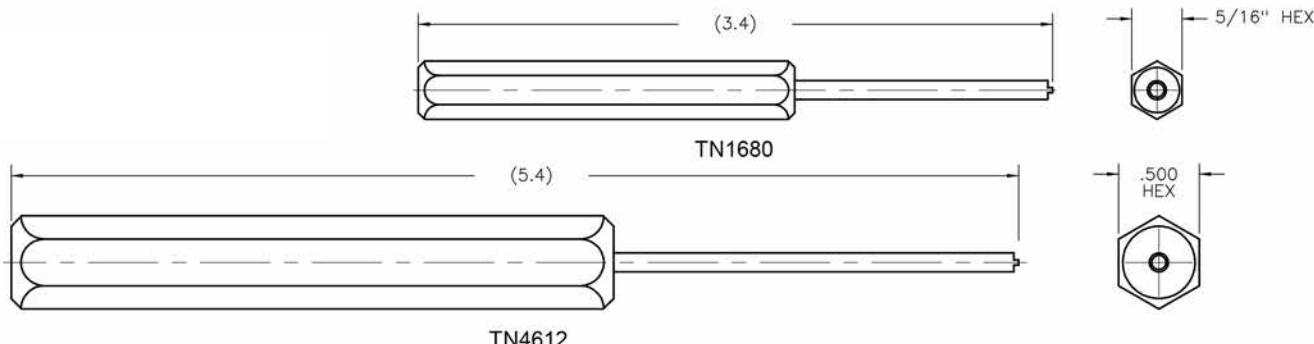
### NOTES:

1. EXTENSION NUTS ARE NECESSARY FOR HOODS WHEN CONNECTOR INVOLVED HAS FIXED HARDWARE. FOR EXAMPLE: GUIDE SET (SY) OR FIXED JACKSCREW SET (J).
2. TWO EXTENSION NUTS ARE REQUIRED PER HOOD.
3. MATERIAL: STAINLESS STEEL, TYPE 303.
4. INSTALLATION: REMOVE NUT FROM HARDWARE ON TERMINATION SIDE OF CONNECTOR USING TN1680, NUT SPANNER WRENCH. INSTALL EXTENSION NUT IN ITS PLACE. FOR INFORMATION ON TN1680 SEE WA-8.

**molex**

# ACCESSORIES

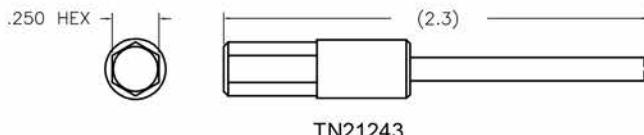
## NUT SPANNER WRENCHES



USING EITHER OF THE SPANNER WRENCHES SHOWN ABOVE, GUIDE SETS MAY BE REMOVED AND REPOSITIONED IN ANY OF THE 64 POLARIZING POSITIONS. REFER TO PAGE W-127 FOR POLARIZATION CHART.

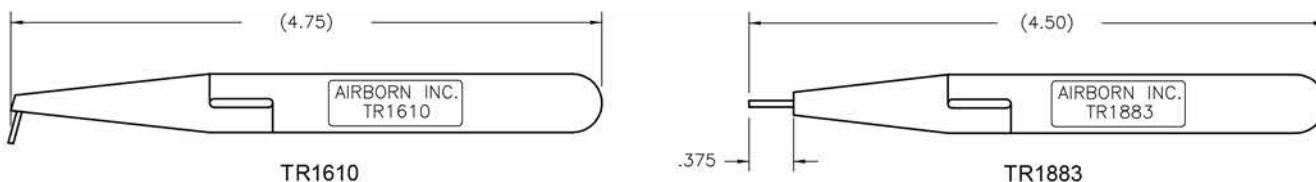
CAUTION: WHEN POLARIZED POSITIONS ARE CHANGED, APPLY LOCTITE 242® TO THREADS.

IF SPANNER NUTS ARE DIFFICULT TO REMOVE DUE TO HARDENED LOCTITE®, APPLY HEAT (300° F) TO NUT AREA FOR ONE HOUR AND REPEAT REMOVAL OPERATION.



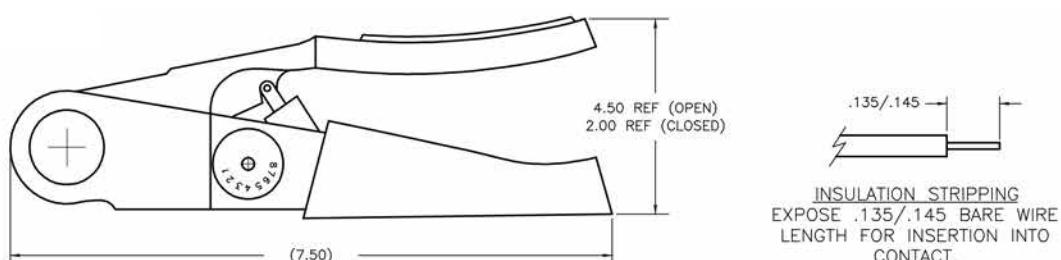
THE 1/4" DRIVE SPANNER WRENCH ABOVE IS DESIGNED FOR USE IN TORQUE WRENCHES

## INSERTION AND REMOVAL TOOLS



## CRIMP TOOLS AND POSITIONERS

TC1652 - CRIMP TOOL  
REF M22520/2-01  
TP1653 - POSITIONER  
REF M22520/2-06



TOOL SELECTION TABLE		
CONTACT	TOOL NO.	POSITIONER
WTK2222P	TC1652	TP1985
WTK2222S		TP1653
WTK2220S657		TP2435
WTK2220P657		TP13784

# CONTACTS

## #22 PINS AND SOCKETS FOR WT, WTA, WTB, WTK, WG AND WGA SERIES

### PINS



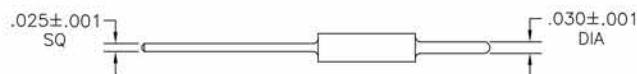
PC PC Pin, straight, solder cup



PD PD9 Pin, straight, dip solder, .140"  
PD11 Pin, straight, dip solder, .172"



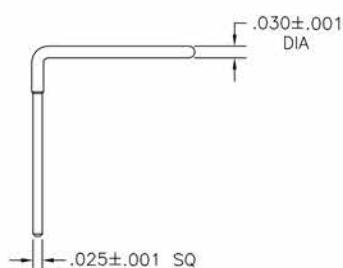
PF PF3 Pin, straight, flex circuit, .050"  
PF6 Pin, straight, flex circuit, .093"



PW PW40 Pin, straight, wire wrap®, .625"

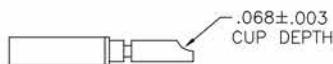


PR PR5 Pin, right angle, dip solder, .081" x .025" dia  
PR7 Pin, right angle, dip solder, .109" x .025" dia  
PR9 Pin, right angle, dip solder, .140" x .025" dia  
PR11 Pin, right angle, dip solder, .172" x .025" dia  
PR15 Pin, right angle, dip solder, .234" x .025" dia  
PRD4 Pin, right angle, dip solder, .063" x .030" dia  
PRD7 Pin, right angle, dip solder, .109" x .030" dia  
PRD8 Pin, right angle, dip solder, .125" x .030" dia

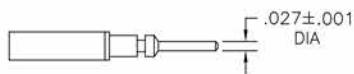


PRW PRW32 Pin, right angle, wire wrap®, .500"  
PRW34 Pin, right angle, wire wrap®, .531"  
PRW40 Pin, right angle, wire wrap®, .625"

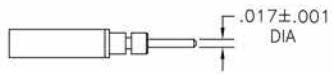
### SOCKETS



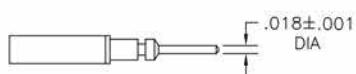
SAC SAC Socket, straight, solder cup, closed entry



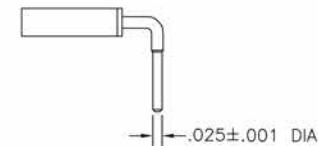
SAD SAD7 Socket, straight, dip solder, .109"  
SAD9 Socket, straight, dip solder, .140"  
SAD11 Socket, straight, dip solder, .172"  
SAD15 Socket, straight, dip solder, .234"  
SAD16 Socket, straight, dip solder, .250"



SAF SAF3 Socket, straight, flex circuit, .050"  
SAF6 Socket, straight, flex circuit, .093"



SAG SAG7 Socket, straight, dip solder, .109"  
SAG9 Socket, straight, dip solder, .140"  
SAG11 Socket, straight, dip solder, .172"



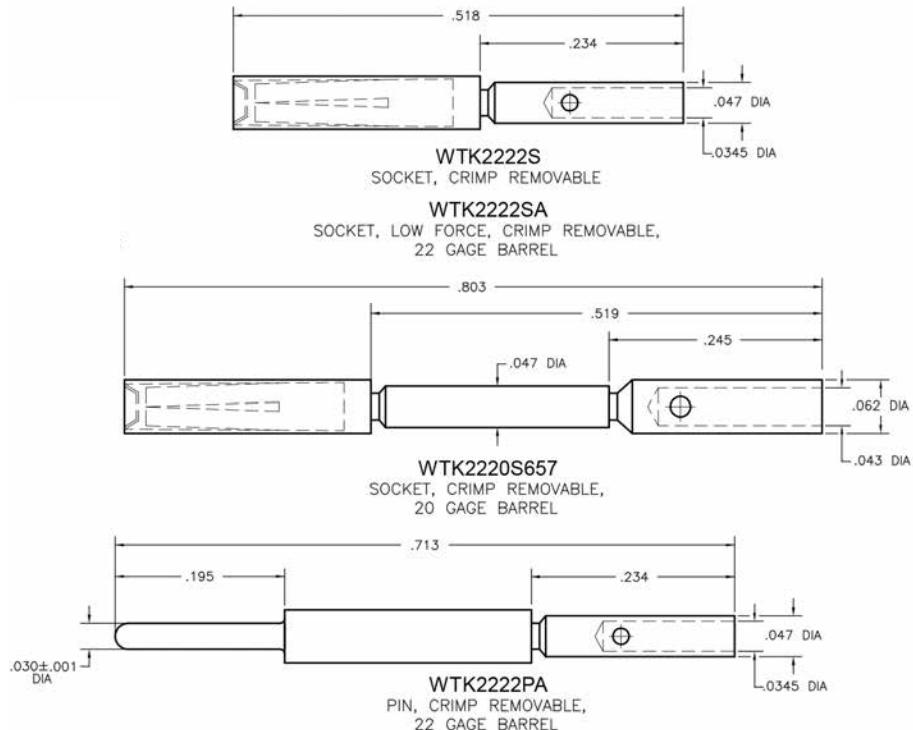
SAR SAR7 Socket, right angle, dip solder, .109"  
SAR9 Socket, right angle, dip solder, .140"  
SAR11 Socket, right angle, dip solder, .172"



SAW SAW24 Socket, straight, wire wrap®, .375"  
SAW40 Socket, straight, wire wrap®, .625"

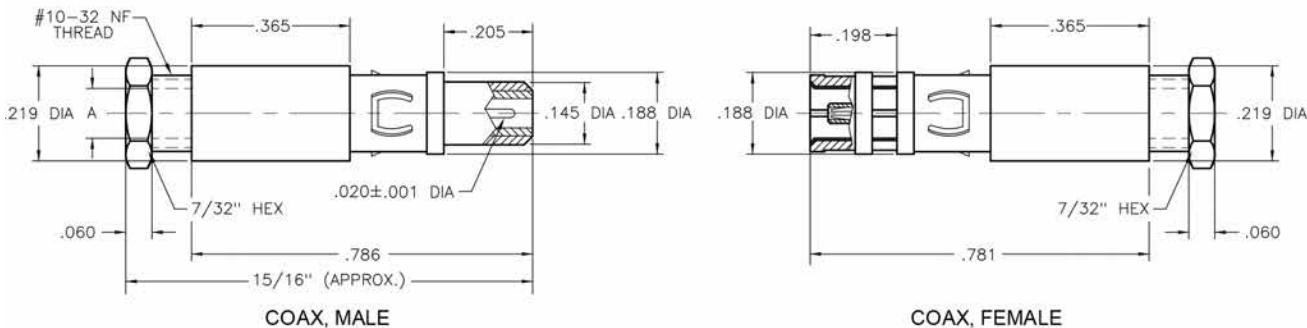
# CONTACTS

## CRIMP REMOVABLE FOR WTDX, WTDXA, WTK AND WTKA SERIES WGDX, WGCXA, WGK AND WGKA SERIES

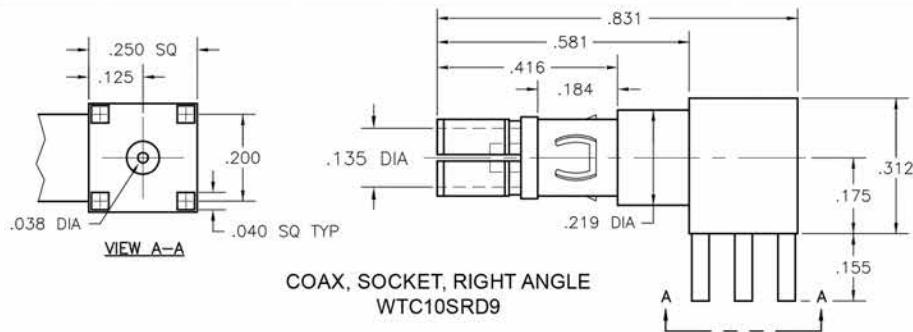


Note: When using crimp contacts with 20 gage barrel, barrel must be cut off prior to removing contact from connector body.

# COAX

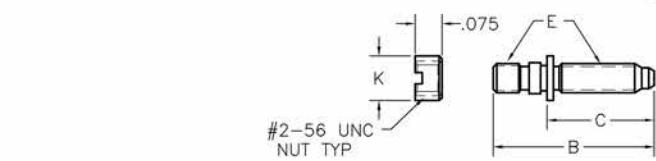


PART #	DESCRIPTION	DIA "A"	CABLE TYPE	PART #	DESCRIPTION
WTC188P		.115	RG174, RG188, RG316	WTC188S	
WTC196P	COAX, STRAIGHT, PIN	.089	RG178, RG196	WTC196S	COAX, STRAIGHT, SOCKET
WTC085P			SEMI-RIGID, .085-.50 OHM	WTC085S	

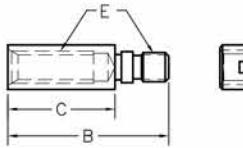


# JACKSETS

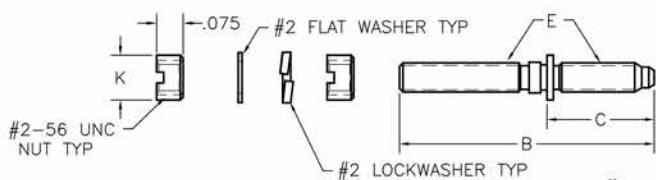
## Fixed Jacksets



**J**

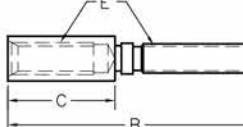


Fixed jackset  
Two fixed jacksockets  
Fixed jackset, reversed  
Two fixed jackscrews

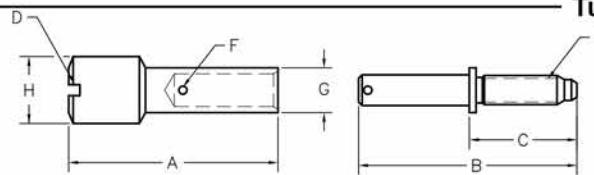


**JL**  
**JLFF**  
**JLFM**  
**JLMM**

**JL**

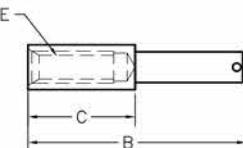


Fixed jackset, long  
Two fixed jacksockets, long  
Fixed jackset, long, reversed  
Two fixed jackscrews, long

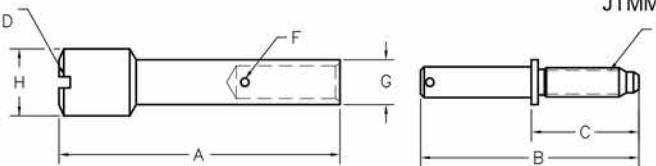


## Turning Jacksets

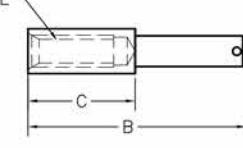
**JT**



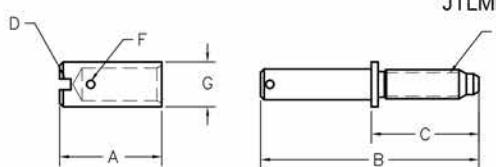
Turning jackset, .500"  
Two turning jacksockets, .500"  
Turning jackset, reversed, .500"  
Two turning jackscrews, .500"



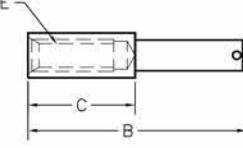
**JTL**



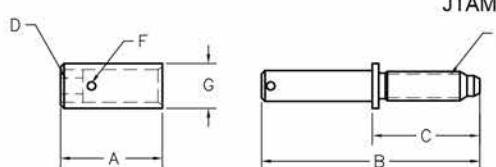
Turning jackset, .700"  
Two turning jacksockets, .700"  
Turning jackset, reversed, .700"  
Two turning jackscrews, .700"



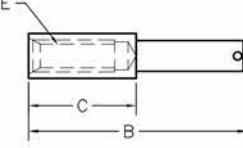
**JTA**



Turning jackset, .200"  
Two turning jacksockets, .200"  
Turning jackset, reversed, .200"  
Two turning jackscrews, .200"

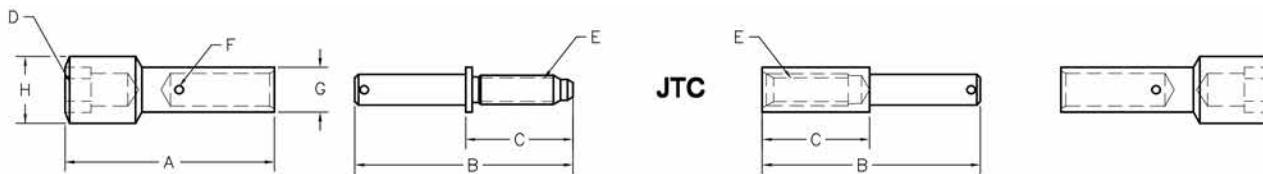


**JTB**



Turning jackset, .200"  
Two turning jacksockets, .200"  
Turning jackset, reversed, .200"  
Two turning jackscrews, .200"

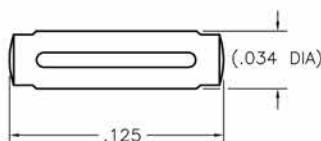
# JACKSETS



**JTC** Turning jackset, .500"  
**JTCFF** Two turning jacksockets, .500"  
**JTCFM** Turning jackset, reversed, .500"  
**JTCMM** Two turning jackscrews, .500"

## GROOVE PIN

SEE NOTE 1



### Notes:

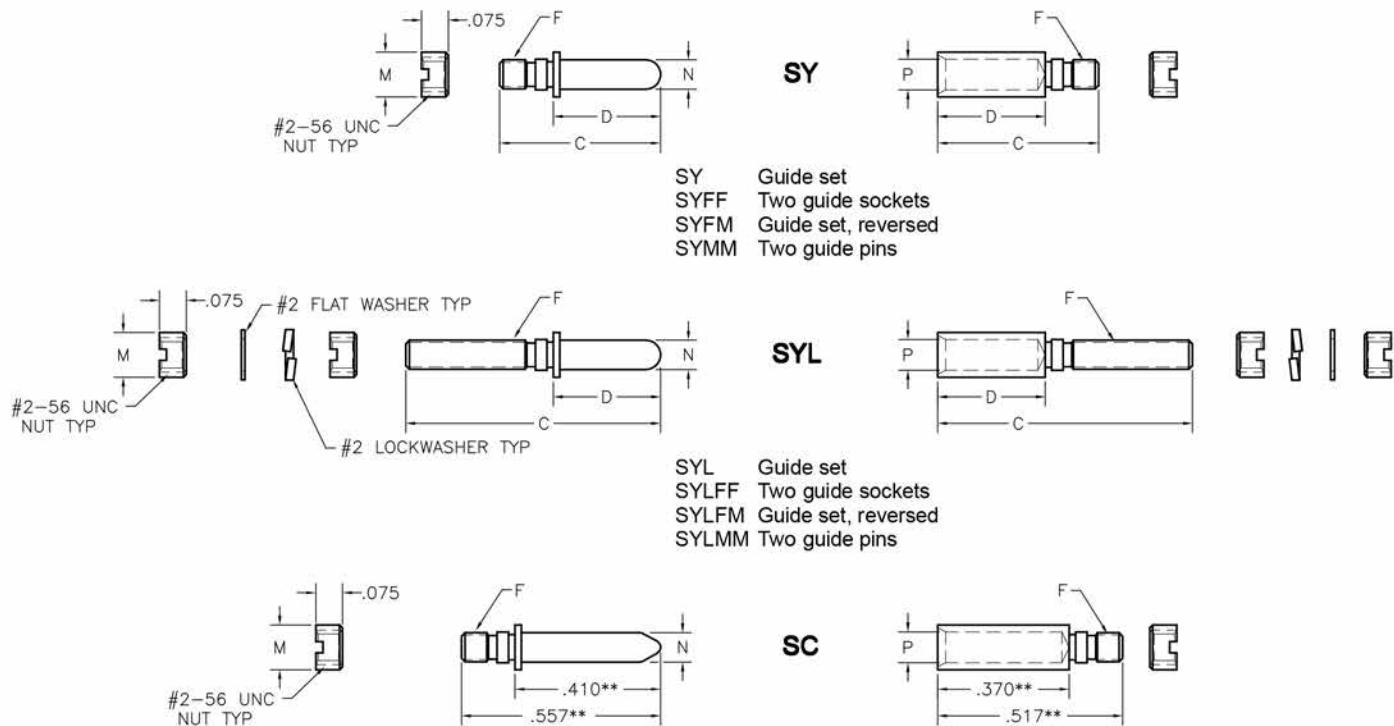
1. Groove pin secures knob to jackscrew and jacksocket on turning hardware.
2. For nut spanner wrench, refer to Data Sheet on WA-9.
3. When installing fixed jacksets, apply Loctite® to threads.
4. Under normal conditions, jackscrews are at socket contact position #1, and jacksockets are at pin contact position #1.
5. Spanner nuts, lockwashers and flat washers shall be supplied separately.

DIMENSIONS										
HARDWARE TYPE	FOR MOLDING TYPE	A	B	C	D	E	F	G	H	K
J	WTA, WTB	—	.450		—	—	—	—	—	.125 DIA
JL	WTA, WTB	—	.712		—	—	—	—	—	.125 DIA
JT	WTA, WTB WTDX, WTK	.585	.610 .860		.031 x .031 SLOT	#2-56 UNC THD	.033 DIA	.125 DIA	.187 DIA	—
JTA	WTA, WTB WTDX, WTK	.285	.610 .860	.300	.031 x .031 SLOT				.125 DIA	—
JTB	WTA, WTB WTDX, WTK	.285	.610 .860		5/64 INT HEX				.125 DIA	—
JTC	WTA, WTB WTDX, WTK	.585	.610 .860		7/64 INT HEX				.187 DIA	—
JTL	WTA, WTB WTDX, WTK	.785	.610 .860		.031 x .031 SLOT				.187 DIA	—

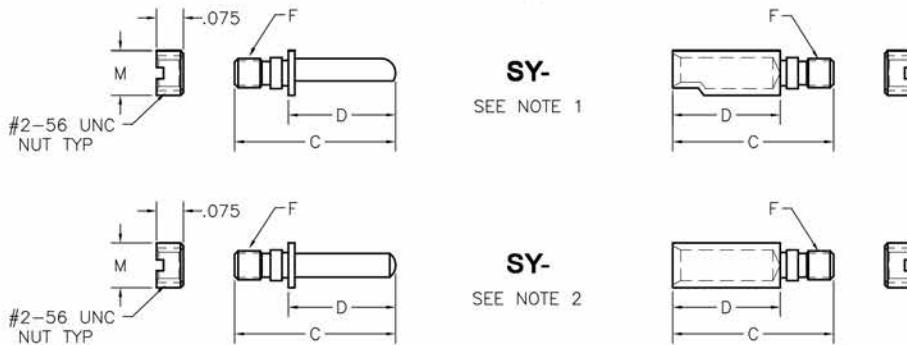
**molex**

# GUIDE SETS

## Guide Sets



## Guide Sets, Polarized



### Notes:

1. For polarized "D" shaped guides, see W-126. Polarizing also available for SYL- and SC- guide sets. To order, use P/N WTBSY-\*, WTBSYL-\* or WTBSC-\*. See W-126 for dash number requirement (example WTBSY-33).
2. For universal type test connector, see WA-17.
3. For nut spanner wrench, refer to Data Sheet on WA-9.
4. When installing guide sets, apply Loctite® to threads.
5. Under normal conditions, jackscrews are at socket contact position #1, and jacksockets are at pin contact position #1.
6. Spanner nuts, lockwashers and flat washers shall be supplied separately.

DIMENSIONS							
PART NUMBER	FOR MOLDING TYPE	C	D	F	M	N	P
WTBSC	WTB COAX	**	**				
WTBSY	WTA, WTB, WG, WGA	.450					
WTBTSY	WTBT	.653					
WTKSY	WTK		.300	#2-56 UNC THD	.125 DIA	.082 DIA	.086 DIA
WTBSYL	WTA, WTB, WG		.712				

# HARDWARE AVAILABILITY BY CONNECTOR SERIES

WTA / B WG – RECEPTACLE      BODY HEIGHT = 0.335												
STYLE	J	JL	SY	SY-*	SYL	SYL-*	JTA	JTB	JTD	JT	JTC	JTL
MATING	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130
TERMINATION	---	0.247	---	---	0.247	0.247	0.200	0.200	0.230	0.500	0.500	0.700
WTB / WG – PLUG      BODY HEIGHT = 0.400												
STYLE	J	JL	SY	SY-*	SYL	SYL-*	JTA	JTB	JTD	JT	JTC	JTL
MATING	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130
TERMINATION	---	0.182	---	---	0.182	0.182	0.135	0.135	0.165	0.435	0.435	0.635
WGA – RECEPTACLE      BODY HEIGHT = 0.375												
STYLE	J	JL	SY	SY-*	SYL	SYL-*	JTA	JTB	JTD	JT	JTC	JTL
MATING	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130
TERMINATION	---	0.207	---	---	0.207	0.207	0.160	0.160	0.190	0.460	0.460	0.660
WGA – PLUG      BODY HEIGHT = 0.400												
STYLE	J	JL	SY	SY-*	SYL	SYL-*	JTA	JTB	JTD	JT	JTC	JTL
MATING	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130
TERMINATION	---	0.182	---	---	0.182	0.182	0.135	0.135	0.165	0.435	0.435	0.635
WGR92 – RECEPTACLE      BODY HEIGHT = 0.375												
STYLE	J	JL	SY	SY-*	SYL	SYL-*	JTA	JTB	JTD	JT	JTC	JTL
MATING	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130
TERMINATION	---	0.207	---	---	0.207	0.207	0.160	0.160	0.190	0.460	0.460	0.660
WGR92 – PLUG      BODY HEIGHT = 0.350												
STYLE	J	JL	SY	SY-*	SYL	SYL-*	JTA	JTB	JTD	JT	JTC	JTL
MATING	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130
TERMINATION	0.247	0.120	0.120	0.120	0.120	0.120	0.205	0.205	0.505	0.705	0.705	0.705
WRD122 – RECEPTACLE      BODY HEIGHT = 0.375												
STYLE	J	JL	SY	SY-*	SYL	SYL-*	L-D65	JTA	JTB	JTD	JTC	JTL
MATING	0.130	0.130	0.130	0.130	0.130	0.130	---	0.130	0.130	0.130	0.130	0.130
TERMINATION	---	0.207	---	---	0.207	0.207	0.230	0.160	0.160	0.460	0.460	0.660
WRD122 – PLUG      BODY HEIGHT = 0.635												
STYLE	JCL	SYCL	SYCL*									
MATING	0.130	0.130	0.130									
TERMINATION	---	---	---									
WRF100 – PLUG      BODY HEIGHT = 0.430												
STYLE								JTB				JTL
MATING								0.130				0.130
TERMINATION								0.190				0.705
WRTBT – RECEPTACLE      BODY HEIGHT = 0.525												
STYLE	J		SY	SY-*			JTA	JTB	JTD	JT	JTC	JTL
MATING	0.130		0.130	0.130			0.130	0.130	0.130	0.130	0.130	0.130
TERMINATION	---		---	---			0.175	0.175	0.205	0.475	0.500	0.675
PA – RECEPTACLE      BODY HEIGHT = 0.375												
STYLE	SY	J						JTB		JT		
MATING	0.175	0.160						0.175		0.175		
TERMINATION	0.200	0.277						0.314		1.054		
PA – PLUG      BODY HEIGHT = 0.375												
STYLE	SY	J						JTB		JT		JTL
MATING	0.210	0.160						0.160		0.160		0.175
TERMINATION	0.273	0.277						0.314		1.054		1.170

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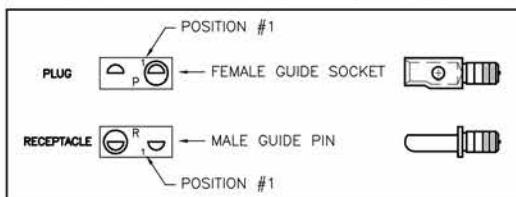
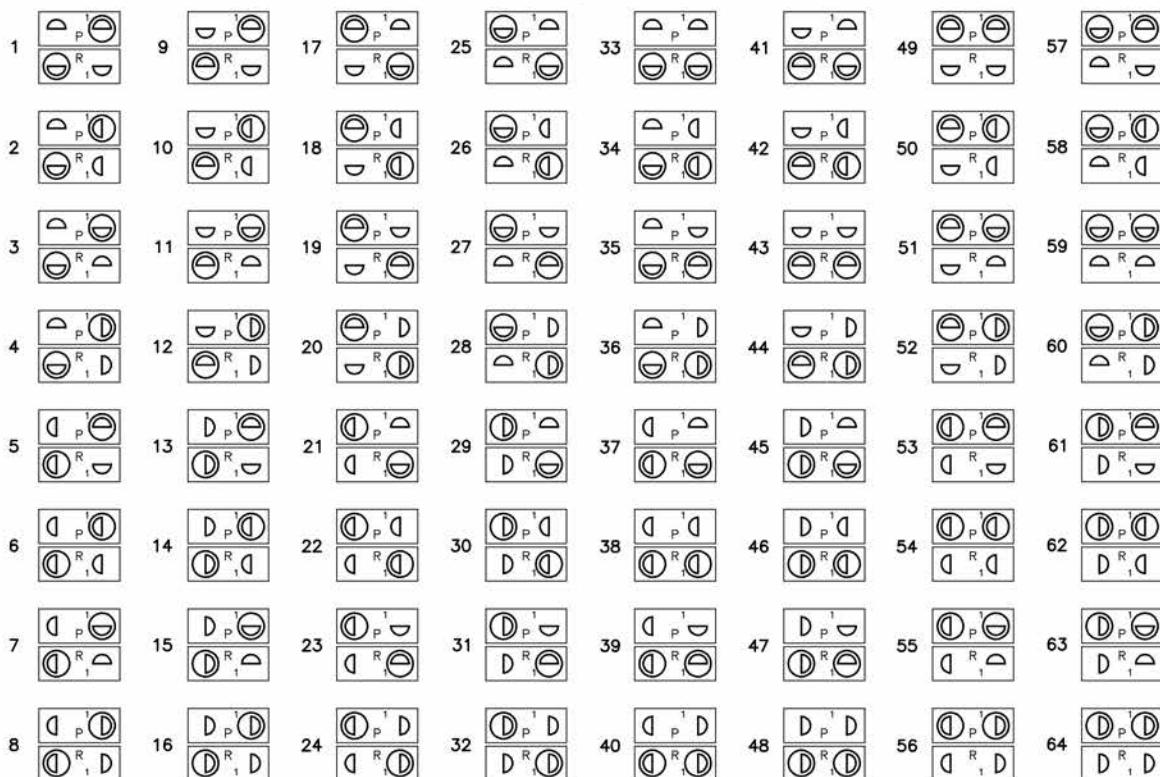
# HARDWARE AVAILABILITY BY CONNECTOR SERIES

WTK / WTDX - PLUG OR RECEPTACLE						BODY HEIGHT = 0.585						
STYLE	J	JL	SY	SY-*			JTA	JTB	JTD	JT	JTC	JTL
MATING	0.130	0.130	0.130	0.130			0.130	0.130	0.130	0.130	0.130	0.130
TERMINATION	---	0.247	---	---			0.200	0.200	0.230	0.500	0.500	0.700
WTA59 BODY HEIGHT = 0.285												
STYLE	J						JTA	JTB				
MATING	0.130						0.130	0.130				
TERMINATION	---						0.135	0.135				
WRBC - RECEPTACLE						BODY HEIGHT = 0.530						
STYLE	SC	SC-*										
MATING	0.145	0.145										
TERMINATION	---	---										
WRBC - PLUG						BODY HEIGHT = 0.515						
STYLE	SC	SC-*										
MATING	0.185	0.185										
TERMINATION	---	---										
WTB COAX - RECEPTACLE						BODY HEIGHT = 0.335						
STYLE	J	JL	SY	SY-*			JTA	JTB		JT		
MATING	0.130	0.130	0.130	0.130			0.130	0.130		0.130		
TERMINATION	---	0.247	---	---			0.200	0.200		0.500		
WTB COAX - PLUG						BODY HEIGHT = 0.400						
STYLE	J	JL	SY				JTA	JTB		JT		
MATING	0.130	0.130	0.130				0.130	0.130		0.130		
TERMINATION	---	---	---				0.135	0.135		0.435		
WTB COAX - RECEPTACLE WITH SC HARDWARE (GUIDE SOCKET)						BODY HEIGHT = 0.335						
STYLE			SC	SC-*								
MATING			0.145	0.145								
TERMINATION			0.040	0.040								
WTB COAX - PLUG WITH SC HARDWARE (GUIDE PIN)						BODY HEIGHT = 0.400						
STYLE			SC	SC-*								
MATING			0.185	0.185								
TERMINATION			---	---								
WTB COAX - RECEPTACLE WITH SC HARDWARE (GUIDE PIN)						BODY HEIGHT = 0.335						
STYLE			SC	SC-*								
MATING			0.185	0.185								
TERMINATION			0.040	0.040								
WTB COAX - PLUG WITH SC HARDWARE (GUIDE SOCKET)						BODY HEIGHT = 0.400						
STYLE			SC	SC-*								
MATING			0.145	0.145								
TERMINATION			---	---								

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# POLARIZATION

## D-Shaped Guide Sets



For optimum safety, use polarization number 1-6-11-16-17-22-27 or 32 when possible. These positions will exclude entry of guide pins at both ends of connectors when an attempt is made to mate incorrectly.

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

Example:

Plug WTB20PR7SY-1  
Receptacle WTB20SECSY-1

To order polarization guide set only, use p/n WTBSY-1. This set consists of one "D-shaped" guide pin, one "D-shaped" guide socket and two spanner nuts (#2-56 UNC thread).

WTBSY-0 is WTBSY-1 except guide set is assembled in connector with the "-1" configuration without applying Loctite®.

To change polarization position of guide sets, order spanner nut wrench, part number TN1680 or TN4612. See W-118.

SERIES	NO. OF CONTACTS	POLARIZED GUIDE SET CODE	POLAR. GUIDE SET ONLY
WTB WG	10 THRU 160	SY-1 (EX. WTB70SACSY-1)	WTBSY-1
WTB COAX TYPE	20-3, 20-6	SC-1 (EX. WTB20-6SACSC-1)	WTBSC-1
WTK	10 THRU 70	SY-1 (EX. WTKA70SSY-1)	WTKSY-1

## 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.

-65		For positions -1 thru -16
-66		For positions -17 thru -32
-67P -67R		For positions -33 thru -48
-68P -68R		For positions -49 thru -64

When ordering -67 or -68 guide sets only, P (plug) or R (receptacle) must be noted. Ex: WTBSY-67R. Not required if guides are assembled in the connector. Ex: WTB70SACSY-67.

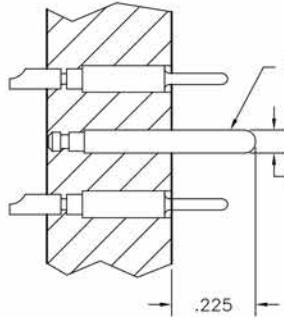
WTBSY-65, WTBSC-65 & WTKSY-65 is Universal Guide Set only, consisting of: one square guide pin one round guide socket two spanner nuts (#2-56 thd)

# POLARIZATION

## Polarizing Pin Applications

### PIN CONTACT —STRAIGHT THRU— CONNECTOR BODY

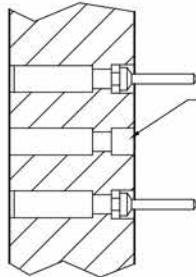
WT, WTA  
WTAV, WTBV



WTA\*\*PCJTA443-1, -2...

### SOCKET CONTACT

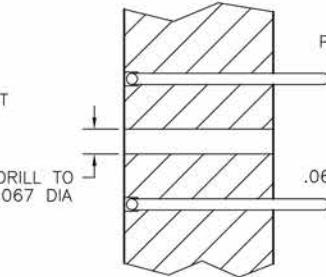
WT, WTA, WTAX,  
WTB, WTBX



WTA\*\*SAD9JL444-1, -2...

### PIN CONTACT —RIGHT ANGLE— CONNECTOR BODY

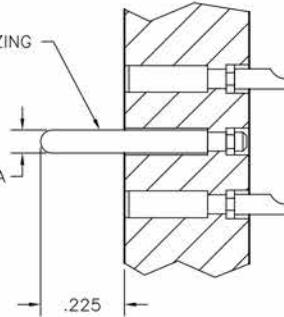
WG, WGA, WGE,  
WT, WTB



WTB\*\*PR7SY515-1, -2...

### SOCKET CONTACT

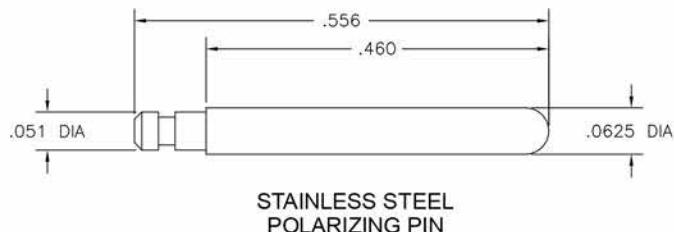
WG, WGA, WGE,  
WT, WTA, WTAX,  
WTB, WTDXA, WTKA



WTB\*\*SACSY515-1, -2...

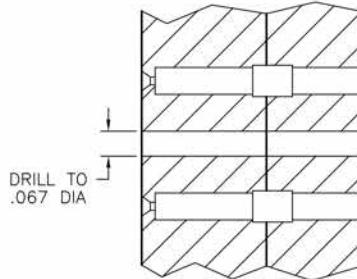
#### Notes:

1. CODE 443 - Polarizing pin installed in contact position noted by dash number.
2. CODE 444 - Contact position noted by dash number is left open.
3. Either pin or socket contacts can be used with 443 or 444.
4. \*\* = connector size
5. For additional dimensions and other information, refer to catalog data sheet of specific connector.



### SOCKET CONTACT

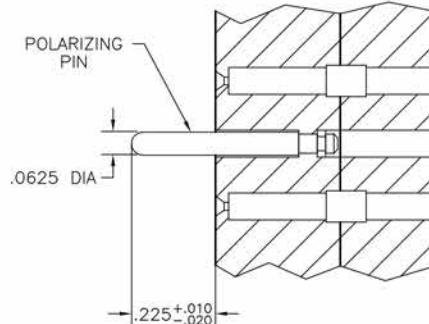
WTDXA, WTKA



WTDXA\*\*SJT478-1, -2...  
WTKA\*\*SSY478-1, -2...

### SOCKET CONTACT

WTDXA, WTKA



WTDXA\*\*SJT515-1, -2...  
WTKA\*\*SSY515-1, -2...

**AIRBORN WB SERIES: 0.050"**  
**MIL-C-55302**

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## AirBorn WB Series

### 0.050" Rectangular Plastic Board-Level Connectors

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Part Number Description .....	W-99

## Two Row - PC Card or SMT-to-Board Connectors

WB Plug, Right-Angle, with Mounting Ears .....	W-100
WBB, WBA Plug, Straight, Surface-Mount, with Mounting Ears.....	W-102
Hardware .....	W-104
WB Board Layout - Plug, Right-Angle.....	W-105
WB Board Layout - Receptacle, Straight .....	W-106
WBB, WBA Board Layout - Plug, Straight, Surface-Mount.....	W-107

## SPECIFICATIONS – MATERIALS AND FINISHES\*

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<b>PIN CONTACTS:</b>	Phosphor bronze per ASTM B 139
<b>SOCKET CONTACT:</b>	BeCu per MIL-C-55302
<b>CONTACT FINISH:</b>	Au per ASTM B 488-, SAE AMS 2422. Localized finish over MIL-C-55302
<b>MOLDED INSULATOR:</b>	Glass filled polyphenylene sulfide per MIL-M-24519, type GST-40F
<b>KEY FEATURES:</b>	Polarized octagonal guides can be a molded integral part of the insulator or separate stainless steel hardware.
<b>TOLERANCES:</b> <i>(Unless otherwise specified)</i>	Angles: $\pm 5^\circ$ Decimals: $\pm 0.010"$ Fractions: $\pm 1/64"$

### NOTES

Molex can manufacture special configurations for your exact specifications.

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

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# PERFORMANCE REFERENCE MIL-C-55302

<b>CONTACT RATING:</b>	1.5 amperes
<b>SOLDERABILITY:</b>	Tested to MIL-STD-202, method 208
<b>OPERATING TEMPERATURE:</b>	-65° to +125° C or -85° to +257° F
<b>CONTACT ENGAGEMENT FORCE:</b>	2.0 oz maximum with 0.0189/0.0190" diameter test pin in accordance with SAE AS 31971
<b>CONTACT SEPARATION FORCE:</b>	10 oz maximum with 0.0169/0.0170" diameter test pin in accordance with SAE AS 31971

CATEGORY	REQUIREMENTS	TEST METHOD PER: SAE AS 13441
TEST VOLTAGE	600V, RMS, 60 Hz at sea level 150V, RMS, 60 Hz at 70,000 feet	#3001
INSULATION RESISTANCE	5,000 megohms minimum at 500 VDC	#3003
DURABILITY	500 connector mating cycles	
CONTACT RESISTANCE	0.0375 volt maximum drop at 1.5 amperes (0.025 Ohms)	#3004

## PART NUMBER DESCRIPTION

Each part number consists of four elements: series, size (number of contacts), type of contacts, and type of hardware.

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 part number is identified by a combination of letters and/or numbers of varying lengths. These numbers are written together without spaces or punctuation.

### **SERIES:**

The series letters identify the connector body style. Follow choices on each catalog page for series numbers.

### **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.

### **HARDWARE:**

Hardware options are shown on each catalog page. Follow the choices for each connector.

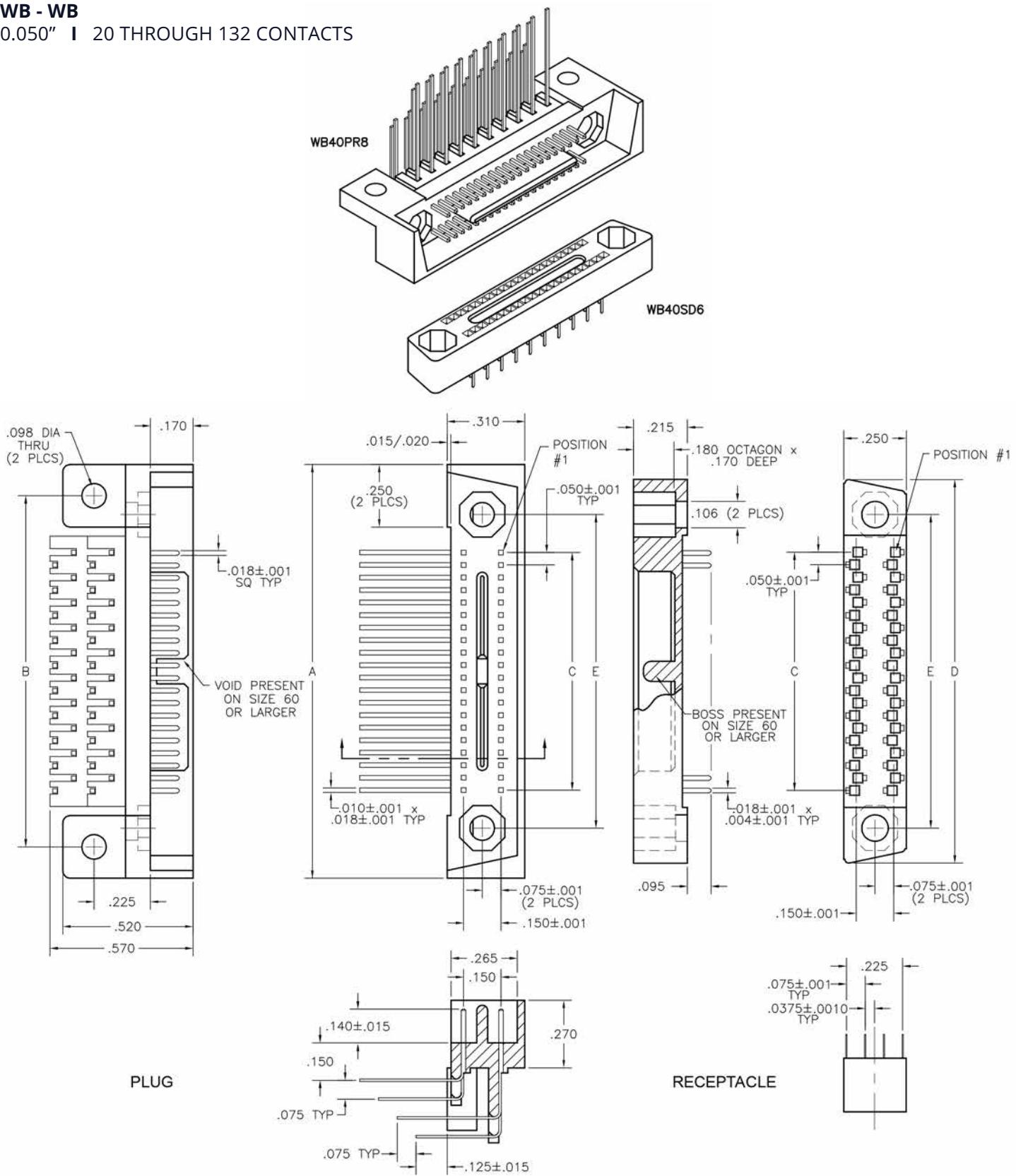
### **NOTES:**

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.

# TWO ROW - PC CARD-TO-CHASSIS OR BOARD

## WB - WB

0.050" | 20 THROUGH 132 CONTACTS



## AIRBORN WB SERIES

### LEAD CONFIGURATION OPTIONS

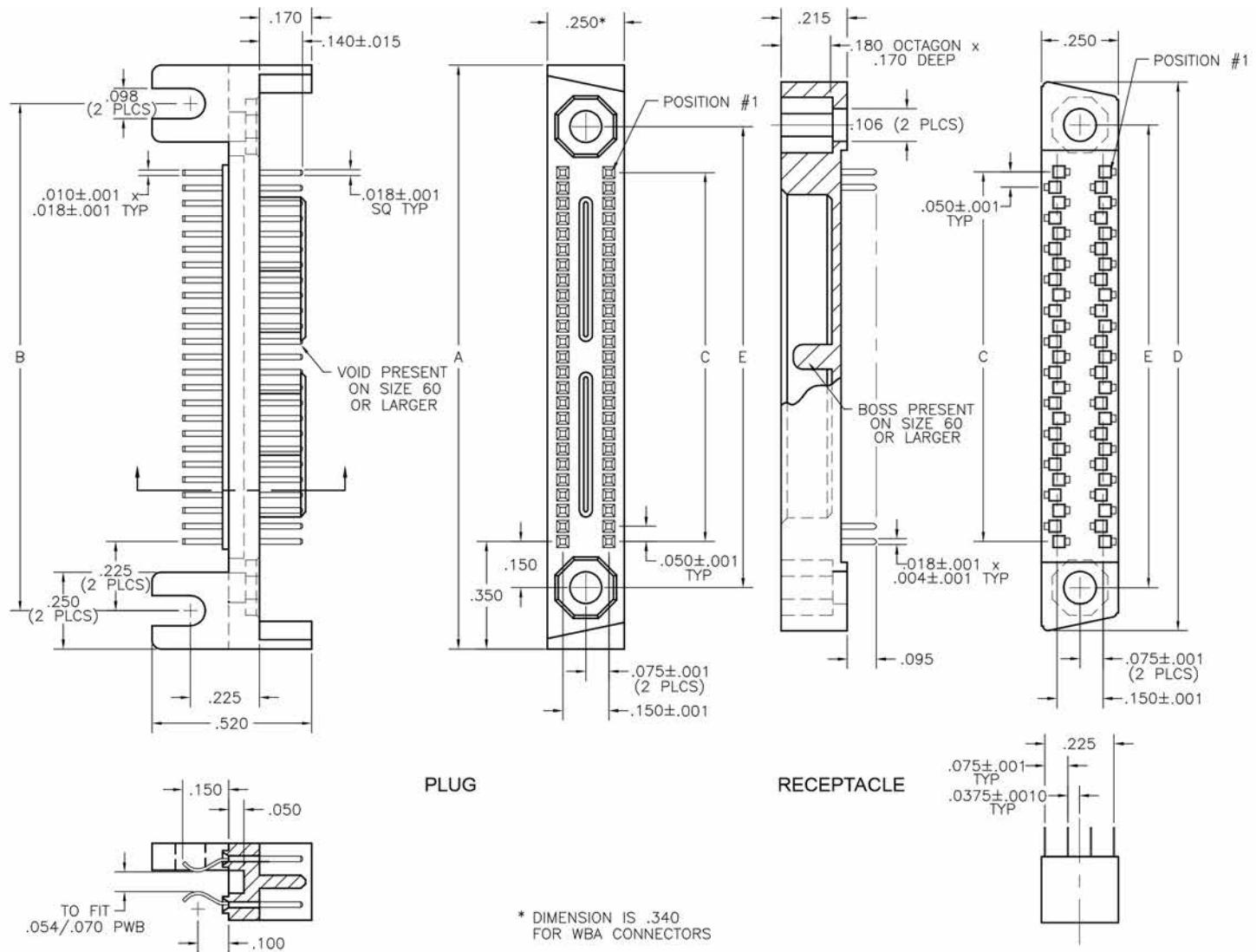
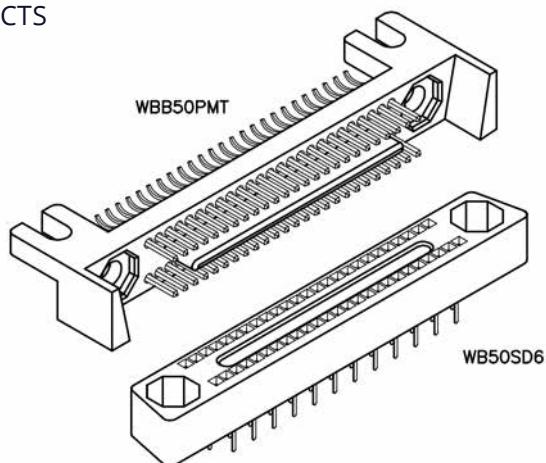
PLUG	RECEPTACLE	PLUG: WB40PR8 RECEPTACLE: WB40SD6 XXXXXXXXXXXX
<b>SERIES</b>		
WB 2 row, right angle, plug, with mounting ears	WB 2 row, straight, receptacle, with mounting ears	
<b>SIZE</b>		
20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 128, 132	20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 128, 132	
<b>CONTACTS</b>		
TYPE CONTACTS/TERMINATIONS: PR8 Pin, right angle, dip solder, .125"	TYPE CONTACTS/TERMINATIONS: SD6 Socket, straight, dip solder, .095" SD9 Socket, straight, dip solder, .140" SD12 Socket, straight, dip solder, .190" SD19 Socket, straight, dip solder, .300"	
<b>HARDWARE</b>		
STYLE OF HARDWARE: (See WB-9) K*_* Integral keying guides, polarized KY*_* Stainless steel keying guides, polarized JMM 2 stainless steel fixed jackscrews	STYLE OF HARDWARE: (See WB-9) K*_* Integral keying guides, polarized KY*_* Stainless steel keying guides, polarized JTFF 2 stainless steel turning jacksockets	

DIMENSIONS					
SIZE	A	B	C	D	E
20	1.150	.900	.450	1.030	.750
30	1.400	1.150	.700	1.280	1.000
40	1.650	1.400	.950	1.530	1.250
50	1.900	1.650	1.200	1.780	1.500
60	2.150	1.900	1.450	2.030	1.750
70	2.400	2.150	1.700	2.280	2.000
80	2.650	2.400	1.950	2.530	2.250
90	2.900	2.650	2.200	2.780	2.500
100	3.150	2.900	2.450	3.030	2.750
110	3.400	3.150	2.700	3.280	3.000
128	3.850	3.600	3.150	3.730	3.450
132	3.950	3.700	3.250	3.830	3.550

## TWO ROW - SMT CARD-TO-CHASSIS OR BOARD

## WBB - WB AND WBA - WB

0.050" | 20 THROUGH 132 CONTACTS



## AIRBORN WB SERIES

### LEAD CONFIGURATION OPTIONS

PLUG	RECEPTACLE	PLUG: WBB50PMT RECEPTACLE: WB50SD6 XXXXXXXXXXXX
<b>SERIES</b>		
WBB 2 row, SMT, plug, with mounting ears	WB 2 row, straight, receptacle, with mounting ears	
WBA 2 row, SMT, plug, full skirt, with mounting ears		
<b>SIZE</b>		
20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 128, 132	20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 128, 132	
<b>CONTACTS</b>		
TYPE CONTACTS/TERMINATIONS: PMT Pin, card edge SMT (Board: .054/.070)	TYPE CONTACTS/TERMINATIONS: SD6 Socket, straight, dip solder, .095" SD9 Socket, straight, dip solder, .140" SD12 Socket, straight, dip solder, .190" SD19 Socket, straight, dip solder, .300"	
<b>HARDWARE</b>		
STYLE OF HARDWARE: (See WB-9) K*_* Integral keying guides, polarized KY*_* Stainless steel keying guides, polarized JMM 2 stainless steel fixed jackscrews	STYLE OF HARDWARE: (See WB-9) K*_* Integral keying guides, polarized KY*_* Stainless steel keying guides, polarized JTFF 2 stainless steel turning jacksockets	

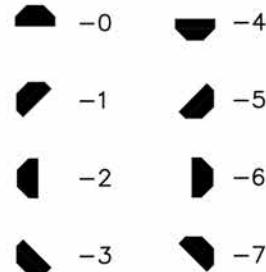
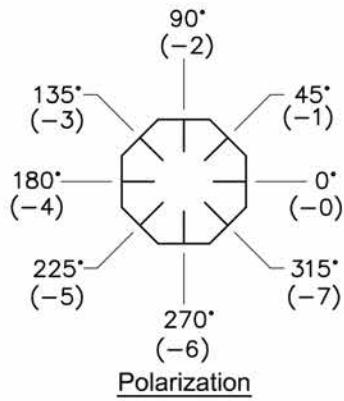
DIMENSIONS					
SIZE	A	B	C	D	E
20	1.150	.900	.450	1.030	.750
30	1.400	1.150	.700	1.280	1.000
40	1.650	1.400	.950	1.530	1.250
50	1.900	1.650	1.200	1.780	1.500
60	2.150	1.900	1.450	2.030	1.750
70	2.400	2.150	1.700	2.280	2.000
80	2.650	2.400	1.950	2.530	2.250
90	2.900	2.650	2.200	2.780	2.500
100	3.150	2.900	2.450	3.030	2.750
110	3.400	3.150	2.700	3.280	3.000
128	3.850	3.600	3.150	3.730	3.450
132	3.950	3.700	3.250	3.830	3.550

# HARDWARE

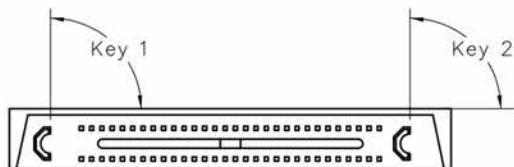
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## Polarization

### Integral Keying Guides



### Polarization Chart



Example: WB\*\*PR8K2-2  
(Plug)



Example: WB\*\*SD6K2-2  
(Receptacle)

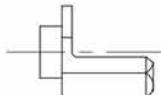
#### Notes:

1. Each "dash" number represents 45° clocking from horizontal (0°).
2. The first number designates "Key 1", the second number designates "Key 2".

## Hardware Options:

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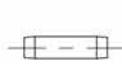
### Hardware Style: KY\* - \*



#### Stainless Steel Polarized Guide

Plug	Mates with	Receptacle	Plug	Mates with	Receptacle
-0		-0	-4		-4
-1		-7	-5		-3
-2		-6	-6		-2
-3		-5	-7		-1

### Hardware Style: JMM (Plug only)



Groove Pin

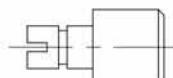


Fixed Jackscrew  
(#4-40 UNC-2A)

### Hardware Style: JTFF (Receptacle only)



E-Ring

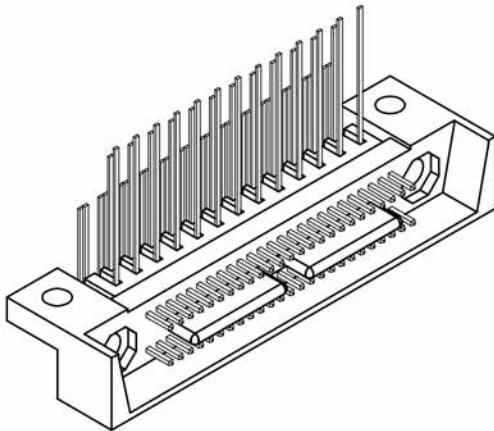


Turning Jacksocket

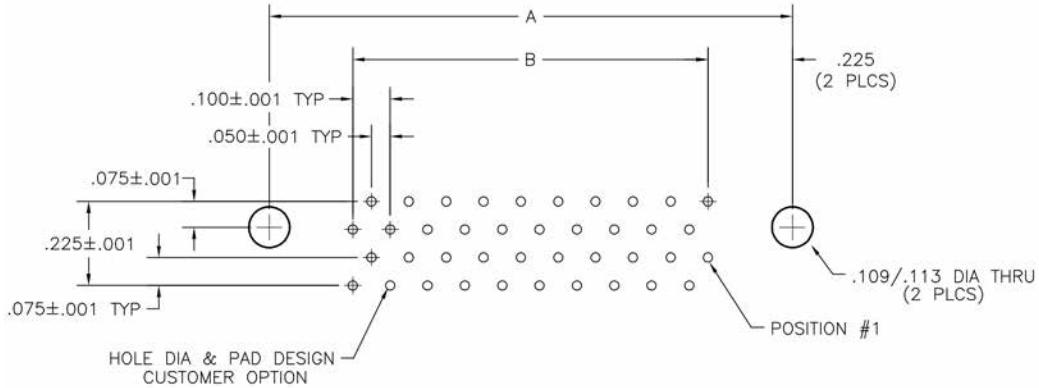
## TWO ROW - RIGHT-ANGLE PTH PLUG

## WB - RECOMMENDED BOARD LAYOUT

0.050" | 20 THROUGH 132 CONTACTS



DIMENSIONS		
SIZE	A	B
20	.900	.450
30	1.150	.700
40	1.400	.950
50	1.650	1.200
60	1.900	1.450
70	2.150	1.700
80	2.400	1.950
90	2.650	2.200
100	2.900	2.450
110	3.150	2.700
128	3.600	3.150
132	3.700	3.250



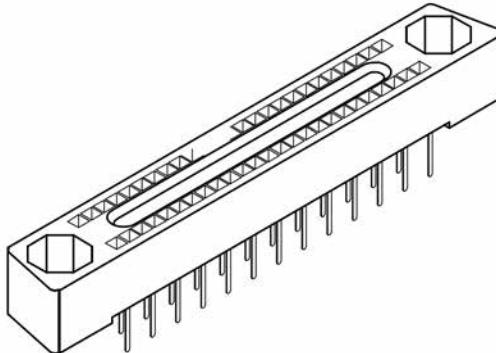
RIGHT ANGLE PTH PLUG  
PC BOARD VIEWED FROM COMPONENT SIDE

SIZE	CONTACT ID	SIZE	CONTACT ID	SIZE	CONTACT ID
20	(19 17 15 13 11 20 18 16 14 12 9 7 5 3 1 10 8 6 4 2)	60	(59 57 60 58 29 27 30 28)	100	(99 97 100 98 49 47 50 48)
30	(30 28 26 24 22 20 18 16 29 27 25 23 21 19 17 15 13 11 9 7 5 3 1 14 12 10 8 6 4 2)	70	(70 68 69 67 35 33 34 32)	110	(110 108 109 107 55 53 54 52)
40	(39 37 40 38 19 17 20 18)	80	(79 77 80 78 39 37 40 38)	128	(127 125 128 126 63 61 64 62)
50	(50 48 49 47 25 23 24 22)	90	(90 88 89 87 45 43 44 42)	132	(131 129 132 130 65 63 66 64)

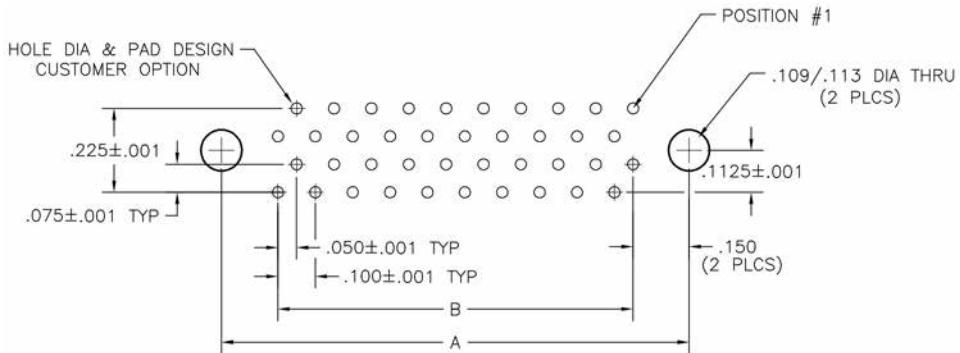
molex

# TWO ROW – STRAIGHT PTH RECEPTACLE

## WB – RECOMMENDED BOARD LAYOUT 0.050" | 20 THROUGH 132 CONTACTS



DIMENSIONS		
SIZE	A	B
20	.750	.450
30	1.000	.700
40	1.250	.950
50	1.500	1.200
60	1.750	1.450
70	2.000	1.700
80	2.250	1.950
90	2.500	2.200
100	2.750	2.450
110	3.000	2.700
128	3.450	3.150
132	3.550	3.250



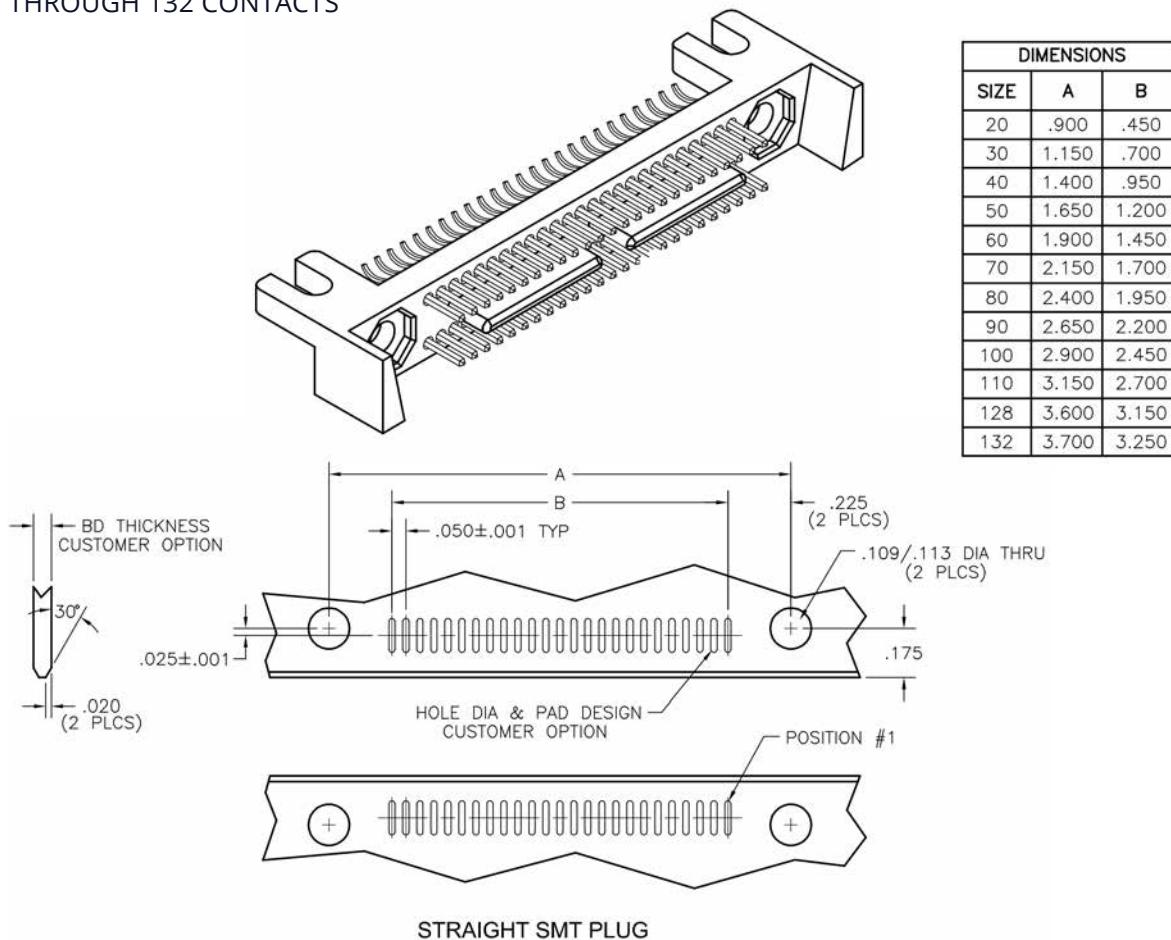
**STRAIGHT PTH RECEPTACLE**  
PC BOARD VIEWED FROM COMPONENT SIDE

SIZE	CONTACT ID	SIZE	CONTACT ID	SIZE	CONTACT ID	
20	(9 7 5 3 1) (10 8 6 4 2) (19 17 15 13 11) (20 18 16 14 12)	60	(29 27) (30 28) (59 57) (60 58)	(3 1) (4 2) (33 31) (34 32)	(49 47) (50 48) (99 97) (100 98)	(3 1) (4 2) (53 51) (54 52)
30	(15 13 11 9 7 5 3 1) (14 12 10 8 6 4 2) (30 28 26 24 22 20 18 16) (29 27 25 23 21 19 17)	70	(35 33) (34 32) (70 68) (69 67)	(3 1) (4 2) (38 36) (39 37)	(55 53) (54 52) (110 108) (109 107)	(3 1) (4 2) (58 56) (59 57)
40	(19 17) (20 18) (39 37) (40 38)	80	(39 37) (40 38) (79 77) (80 78)	(3 1) (4 2) (43 41) (44 42)	(63 61) (64 62) (127 125) (128 126)	(3 1) (4 2) (67 65) (68 66)
50	(25 23) (24 22) (50 48) (49 47)	90	(45 43) (44 42) (90 88) (89 87)	(3 1) (4 2) (48 46) (49 47)	(65 63) (66 64) (131 129) (132 130)	(3 1) (4 2) (69 67) (70 68)

## TWO ROW - STRAIGHT SMT PLUG

## WBB - WBA - RECOMMENDED BOARD LAYOUT

0.050" | 20 THROUGH 132 CONTACTS



SIZE	CONTACT ID	SIZE	CONTACT ID	SIZE	CONTACT ID
20	C 15 C C 14 C C 13 C C 38 C C 18 C C 27 C C 22 C C 21 C	60	C 30 C C 29 C C 28 C C 59 C C 58 C C 23 C C 13 C C 12 C C 11 C	100	C 50 C C 49 C C 48 C C 100 C C 99 C C 98 C C 33 C C 32 C C 31 C
30	C 15 C C 14 C C 13 C C 38 C C 18 C C 27 C C 22 C C 21 C	70	C 35 C C 34 C C 33 C C 70 C C 69 C C 68 C	110	C 55 C C 54 C C 53 C C 110 C C 109 C C 108 C C 38 C C 37 C C 36 C
40	C 50 C C 49 C C 48 C C 24 C C 23 C C 3 C C 2 C C 1 C	80	C 80 C C 79 C C 78 C C 40 C C 39 C C 38 C C 43 C C 42 C C 41 C	128	C 128 C C 127 C C 126 C C 64 C C 63 C C 62 C C 132 C C 131 C C 130 C C 66 C C 65 C C 64 C C 3 C C 2 C C 1 C
50	C 50 C C 49 C C 48 C C 24 C C 23 C C 3 C C 2 C C 1 C	90	C 45 C C 44 C C 43 C C 90 C C 89 C C 88 C C 48 C C 47 C C 46 C	132	C 66 C C 65 C C 64 C C 132 C C 131 C C 130 C C 69 C C 68 C C 67 C C 3 C C 2 C C 1 C

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