



Welcome to the World of AirBorn Interconnect Solutions

JULY 2009

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

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

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

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

Each connector part number identifies four elements:

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

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

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

When everything matters, go AirBorn.

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"W" SERIES - .100"
MIL-C-55302
See pages W-7 thru W-86

"WB" SERIES - .050"
MIL-C-55302
See pages WB-1 thru WB-13

"W" SERIES ACCESSORIES
See pages WA-1 thru WA-25



"W" SERIES - .100"
MIL-C-55302



Mating Matrix for AirBorn "W" Series Connectors

SOCKETS

P
I
N
S

SERIES	WT	WTA (F)	WTAX	WTB	WTBT	WTDX	WTK	WG	WGA	WGDV	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						
WGA									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, WGDV, WGK, WRD, WRDDX, WRF

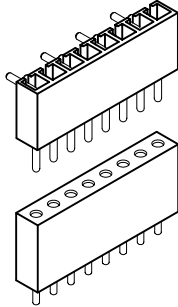
PCB CONNECTORS WT, WTA, WTAX, WTB, WTBT, WG, WGA, WRD, WRF

(T) = TURNING HARDWARE

(F) = FIXED HARDWARE

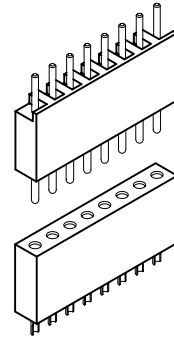
Daughterboard to Motherboard or Chassis

Right angle plug to
straight receptacle



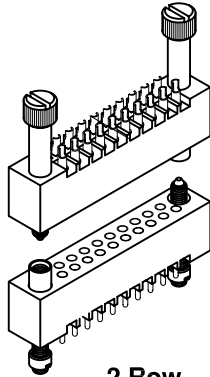
1 Row
Sizes: 3 thru 22
Page: W-11

Straight plug to
straight receptacle



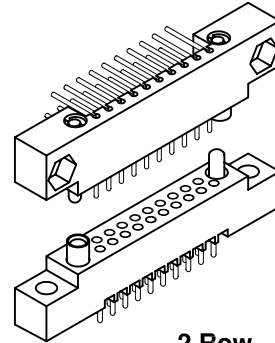
1 Row
Sizes: 3 thru 22
Page: W-13

Cable to
board or panel



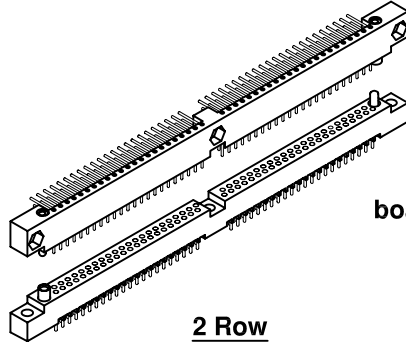
2 Row
Sizes: 10 thru 70
Page: W-15

PC card to
board or chassis



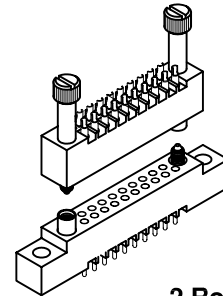
2 Row
Sizes: 10 thru 70
Page: W-19

PC card to
board or chassis



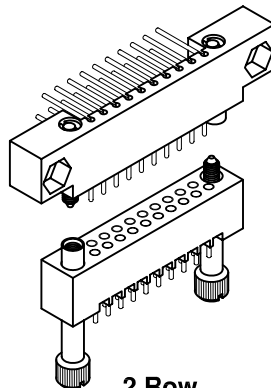
2 Row
Sizes: 90, 100 & 120
Page: W-21

Cable to
board or PC card



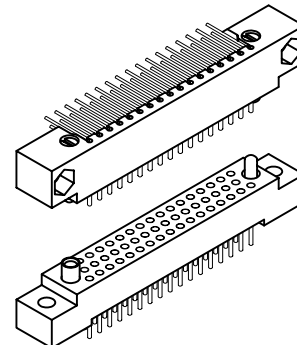
2 Row
Sizes: 10 thru 70
Page: W-27

PC card to
board or PC card



2 Row
Sizes: 10 thru 70
Page: W-29

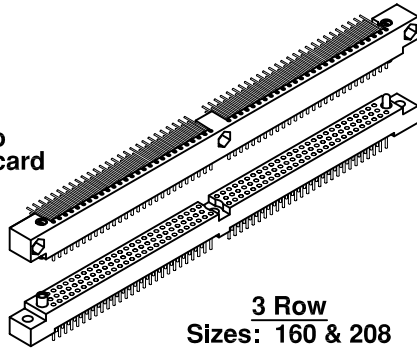
PC card to
board or chassis



3 Row
Sizes: 50 thru 104
Page: W-43

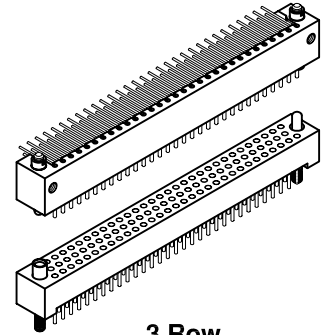
Daughterboard to Motherboard or Chassis

PC card to
board or PC card



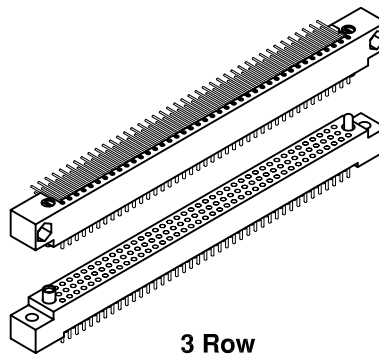
3 Row
Sizes: 160 & 208
Page: W-47

PC card to
board or chassis



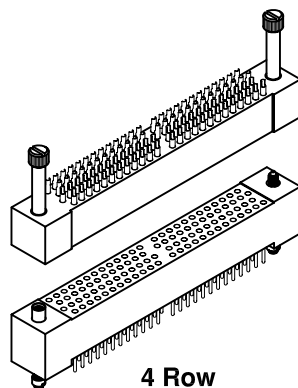
3 Row
Sizes: 92
Page: W-53

PC card to
board or chassis



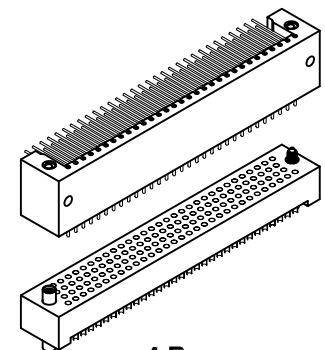
3 Row
Sizes: 122
Page: W-55

Cable to
board or panel



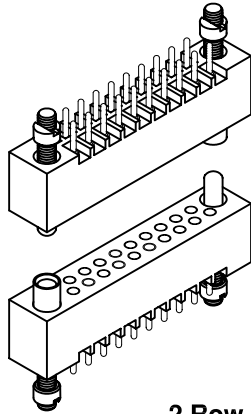
4 Row
Sizes: 100
Page: W-59

PC card to
board or chassis

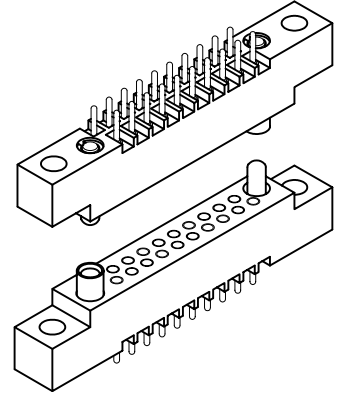


4 Row
Sizes: 122
Page: W-61

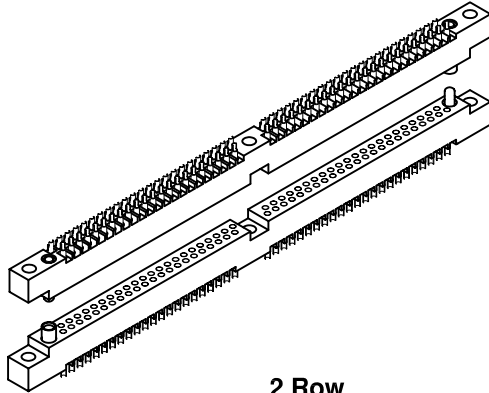
Sandwich Boards



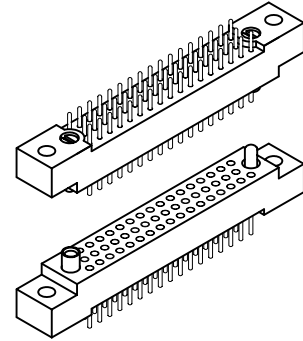
2 Row
Sizes: 10 thru 70
Page: W-17



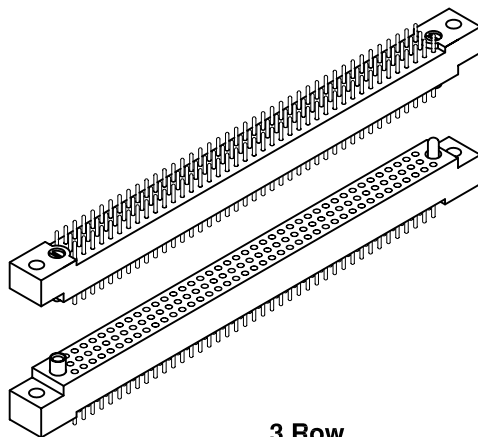
2 Row
Sizes: 10 thru 70
Page: W-23



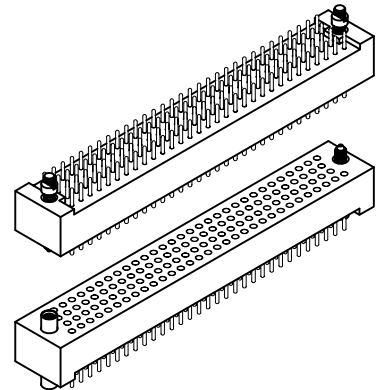
2 Row
Sizes: 90 & 100
Page: W-25



3 Row
Sizes: 50 thru 104
Page: W-45



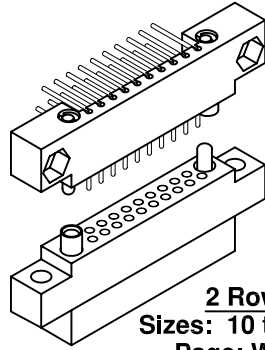
3 Row
Sizes: 122
Page: W-57



4 Row
Sizes: 122
Page: W-63

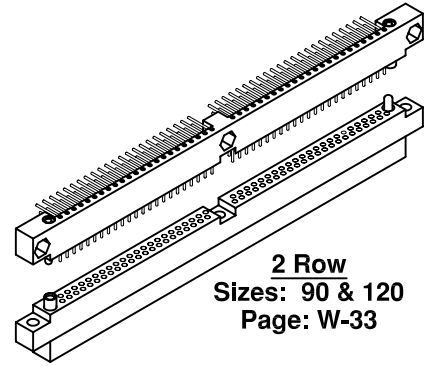
Crimp Removable

PC card to chassis



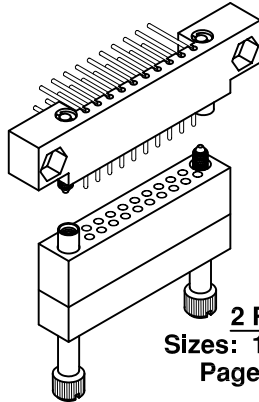
2 Row
Sizes: 10 thru 70
Page: W-31

PC card to chassis



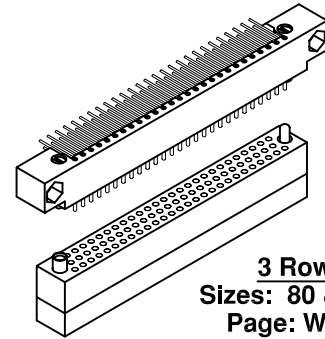
2 Row
Sizes: 90 & 120
Page: W-33

PC card to board



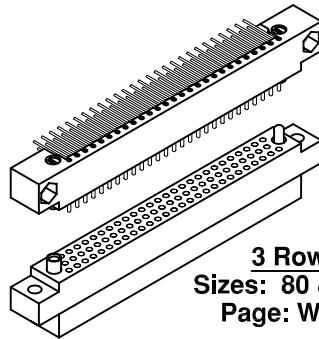
2 Row
Sizes: 10 thru 70
Page: W-35

PC card to chassis



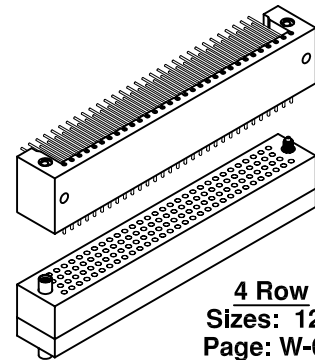
3 Row
Sizes: 80 & 160
Page: W-51

PC card to chassis



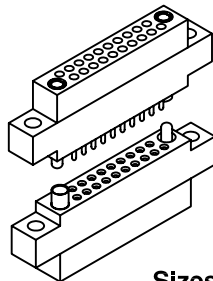
3 Row
Sizes: 80 & 160
Page: W-49

PC card to cable

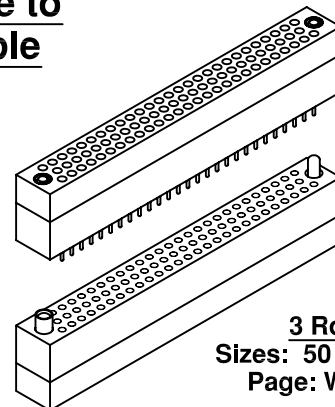


4 Row
Sizes: 122
Page: W-65

Crimp Removable to Crimp Removable

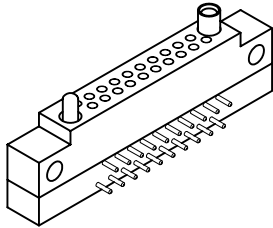


2 Row
Sizes: 10 thru 70
Page: W-34.1

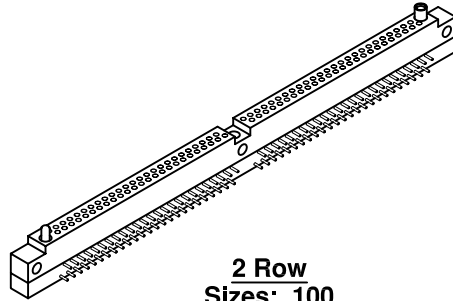


3 Row
Sizes: 50 thru 104
Page: W-52.1

Extender Boards



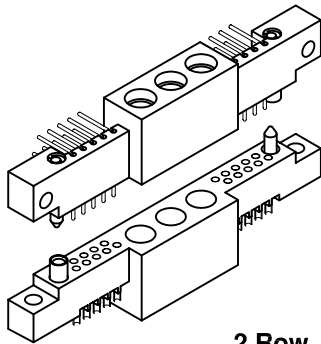
2 Row
Sizes: 10 thru 70
Page: W-39



2 Row
Sizes: 100
Page: W-41

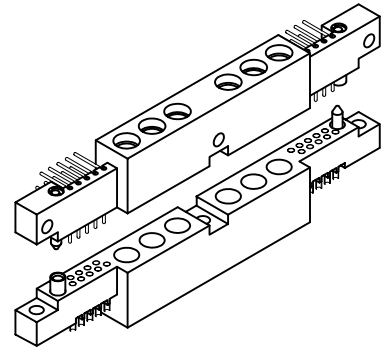
Coax Connectors

PC Card to
board or chassis



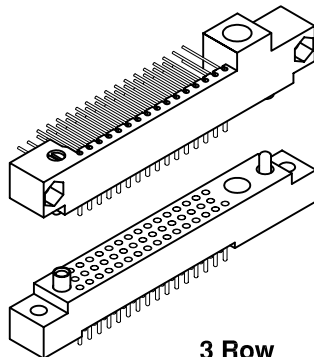
2 Row
Sizes: 20-3
Page: W-67

PC Card to
board or chassis



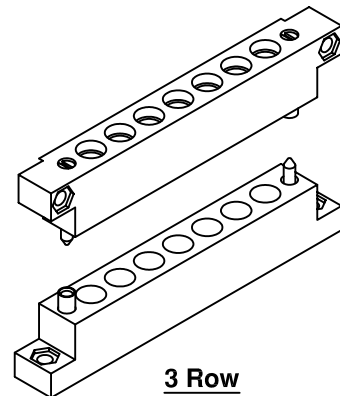
2 Row
Sizes: 20-6
Page: W-69

PC Card to
chassis or board



3 Row
Sizes: 47-1
Page: W-71

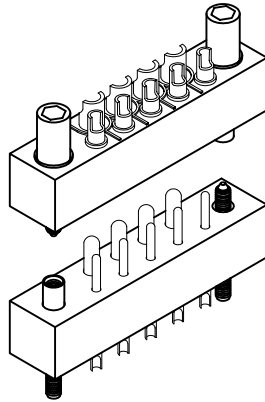
PC Card to
chassis



3 Row
Sizes: 1, 7 & 11
Page: W-73

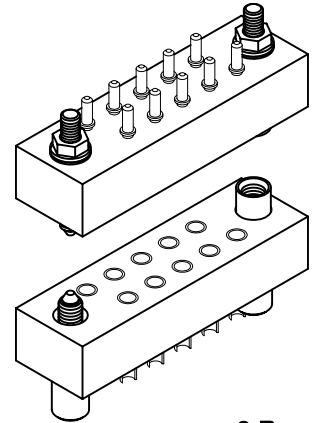
Misc Connectors

Power cable to chassis



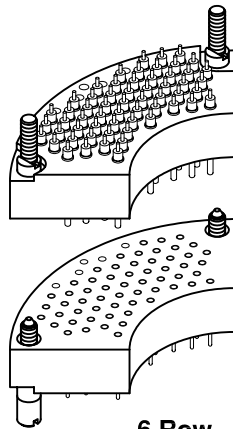
2 Row
Sizes: 5 & 4-5
Page: W-75

Power cable to chassis



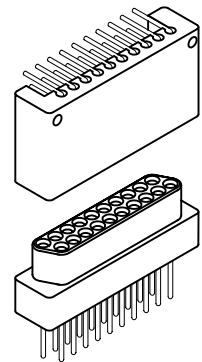
2 Row
Sizes: 10
Page: W-77

Quarter round sandwich boards



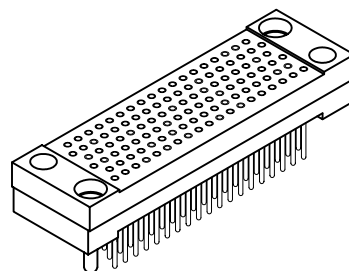
6 Row
Sizes: 59
Page: W-79

Pin protected PC card to board



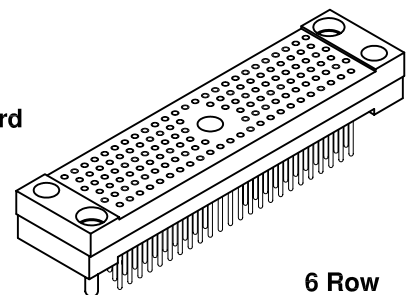
2 Row
Sizes: 10 & 20
Page: W-81

Stackable board to board



6 Row
Sizes: 111
Page: W-83

Stackable board to board



6 Row
Sizes: 135
Page: W-85

Contents

"W" Series

.100" Rectangular Plastic Board Level Connectors

W-1	Index
W-7	Contents
W-8	Specifications
W-9	Performance
W-10	Part number description

1-Row Connectors - Board to Board, Board to Cable

W-11	WT - WT	PC card to cable or board, cable to cable
W-13	WT - WT	PC card to cable or board, cable to cable

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

W-15	WTA - WTA	Cable to board or panel, without mounting ears. Sizes: 10 thru 70
W-17	WTAV-WTAX	Sandwich boards (straight to straight). Sizes: 10 thru 70
W-19	WTB - WTB	PC card to board or chassis. Sizes: 10 thru 70
W-21	WTB - WTB	PC card to board or chassis. Sizes: 90, 100 & 120
W-23	WTBV - WTB	Sandwich boards. Sizes: 10 thru 70
W-25	WTBV - WTB	Sandwich boards. Sizes: 90 & 100
W-27	WTA - WTB	Cable to board or PC card. Sizes: 10 thru 70
W-29	WTB - WTAX	PC card to board or PC card. Sizes: 10 thru 70
W-31	WTB - WTKA	PC card to chassis (crimp removable), with mounting ears. Sizes: 10 thru 70
W-33	WTB - WTKA	PC card to chassis (crimp removable), with mounting ears. Sizes: 90 & 120
W-34.1	WTKV - WTKA	Chassis to chassis (crimp removable), with mounting ears. Sizes: 10 thru 70
W-35	WTB - WTDXA	PC card to cable (crimp removable), without mounting ears. Sizes: 10 thru 70
W-37	WTB - WTDXA	PC card to cable (crimp removable), without mounting ears. Sizes: 90 & 120
W-38.1	WTDV - WTDXA	Chassis to chassis (crimp removable), without mounting ears. Sizes: 10 thru 70
W-39	WTBT	Extender board (right angle receptacle). Sizes: 10 thru 70
W-41	WTBT	Extender board (right angle receptacle). Sizes: 100

3-Row Connectors - Board to Board, Board to Cable

W-43	WG - WG	PC card to board or chassis. Sizes: 50 thru 104
W-45	WGV - WG	Sandwich board to PC card. Sizes: 50 thru 104
W-47	WG - WG	PC card to board or PC card. Sizes: 160 & 208
W-49	WG - WGKA	PC card to chassis (crimp removable), with mounting ears. Sizes: 80 & 160
W-50.1	WGKV - WGKA	Chassis to chassis (crimp removable), with mounting ears. Sizes: 50 thru 104
W-51	WG - WGDXA	PC card to chassis (crimp removable), without mounting ears. Sizes: 80 & 160
W-52.1	WGDV - WGDXA	Chassis to chassis (crimp removable), without mounting ears. Sizes: 50 thru 104
W-53	WGR - WGR	PC card to board or chassis. Sizes: 92
W-55	WGA - WGA	PC card to board or chassis. Sizes: 122
W-57	WGA - WGA	Sandwich boards. Sizes: 122

4-Row Connectors - Board to Board, Board to Cable

W-59	WRF - WRF	Cable to board or panel. Sizes: 100
W-61	WRD - WRD	PC card to board or chassis. Sizes: 122
W-63	WRDV - WRD	Sandwich boards. Sizes: 122
W-65	WRD - WRDDXA	PC card to cable (crimp removable) without mounting ears. Sizes: 122

Coax Hybrid Connectors - PC Card to Board, Board to Cable (SMB slide-on, 50 ohm contacts)

W-67	WTB20-3	Signal-coax hybrid, PC card to board or chassis. Sizes: 20-3
W-69	WTB20-6	Signal-coax hybrid, PC card to board or chassis. Sizes: 20-6
W-71	WG47-1	Signal-coax hybrid, PC card to board or chassis. Sizes: 47-1
W-73	WRBC	Coax hybrid. Sizes 1, 7 & 11

Miscellaneous Connectors

W-75	PA - PA	Power connector (#12 & #16 contacts) to chassis. Sizes: 5 & 4-5
W-77	PA - PA	Power connector (#12 contacts) to chassis. Sizes: 10
W-79	WTA59 - WTA59	Quarter round sandwich boards. Sizes: 59
W-81	WTE - WTE	Pin protected PC card to board. Sizes: 10 & 20
W-83	WE	Stackable, board to board. Sizes: 111
W-85	WE	Stackable, board to board. Sizes: 135

Contents

"WB" Series

.050" Rectangular Plastic Board Level Connectors

WB-1	Contents
WB-2	Specifications
WB-3	Performance
WB-4	Part number description
	2-Row Connectors - PC Card or SMT to Board, Sizes: 20-132
WB-5	WB Plug, right angle, with mounting ears
	WB Receptacle, straight, with mounting ears
WB-7	WBB, WBA Plug, straight, surface mount, with mounting ears
	WB Receptacle, straight, with mounting ears
WB-9	Hardware
WB-10	WB Board layout - plug, right angle
WB-11	WB Board layout - receptacle, straight
WB-12	WBB, WBA Board layout - plug, straight, surface mount
	Military Cross Reference
WB-13	Chart

Specifications

Materials and Finishes *

Pin Contacts:	Copper alloy per MIL-C-55302
Socket Contacts:	Clipped contacts: Contact: BeCu per MIL-C-55302 Terminal: Copper alloy per MIL-C-55302 Crimp removable contacts: Contact & terminal: Copper alloy per MIL-C-55302
Contact Finish:	Gold plate per ASTM B 488 or SAE AMS 2422. Localized finish per MIL-C-55302
Molded Insulators:	Glass filled polyphenylene sulfide per MIL-M-24519, Type GST-40F
Jackscrews:	Stainless steel per ASTM A 582/A582M-, Passivated per ASTM-A967, SAE AMS-QQ-P-35
Jacksockets:	Stainless steel per ASTM A 582/A582M-, Passivated per ASTM-A967, SAE AMS-QQ-P-35
Jackscrew Knobs:	Stainless steel per ASTM A 582/A582M-, Passivated per ASTM-A967, SAE AMS-QQ-P-35
Guide Pins, Guide Sockets:	Stainless steel per ASTM A 582/A582M-, Passivated per ASTM-A967, SAE AMS-QQ-P-35
Guide Sockets, Polarized "D" type:	BeCu per ASTM-B196, ASTM B 197/B 197M-, Nickel plated per SAE AMS-QQ-N-290
Face Seal Gasket:	Silicone rubber per A-A-59588
Miscellaneous:	
Connector Markings:	Contact numbers are stamped on the side of the connector. Numbers are stamped on the low-numbered side only on 2-row and 3-row right angle connectors
Torque:	Polarizing Guides and Floating Mounts: 16 + 8/-0 inch ounces. (Minimum of 7 inch ounce reverse torque per Mil-C-55302). Mounting & Hood Hardware: 24 inch ounces maximum. Mating Jacksets: 32 inch ounces maximum Wrap Post: 2 inch ounce minimum per Mil-STD-1130. Helicoil Inserts: #2-56 – 24 in/oz. maximum. #4-40 – 32 in/oz. maximum.
Tolerances:	Unless otherwise specified: Fractions = $\pm 1/64$ " Decimals = $\pm .010$ " Angles = $\pm 5^\circ$

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

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



Performance

Reference MIL-C-55302

Contact Rating: 5-amperes

Solderability: Terminals (except wire wrap[®] and crimp) tested in accordance with MIL-STD-202, Method 208

Wire Size: Stranded #22 AWG (adapter sleeves available for larger sizes or twisted pairs).

Operating Temperature: -65° to +125° C or -85° to +257° F

<u>Category:</u>	<u>Requirements:</u>	<u>Test Method Per:</u> <u>SAE AS 13441</u>
Test Voltage:	1,000 V, RMS, 60 Hz @ sea level 300 V, RMS, 60 Hz @ 70,000 feet	#3001
Insulation Resistance:	5,000 megohms minimum @ 500 VDC	#3003
Durability:	500 connector mating cycles	
Vibration:	Mated connectors, Test condition III	#2005
Salt Spray:	Mated connectors, Test condition B	#1001
Shock:	Mated connectors, Test condition G	#2004
Humidity:	Test Type II, except steps 7A and 7B not required	#1002
Temperature Cycling:	Mated connectors, Test condition A	#1003
Contact Resistance:	.025 volt maximum drop @ 5 amperes - .005 ohms (interface measurement)	#3004
Contact Engaging Force:	4.00 oz. maximum with .031 diameter test pin per SAE AS31971	#2014 & MIL-C-55302
Contact Engaging Force:	For lower force contacts with a nominal engaging force of 2 ounces per socket contact, substitute the letter "O" for the letter "A". Example: Part number WRG208SOCSY	
Sizes 50 and larger:	Upon engagement, center area of mating faces may remain open .010" to .025" due to slight flexing of molding. Vibration or shock should provide complete closure.	
Guides and Jacks:	If location of pin or socket contacts is reversed, location of male and female guides or jacks is also reversed; except when using "D" shaped polarized guides.	
	When polarized positions are changed, apply Loctite [®] 83-21 or equivalent to threads.	

Note: See "Military Cross Reference" chart in the Accessories section.

Part Number Description

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.

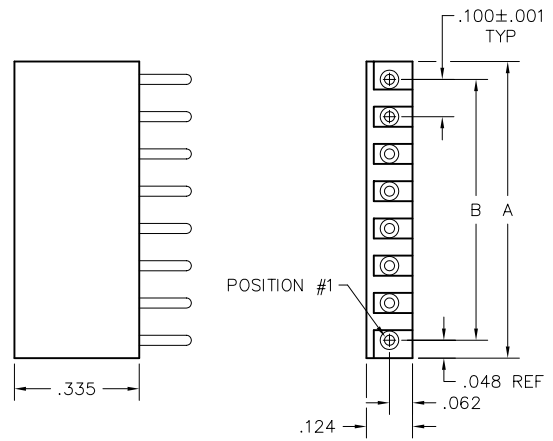
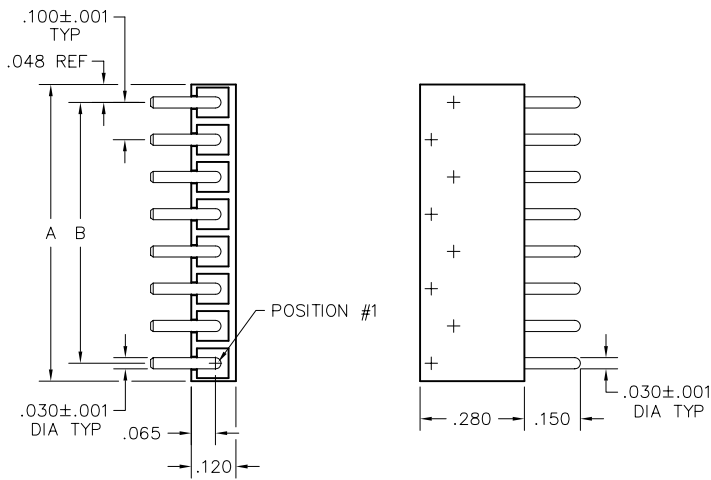
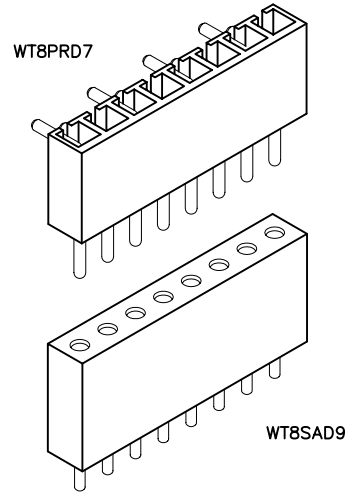
Each page is as comprehensive as possible. However, if you do not find a particular connector size or option, please contact the factory for further assistance.

1 • ROW Right Angle Plug to Straight Receptacle

.100"

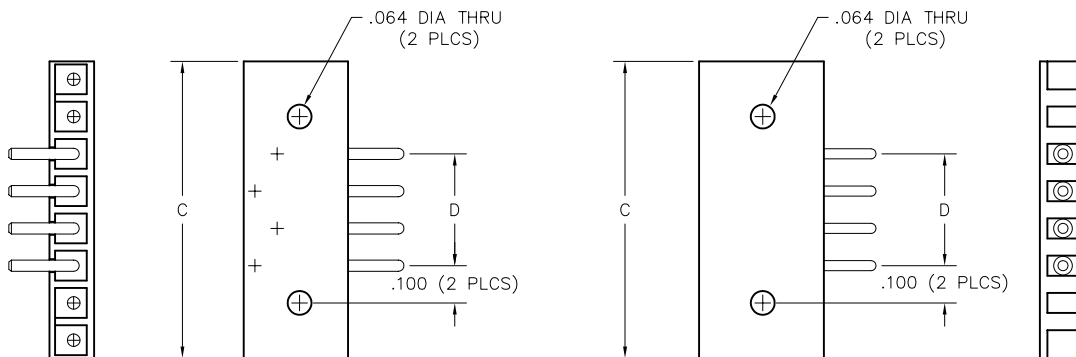
WT - WT

3 thru 22 Contacts



PLUG

RECEPTACLE



MOUNTING HOLES
(OPTION: CD)

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

PLUG	RECEPTACLE
SERIES	
WT Plug, right angle, 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: 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	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) 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

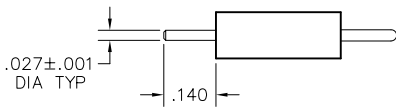
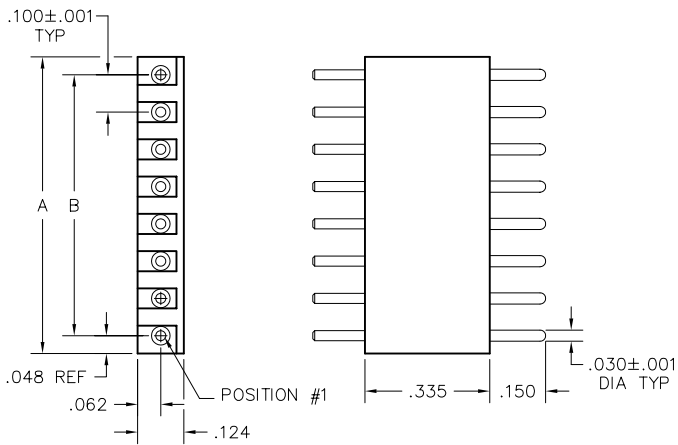
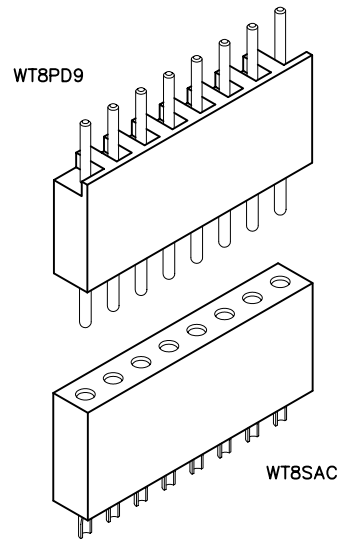
DIMENSIONS (CD)			
SIZE	# OF CONTACTS	C	D
5	1	.496	—
6	2	.596	.100
7	3	.696	.200
8	4	.796	.300
9	5	.896	.400
10	6	.996	.500
11	7	1.096	.600
12	8	1.196	.700
13	9	1.296	.800
14	10	1.396	.900
15	11	1.496	1.000
16	12	1.596	1.100
17	13	1.696	1.200
18	14	1.796	1.300
19	15	1.896	1.400
20	16	1.996	1.500
21	17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

1 • ROW Straight Plug to Straight Receptacle

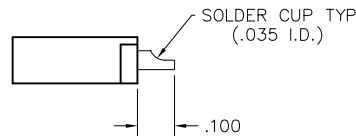
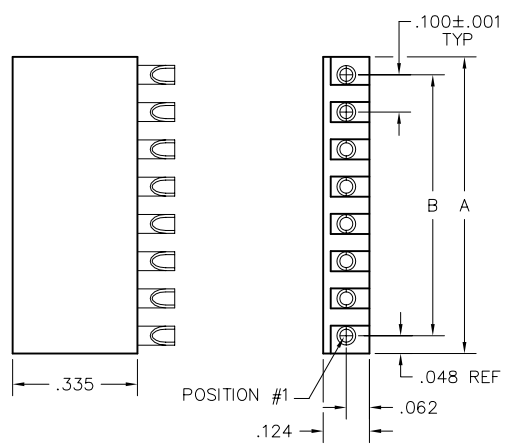
.100"

WT - WT

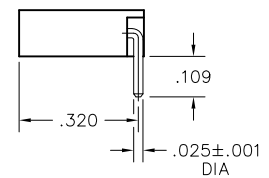
3 thru 22 Contacts



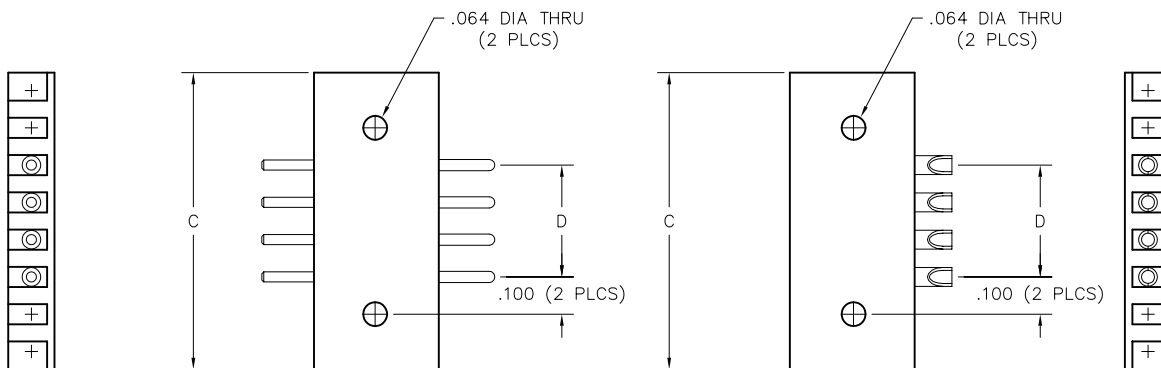
PLUG



RECEPTACLE



RIGHT ANGLE
(WT8SAR7)



MOUNTING HOLES
(OPTION: CD)

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: 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" 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 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-13. Example: WT8PCCD 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

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

- 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:		TYPE CONTACTS/TERMINATIONS:	
PC	Pin, straight, solder cup (.035" I.D.)	SAC	Socket, straight, solder cup (.035" I.D.)
PD5	Pin, straight, dip solder, .078" x .027" dia	SAD7	Socket, straight, dip solder, .109" x .027" dia
PD7	Pin, straight, dip solder, .109" x .027" dia	SAD9	Socket, straight, dip solder, .140" x .027" dia
PD9	Pin, straight, dip solder, .140" x .027" dia	SAD11	Socket, straight, dip solder, .172" x .027" dia
PD11	Pin, straight, dip solder, .172" x .027" dia	SAF3	Socket, straight, flex circuit, .050"
PD13	Pin, straight, dip solder, .203" x .027" dia	SAF6	Socket, straight, flex circuit, .093"
PD15	Pin, straight, dip solder, .234" x .027" dia	SAF9	Socket, straight, flex circuit, .140"
PD20	Pin, straight, dip solder, .312" x .027" dia	SAG7	Socket, straight, dip solder, .109" x .018" dia
PF3	Pin, straight, flex circuit, .050"	SAG9	Socket, straight, dip solder, .140" x .018" dia
PF6	Pin, straight, flex circuit, .093"	SAG11	Socket, straight, dip solder, .172" x .018" dia
PF8	Pin, straight, flex circuit, .125"	SAP	Socket, straight, pin termination, .150" (connector saver)
PW34	Pin, straight, wire wrap [®] , .531"	SAW24	Socket, straight, wire wrap [®] , .375"
PW40	Pin, straight, wire wrap [®] , .625"	SAW40	Socket, straight, wire wrap [®] , .625"

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: WTA10PD9QJ. 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.

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

- Option Codes: Add to the end of the part number. Example: WTA10SAD9J-D01. 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
- 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



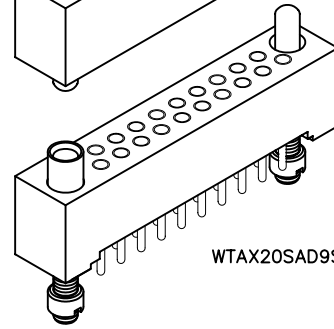
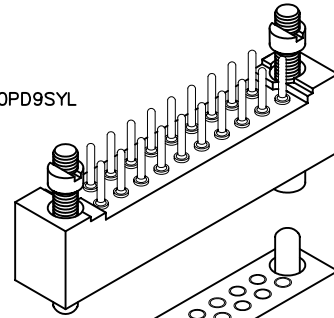
2 • ROW Sandwich Boards

.100"

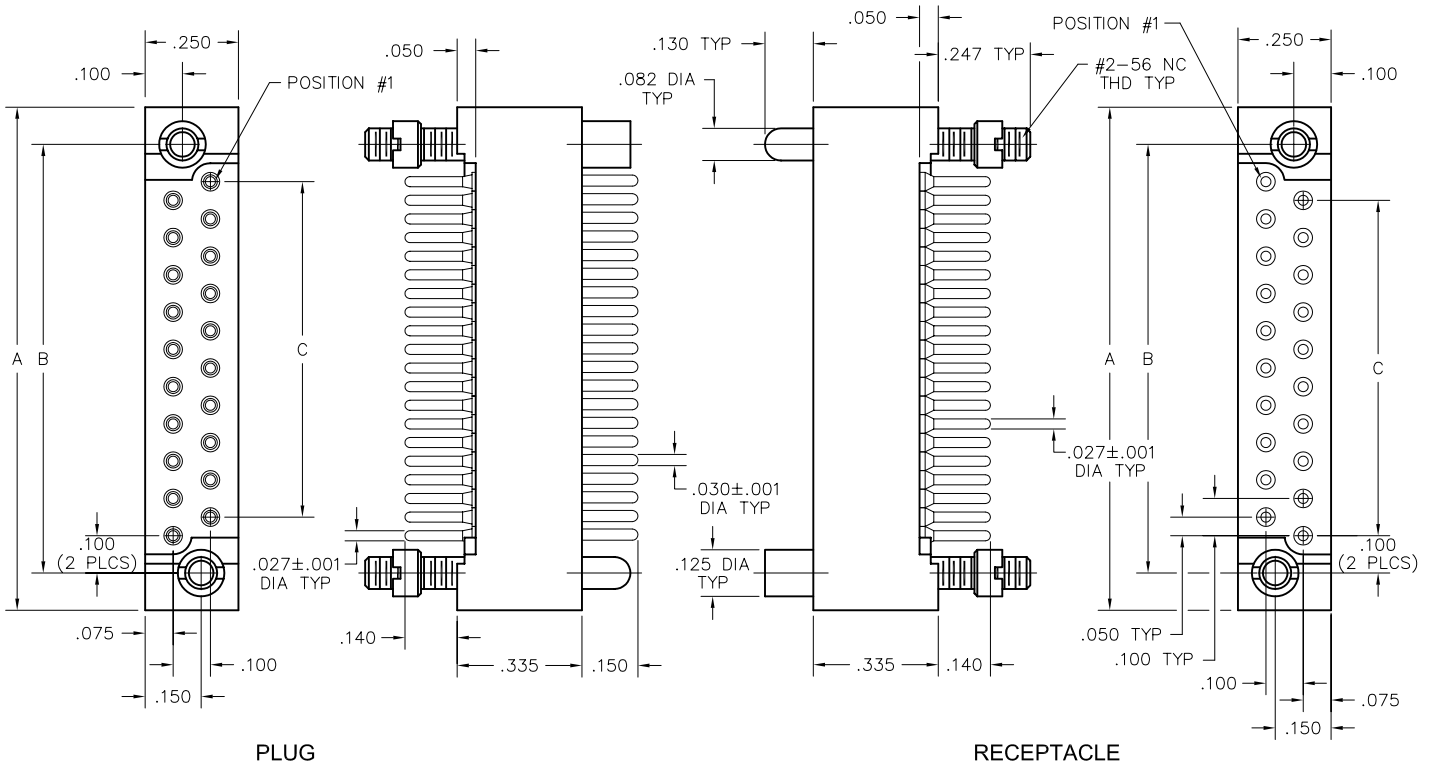
WTAV - WTAX

10 thru 70 Contacts

WTAV20PD9SYL



WTAX20SAD9SYL



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				

PLUG: WTAV 20 PD9 SYL
 RECEPTACLE: WTAX 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

- Jacket 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

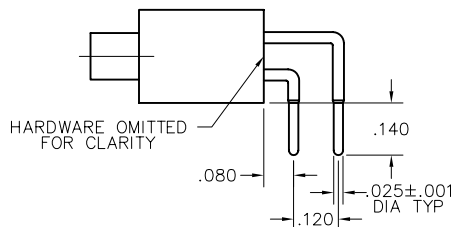
SY	Guide set
SY-#	Guide set, polarized
SYL	Guide set, long
SYL-#	Guide set, long, polarized
J	Fixed jackset
JL	Fixed jackset, long

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 -443). 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



CONTACT OPTION: SOR9

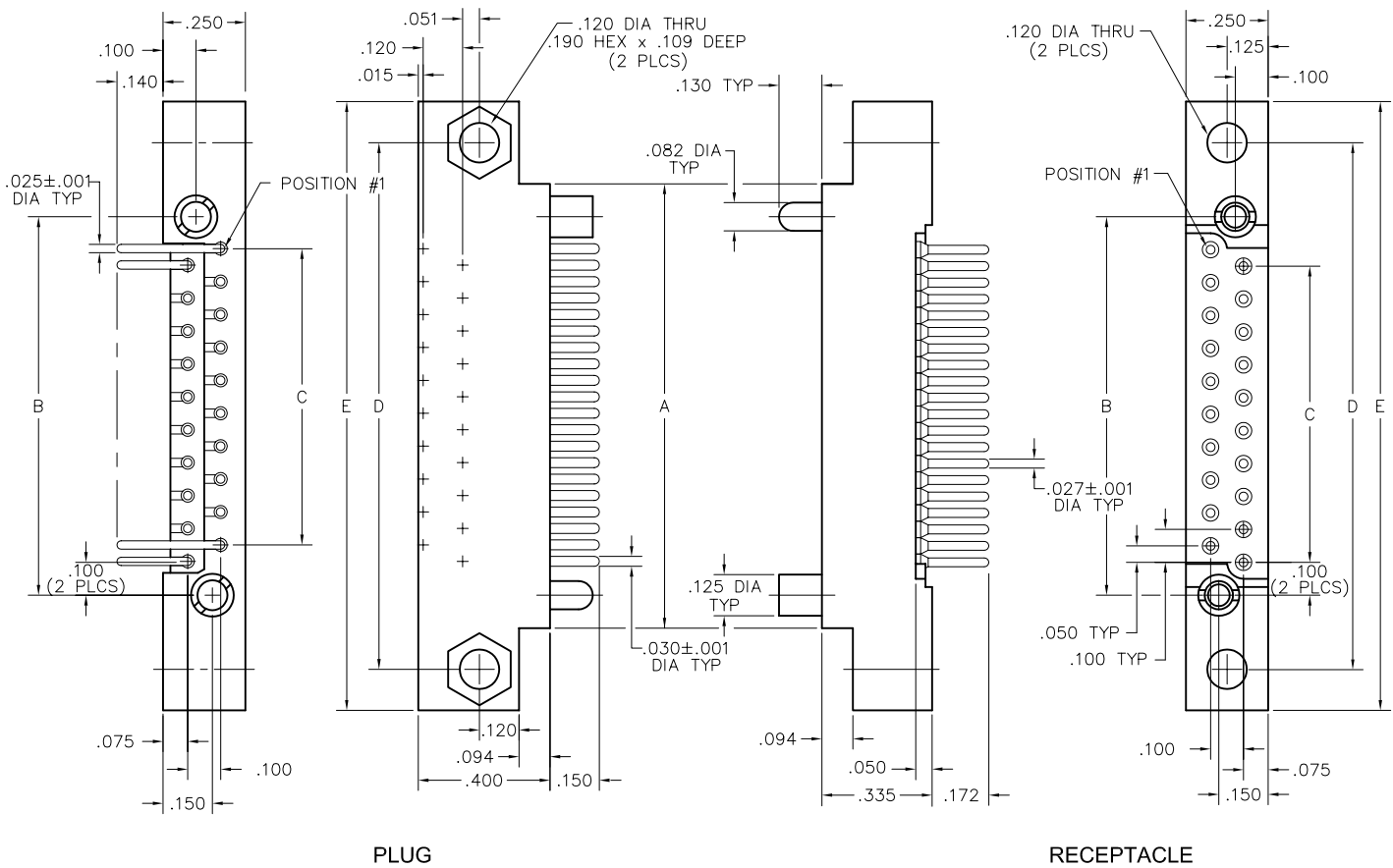
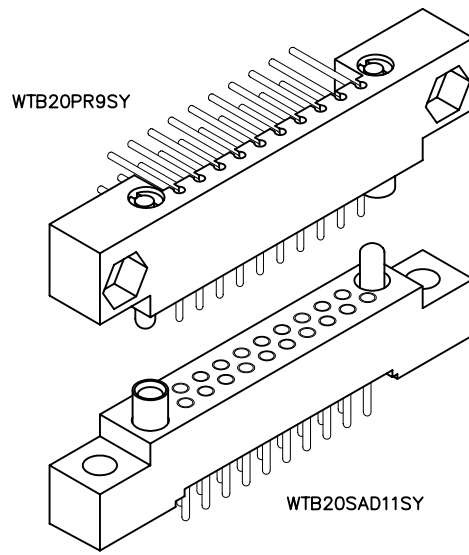


2 • ROW PC Card to Board or Chassis

.100"

WTB - WTB

10 thru 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						

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
SY-# Guide set, polarized	SY-# Guide set, polarized
SYL Guide set, long	SYL Guide set, long
SYL-# Guide set, long, polarized	SYL-# Guide set, long, polarized
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

- 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

PLUG: WTB 90 PR9 SY
 RECEPTACLE: WTB 90 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 (90, 100, or 120)	XX Number of contacts (90, 100, or 120)

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
PR15	Pin, right angle, dip solder, .234" 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

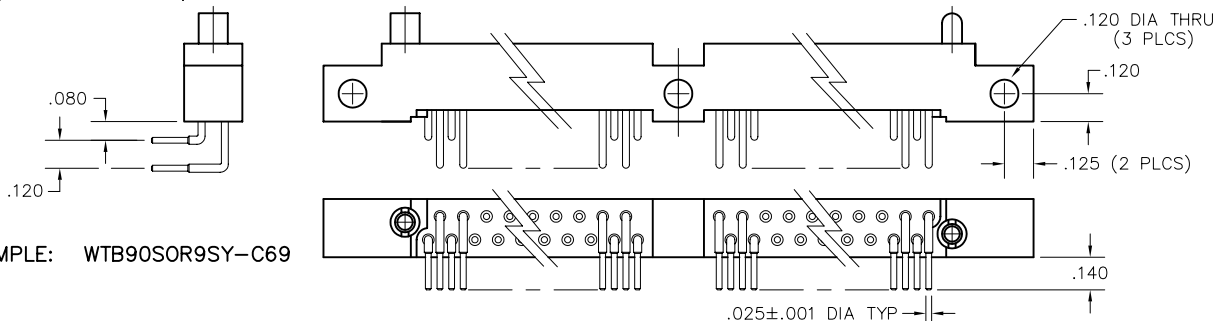
• Plug facial seal gaskets and hoods; order separately or add "Q" in part number. Example: WTB90PR9QJ. See "Gaskets" and "Hoods" in Accessories section for instructions.

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



EXAMPLE: WTB90SOR9SY-C69



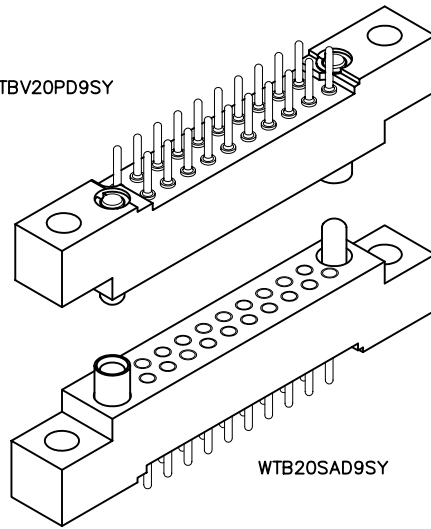
2 • ROW Sandwich Boards

.100"

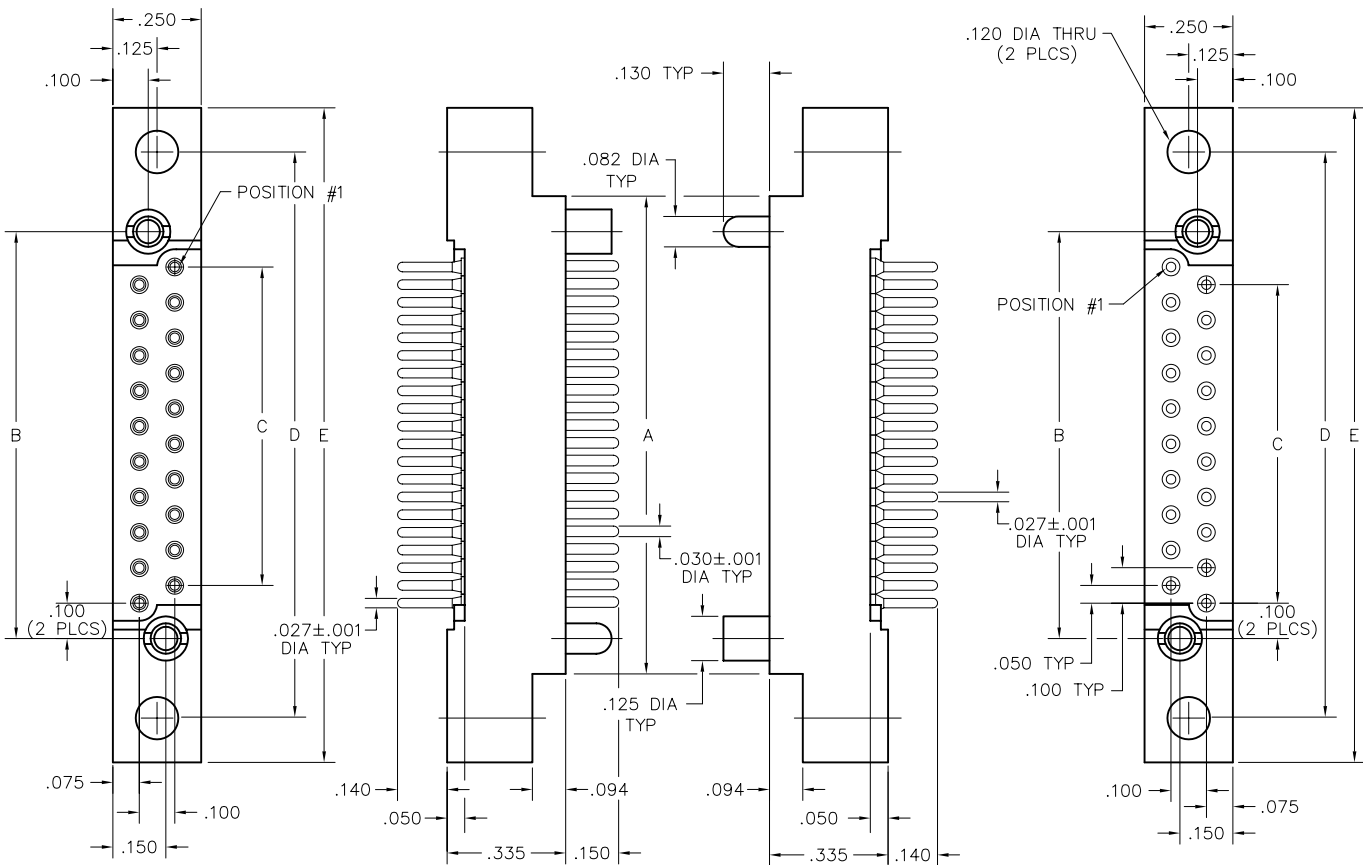
WTBV - WTB

10 thru 70 Contacts

WTBV20PD9SY



WTB20SAD9SY



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						

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

- 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: WTBV10PD9QJ. See "Gaskets" and "Hoods" in Accessories section for instructions.

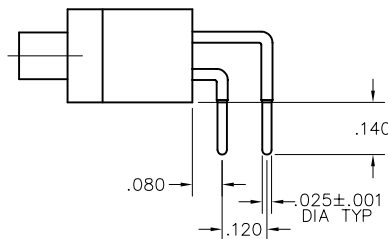
SY	Guide set
SY-#	Guide set, polarized
SYL	Guide set, long
JT	Turning jackset, .500"
JTA	Turning jackset, .200"
JTB	Hex turning jackset, .200"
JTC	Hex turning jackset, .500"
JTL	Turning jackset, long, .700"

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: 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



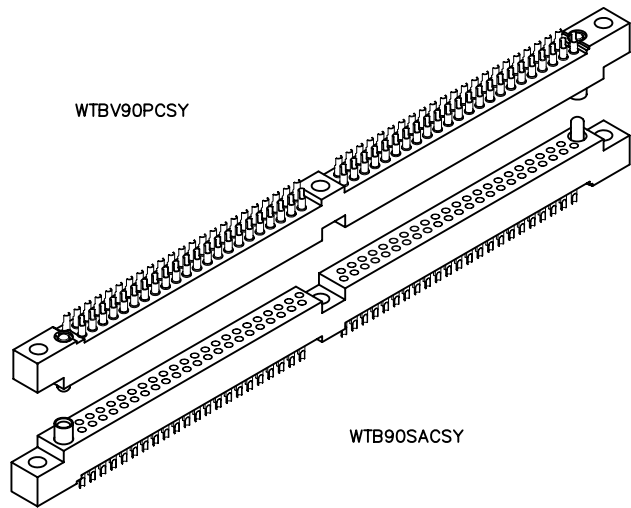
2 · ROW Sandwich Boards

.100"

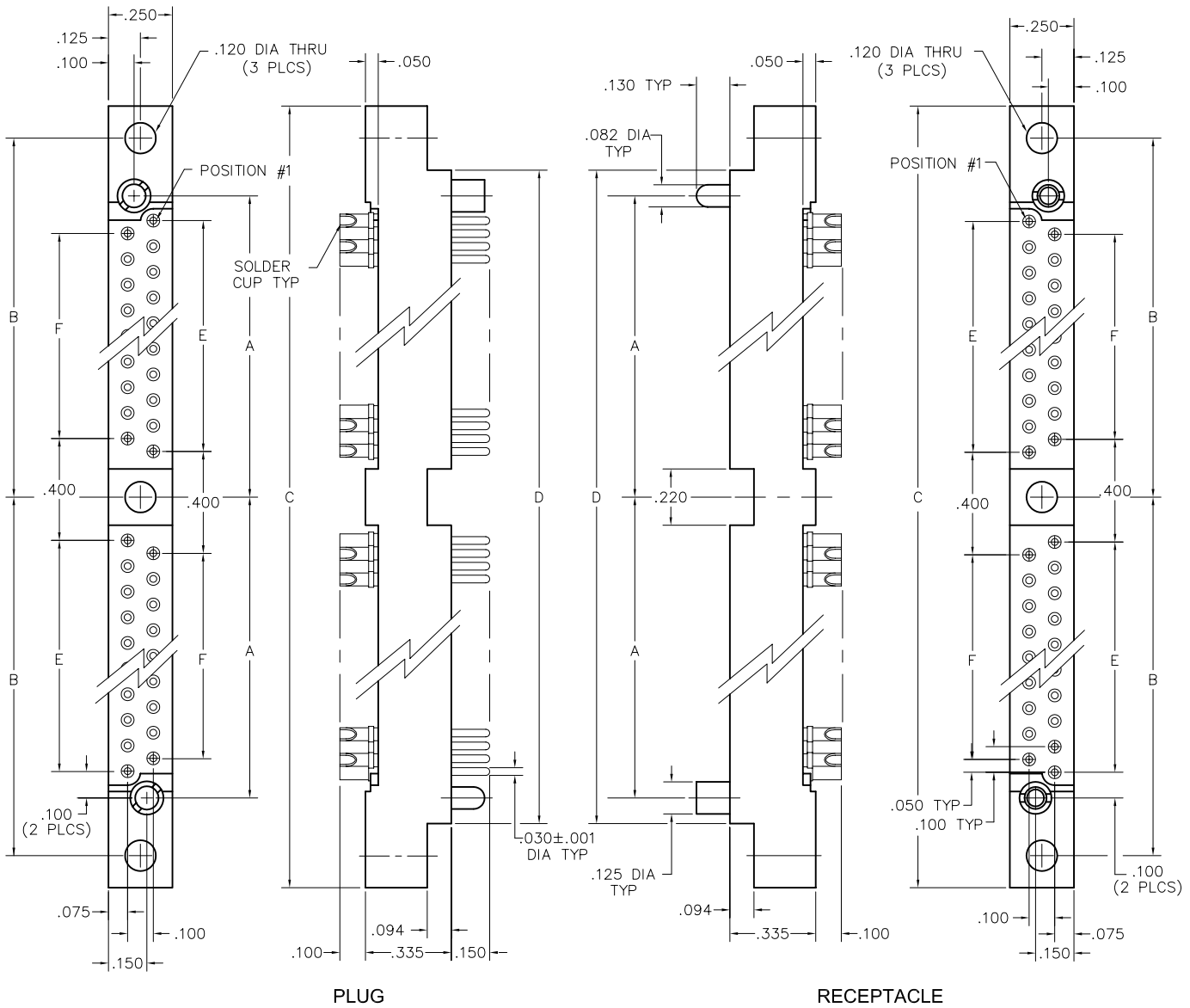
WTBV - WTB

90 & 100 Contacts

WTBV90PCSY



WTB90SACSY



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

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 WTB 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:	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

- 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
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: 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

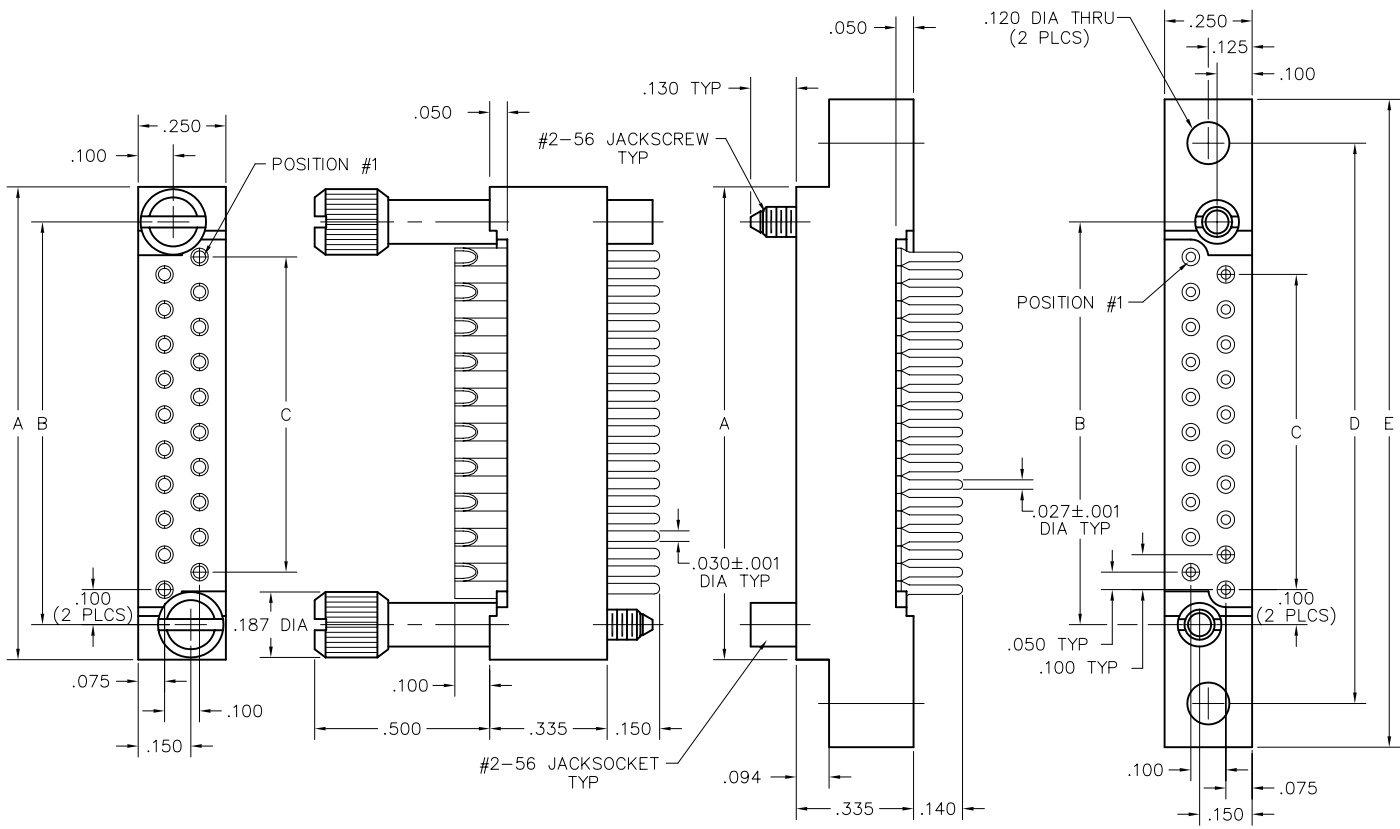
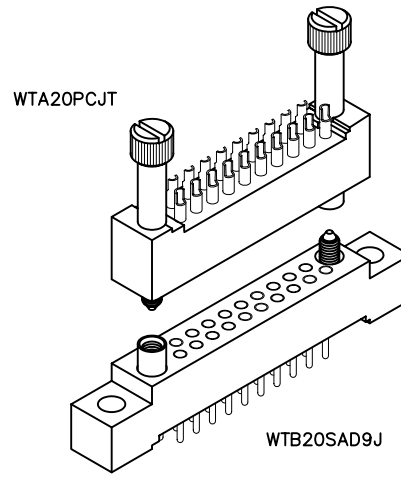


2 • ROW Cable to Board or PC Card

.100"

WTA - WTB

10 thru 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						

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

PLUG		RECEPTACLE	
SERIES			
WTA	Plug, straight, without 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"> Pin or socket contacts can be used in either plug or receptacle. WTA connectors - jackset hardware determines the image. Must specify image with guide set hardware. See page W-17. WTB connectors - contacts determine the image. Right angle pin contacts are always plug image, and straight pin or sockets are receptacle image. 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:		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"> 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. 			
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	
<ul style="list-style-type: none"> Option Codes: Add to the end of the part number. Example: WTA10SAD9J-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. <input checked="" type="checkbox"/>
-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	



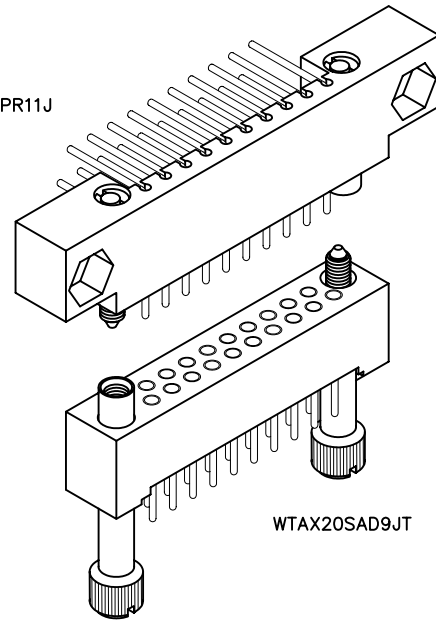
2 • ROW PC Card to Board or PC Card

.100"

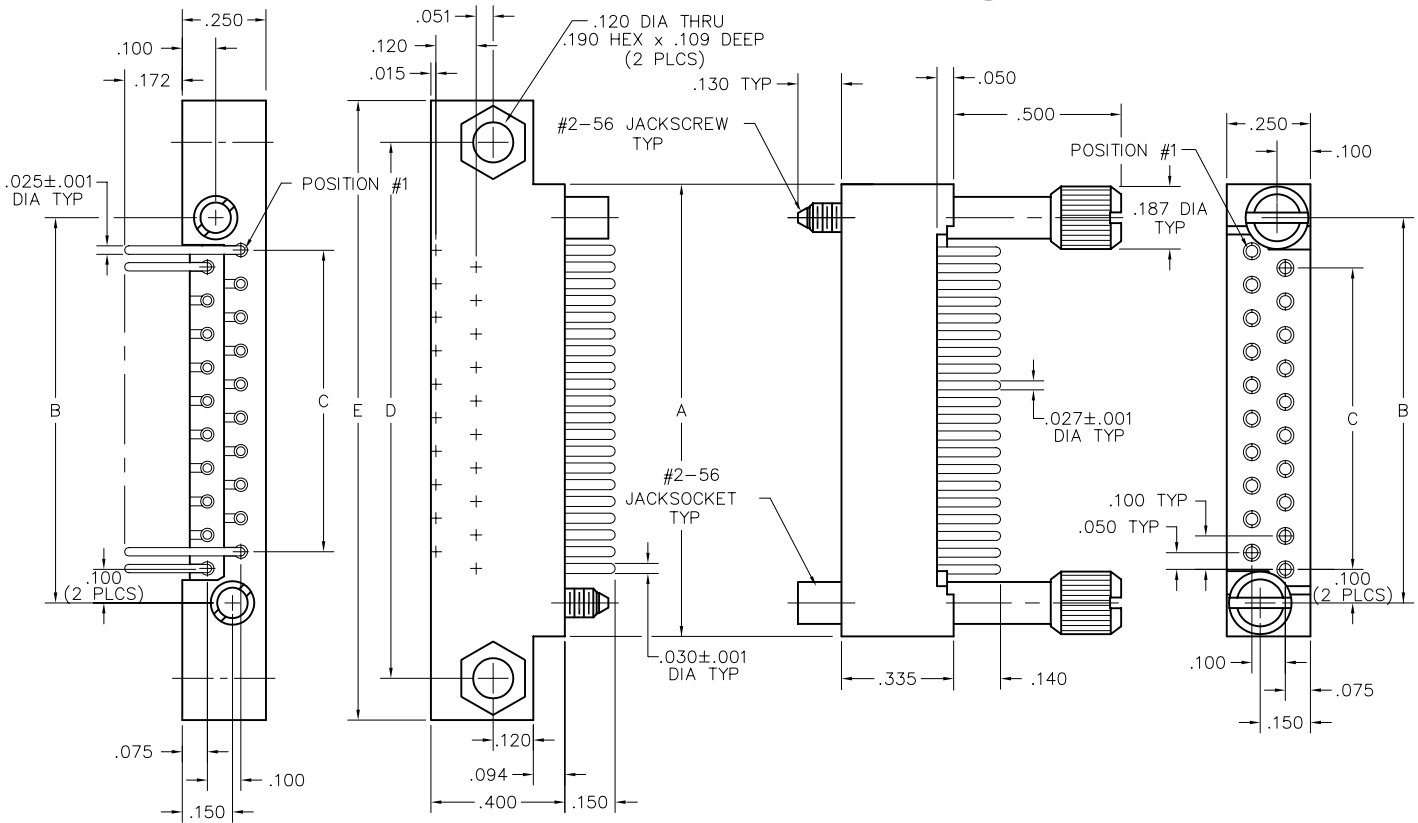
WTB-WTAX

10 thru 70 Contacts

WTB20PR11J



WTAX20SAD9JT



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						

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



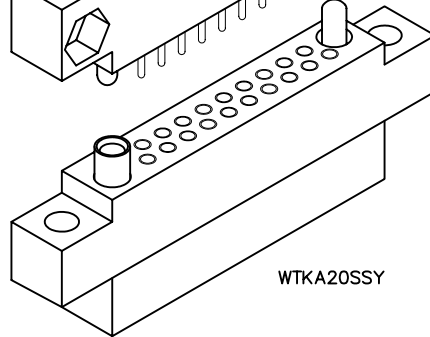
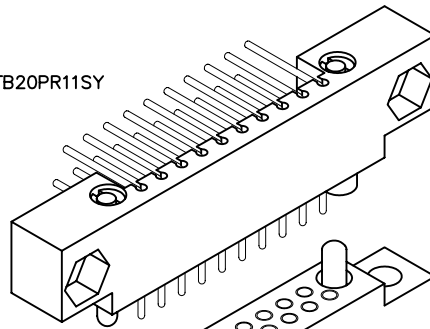
2 • ROW PC Card to Chassis

.100"

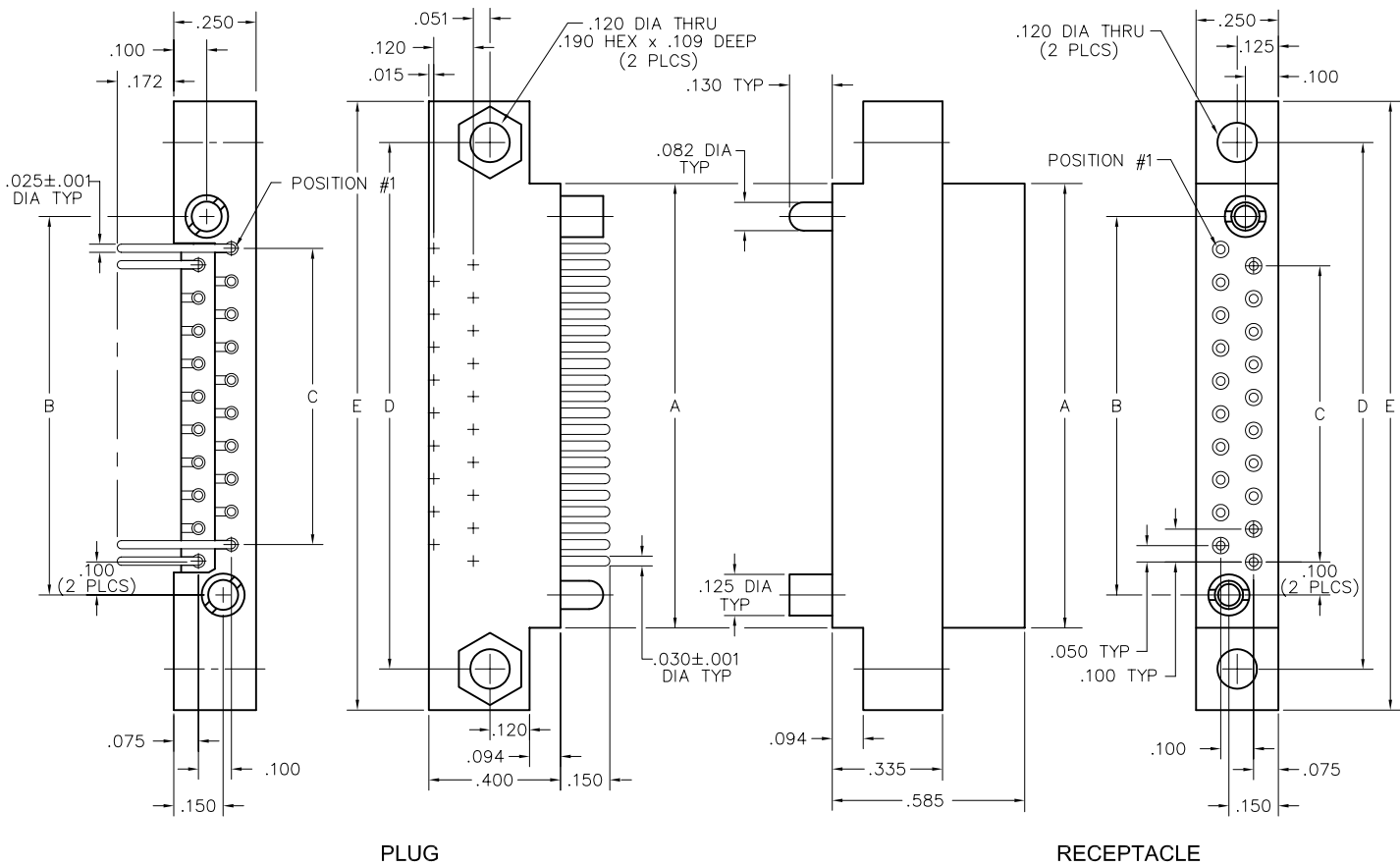
WTB - WTKA

10 thru 70 Contacts

WTB20PR11SY



WTKA20SSY



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						

PLUG: WTB 20 PR11 SY
 RECEPTACLE: WTKA 20 S SY
 XXXX XX XXXX XX

PLUG

RECEPTACLE

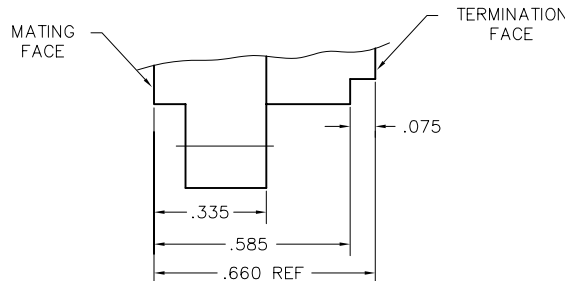
SERIES	
WTB Plug, right angle, with mounting ears	WTKA Receptacle, straight, crimp removable, with mounting ears
<ul style="list-style-type: none"> WTKA and WTDXA connectors will mate with WTA, WTAV, WTB, WTBV connectors. "A" means contacts are included. 	

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	
<ul style="list-style-type: none"> 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. 	
<p>TYPE CONTACTS/TERMINATIONS:</p> <p>PR7 Pin, right angle, dip solder, .109" x .025" dia</p> <p>PR9 Pin, right angle, dip solder, .140" x .025" dia</p> <p>PR11 Pin, right angle, dip solder, .172" x .025" dia</p> <p>PRW40 Pin, right angle, wire wrap[®], .625"</p>	<p>TYPE CONTACTS/TERMINATIONS:</p> <p>S Socket, straight, crimp removable, 22 AWG</p> <p>SA Same as above</p> <p>P Pin, straight, crimp removable, 22 AWG</p>

HARDWARE	
SY Guide set	SY Guide set
SY-# Guide set, polarized	SY-# Guide set, polarized
J Fixed jackset	J Fixed jackset
JT Turning jackset, .435"	JT Turning jackset, .500"
JTA Turning jackset, .135"	JTA Turning jackset, .200"
JTB Hex turning jackset, .135"	JTB Hex turning jackset, .200"
JTC Hex turning jackset, .435"	JTC Hex turning jackset, .500"
JTL Turning jackset, long, .635"	JTL Turning jackset, long, .700"

OPTIONS	
<ul style="list-style-type: none"> 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

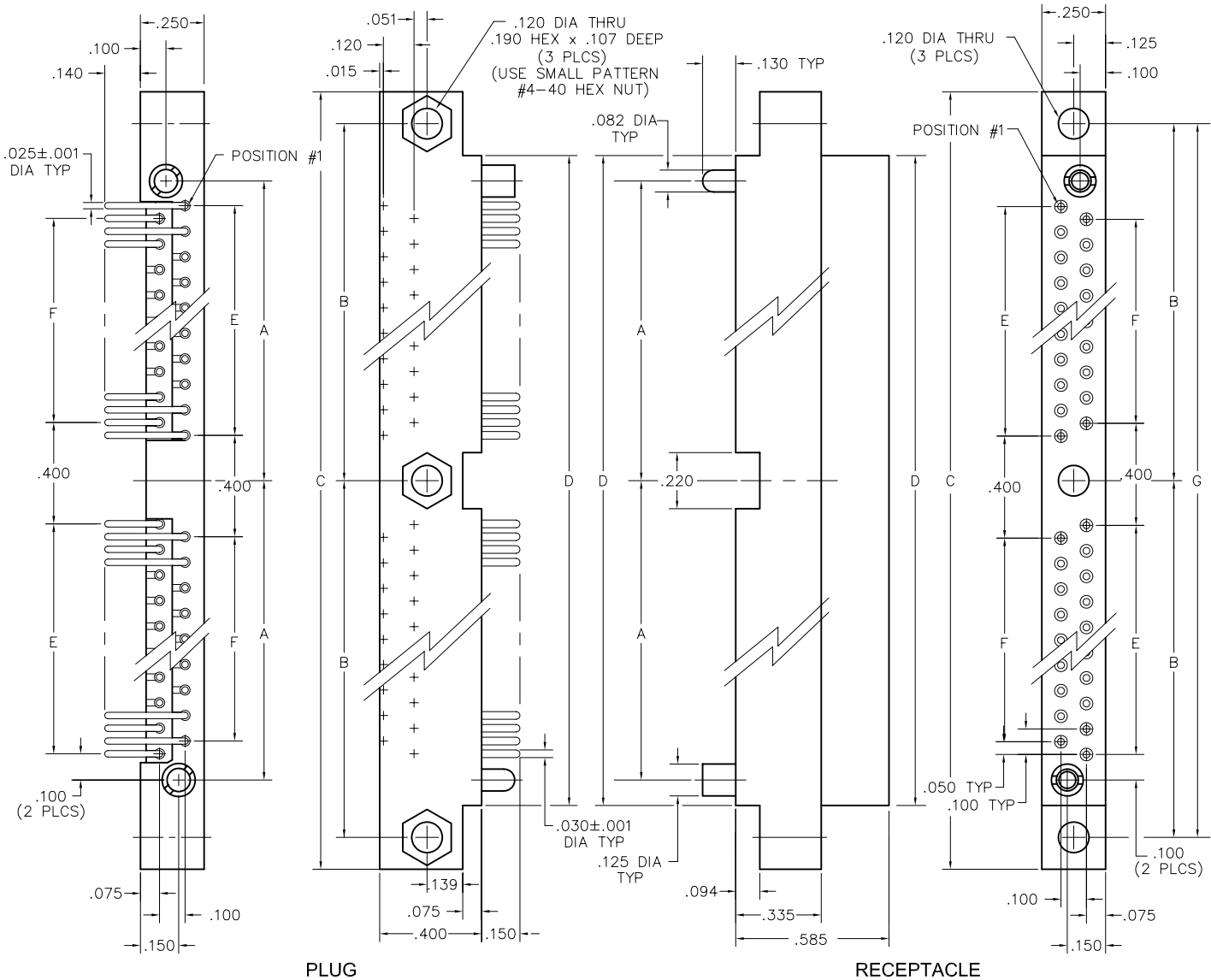
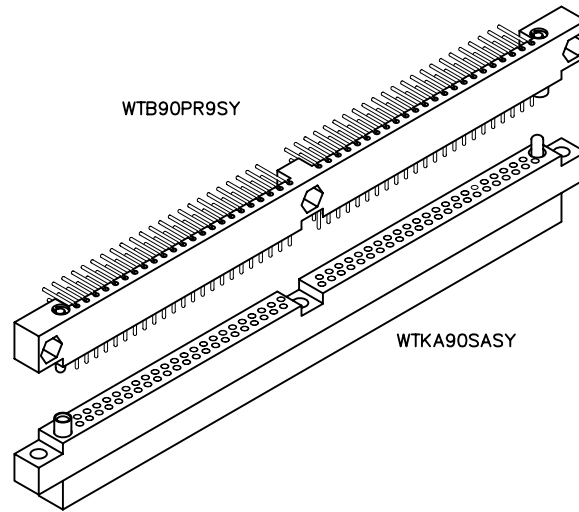


2 • ROW PC Card to Chassis

.100"

WTB - WTKA

90 & 120 Contacts



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

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

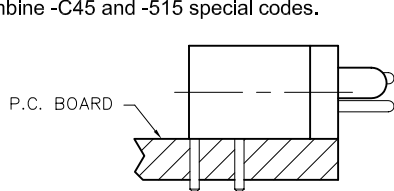
PLUG		RECEPTACLE	
SERIES			
WTB	Plug, right angle, with mounting ears	WTKA	Receptacle, straight, crimp removable, with mounting ears
<ul style="list-style-type: none"> WTKA and WTDXA connectors will mate with WTA, WTAV, WTB, WTBV connectors. "A" means contacts are included. 			

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

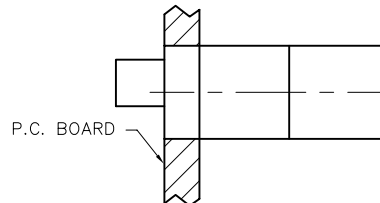
CONTACTS			
<ul style="list-style-type: none"> The use of gaskets is not recommended with crimp socket contacts. WTKA** includes full compliment of WTK2222 (Socket or Pin) crimp removable contacts packaged with connectors. See "Contacts" in Accessories section to order separately. When using crimp contacts with 20 gage barrel, barrel must be cut off prior to removing contact from connector body. 			
TYPE CONTACTS/TERMINATIONS:		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, .435"	JT	Turning jackset, .500"
JTA	Turning jackset, .135"	JTA	Turning jackset, .200"
JTB	Hex turning jackset, .135"	JTB	Hex turning jackset, .200"
JTC	Hex turning jackset, .435"	JTC	Hex turning jackset, .500"
JTL	Turning jackset, long, .635"	JTL	Turning jackset, long, .700"

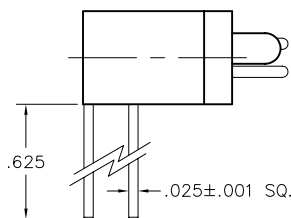
- | OPTIONS | |
|---|--|
| <ul style="list-style-type: none"> Option Codes: Add to the end of the part number. Example: WTKA10SSY-C45. Call factory for additional codes. | |
| -443 | Polarizing pin installed in contact position noted by dash number. See "Polarization" in Accessories section. Receptacle 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. |



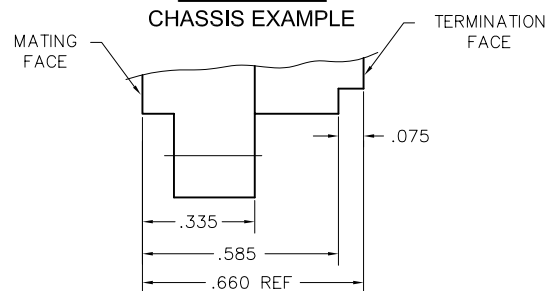
WTB90PR9SY
P.C. BOARD EXAMPLE



WTKA90SASY
CHASSIS EXAMPLE



WTB90PRW40SY
WIRE WRAP EXAMPLE



DETAIL A



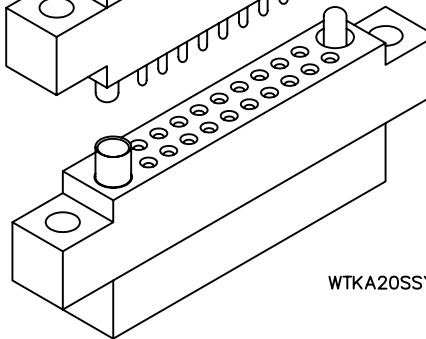
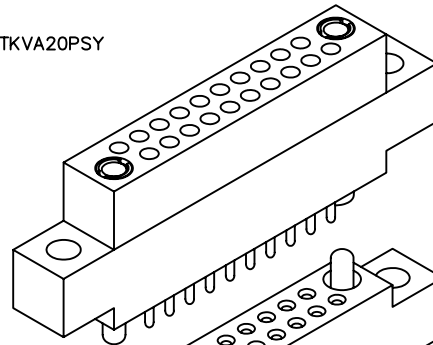
2 • ROW Chassis to Chassis

.100"

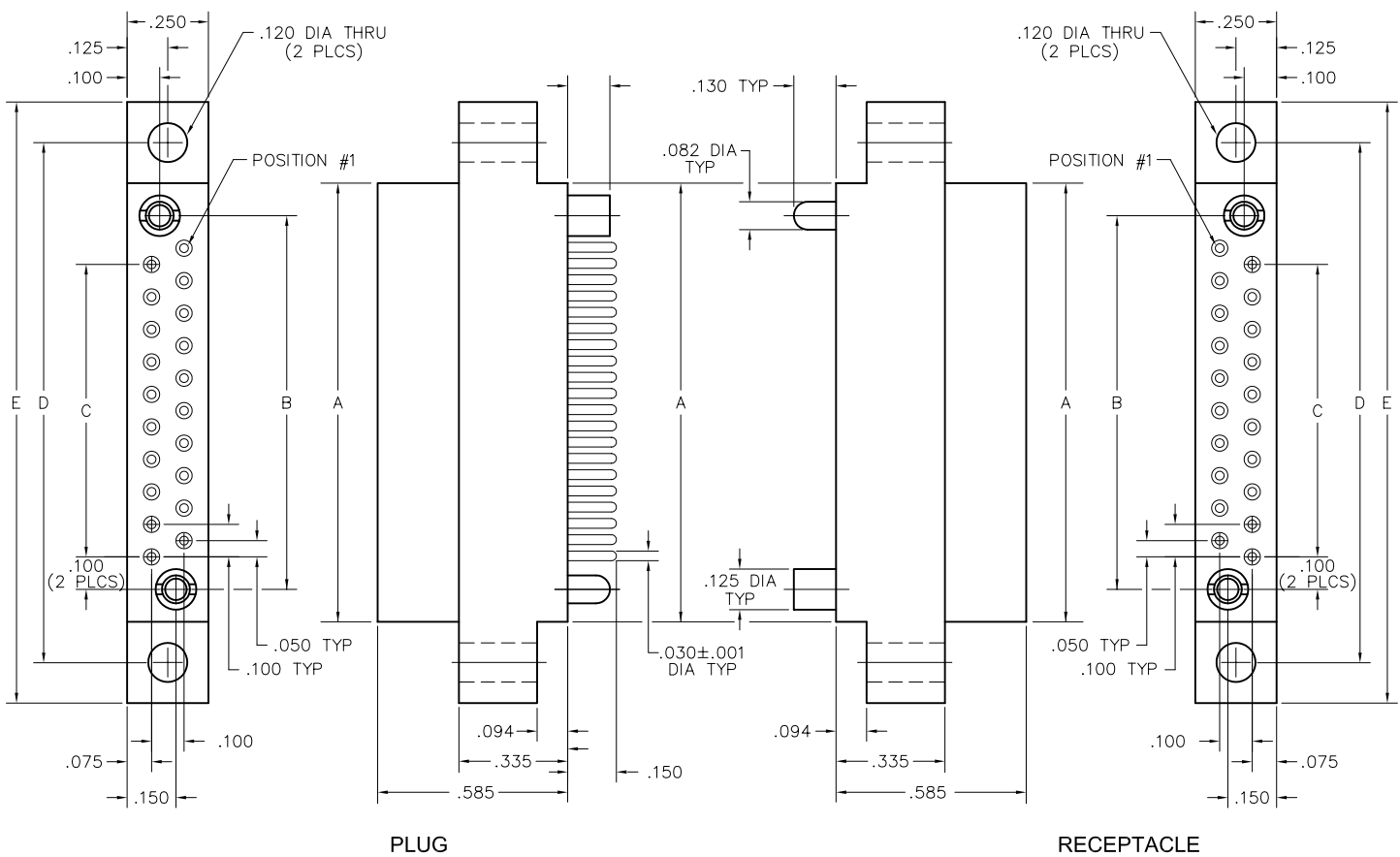
WTKVA - WTKA

10 thru 70 Contacts

WTKVA20PSY



WTKA20SSY



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						

PLUG: WTKVA20 P SY
 RECEPTACLE: WTKA 20 S SY
 XXXX XX XXXX XX

PLUG

RECEPTACLE

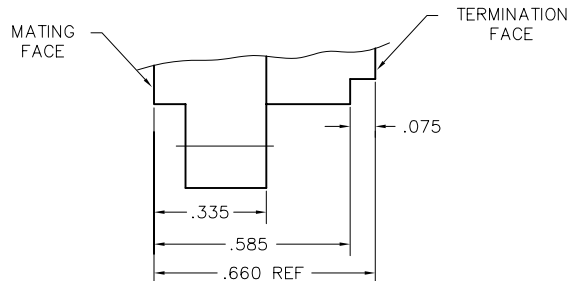
SERIES	
WTKVA Plug, straight, crimp removable, with mounting ears	WTKA Receptacle, straight, crimp removable, with mounting ears
<ul style="list-style-type: none"> WTKVA and WTKA connectors will mate with WTA, WTAV, WTB, WTBV connectors. "A" means contacts are included. 	

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	
<ul style="list-style-type: none"> The use of gaskets is not recommended with crimp connectors. WTKVA** and 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: 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
SY-# Guide set, polarized	SY-# Guide set, polarized
J Fixed jackset	J Fixed jackset
JT Turning jackset, .435"	JT Turning jackset, .500"
JTA Turning jackset, .135"	JTA Turning jackset, .200"
JTB Hex turning jackset, .135"	JTB Hex turning jackset, .200"
JTC Hex turning jackset, .435"	JTC Hex turning jackset, .500"
JTL Turning jackset, long, .635"	JTL Turning jackset, long, .700"

OPTIONS	
<ul style="list-style-type: none"> 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



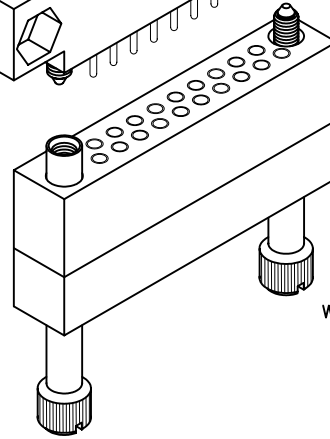
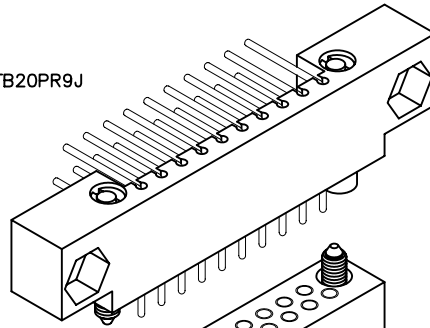
2 • ROW PC Card to Board

.100"

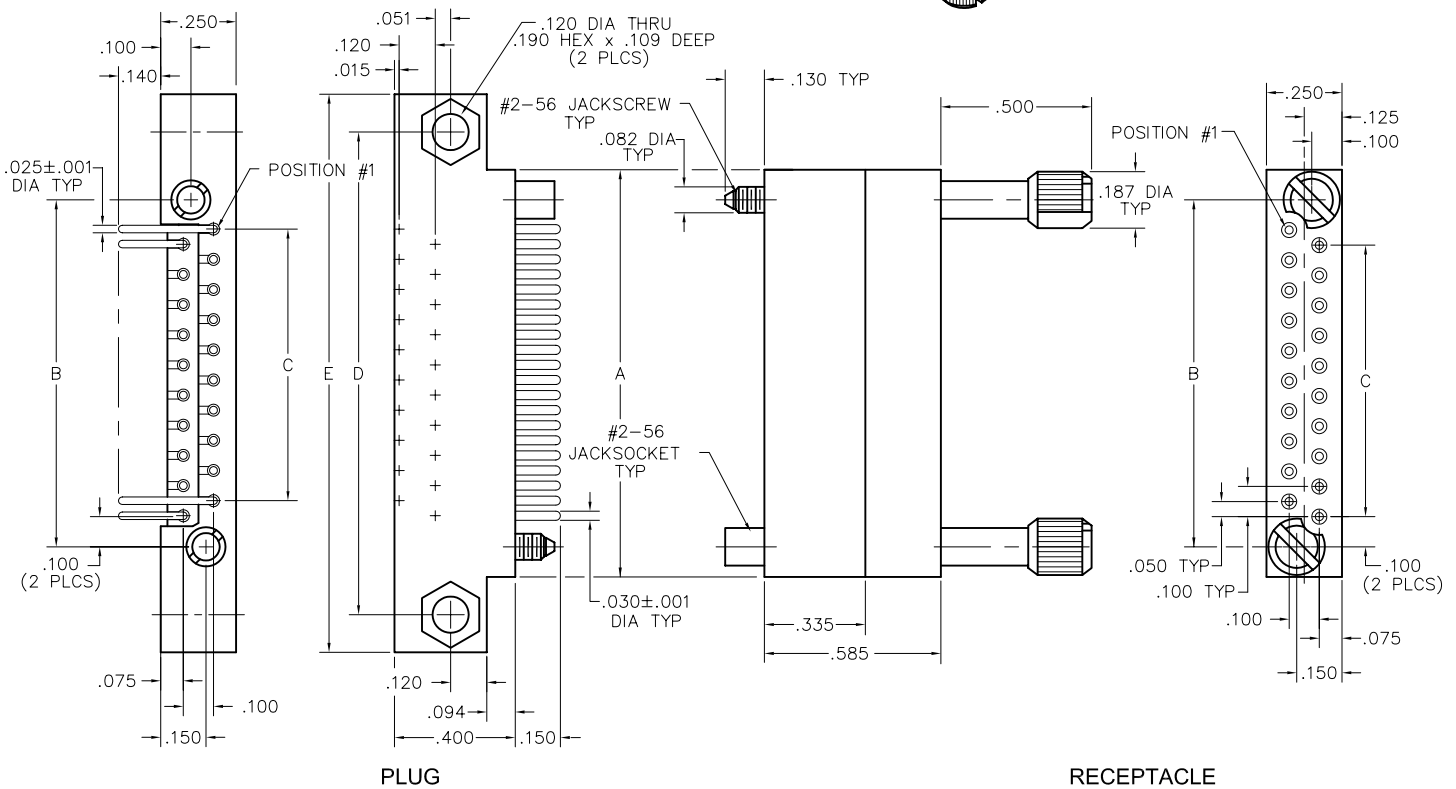
WTB - WTDXA

10 thru 70 Contacts

WTB20PR9J



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						

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

PLUG

RECEPTACLE

SERIES

WTB Plug, right angle, with mounting ears • WTKA and WTDXA connectors will mate with WTA, WTAV, WTB, WTBV connectors. "A" means contacts are included.	WTDXA Receptacle, straight, crimp removable, 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

- 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.

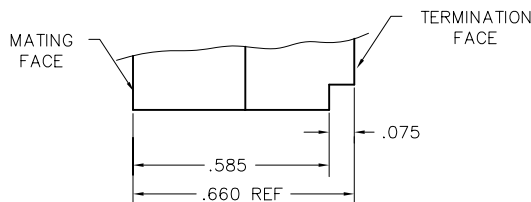
TYPE CONTACTS/TERMINATIONS: PR7 Pin, right angle, dip solder, .109" x .025" dia PR9 Pin, right angle, dip solder, .140" x .025" dia PR11 Pin, right angle, dip solder, .172" x .025" dia PRW40 Pin, right angle, wire wrap®, .625"	TYPE CONTACTS/TERMINATIONS: S Socket, straight, crimp removable, 22 AWG SA 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"
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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

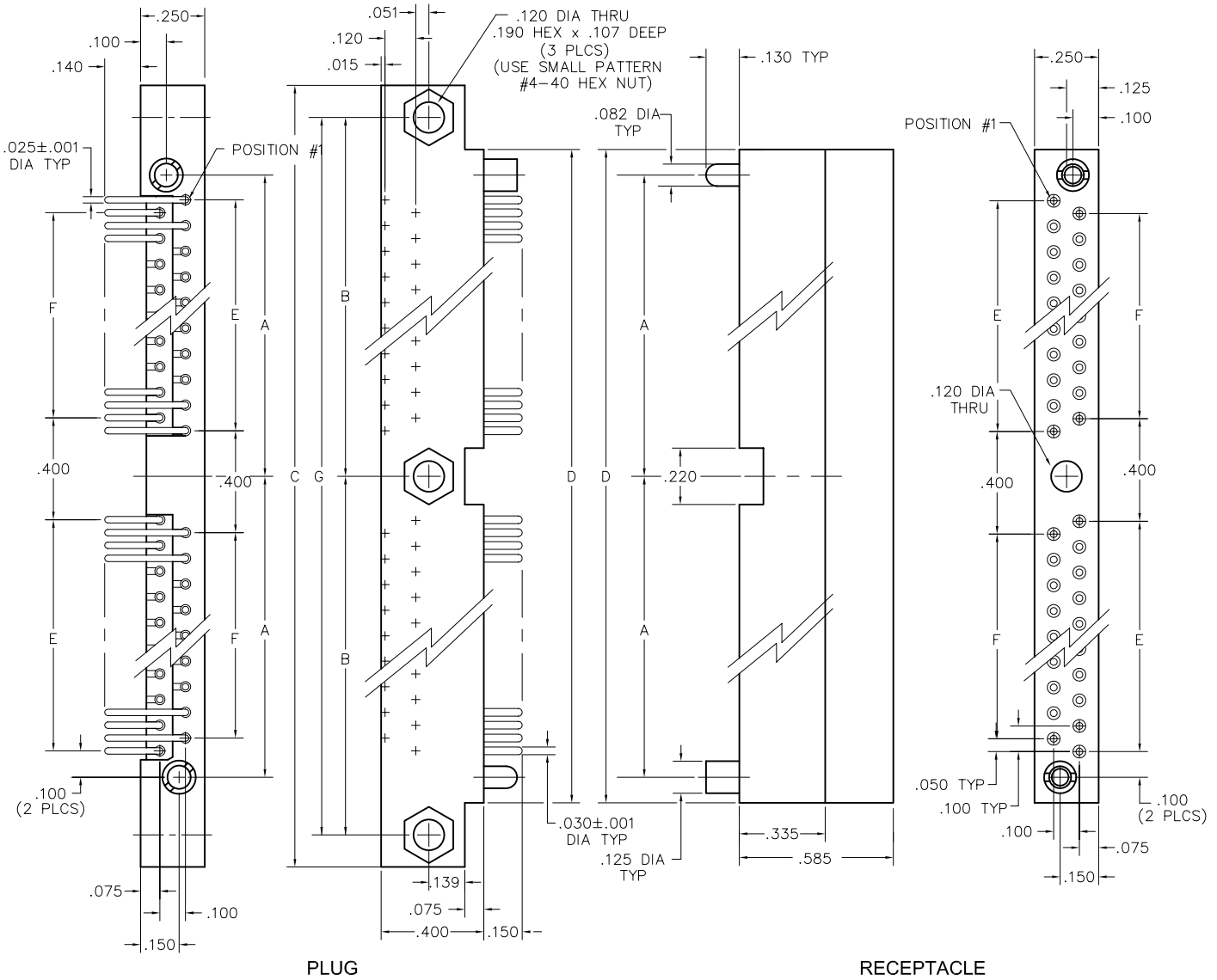
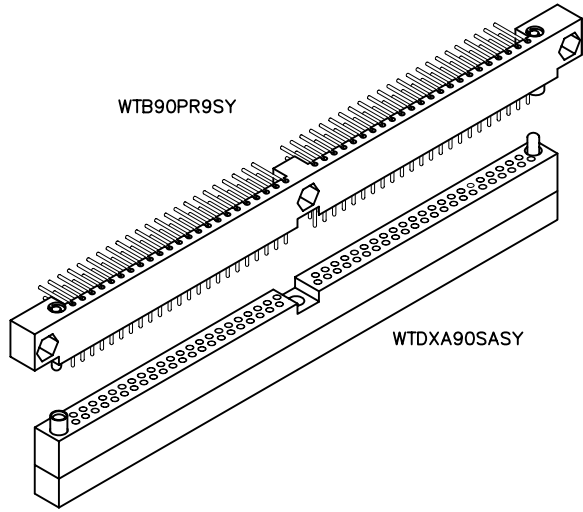


2 • ROW PC Card to Board

.100"

WTB - WTDXA

90 & 120 Contacts



DIMENSIONS							
SIZE	A	B	C	D	E	F	G
90	2.475	2.700	5.560	5.150	2.200	2.100	5.400
120	3.225	3.450	7.150	6.650	2.900	2.900	6.900

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

PLUG

RECEPTACLE

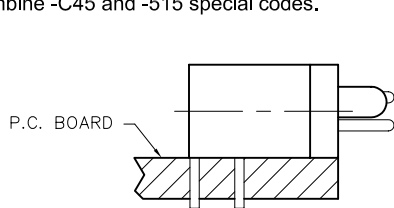
SERIES	
WTB Plug, right angle, with mounting ears	WTDXA Receptacle, straight, crimp removable, without mounting ears
<ul style="list-style-type: none"> • WTKA and WTDXA connectors will mate with WTA, WTAV, WTB, WTBV connectors. "A" means contacts are included. 	

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

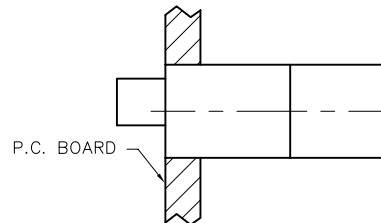
CONTACTS	
<ul style="list-style-type: none"> • The use of gaskets is not recommended with crimp socket contacts. • WTKA** includes full compliment of WTK2222 (Socket or Pin) crimp removable contacts packaged with connectors. See "Contacts" in Accessories section to order separately. • When using crimp contacts with 20 gage barrel, barrel must be cut off prior to removing contact from connector body. 	
<p>TYPE CONTACTS/TERMINATIONS:</p> <p>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"</p>	<p>TYPE CONTACTS/TERMINATIONS:</p> <p>S Socket, straight, crimp removable, 22 AWG SA Same as above P Pin, straight, crimp removable, 22 AWG</p>

HARDWARE	
SY Guide set	SY Guide set
SY-# Guide set, polarized	SY-# Guide set, polarized
J Fixed jackset	J Fixed jackset
JT Turning jackset, .435"	JT Turning jackset, .500"
JTA Turning jackset, .135"	JTA Turning jackset, .200"
JTB Hex turning jackset, .135"	JTB Hex turning jackset, .200"
JTC Hex turning jackset, .435"	JTC Hex turning jackset, .500"
JTL Turning jackset, long, .635"	JTL Turning jackset, long, .700"

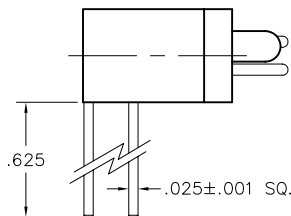
- OPTIONS**
- Option Codes: Add to the end of the part number. Example: WTDXA90SSY-C45. Call factory for additional codes.
 - 443 Polarizing pin installed in contact position noted by dash number. See "Polarization" in Accessories section. Receptacle connector only.
 - 444 Contact position noted by dash 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.



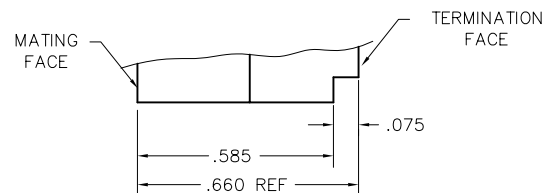
WTB90PR9SY
 P.C. BOARD EXAMPLE



WTDXA90SASY
 CHASSIS EXAMPLE



WTB90PRW40SY
 WIRE WRAP EXAMPLE



DETAIL A

PLUG: WTDVA20 P SY
 RECEPTACLE: WTDXA20 S SY
 XXXX XX XXXX XX

PLUG

RECEPTACLE

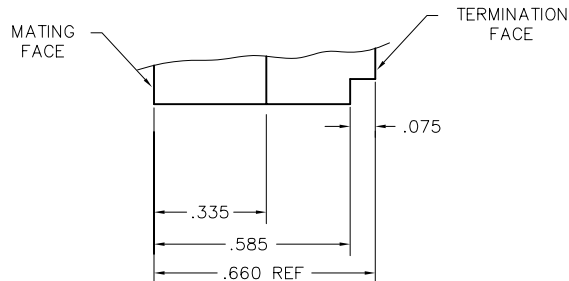
SERIES	
WTDVA Plug, straight, crimp removable, without mounting ears	WTDXA Receptacle, straight, crimp removable, without mounting ears
<ul style="list-style-type: none"> WTDVA and WTDXA connectors will mate with WTA, WTAV, WTB, WTBV connectors. "A" means contacts are included. 	

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	
<ul style="list-style-type: none"> 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
SY-# Guide set, polarized	SY-# Guide set, polarized
J Fixed jackset	J Fixed jackset
JT Turning jackset, .435"	JT Turning jackset, .500"
JTA Turning jackset, .135"	JTA Turning jackset, .200"
JTB Hex turning jackset, .135"	JTB Hex turning jackset, .200"
JTC Hex turning jackset, .435"	JTC Hex turning jackset, .500"
JTL Turning jackset, long, .635"	JTL Turning jackset, long, .700"

OPTIONS	
<ul style="list-style-type: none"> 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

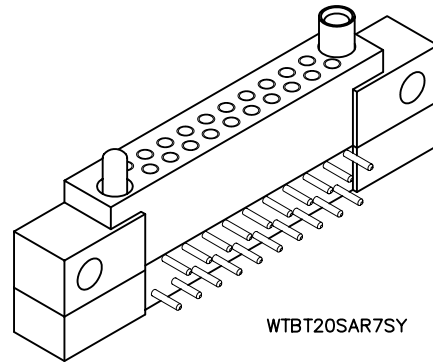


2 • ROW Extender Board Connector*

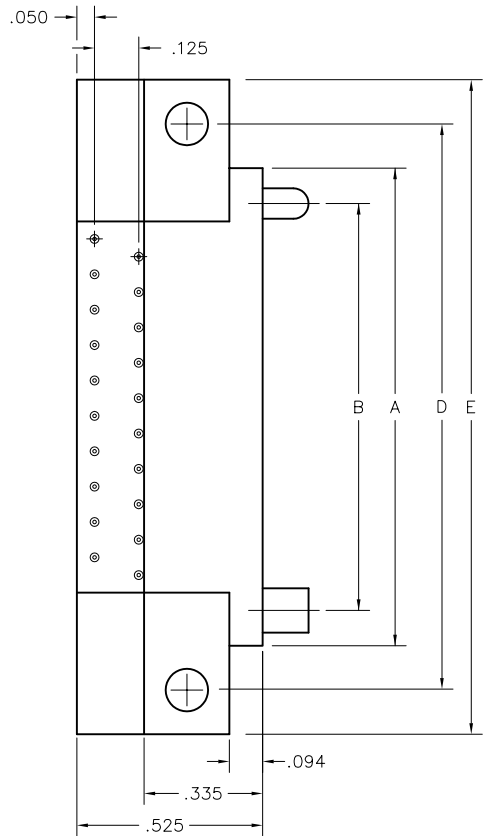
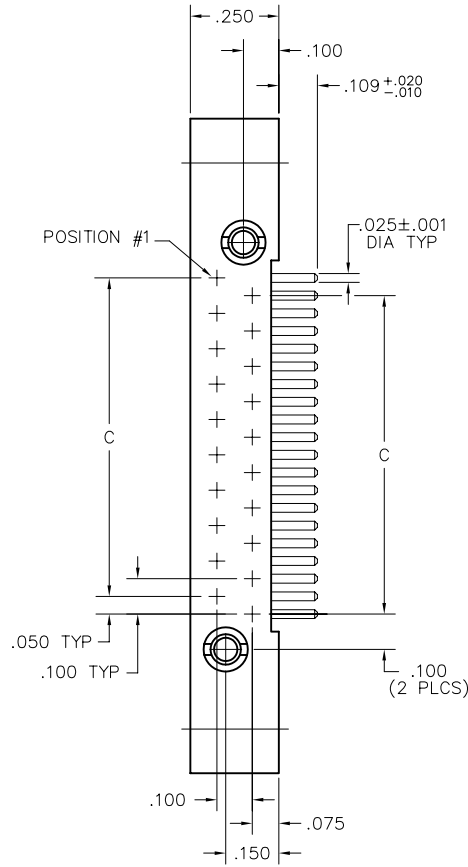
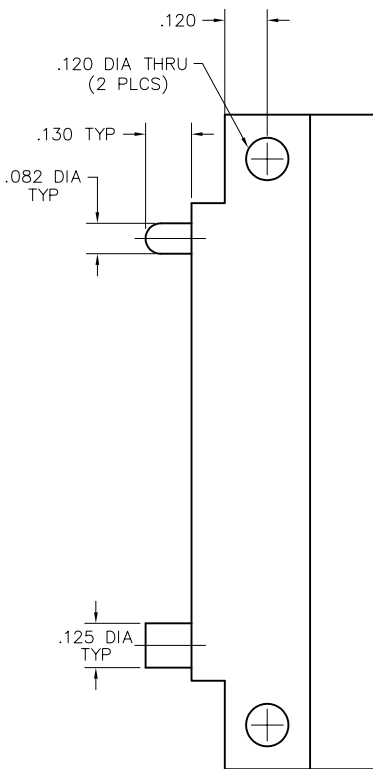
.100"

WTBT

10 thru 70 Contacts



WTBT20SAR7SY



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

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

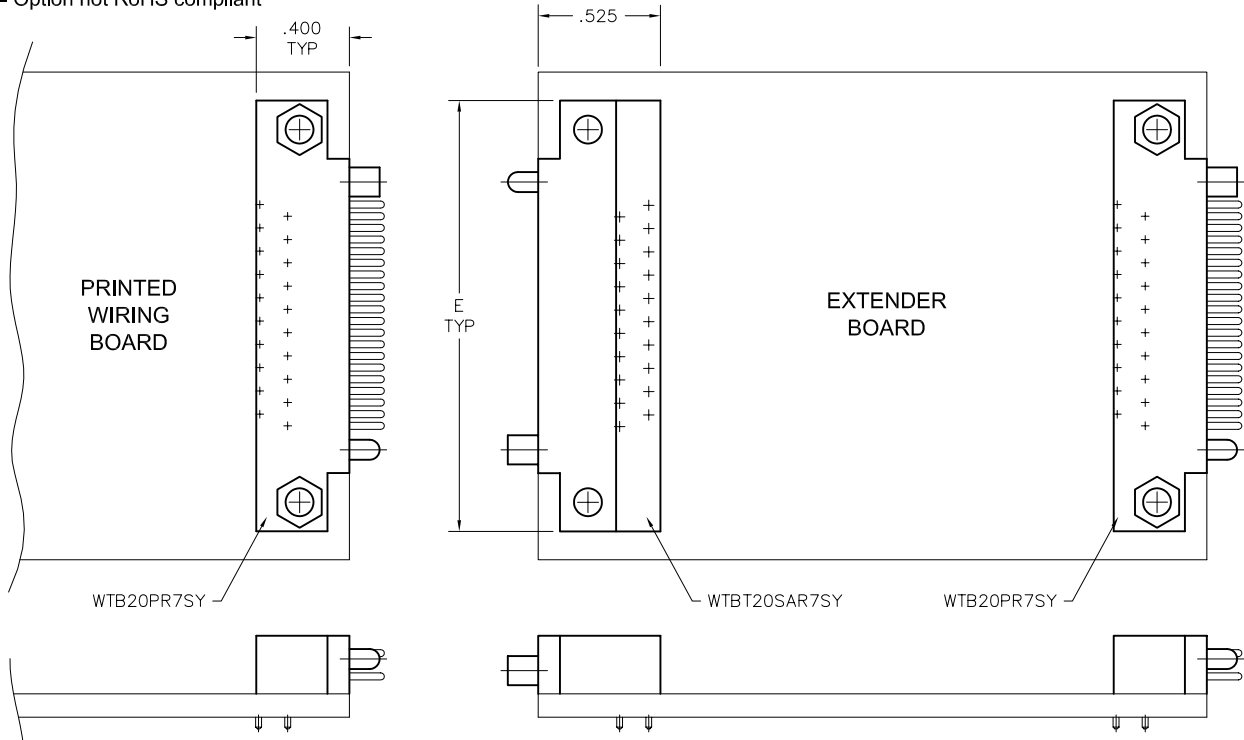
HARDWARE

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



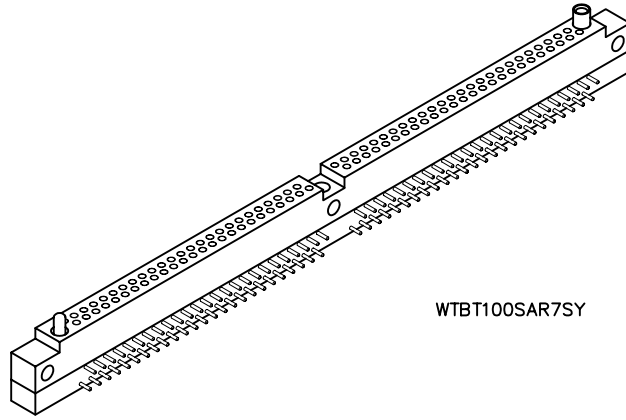


2 · ROW Extender Board Connector*

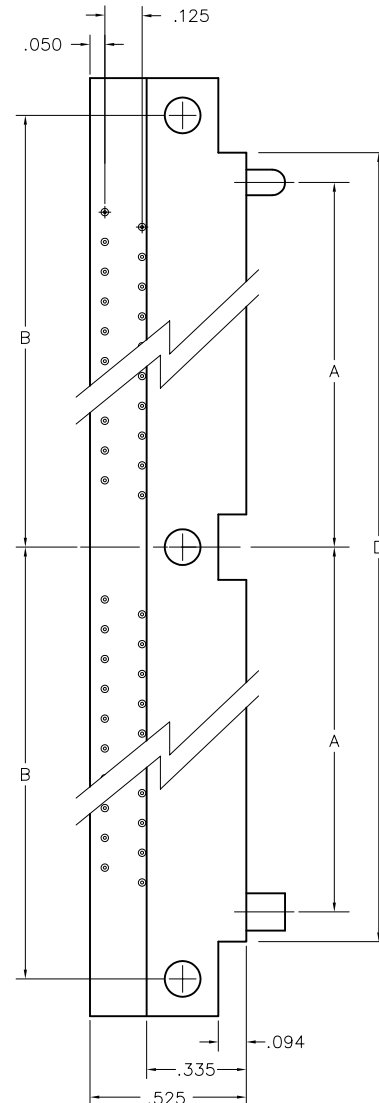
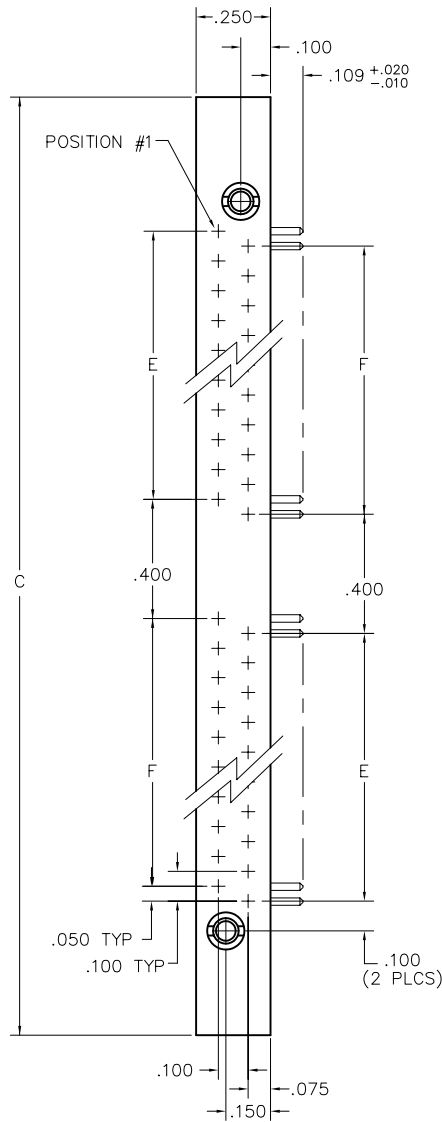
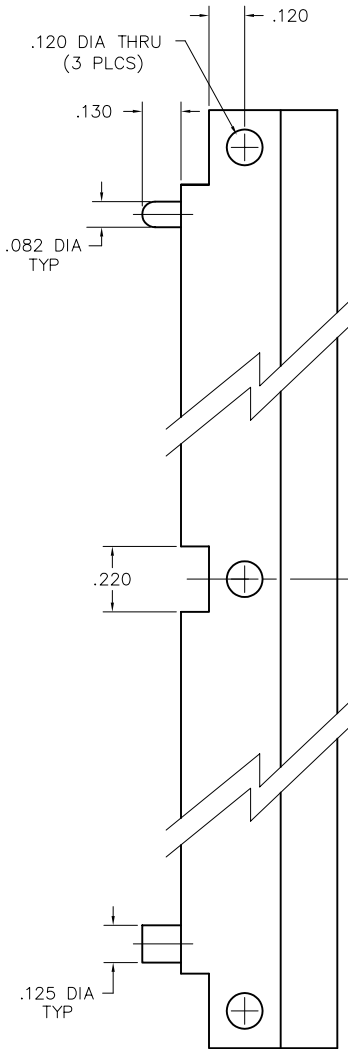
.100"

WTBT

100 Contacts



WTBT100SAR7SY



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

RECEPTACLE

SERIES

WTBT Receptacle, right angle, with mounting ears
 • WTBT connectors will mate with WTA, WTA V, WTB, WTB V.

SIZE

XXX Number of contacts (100)

CONTACTS

TYPE CONTACTS/TERMINATIONS:

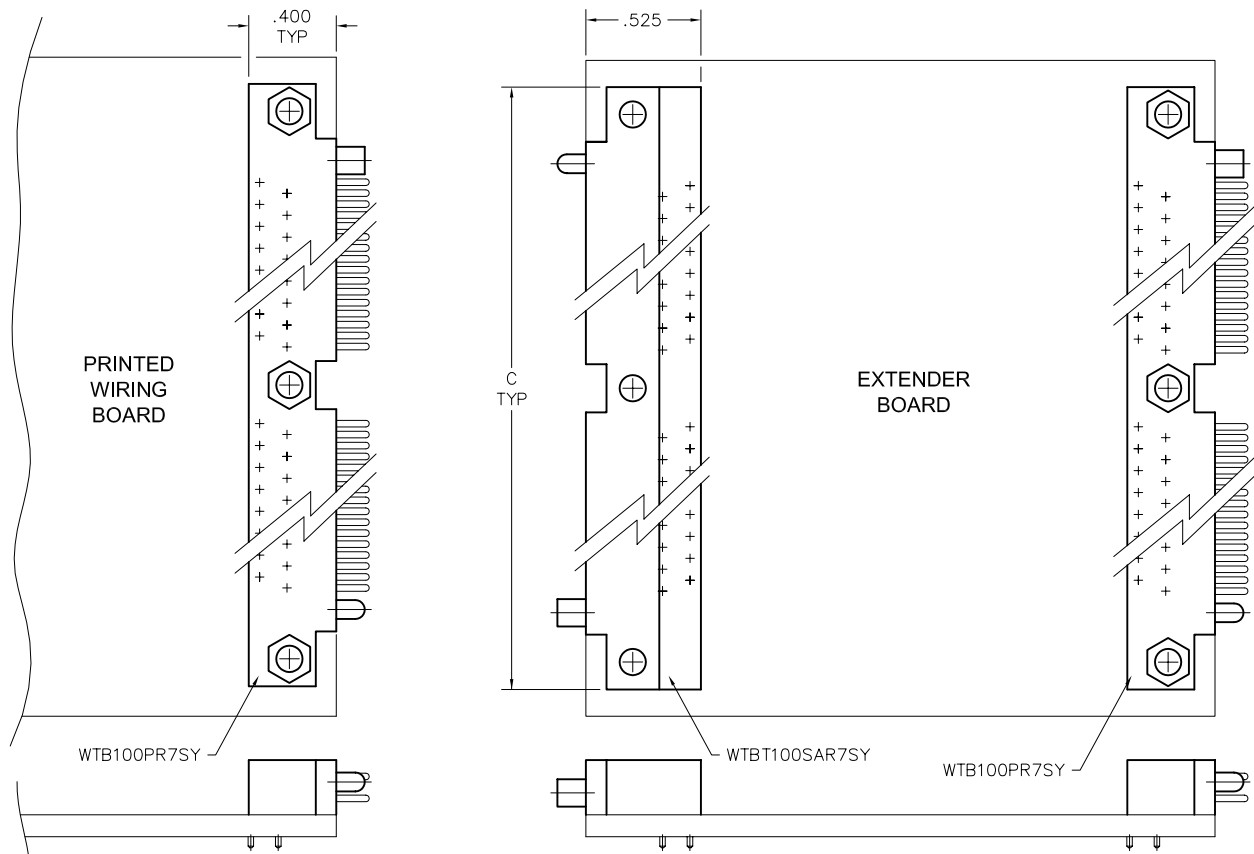
- SAR7 Socket, right angle, dip solder, .109" x .025" dia
- SAR9 Socket, right angle, dip solder, .140" x .025" dia
- SAR11 Socket, right angle, dip solder, .172" x .025" dia
- SARC Socket, right angle, solder cup (.035" I.D.)

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



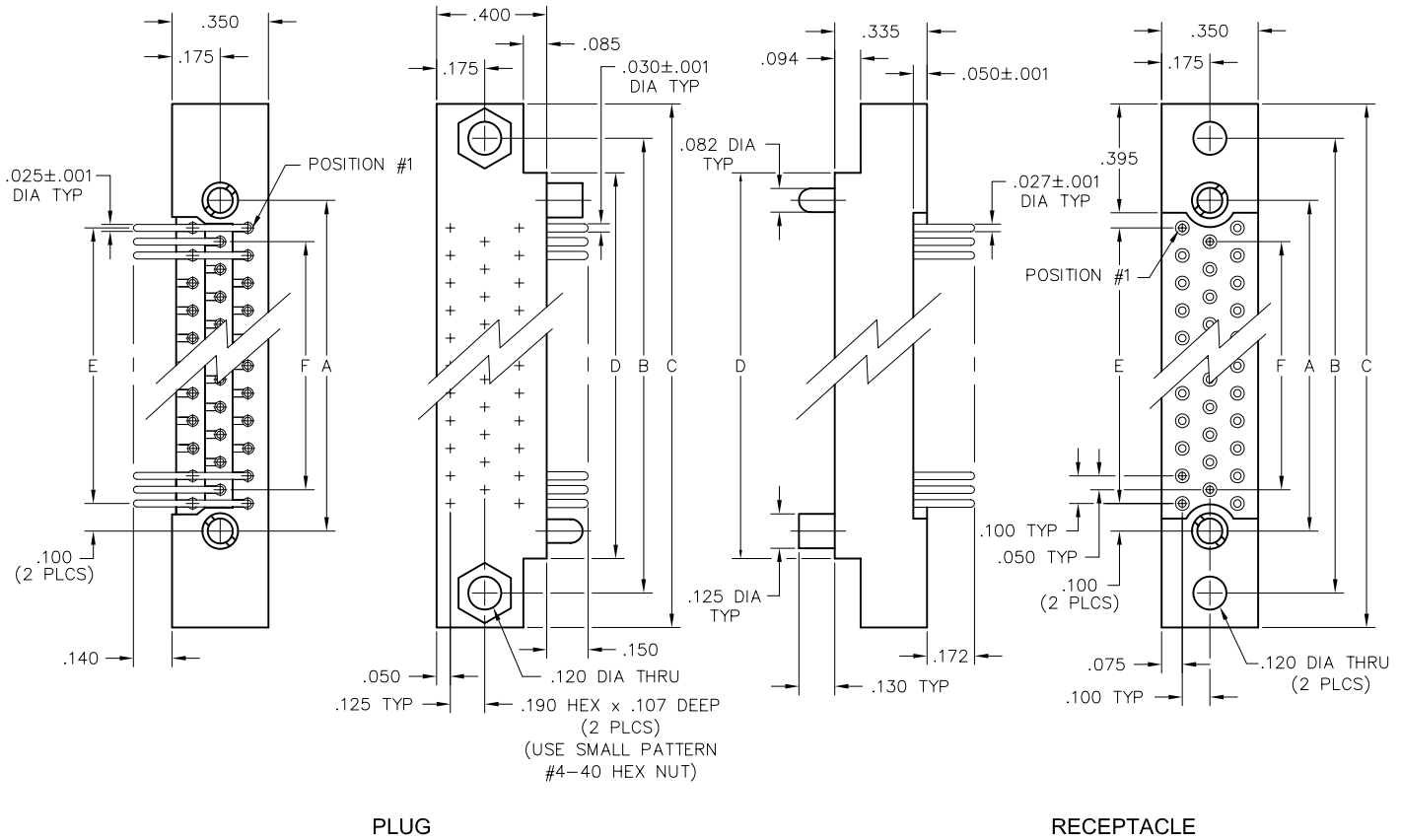
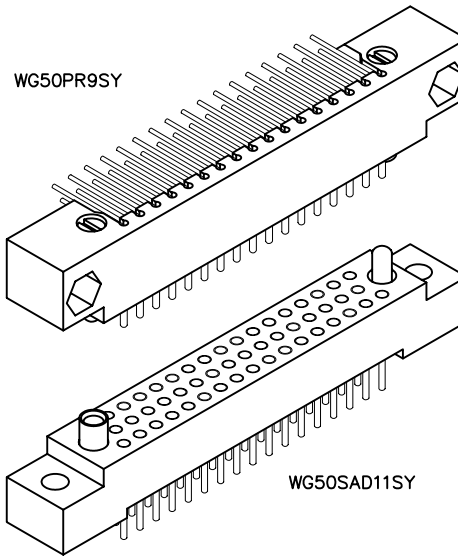


3 • ROW PC Card to Board or Chassis

.100"

WG - WG

50 thru 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

PLUG: WG 50 PR9 SY
 RECEPTACLE: WG 50 SAD11 SY
 XX XX 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 (50, 62, 80, 92, or 104)	XX	Number of contacts (50, 62, 80, 92, or 104)
----	---	----	---

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
PR15	Pin, right angle, dip solder, .234" x .025" dia
PRW34	Pin, right angle, wire wrap [®] , .531"
PRW42	Pin, right angle, wire wrap [®] , .656"

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

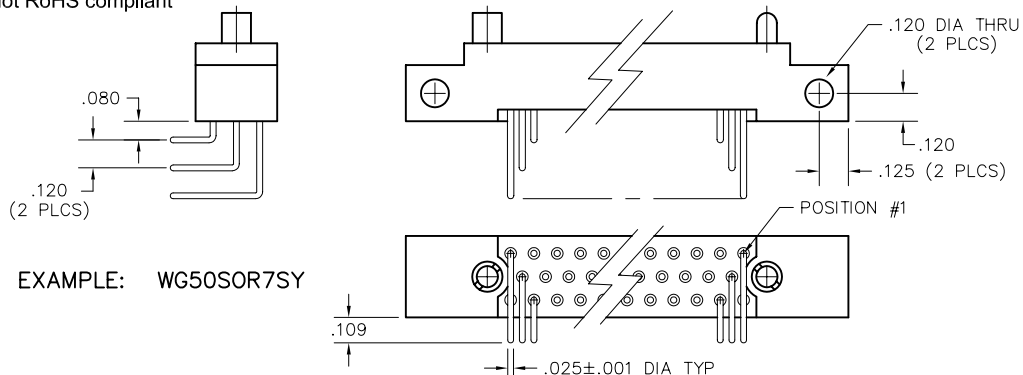
- Plug facial seal gaskets and hoods; order separately or add "Q" in part number. Example: WG50PR9QJ. See "Gaskets" and "Hoods" in Accessories section for instructions.

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

- Option Codes: Add to the end of the part number. Example: WG80PR9SY342. 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).
- D54 Combine -B82 & -D01 options
- G69 Solder cups fixed in an outward orientation (otherwise contacts will rotate)

= Option not RoHS compliant



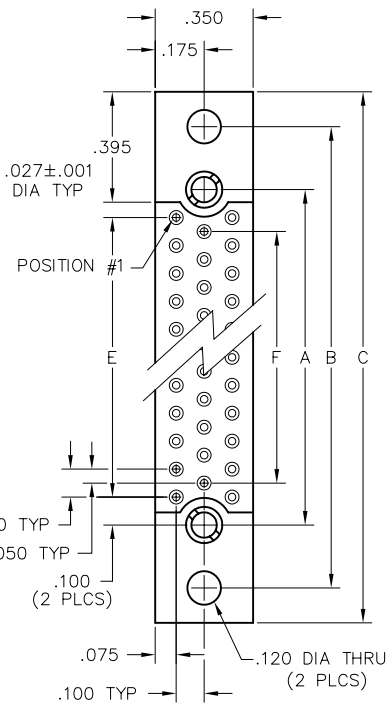
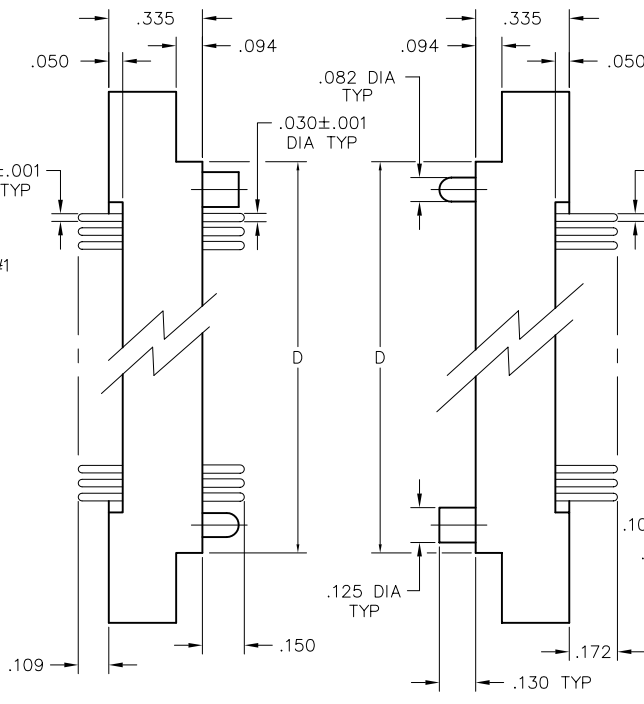
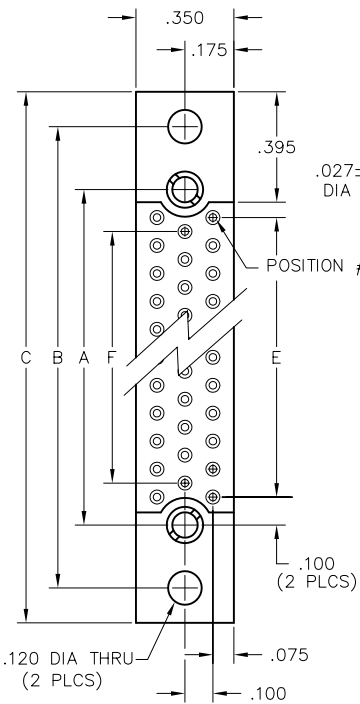
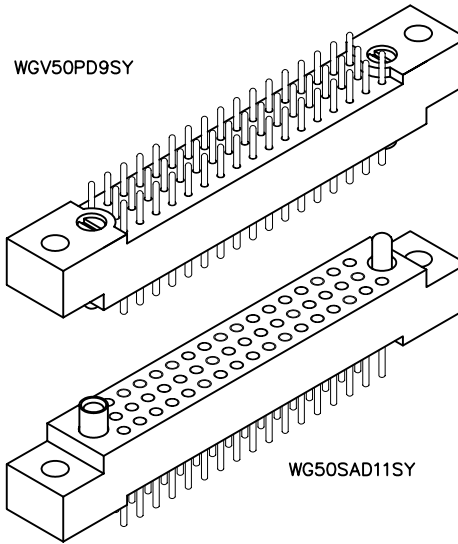


3 • ROW Sandwich Boards

.100"

WGV - WG

50 thru 104 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

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

PLUG

RECEPTACLE

SERIES

WGV Plug, with mounting ears	WG Receptacle, straight, with mounting ears
	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

- 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: WGV50PD9QJ. See "Gaskets" and "Hoods" in Accessories section for instructions.

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

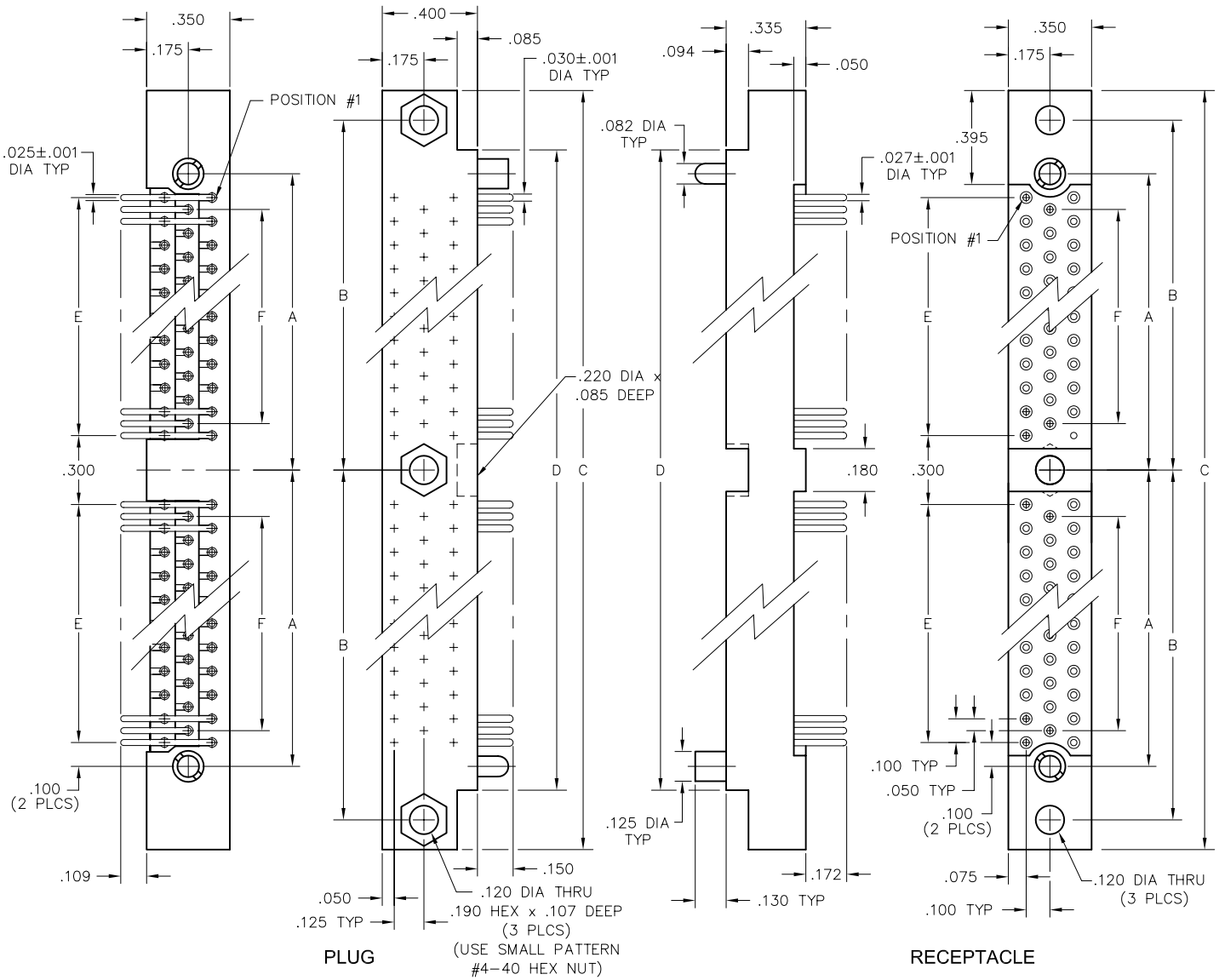
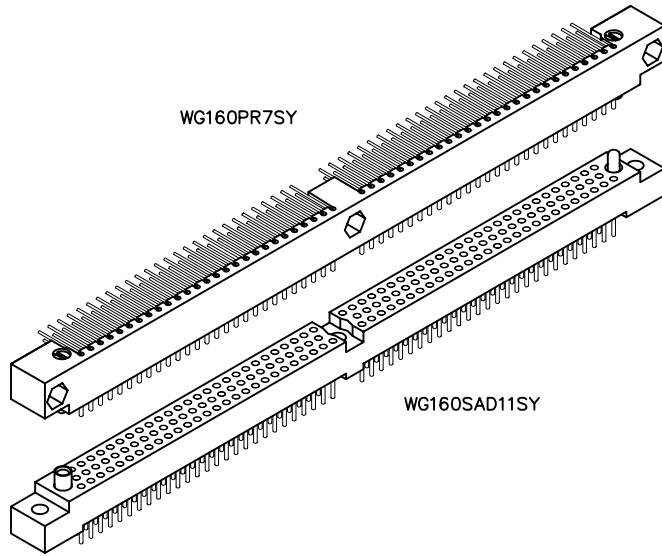


3 • ROW PC Card to Board or PC Card

.100"

WG - WG

160 & 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

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.

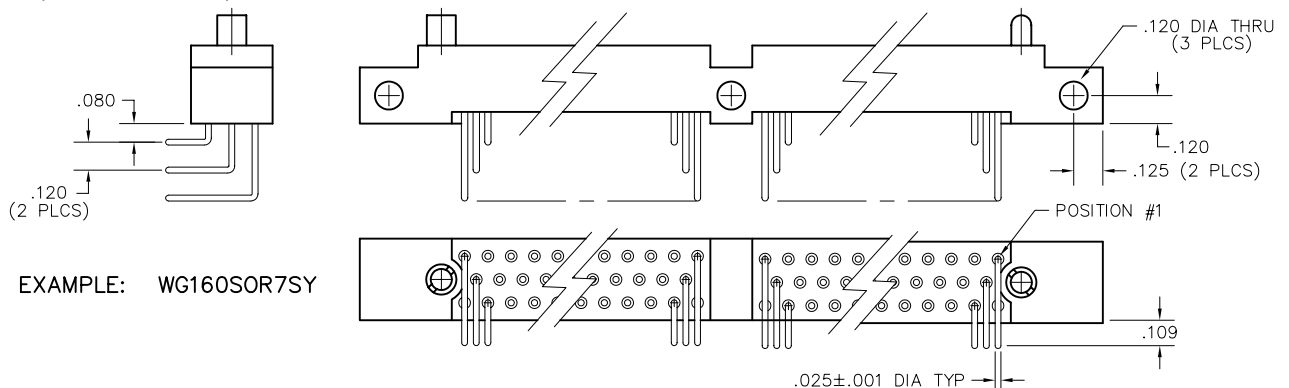
TYPE CONTACTS/TERMINATIONS:
 PR7 Pin, right angle, dip solder, .109" x .025" dia
 PR9 Pin, right angle, dip solder, .140" x .025" dia
 PR11 Pin, right angle, dip solder, .172" x .025" dia

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 "Q" in part number. Example: WG160PR9QJ. See "Gaskets" and "Hoods" in Accessories section for instructions.	
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	
• 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. <input checked="" type="checkbox"/>
-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



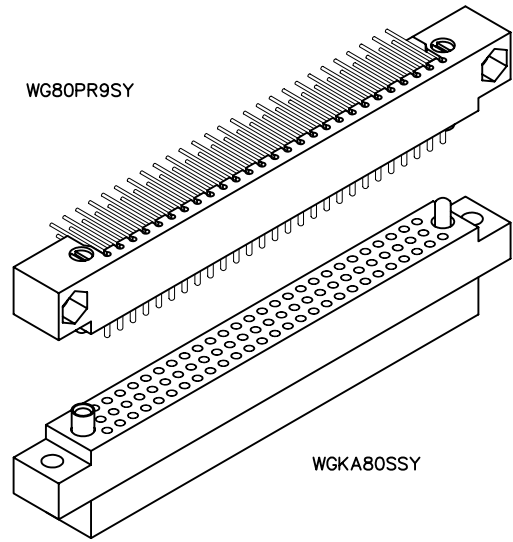
3 • ROW PC Card to Chassis

.100"

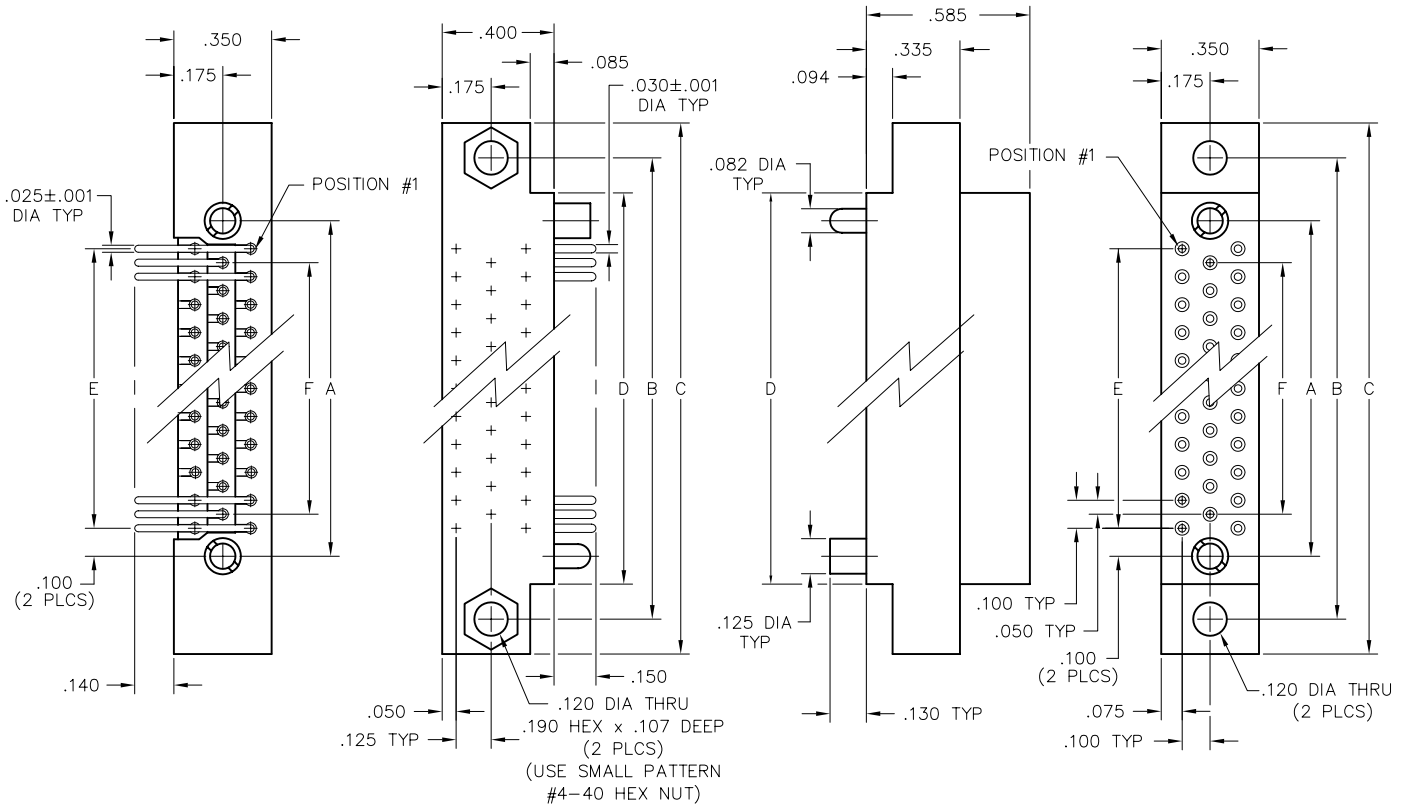
WG - WGKA

50 thru 160

WG80PR9SY



WGKA80SSY



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

PLUG: WG 80 PR9 SY
 RECEPTACLE: WGKA 80 S SY
 XXXX XX XXX XX

PLUG

RECEPTACLE

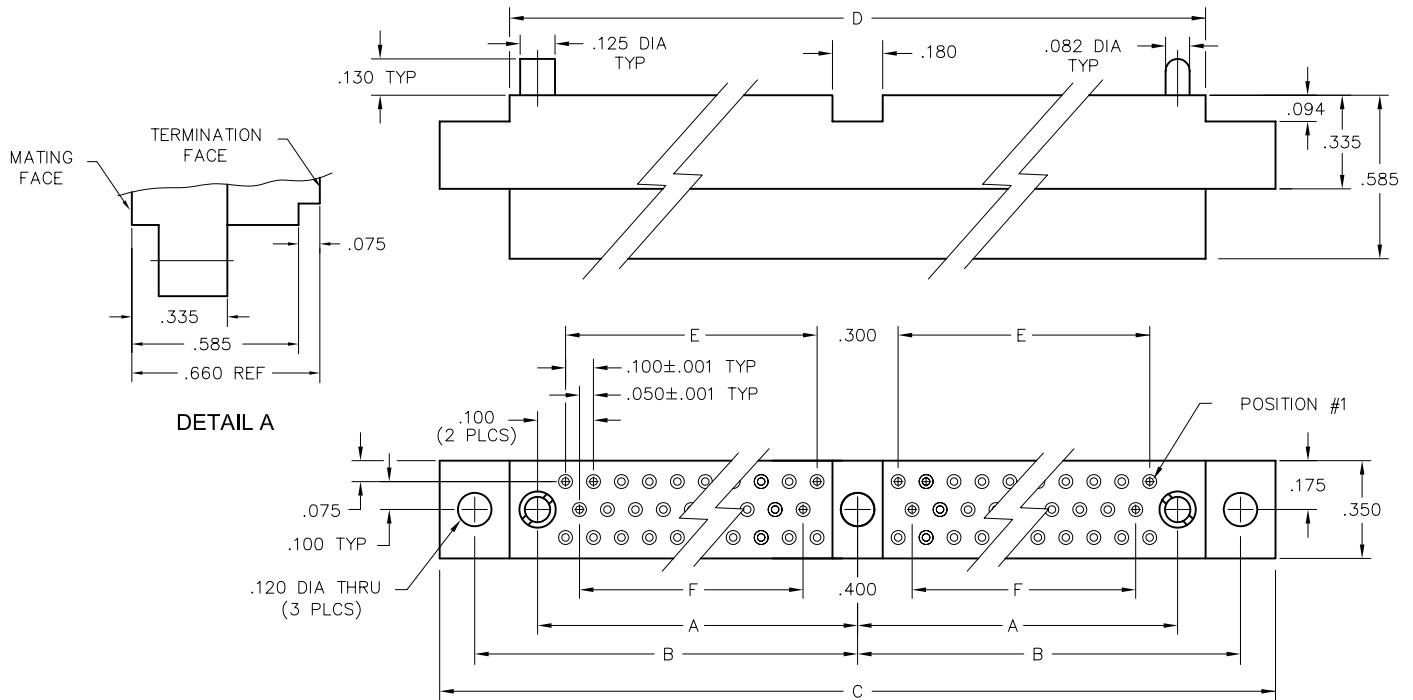
SERIES	
WG Plug, right angle, with mounting ears	WGKA Receptacle, straight, crimp removable, with mounting ears
<ul style="list-style-type: none"> WGKA and WGDXA also mate with WGV connectors. "A" means contacts are included. 	

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"> The use of gaskets is not recommended with crimp socket 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. When using crimp contacts with 20 gage barrel, barrel must be cut off prior to removing contact from connector body. 	
<p>TYPE CONTACTS/TERMINATIONS:</p> <p>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"</p>	<p>TYPE CONTACTS/TERMINATIONS:</p> <p>S Socket, straight, crimp removable, 22 AWG SA Same as above P Pin, straight, crimp removable, 22 AWG</p>

HARDWARE	
<ul style="list-style-type: none"> 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. 	
SY Guide set	SY Guide set
SY-# Guide set, polarized	SY-# Guide set, polarized

OPTIONS	
<ul style="list-style-type: none"> Option Codes: Add to the end of the part number. Example: WGKA80SSY-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: WGKA160SSY

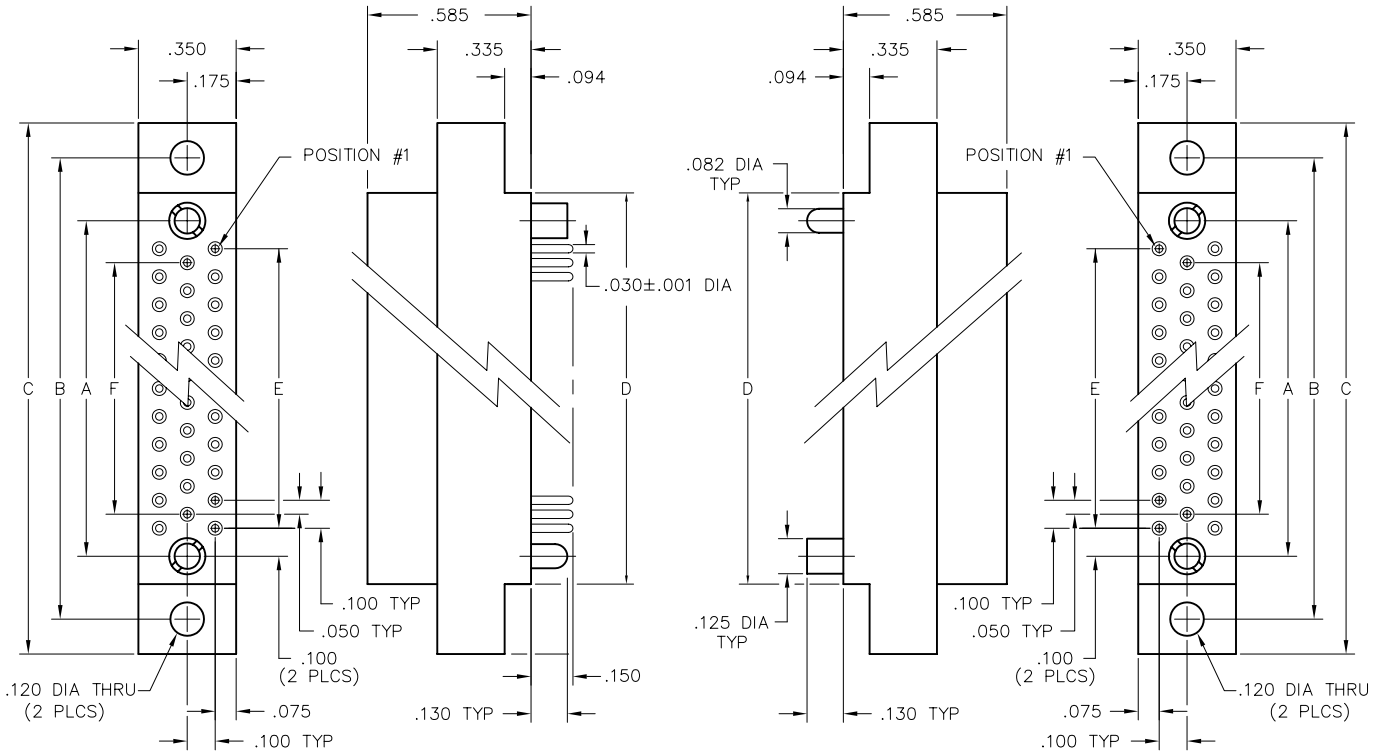
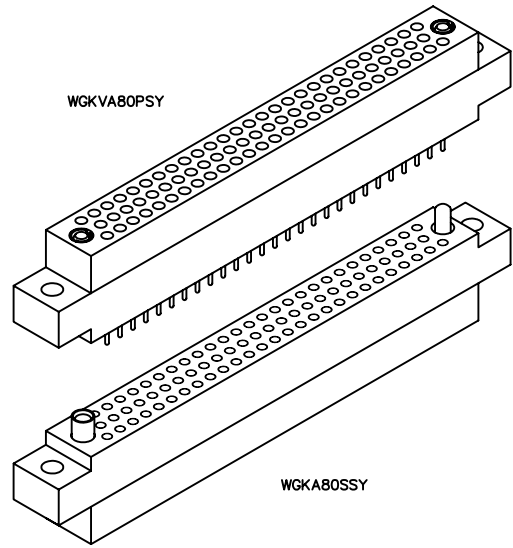


3 • ROW Chassis to Chassis

.100"

WGKVA - WGKA

50 thru 160



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

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

PLUG

RECEPTACLE

SERIES

<p>WGKVA Plug, straight, crimp removable, with mounting ears</p> <ul style="list-style-type: none"> WGKVA and WGKA also mate with WG or WGV connectors. "A" means contacts are included. 	<p>WGKA Receptacle, straight, crimp removable, with mounting ears</p>
---	---

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

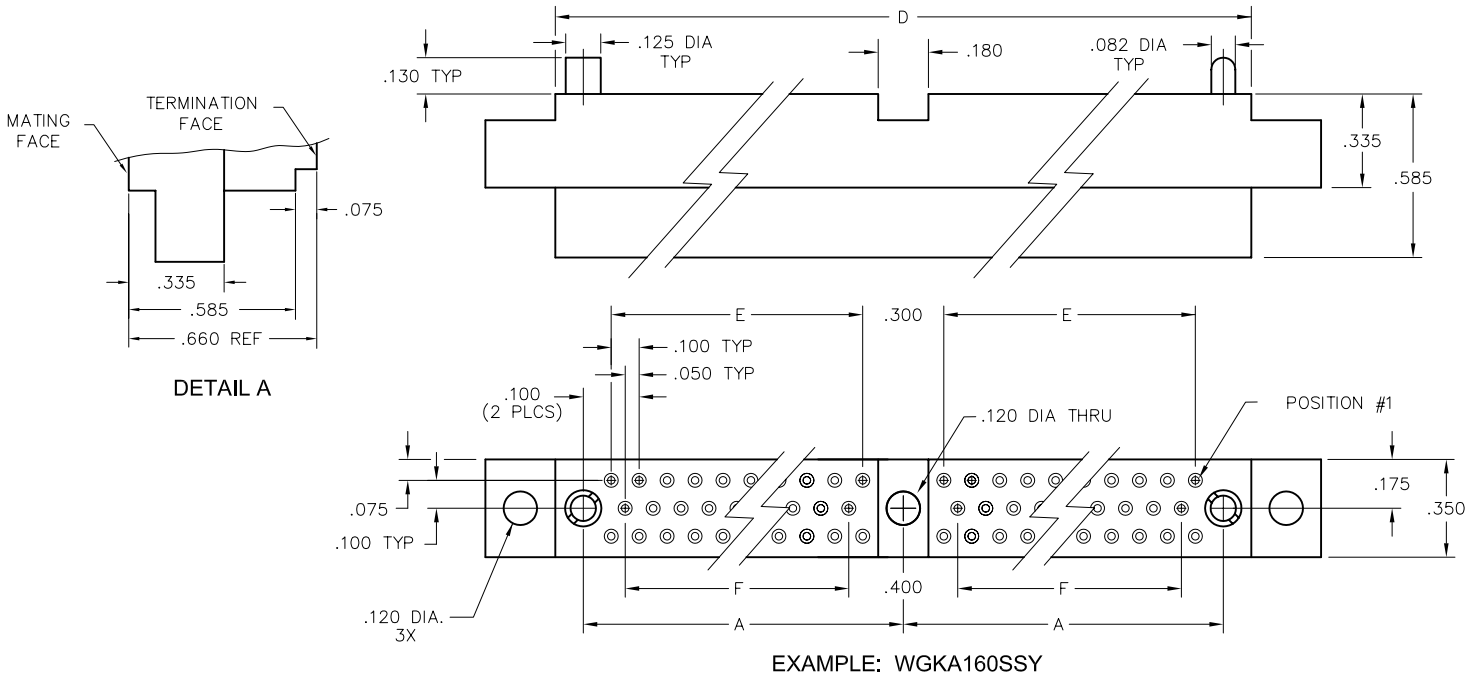
HARDWARE

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.





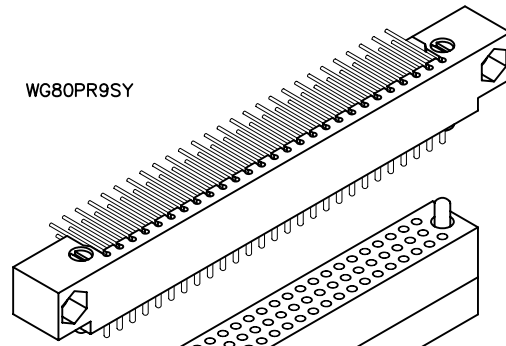
3 • ROW PC Card to Chassis

.100"

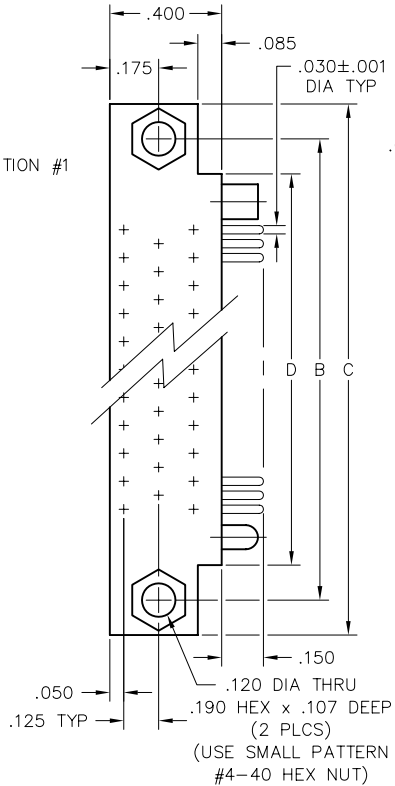
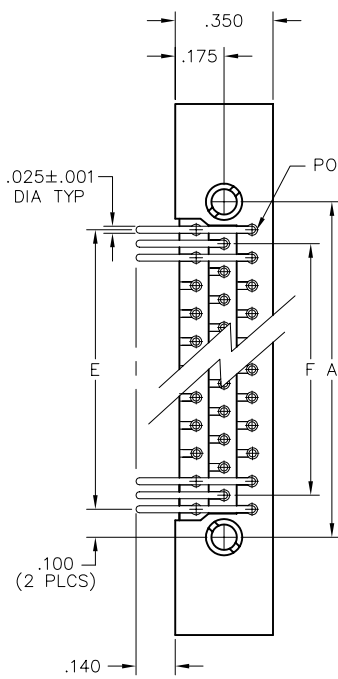
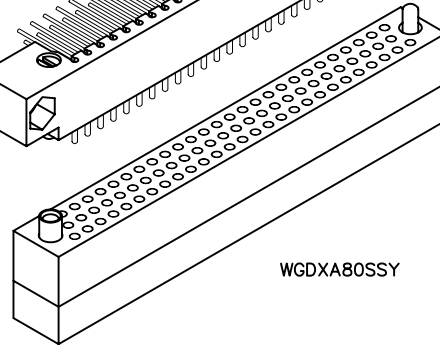
WG - WGDXA

50 thru 160

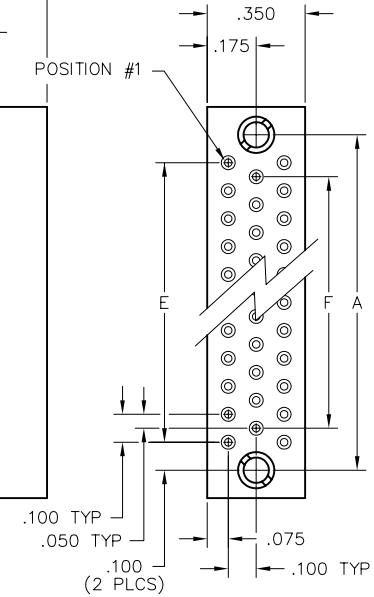
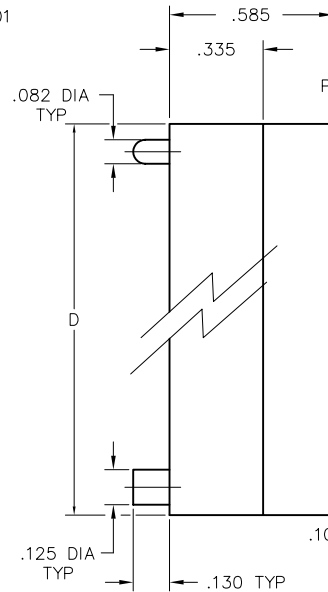
WG80PR9SY



WGDXA80SSY



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

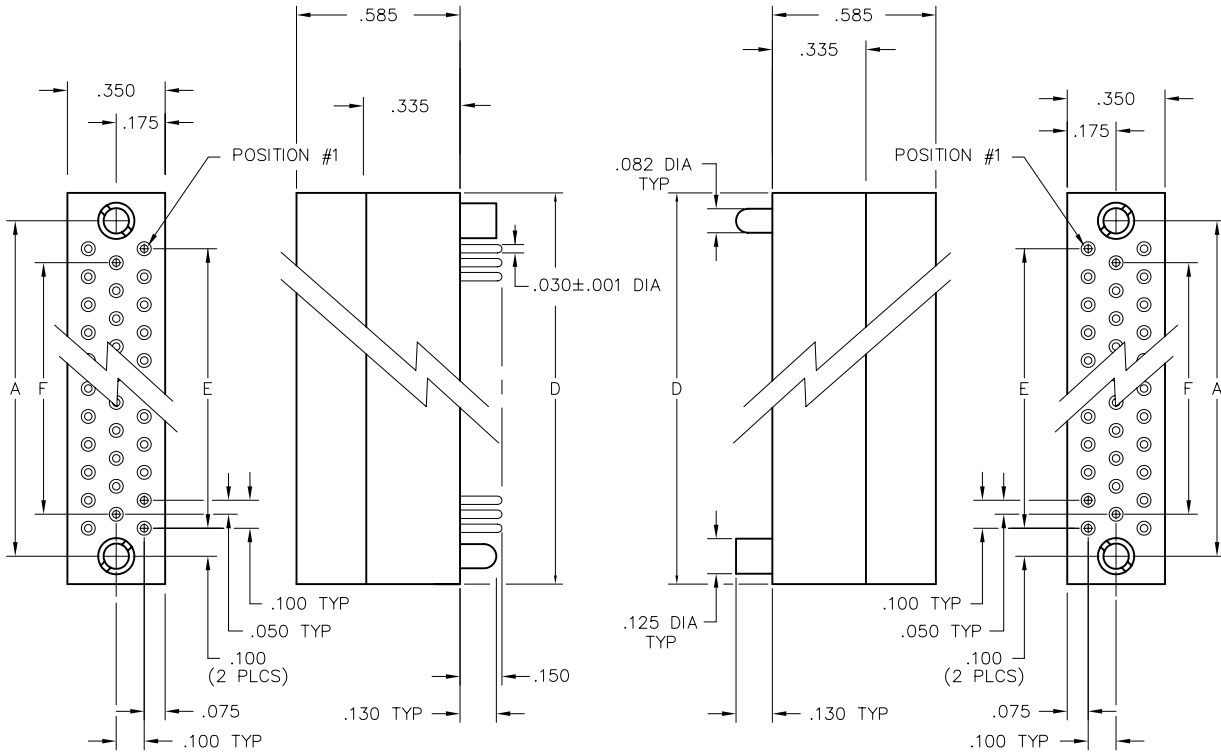
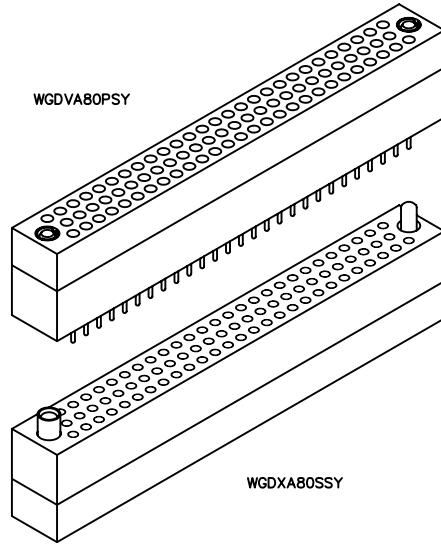


3 • ROW Chassis to Chassis

.100"

WGDVA - WGDXA

50 thru 160



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

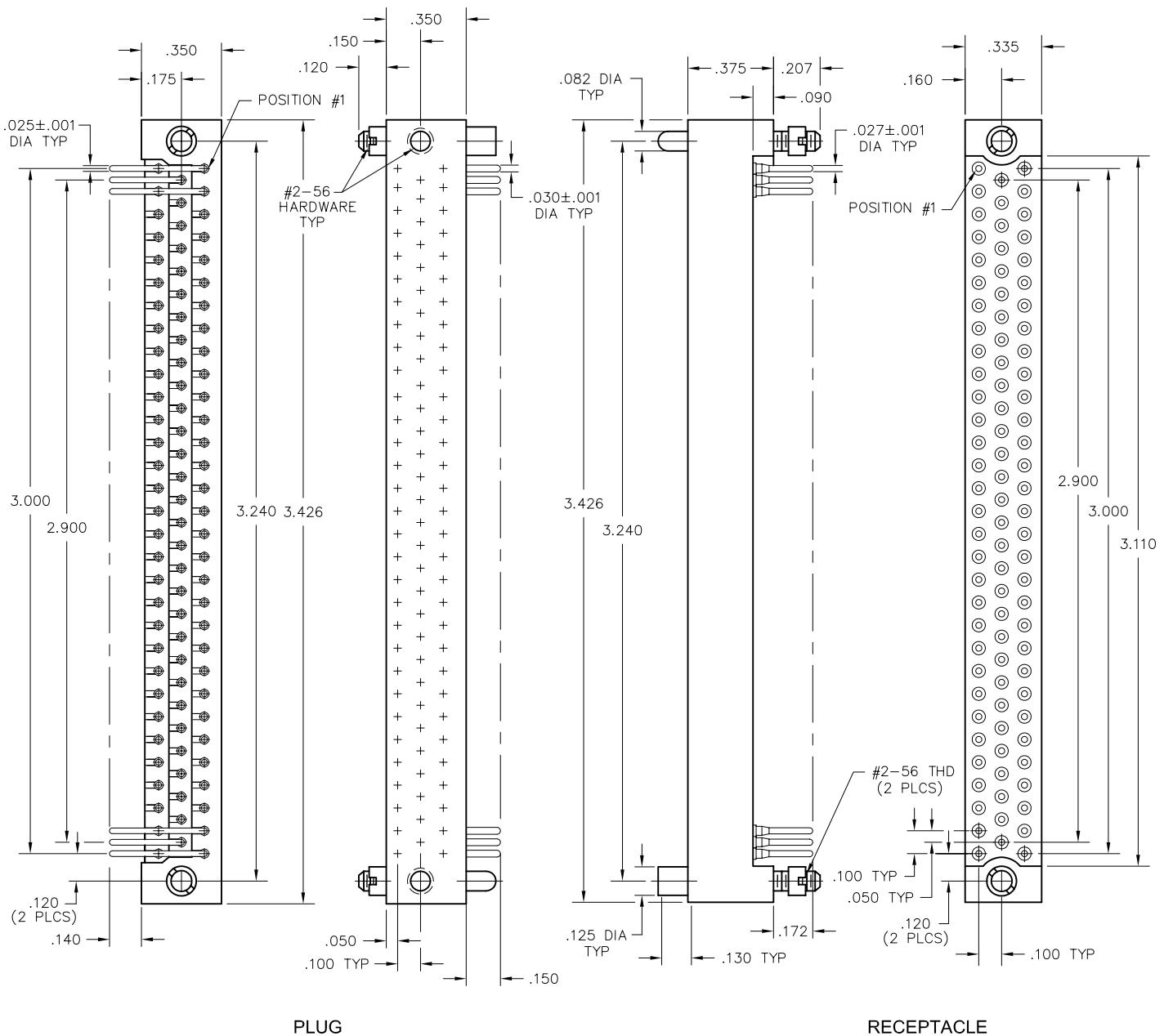
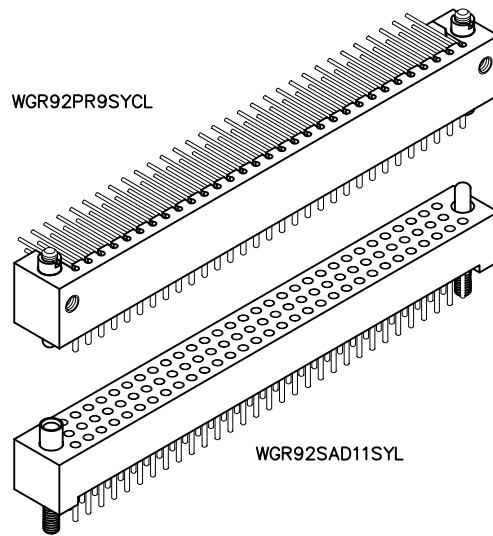


3 • ROW PC Card to Board or Chassis

.100"

WGR - WGR

92 Contacts



PLUG: WGR 92 PR9 SYCL
 RECEPTACLE: WGR 92 SAD11 SYL
 XXX XX XXXXX XXXX

PLUG

RECEPTACLE

SERIES	
WGR Plug, right angle, without mounting ears	WGR Receptacle, straight, without mounting ears

SIZE	
92 Number of contacts	92 Number of contacts

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

TYPE CONTACTS/TERMINATIONS:

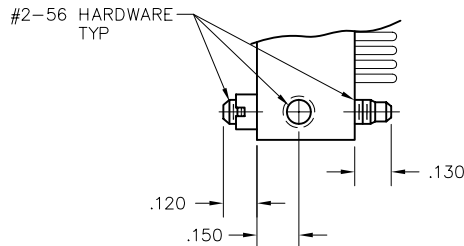
SAC	Socket, straight, solder cup (.035" I.D.)
SAD7	Socket, straight, dip solder, .109" x .027" dia
SAD9	Socket, straight, dip solder, .140" x .027" dia
SAD11	Socket, straight, dip solder, .172" x .027" dia
SAD16	Socket, straight, dip solder, .250" x .027" dia
SAG7	Socket, straight, dip solder, .109" 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

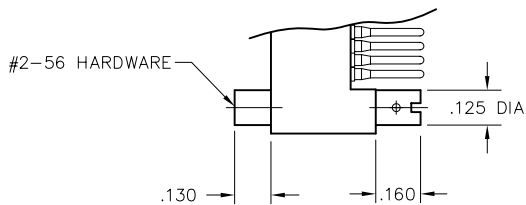
SYCL	Guide set, cross hole mount	SYL	Guide set, long
JCL	Fixed jackset, cross hole mount	JT	Turning jackset, .460"
		JTA	Turning jackset, .160"

OPTIONS

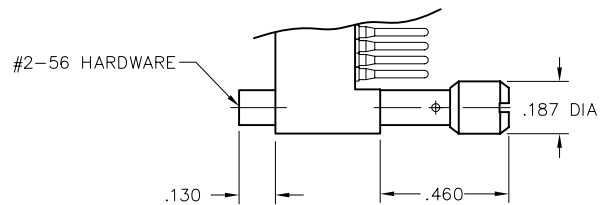
- Option Codes: Add to the end of the part number. Example: WGR92PR9JCL-D01. Call factory for additional codes.
- D01 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with 63/37 or 60/40 solder.
- P39 Pretinned contact terminations (except solder cups, wire wraps® and flex contacts) with SAC305 solder (lead free).
- = Option not RoHS compliant



EXAMPLE: -JCL HARDWARE (PLUG)



EXAMPLE: -JTA HARDWARE (RECEPTACLE)



EXAMPLE: -JT HARDWARE (RECEPTACLE)



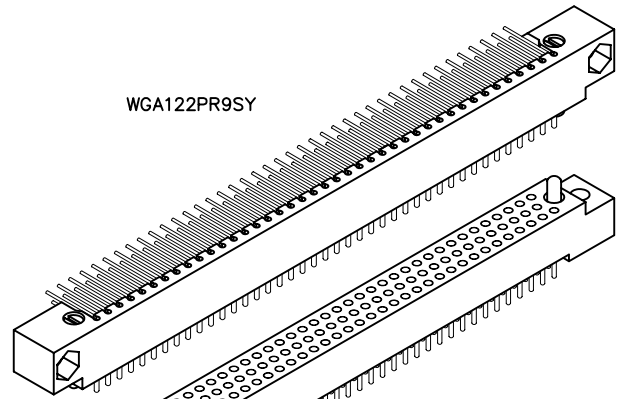
3 • ROW PC Card to Board or Chassis

.100"

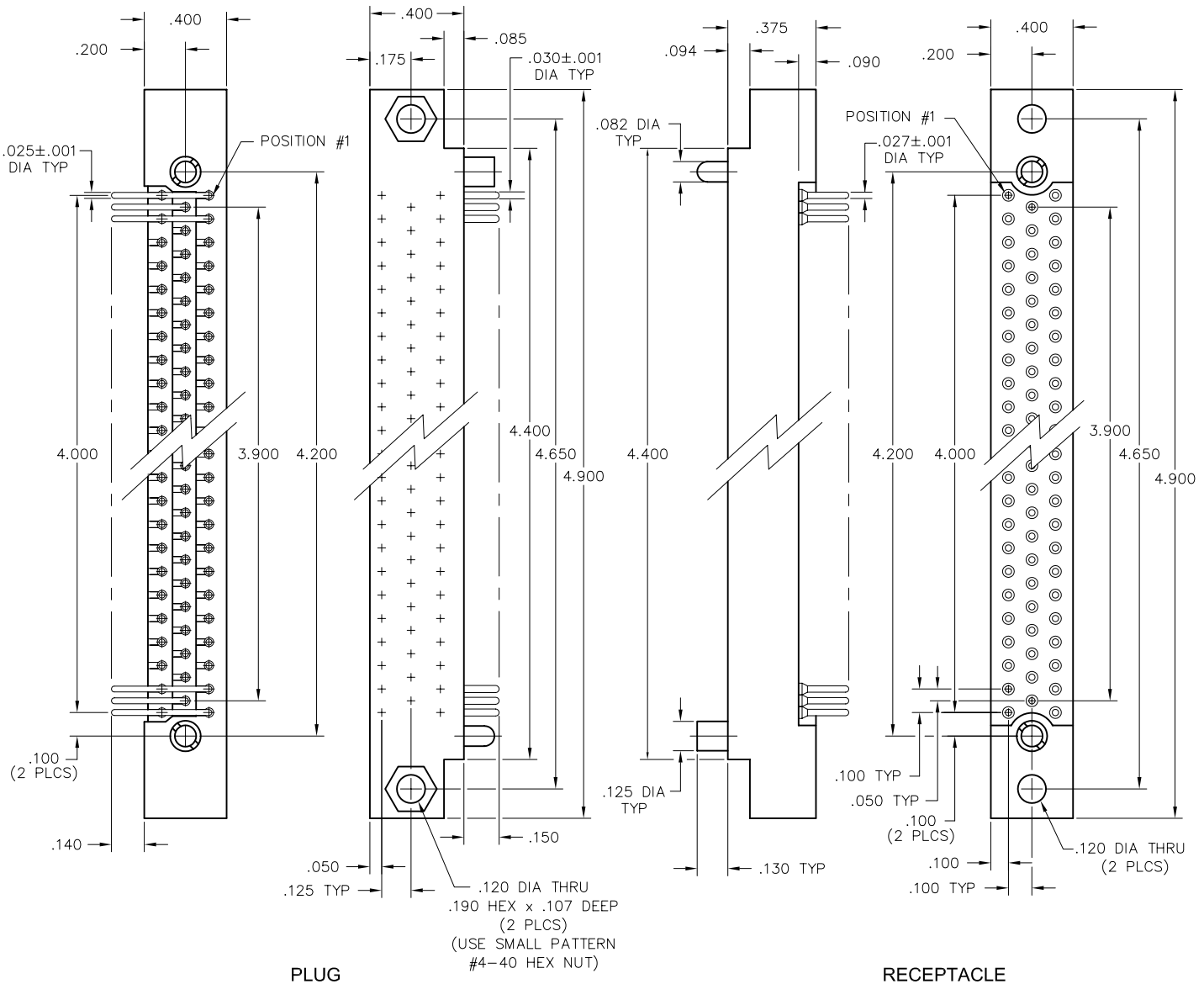
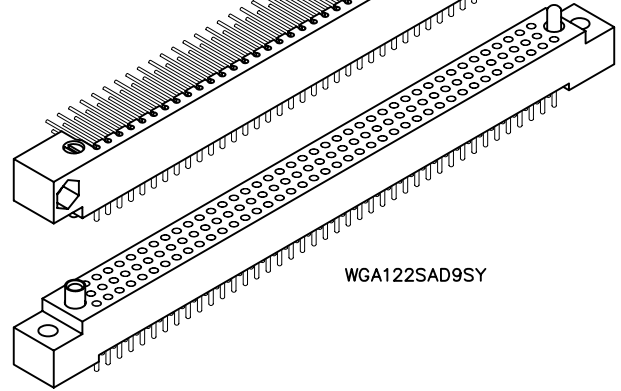
WGA - WGA

122 Contacts

WGA122PR9SY



WGA122SAD9SY



PLUG

RECEPTACLE

SERIES	
WGA Plug, right angle, 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

- 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
PRW32	Pin, right angle, wire wrap [®] , .500"

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

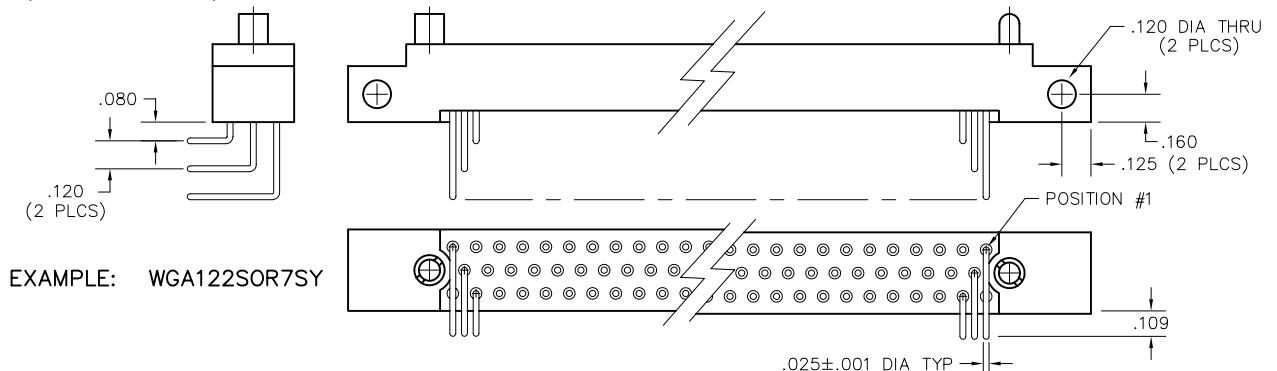
HARDWARE

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"	JL	Fixed jackset, long
JTA	Turning jackset, .135"	JT	Turning jackset, .460"
JTB	Hex turning jackset, .135"	JTA	Turning jackset, .160"
JTC	Turning jackset, .435"	JTB	Hex turning jackset, .160"
JTL	Turning jackset, long, .635"	JTC	Turning jackset, .460"
		JTL	Turning jackset, long, .660"

OPTIONS

- Option Codes: Add to the end of the part number. Example: WGA122PR9SY548. 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)
- 413 Straight pin contacts in right angle plug molding with solder cup terminals extending .100" beyond molding.
- D54 Combine -B82 and -D01 special codes.

☒ = Option not RoHS compliant



PLUG: WGAV 122 PD9 SY
 RECEPTACLE: WGA 122 SAD9 SY
 XXXX XXX XXXX XX

PLUG

RECEPTACLE

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

- 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
PF6	Pin, straight, flex circuit, .093"

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

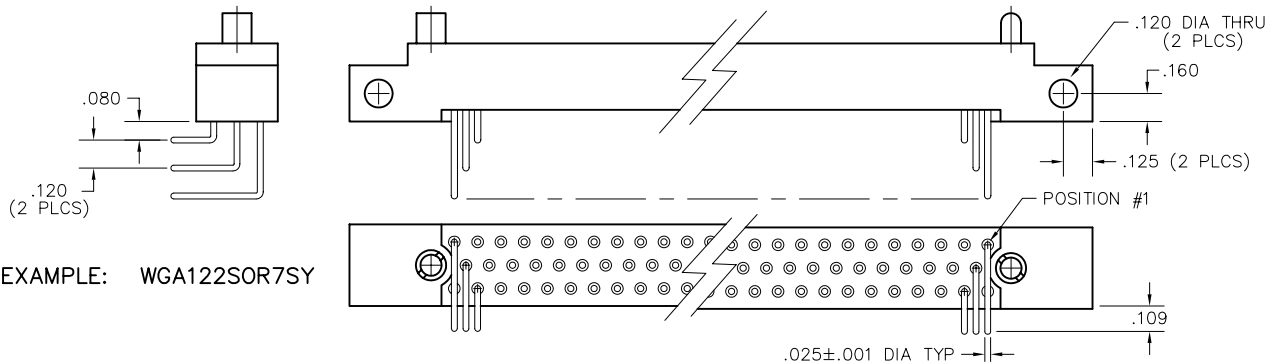
- Plug facial seal gaskets and hoods; order separately or add "Q" in part number. Example: WGAV122PD9QJ. See "Gaskets" and "Hoods" in Accessories section for instructions.

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

- Option Codes: Add to the end of the part number. Example: WGAV122PD9SY-D01. Call factory for additional codes.
- 342 Remove mounting ears, (.250" each end)
- 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



EXAMPLE: WGA122SOR7SY

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	
<ul style="list-style-type: none"> • 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. 	
PC	Pin, straight, solder cup
PD11	Pin, straight, dip solder, .172" x .027" dia
PF6	Pin, straight, flex circuit, .093"
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	
<ul style="list-style-type: none"> • 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 [®] 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).
-D54	Combine -B82 & -D01 special codes
<input checked="" type="checkbox"/> = Option not RoHS compliant	

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

PLUG

RECEPTACLE

SERIES

WRD Plug, right angle, 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

TYPE CONTACTS/TERMINATIONS:	TYPE CONTACTS/TERMINATIONS:
PR5 Pin, right angle, dip solder, .078" x .025" dia	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
	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"

HARDWARE

SYCL Guide set, cross hole mount	J Fixed Jackset
SYCL-# Guide set, cross hole mount, polarized	JTA Turning jackset, .160"
JCL Fixed jackset, cross hole mount	JTB Hex turning jackset, .160"
JTB Turning jackset, no cross hole	JTL Long turning jackset, .640"
	SY Guide set
	SY-# Guide set, polarized

OPTIONS

- Option Codes: Add to the end of the part number. Example: WRD122SAD9SY-D54. 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



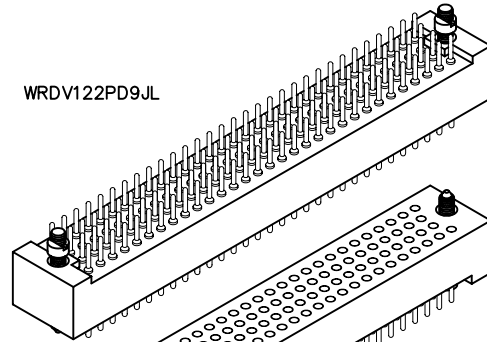
4 • ROW Sandwich Boards

.100"

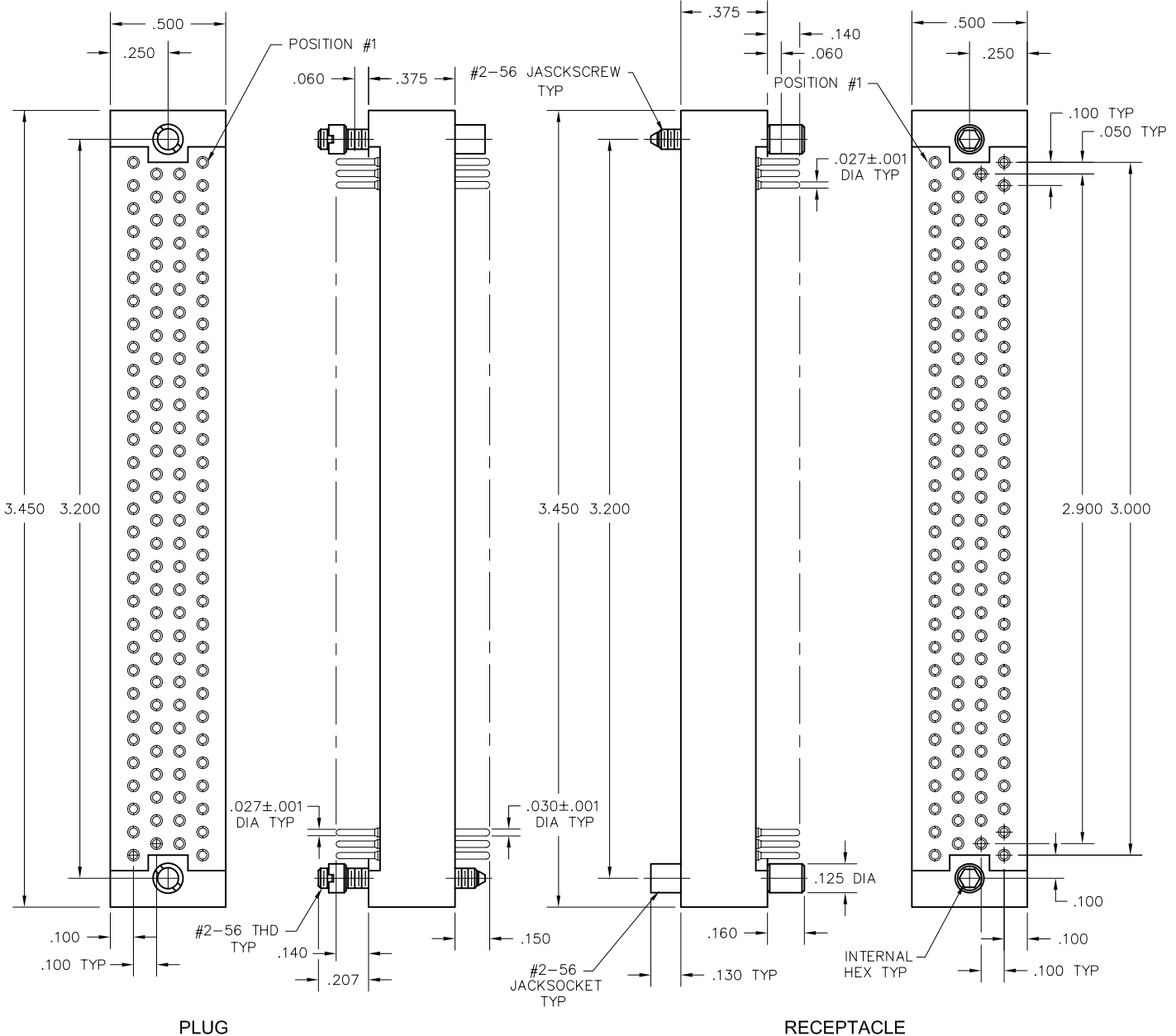
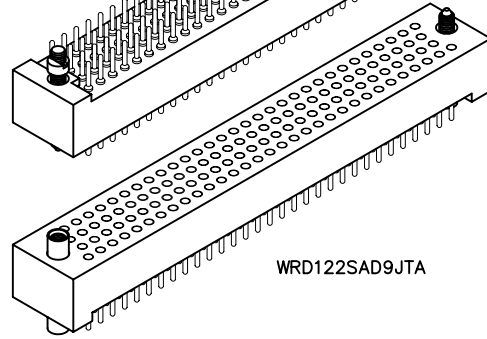
WRDV - WRD

122 Contacts

WRDV122PD9JL



WRD122SAD9JTA



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:

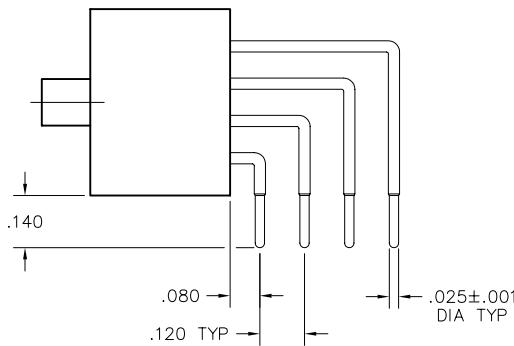
SAC	Socket, straight, solder cup (.035" I.D.)
SAD7	Socket, straight, dip solder, .109" x .027" dia
SAD9	Socket, straight, dip solder, .140" x .027" dia
SAD11	Socket, straight, dip solder, .172" x .027" dia
SAD15	Socket, straight, dip solder, .234" x .027" dia
SAF3	Socket, straight, flex circuit, .050"
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	J	Fixed jackset
JL	Fixed jackset, long	JL	Fixed jackset, long
JTA	Turning jackset, .160"	JTA	Turning jackset, .160"
JTB	Hex turning jackset, .160"	JTB	Hex turning jackset, .160"
JTL	Long turning jackset, .660"	JTL	Long turning jackset, .660"
SY	Guide set	SY	Guide set
SY-#	Guide set, polarized	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

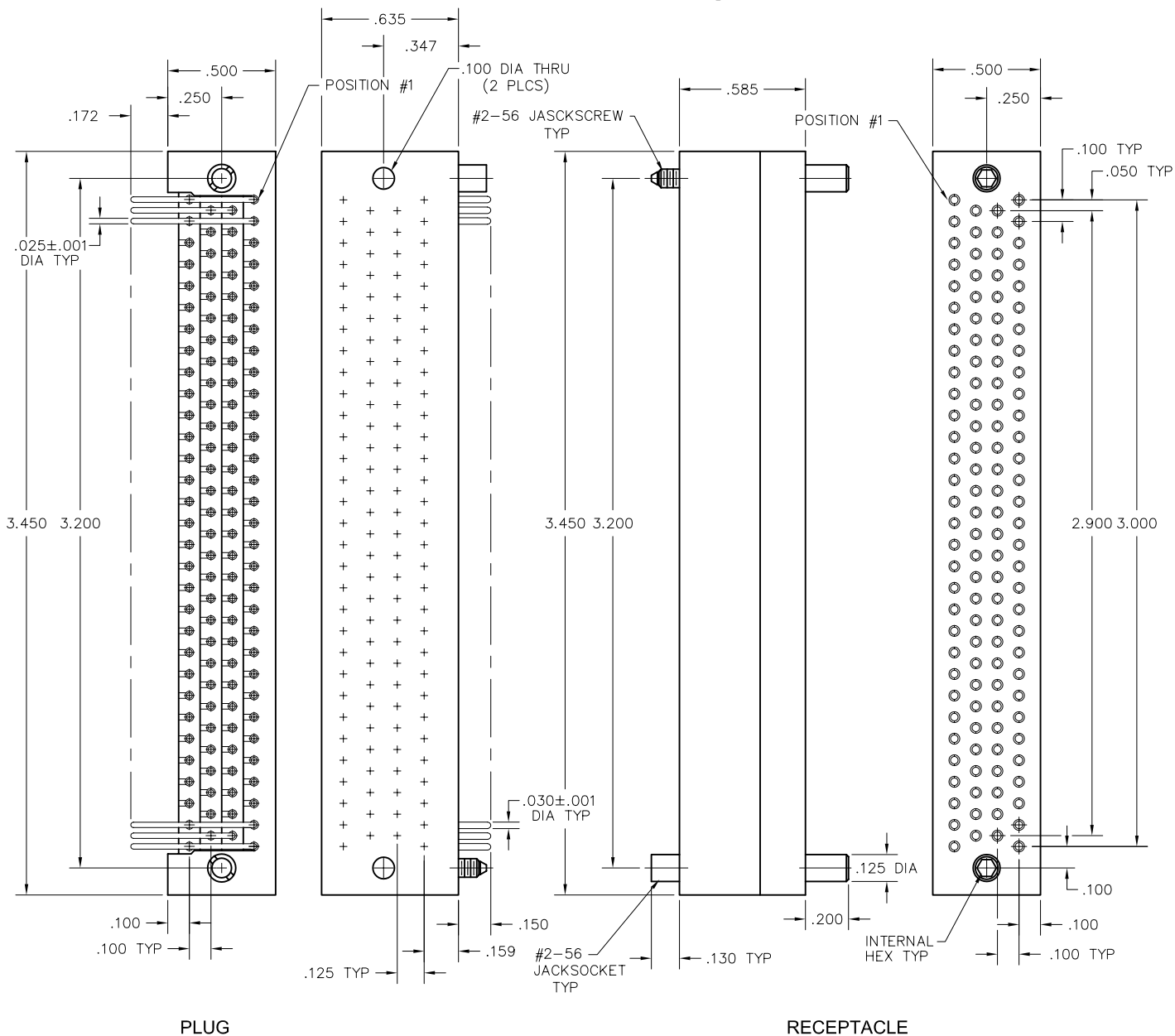
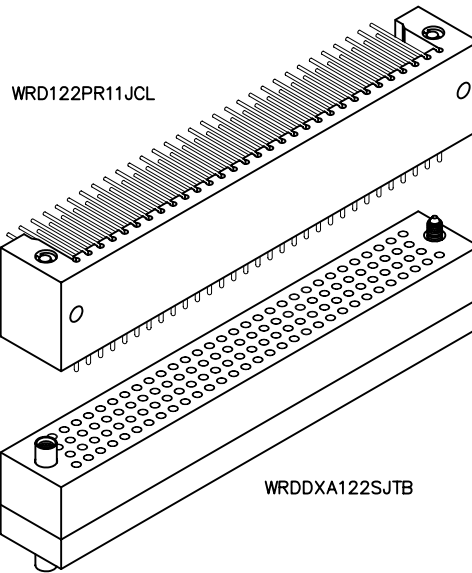


4 • ROW PC Card to Cable

.100"

WRD - WRDDXA

122 Contacts



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

PLUG

RECEPTACLE

SERIES

WRD Plug, right angle, without mounting ears • WRDDXA mates with WRD and WRDV connectors. "A" means contacts are included.	WRDDXA Receptacle, straight, crimp removable, without mounting ears
---	---

SIZE

122 Number of contacts	122 Number of contacts
------------------------	------------------------

CONTACTS

- The use of gaskets is not recommended with crimp socket contacts.
- WRDDXA** includes full complement of WTK2222 (S or PA) 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.

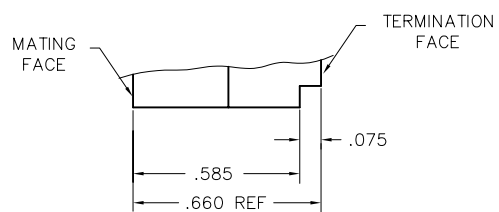
TYPE CONTACTS/TERMINATIONS:	
PR7 Pin, right angle, dip solder, .109" x .025" dia	S Socket, straight, crimp removable, 22 AWG
PR9 Pin, right angle, dip solder, .140" x .025" dia	SA Same as above
PR11 Pin, right angle, dip solder, .172" x .025" dia	P Pin, straight, crimp removable, 22 AWG

HARDWARE

JCL Fixed jackset, cross hole mount	SY Guide set
SYCL Guide set, cross hole mount	SY-# Guide set, polarized
SYCL-# Guide set, cross hole mount, polarized	SYL Guide set, long
	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

PLUG: WTB 20-3 PR9 SC
 RECEPTACLE: WTB 20-3 SAC SC
 XXX XXXX XXX XX

PLUG		RECEPTACLE	
SERIES			
WTB	Plug, right angle, with mounting ears	WTB	Receptacle, straight, with mounting ears
SIZE			
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
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			
SC	Guide set	SC	Guide set
SC-#	Guide set, polarized	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: WTB20-3SAD11SC-C34. 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

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:		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			
SC	Guide set	SC	Guide set
SC-#	Guide set, polarized	SC-#	Guide set, polarized

OPTIONS

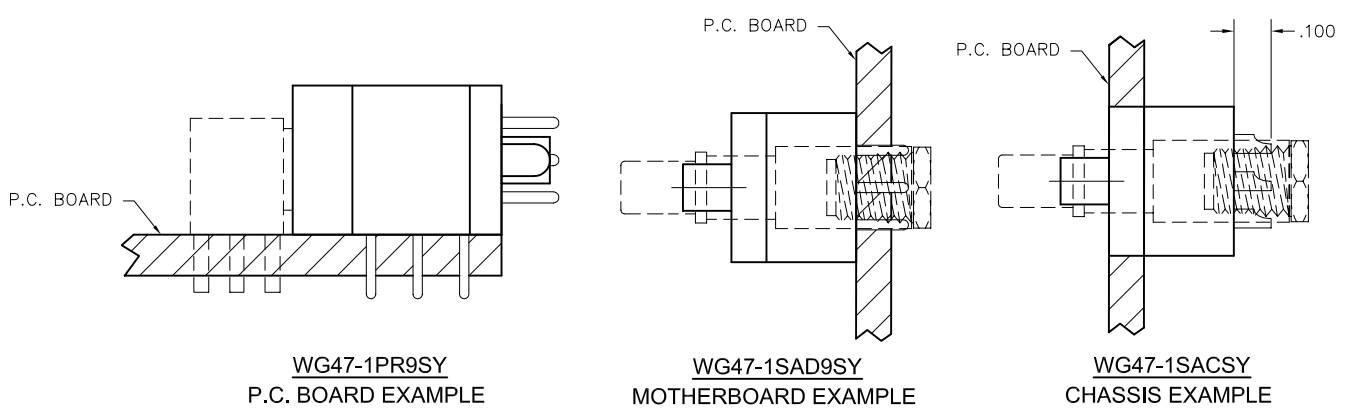
- Molded insulator: Diallyl Phthalate per ASTM-D5948 (GDI-30F or SDG-F)
 - Removable type coax contacts sold separately. See "Coax Contacts" in Accessories section for instructions.
 - Coax Contacts:
 - WTC188P = straight pin (to be installed in receptacle insulator only)
 - WTC196P = straight pin (to 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

PLUG: WG 47-1 PR11 SY
 RECEPTACLE: WG 47-1 SAD9 SY
 XX 47-1 XXXX XX

PLUG		RECEPTACLE	
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: 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			
SY	Guide set	SY	Guide set
SY-#	Guide set, polarized	SY-#	Guide set, polarized

OPTIONS

- Molded insulator (plug only): 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: WG47-1SACSY-C34. 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).
 - 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 SAC 305 solder (lead free).
- ☒ = Option not RoHS compliant



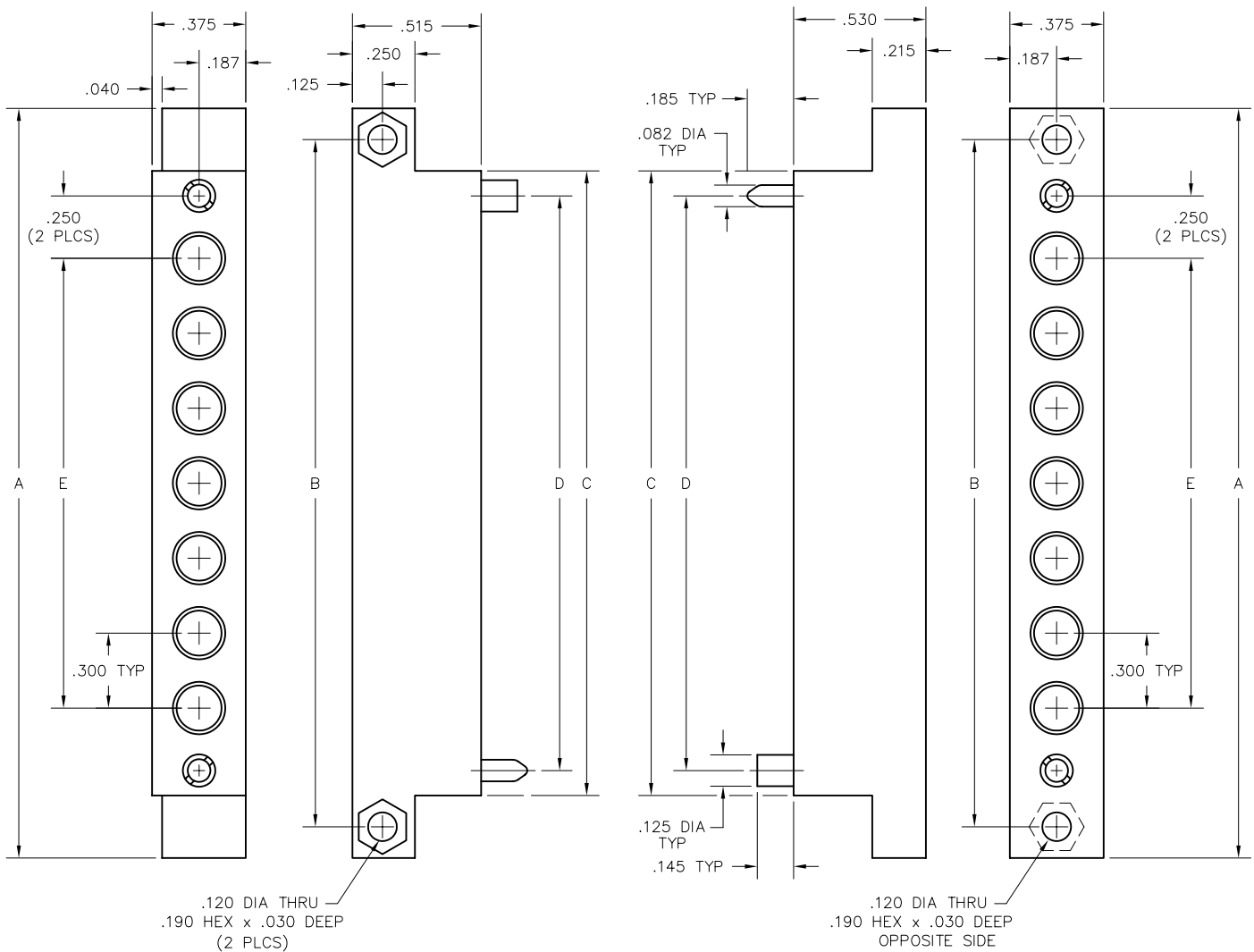
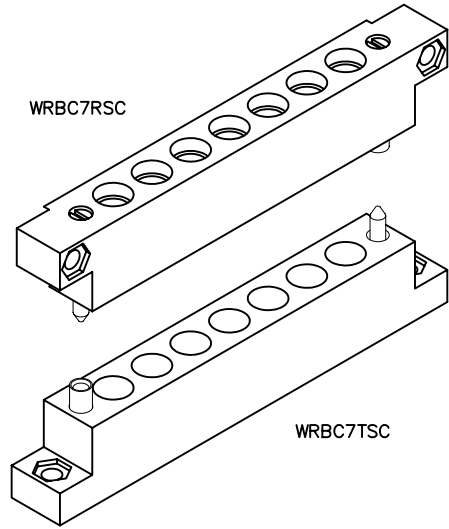


1 • ROW Coax Connectors PC Card to Chassis

.300"

WRBC - WRBC

1, 7 & 11 Contacts



.120 DIA THRU
.190 HEX x .030 DEEP
(2 PLCS)

PLUG

.120 DIA THRU
.190 HEX x .030 DEEP
OPPOSITE SIDE
(2 PLCS)

RECEPTACLE

DIMENSIONS					
SIZE	A	B	C	D	E
1*	.875	.625	.375	—	—
7	3.000	2.750	2.500	2.300	1.800
11	4.200	3.950	3.700	3.500	3.000

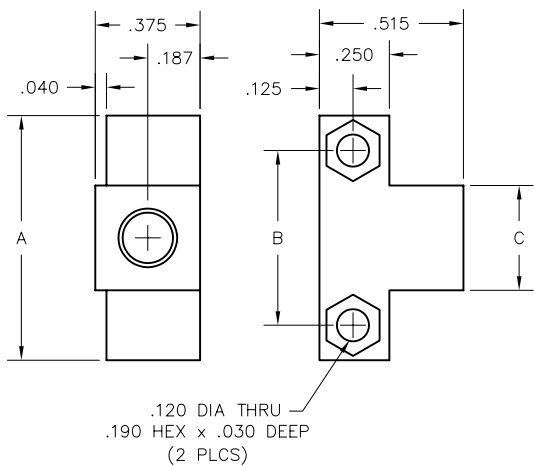
* = SEE OPPOSITE PAGE FOR 1 POSITION CONFIGURATION

PLUG:	WRBC	7	R	SC
RECEPTACLE:	WRBC	7	T	SC
	XXXX	XX	X	XX

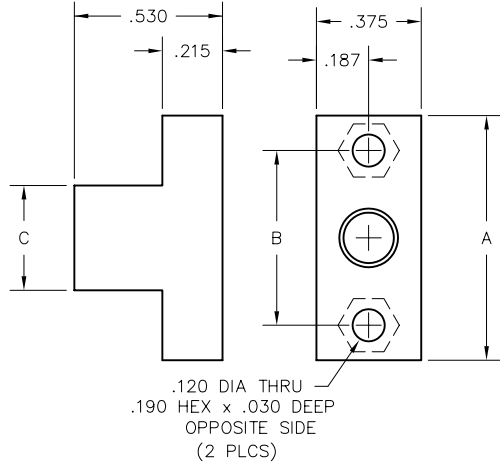
PLUG		RECEPTACLE	
SERIES			
WRBC	Plug, right angle, with mounting ears	WRBC	Receptacle, straight, with mounting ears
SIZE			
XX	Number of coax contacts (1, 7 or 11)	XX	Number of coax contacts (1, 7 or 11)
CONTACTS			
R	TYPE CONTACTS/TERMINATIONS: Sockets, straight or right angle, removable coax contacts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

OPTIONS

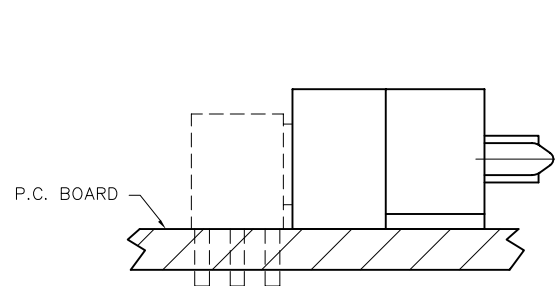
- Removable type coax contacts sold separately. See "Coax Contacts" in Accessories section for instructions.
- Coax Contacts:
 - WTC188P = straight pin (to be installed in receptacle insulator only)
 - WTC196P = straight pin (to be installed in receptacle insulator only)
 - WTC085P = straight pin (to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



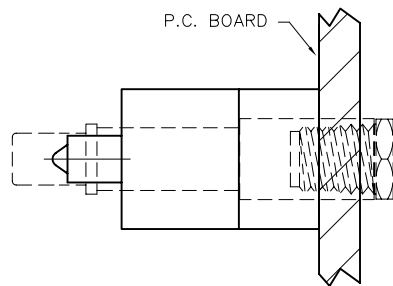
WRBC1R



WRBC1T



WRBC7RSC
P.C. BOARD EXAMPLE



WRBC7TSC
MOTHERBOARD EXAMPLE

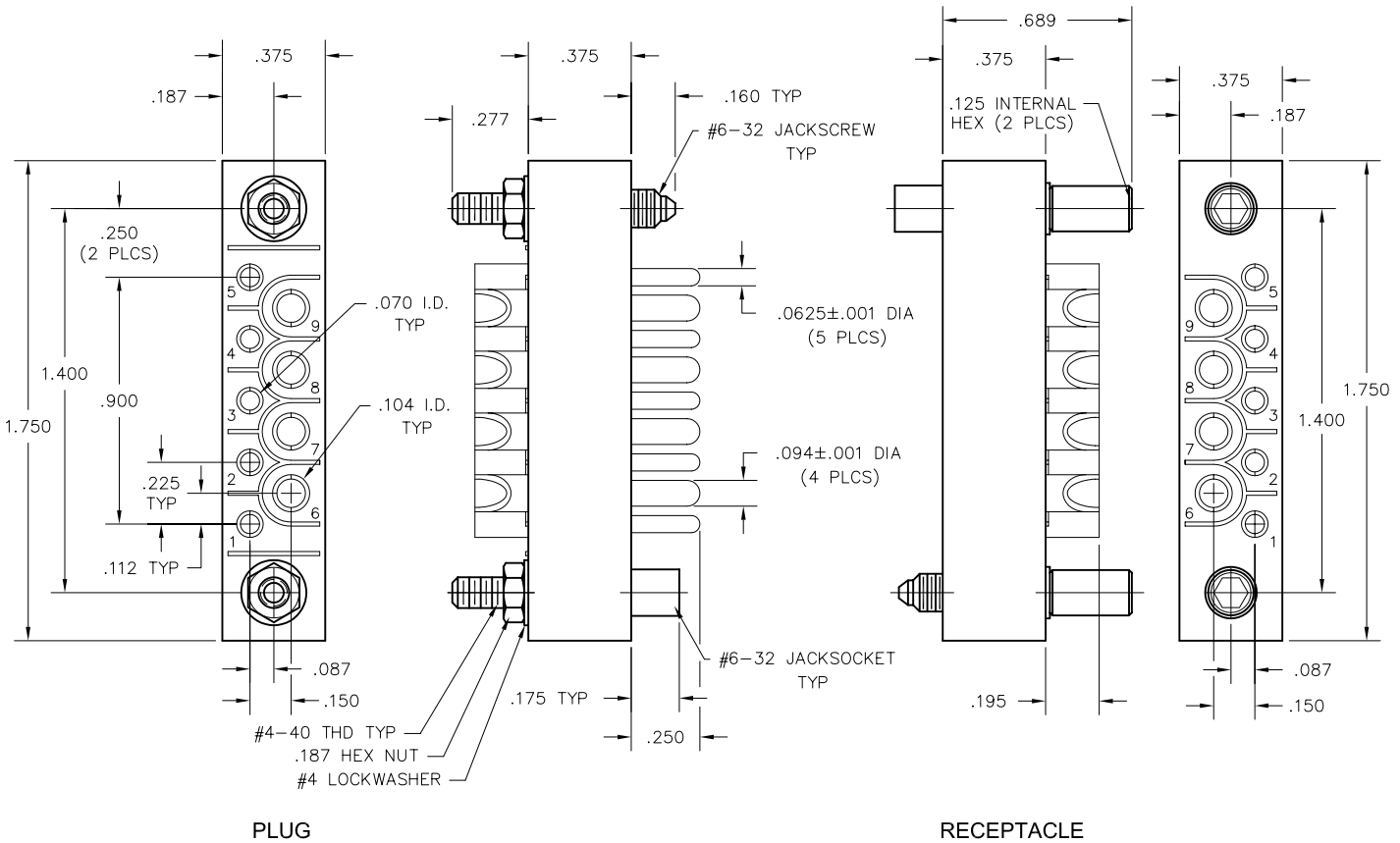
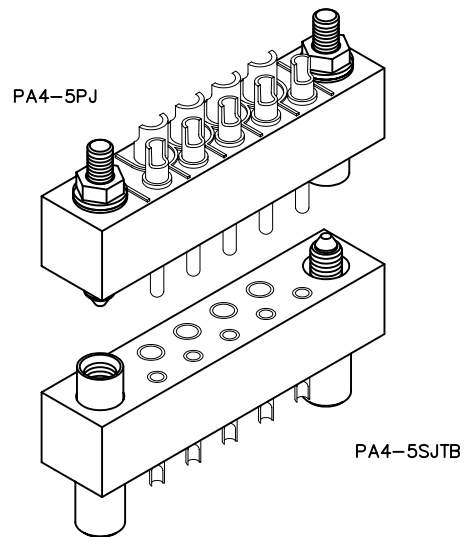
MISC. CONNECTORS

Power Cable to Chassis

.225"

PA - PA

5 & 4-5 Contacts



SEE OPPOSITE PAGE FOR 5 POSITION CONFIGURATION.
SEE PAGE W-77 & W-78 FOR 10 POSITION CONFIGURATION.

PLUG:	PA	4-5	S	JTB
RECEPTACLE:	PA	4-5	P	J
	XX	XXX	X	XXX

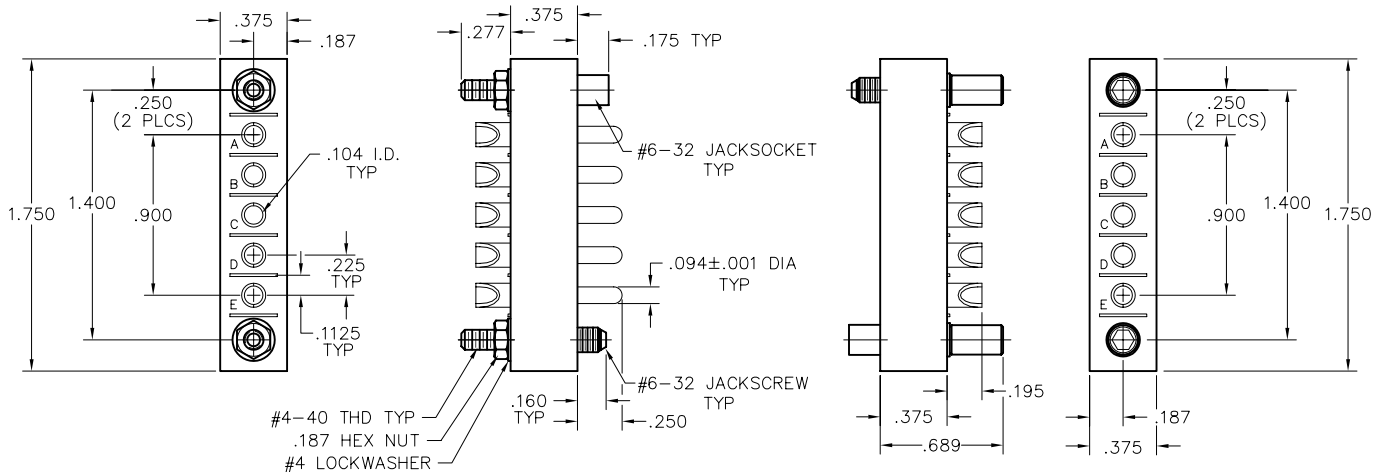
PLUG		RECEPTACLE	
SERIES			
PA	Power connectors	PA	Power connectors
SIZE			
5	5 #12 contacts	5	5 #12 contacts
4-5	4 #12 contacts & 5 #16 contacts	4-5	4 #12 contacts & 5 #16 contacts
CONTACTS			
TYPE CONTACTS/TERMINATIONS:		TYPE CONTACTS/TERMINATIONS:	
P	Pin, straight, solder cup	S	Socket, straight, solder cup
PD11	Pin, straight, dip solder, .172" x .062" dia	SD11	Socket, straight, dip solder, .172" x .062" dia
HARDWARE			
SY	Guide set	SY	Guide set
J	Fixed jackset	J	Fixed jackset
JT	Turning jackset, 1.054"	JT	Turning jackset, 1.054"
JTB	Hex turning jackset, .314"	JTB	Hex turning jackset, .314"
JTL	Long turning jackset, 1.175"	JTL	Long turning jackset, 1.175"

OPTIONS

- Hood (PA5H) for use with PA5 and PA4-5 connectors. Specify JTL hardware when using hood.
 - For hood strain relief, add "H" to "JTL" hardware. Example: PA5SJTLH.
 - 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: 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



PLUG
EXAMPLE: PA5PJ

RECEPTACLE
EXAMPLE: PA5SJTB

PLUG:	PA	10	S	JTB
RECEPTACLE:	PA	10	P	J
	XX	XX	X	XXX

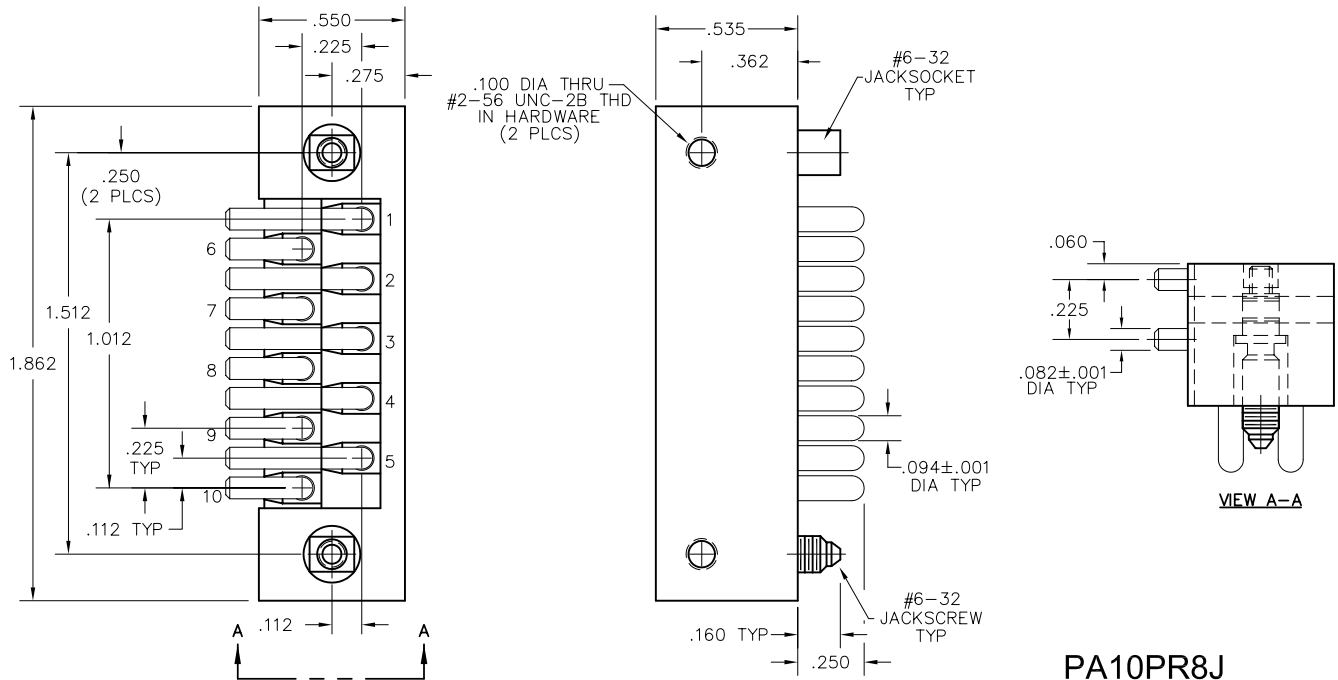
PLUG		RECEPTACLE	
SERIES			
PA	Power connectors	PA	Power connectors
SIZE			
10	10 #12 contacts	10	10 #12 contacts
CONTACTS			
TYPE CONTACTS/TERMINATIONS: P Pin, straight, solder cup PD11 Pin, straight, dip solder, .172" x .062" dia PR7 Pin, right angle, dip solder, .109" x .082" dia PR8 Pin, right angle, dip solder, .125" x .082" dia		TYPE CONTACTS/TERMINATIONS: S Socket, straight, solder cup SD11 Socket, straight, dip solder, .172" x .062"	
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: PA10PD11SY-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



PA10PR8J

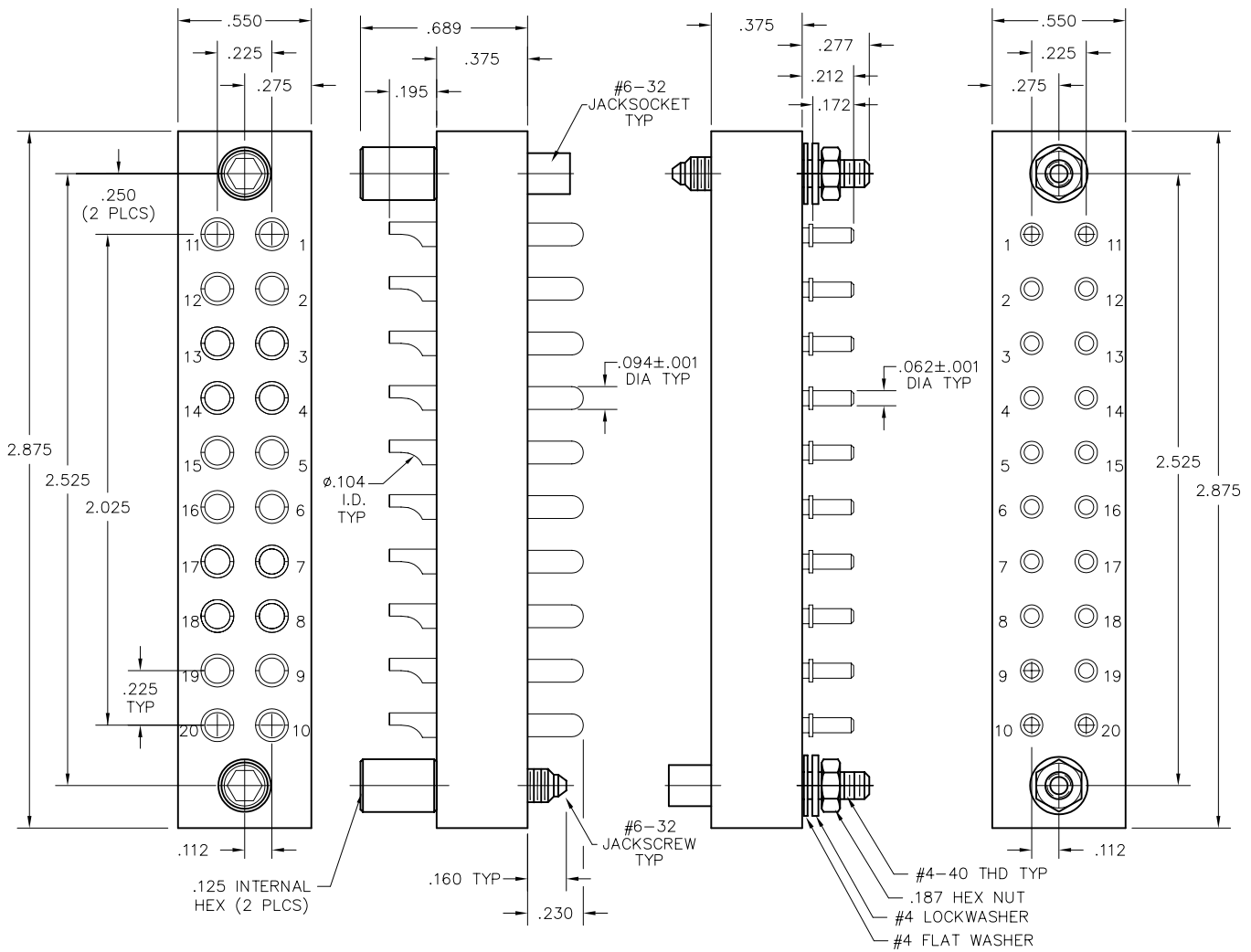
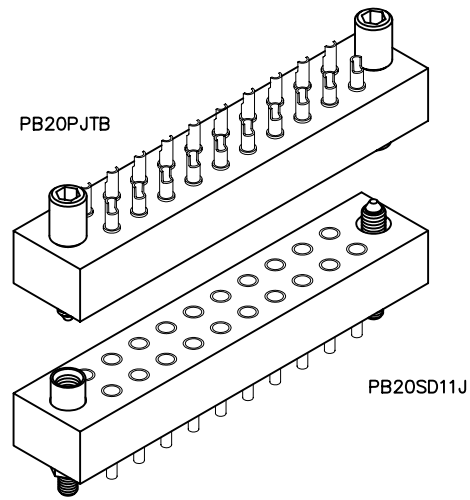


MISC. CONNECTORS Power Cable to Chassis

.225"

PB - PB

20 Contacts



SEE OPPOSITE PAGE FOR 20 POSITION RIGHT ANGLE PLUG CONFIGURATION.

PLUG:	PB	20	S	JTB
RECEPTACLE:	PB	20	P	J
	XX	XX	X	XXX

PLUG

RECEPTACLE

SERIES

PB	Power connectors		PB	Power connectors
----	------------------	--	----	------------------

SIZE

20	20 #12 contacts		20	20 #12 contacts
----	-----------------	--	----	-----------------

CONTACTS

TYPE CONTACTS/TERMINATIONS:

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

TYPE CONTACTS/TERMINATIONS:

S Socket, straight, solder cup
 SD11 Socket, straight, dip solder, .172" x .062"

HARDWARE

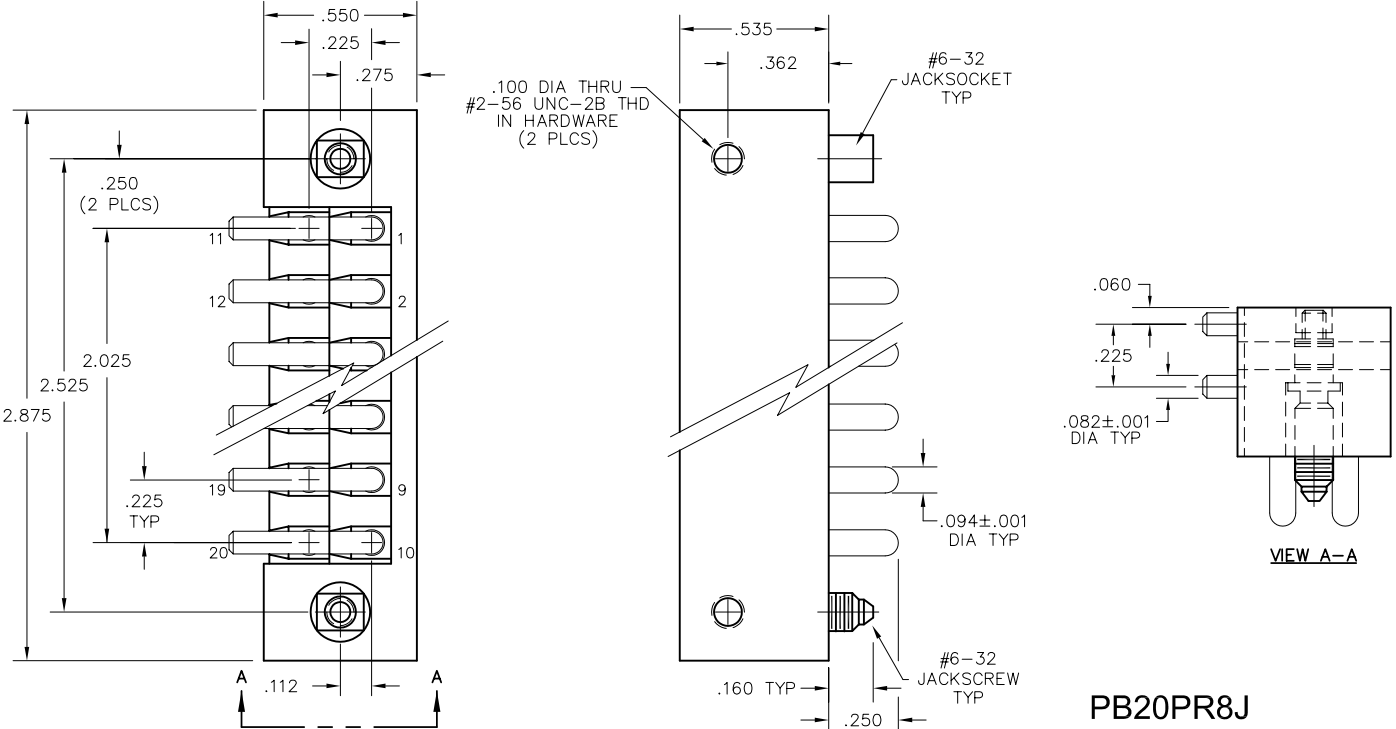
SY Guide set
 J Fixed jackset
 JT Turning jackset, 1.054" (straight plug only)
 JTB Hex turning jackset, .314" (straight plug only)
 JTL Long turning jackset, 1.175"

SY Guide set
 J Fixed jackset
 JT Turning jackset, 1.054"
 JTB Hex turning jackset, .314"
 JTL Long turning jackset, 1.175"

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

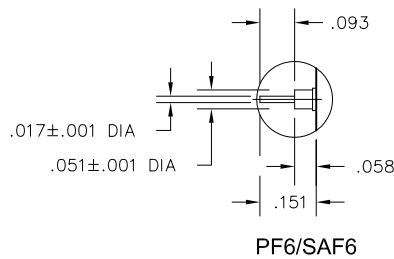
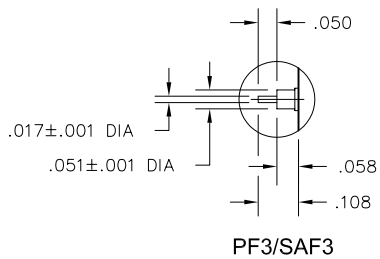
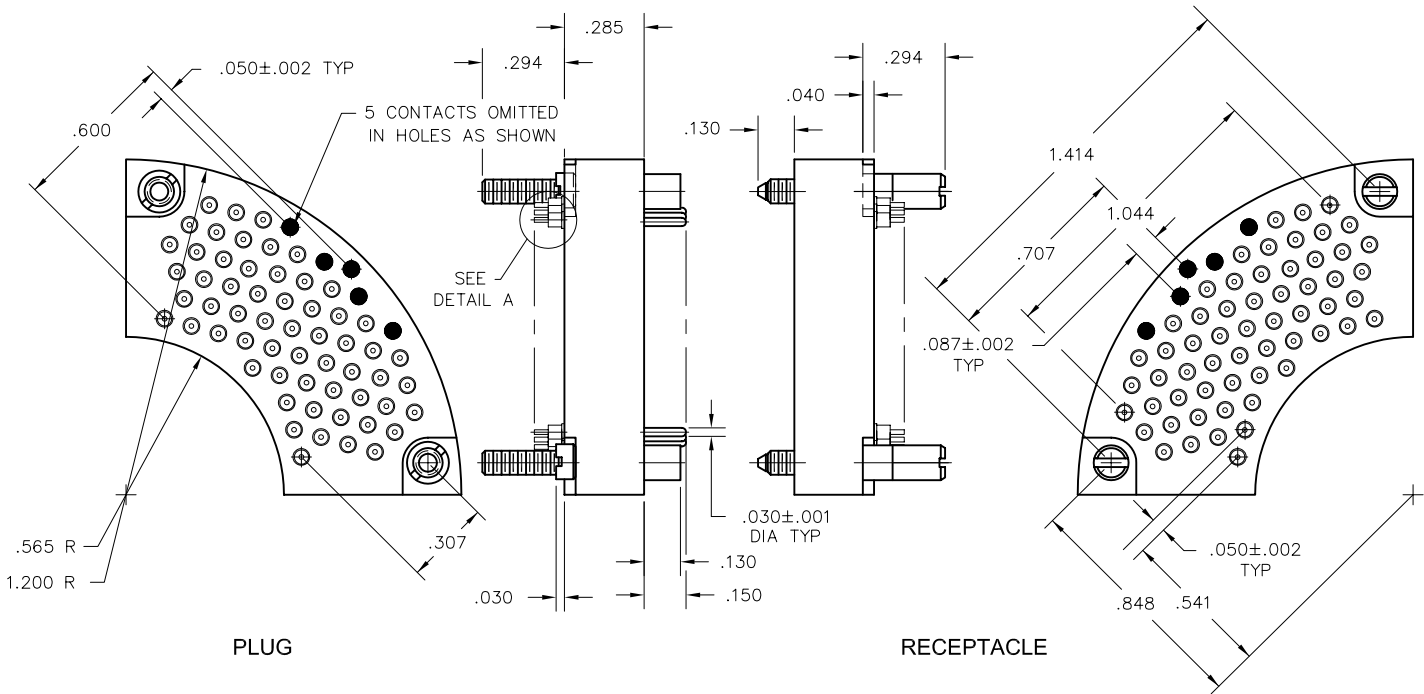
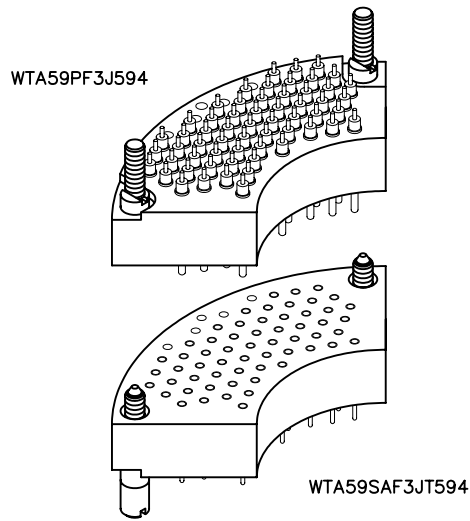


MISC CONNECTORS Quarter Round Sandwich Boards

.087" x .050"

WTA - WTA

59 Contacts



DETAIL A

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:		TYPE CONTACTS/TERMINATIONS:	
PC	Pin, straight, solder cup (.035" I.D.)	SAC	Socket, straight, solder cup (.035" I.D.)
PF3	Pin, straight, flex circuit, .050"	SAF3	Socket, straight, flex circuit, .050"
PF6	Pin, straight, flex circuit, .093"	SAF6	Socket, straight, flex circuit, .093"
HARDWARE			
J594	Fixed jacksockets	JT594	Turning jackscrews, slot head
		JTB594	Turning jackscrews, 5/64" internal hex head

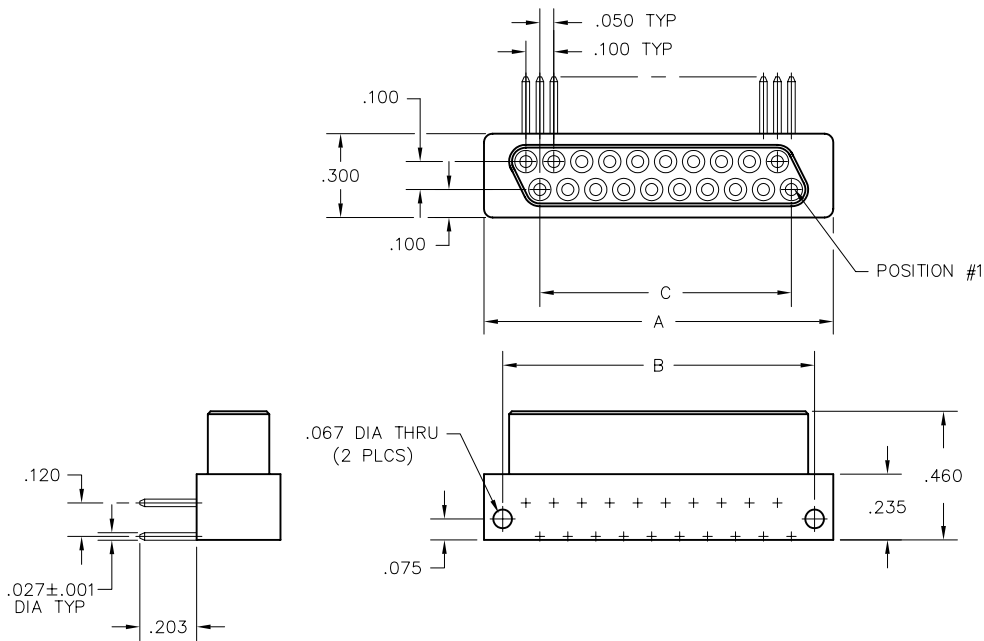
OPTIONS

- 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.

PLUG: WTE 20 PR7
 RECEPTACLE: WTE 20 SAD23
 XXX XX XXXXX

PLUG		RECEPTACLE	
SERIES			
WTE	Plug, right angle (male pins, female shell)	WTE	Receptacle, straight (female pins, male shell)
		WTE	Receptacle, right angle (female pins, male shell)
SIZE			
XX	Number of contacts (10 or 20)	XX	Number of contacts (10 or 20)
CONTACTS			
	TYPE CONTACTS/TERMINATIONS:		TYPE CONTACTS/TERMINATIONS:
PR5	Pin, right angle, dip solder, .081"	SAD9	Socket, straight, dip solder, .140"
PR7	Pin, right angle, dip solder, .109"	SAD23	Socket, straight, dip solder, .360"
		SAR13	Socket, right angle, dip solder, .203"
OPTIONS			

- Cannot pre-tin these connectors.
- Insulator: glass filled nylon per ASTM-D4066.
- Not recommended for use with lead free solder process.



RECEPTACLE
 EXAMPLE: WTE20SAR13

DIMENSIONS			
SIZE	A	B	C
10	.750	.616	.400
20	1.250	1.116	.900

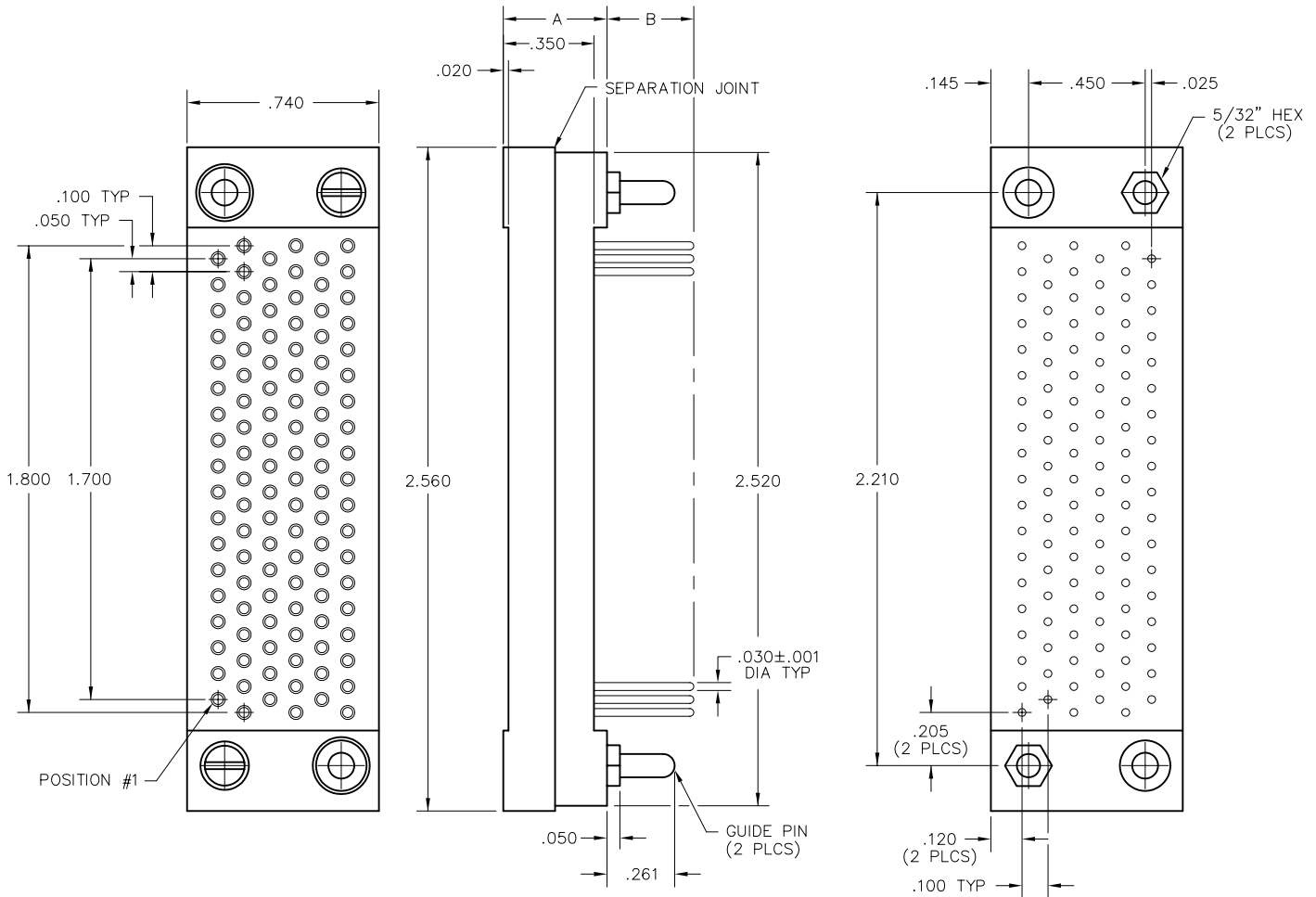
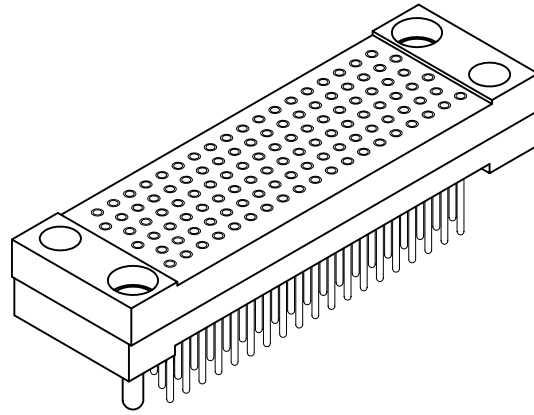


MISC CONNECTORS Stackable Board to Board

.100"

WE

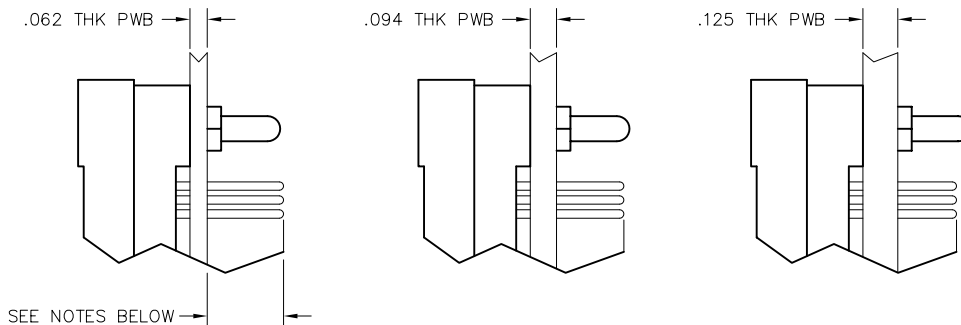
111 Contacts



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

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
HARDWARE	
GA	Guide set, motherboard
GB	Guide set, stackable



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").



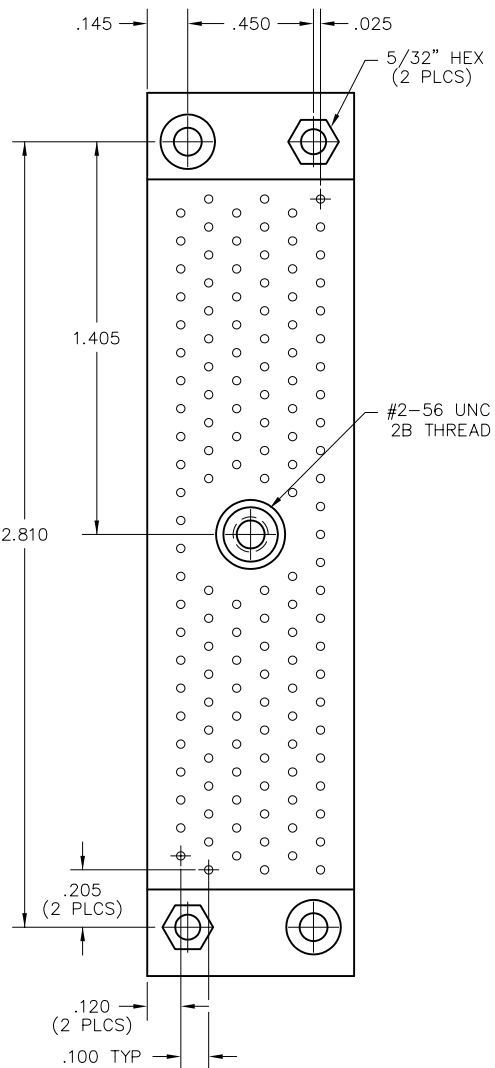
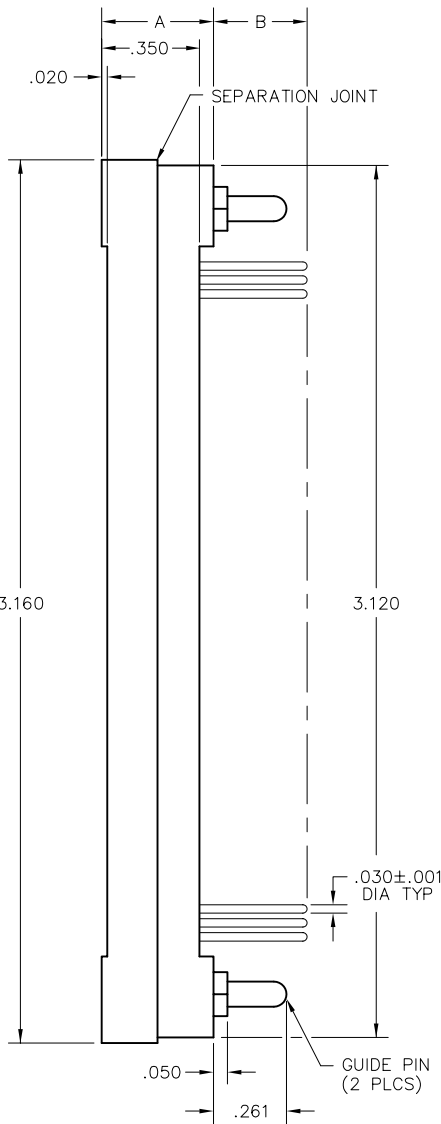
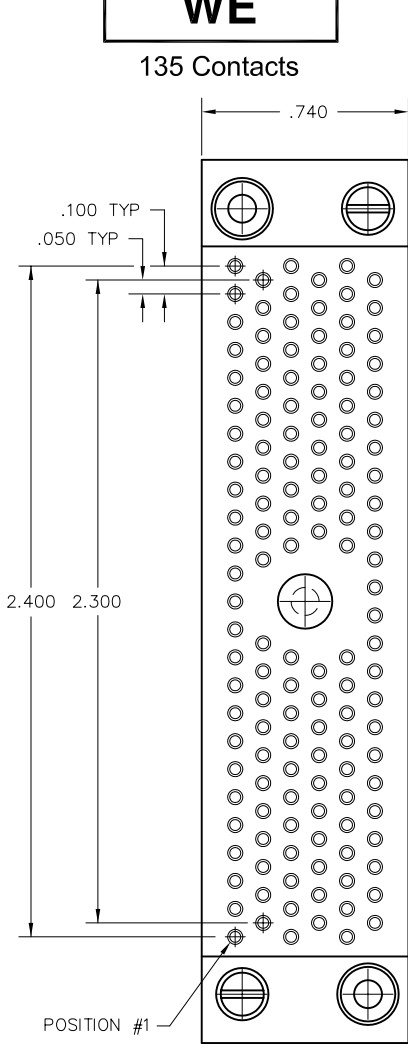
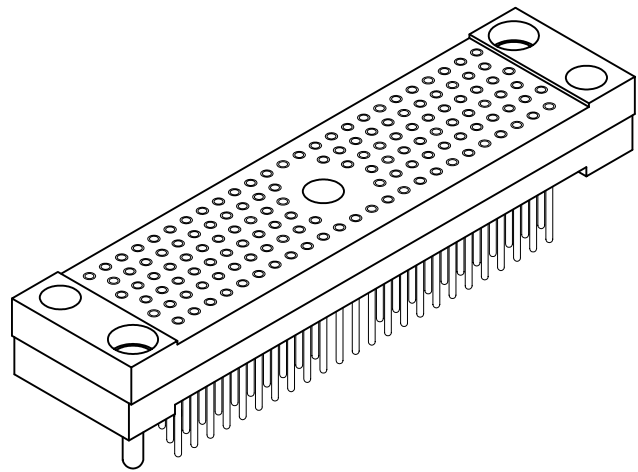
MISC CONNECTORS

Stackable Board to Board

.100"

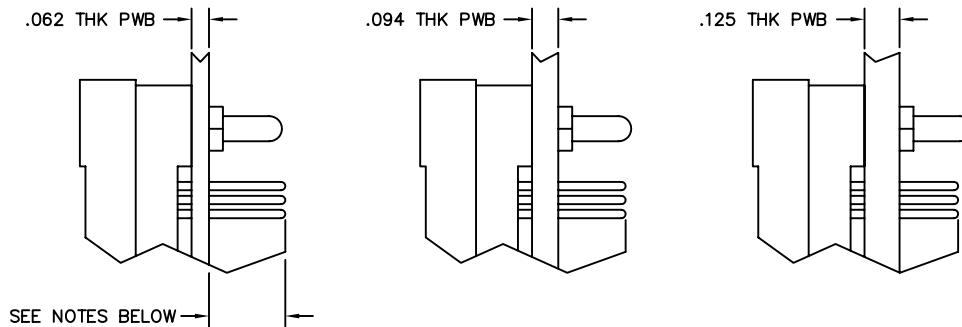
WE

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

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				
HARDWARE					
GA	Guide set, motherboard				
GB	Guide set, stackable				



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").

"W" SERIES ACCESSORIES

Contents

"W" Series

Hardware, Contacts and Accessories

Accessories

WA-2	Floating Mounts
WA-4	Face Seal Gaskets for WTA-WTB Series
WA-5	Face Seal Gaskets for WG-WGA-WGE Series
WA-6	Hoods for WTA, WTAX Series
WA-7	Hoods for WTD, WTDX Series
WA-8	Adapter Sleeve, Coax Removal Tool, Extension Nuts
WA-9	Nut Spanner Wrench, Crimp & Removal Tools

Contacts

WA-10	#22 Pin Contacts, #22 Socket Contacts
WA-11	Crimp Removable Contacts, Coax Contacts

Hardware

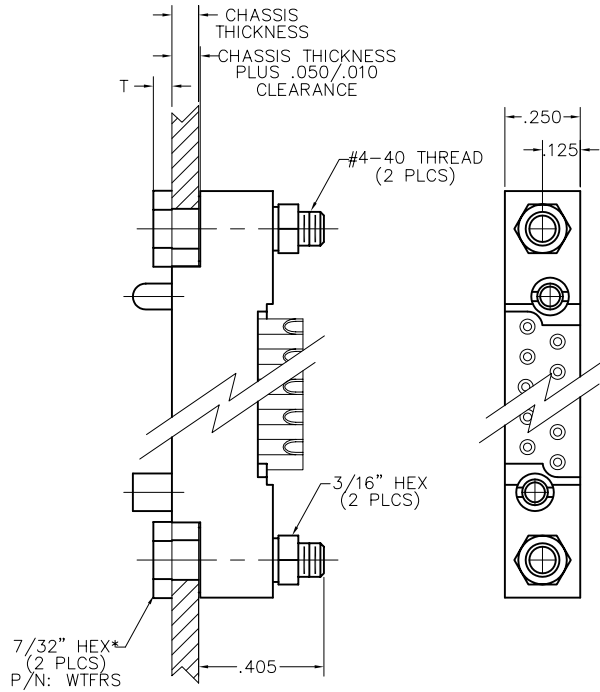
WA-12	Fixed Jacksets, Turning Jacksets
WA-14	Guide Sets
WA-15	Hardware Availability Chart
WA-17	Polarization - "D" Shaped Guide Sets
WA-18	Polarizing Pin Application

Military Cross Reference

WA-19	Military Cross Reference Chart
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Accessories

Floating Mounts for WTB-WTK Receptacles



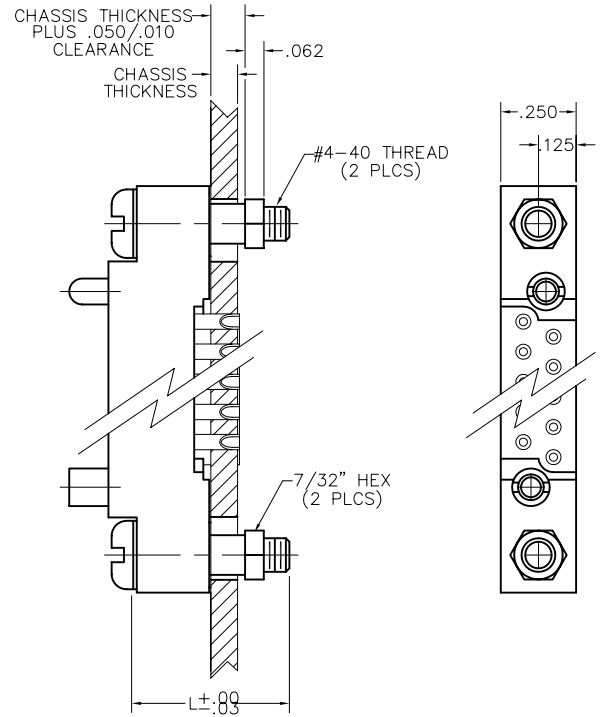
FLOATING MOUNT
REAR

DIMENSIONS			
CHASSIS THICKNESS	MOUNTING SCREW HEX HEAD	MOUNTING SCREW ROUND HEAD	T
.062	WTFRS062	WTFRAS062	.062
.093	WTFRS093	WTFRAS093	.062
.125	WTFRS125	WTFRAS125	.050

CONNECTOR SIZES 10-70 REQUIRE 2 WTFRS SCREW ASSEMBLIES.

CONNECTOR SIZES OVER 70 REQUIRE 2 WTFRS ASSEMBLIES AND ONE WTFRA SCREW ASSEMBLY.

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

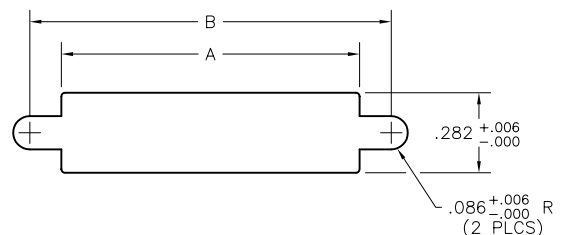


FLOATING MOUNT
FRONT

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

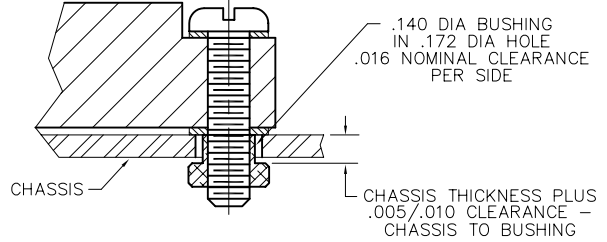
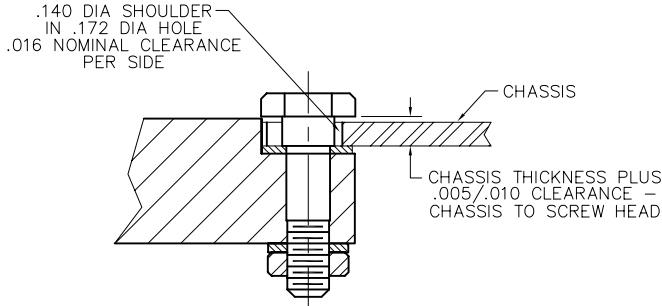
DIMENSIONS					
SIZE	A +.006 -.000	B ±.003	SIZE	A +.006 -.000	B ±.003
10	.882	1.100	44	2.582	2.800
14	1.082	1.300	50	2.882	3.100
20	1.382	1.600	54	3.082	3.300
24	1.582	1.800	56	3.182	3.400
26	1.682	1.900	60	3.382	3.600
30	1.882	2.100	66	3.682	3.900
36	2.182	2.400	70	3.882	4.100
40	2.382	2.600			

CHASSIS CUTOUT WTB-WTK, SIZES 10-70

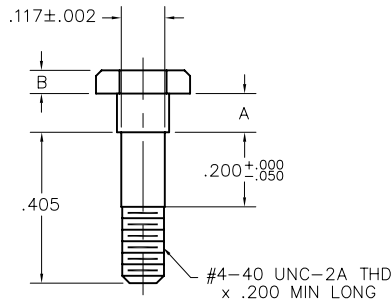


Accessories

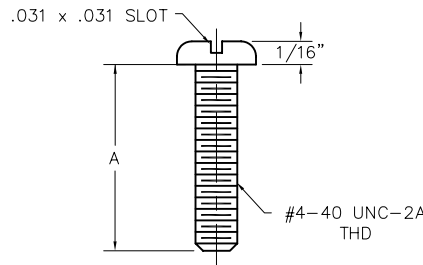
Floating Mounts for WTB-WTK Receptacles



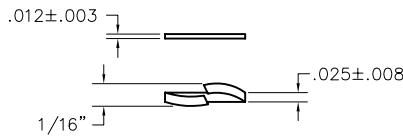
FLOATING STUD, HEX HEAD
7/32±.005 HEX HEAD



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

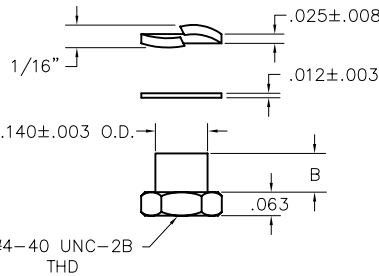


FLAT WASHER
.215 O.D. x .120 I.D.



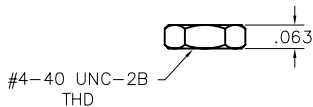
SPLIT LOCKWASHER
.212±.015 O.D. x .115 I.D.

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



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

HEX NUT
3/16±.005



FLOATING BUSHING
7/32" HEX

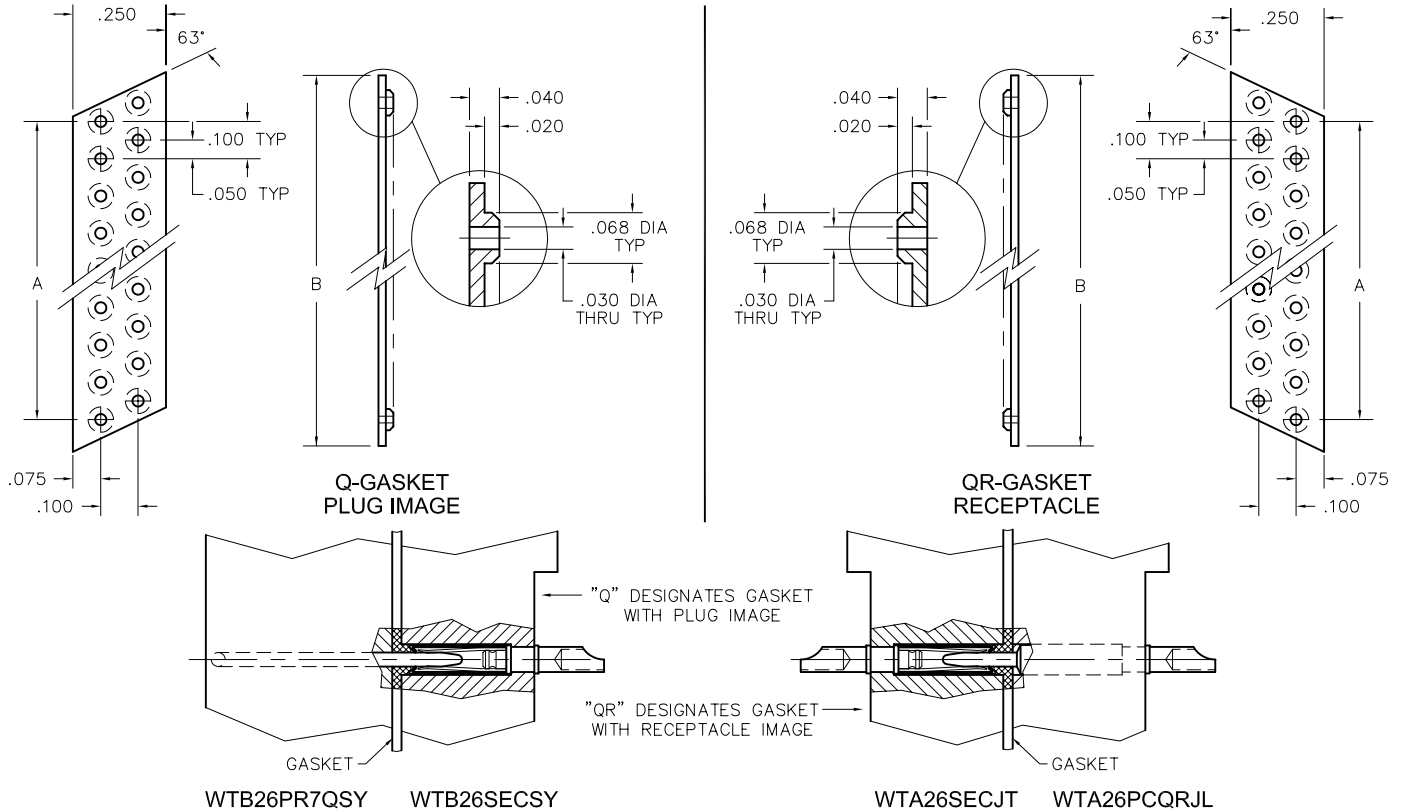
PART NUMBER	A $\begin{smallmatrix} +.000 \\ -.005 \end{smallmatrix}$	B $\begin{smallmatrix} +.000 \\ -.005 \end{smallmatrix}$	CHASSIS THICKNESS
WTFRS062	.073	.062	.062
WTFRS093	.104	.062	.093
WTFRS125	.135	.050	.125

PART NUMBER	A $\begin{smallmatrix} +.000 \\ -.030 \end{smallmatrix}$	B $\pm .003$	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	SST SERIES 300 PER ASTM-A582 AND/OR QQ-S-763/766	PASSIVATE PER SAE AMS- QQ-P-35 OR ASTM-A967		X	
FLOATING STUD 7/32" HEX HEAD			X		
FLOATING BUSHING 7/32" HEX HEAD					X
MOUNTING SCREW 7/32" DIA, ROUND HEAD					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	WTA-P-JT JTA JTL	WTB10QR	WTA-P-J JL	
14	.600	.825	WTB14Q		WTB14QR		
20	.900	1.125	WTB20Q		WTB20QR		
24	1.100	1.325	WTB24Q		WTB24QR		
26	1.200	1.425	WTB26Q		WTB26QR		
30	1.400	1.625	WTB30Q		WTB30QR		
36	1.700	1.925	WTB36Q		WTB36QR		WTAX-P-SY SYL
40	1.900	2.125	WTB40Q		WTB40QR		
44	2.100	2.325	WTB44Q		WTB44QR		
50	2.400	2.625	WTB50Q		WTB50QR		
54	2.600	2.825	WTB54Q	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				
				WTB-P-SY			

Ask About AirBorn's Accelerated Delivery Service

Accessories

Face Seal Gaskets for
WG-WGA-WGE Series

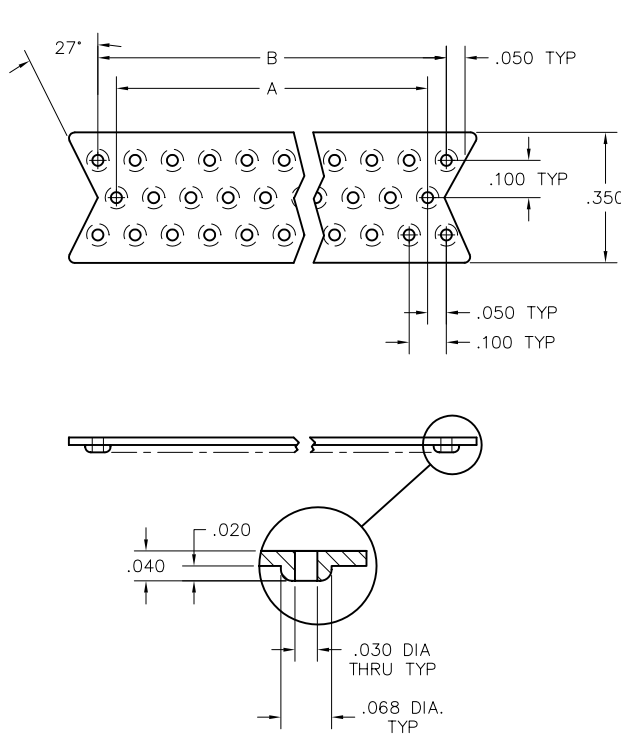


FIGURE 1

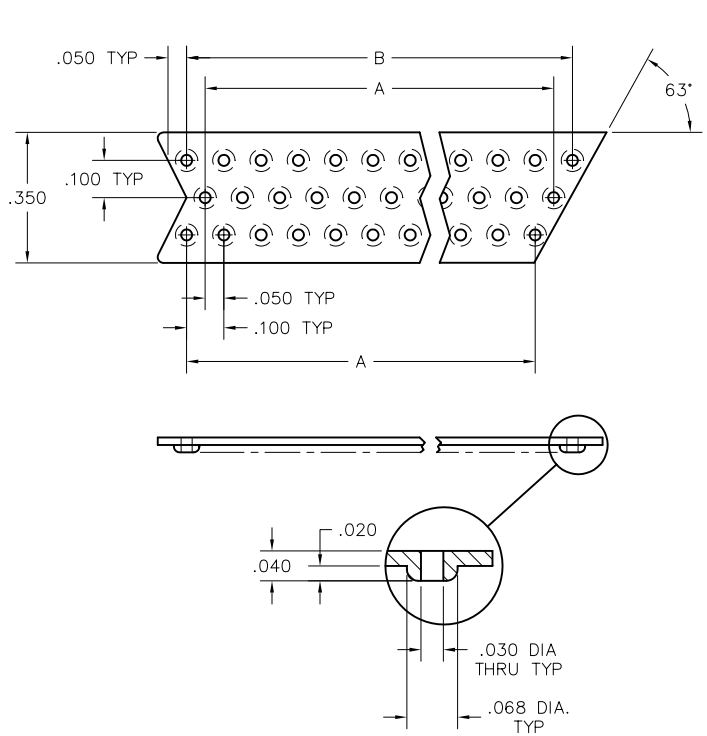


FIGURE 2

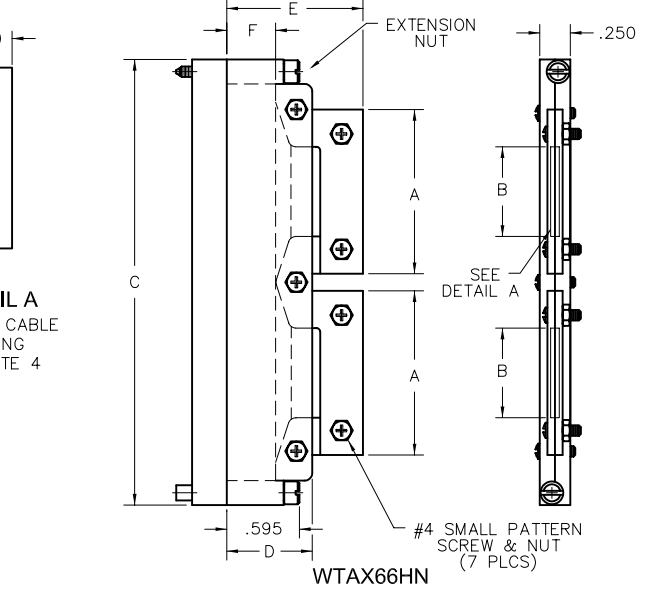
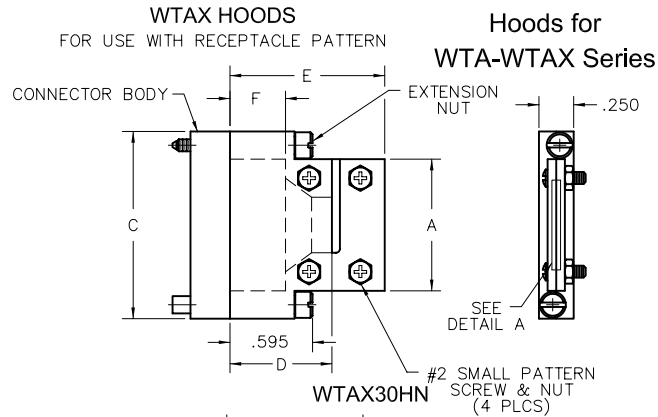
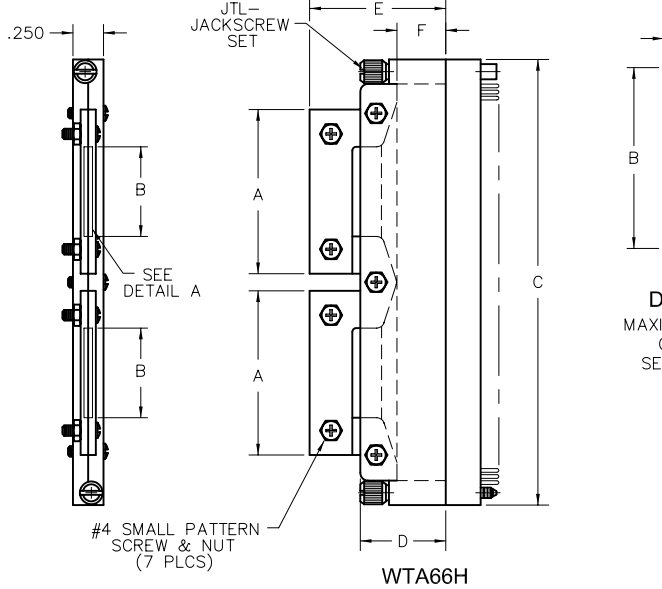
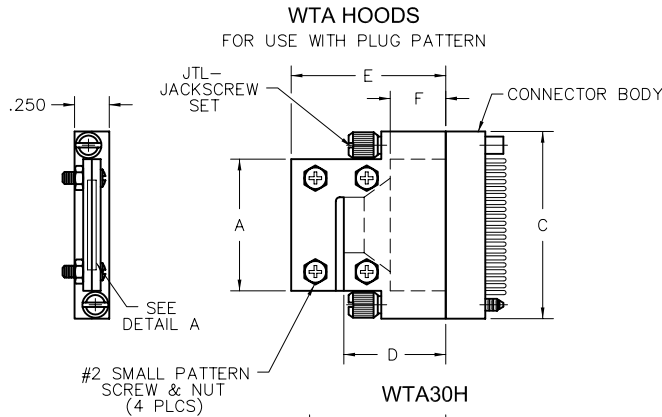
NOTES:

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 JTA JTL
80	2.500	2.600	1	WG80Q	
92	2.900	3.000	1	WG92Q	
61	1.900	2.000	2	WG61Q	WGV-P-SY SYL
52	1.600	1.700	2	WG52Q	
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



DETAIL A
MAXIMUM CABLE
OPENING
SEE NOTE 4

WTA HOODS, PLUG IMAGE						WTAX HOODS, RECEPTACLE IMAGE						PART NO. DESIGNATION					
PART NO.	A	B $\pm .015$ $-.025$	C	D	E	F	PART NO.	A	B $\pm .015$ $-.025$	C	D	E	F	SERIES	SIZE	HOOD DESIGNATION	FOR HARDWARE TYPE
WTA20H	.950	.400	1.350				WTAX20H	1.450	.800	1.850				WTA	20 THRU 70	H	JTL - LONG TURNING JACKSCREW SET
WTA30H	1.450	.800	1.850				WTAX30H	1.450	.800	1.850							
WTA36H	1.300	.750	2.150				WTAX36H	1.300	.750	2.150							
WTA40H	1.500	.950	2.350				WTAX40H	1.500	.950	2.350							
WTA44H	1.700	1.150	2.550				WTAX44H	1.700	1.150	2.550				WTAX	30 THRU 70	HN	J - FIXED JACKSCREW SET SY - GUIDE SET
WTA50H	2.000	1.450	2.850	.700	1.115	.400	WTAX50H	2.000	1.450	2.850	.700	1.115	.400				
WTA54H	2.200	1.650	3.050				WTAX54H	1.950	1.400	3.050							
WTA56H	2.060	1.500	3.150				WTAX56H	2.060	1.500	3.150							
WTA60H	1.240	.700	3.350				WTAX60H	1.240	.700	3.350							
WTA66H	1.350	.735	3.650				WTAX66H	1.345	.735	3.650							
WTA70H	1.445	.885	3.850				WTAX70H	1.445	.885	3.850							

NOTES:

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

EXAMPLES:

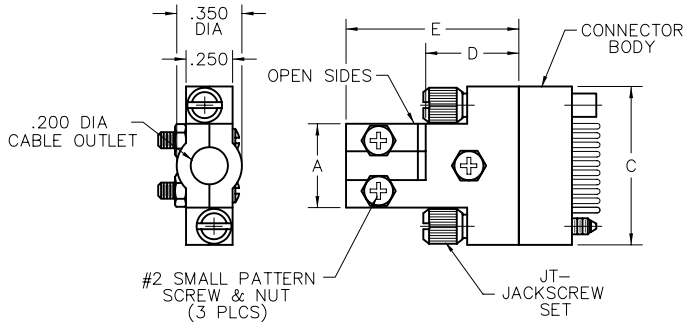
- WTA**H = DESIGNATES HOOD USED WITH JTL HARDWARE
- WTA**HN = DESIGNATES HOOD USED WITH J OR SY HARDWARE (INCLUDES EXTENSION NUTS).
- WTAHN = DESIGNATES EXTENSION NUTS ONLY.

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

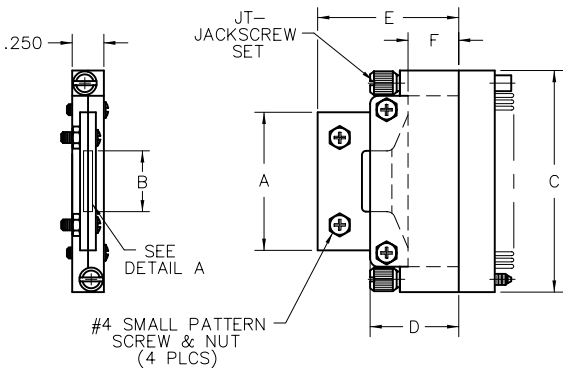
Accessories

Hoods for WTD-WTDX Series

WTD HOODS
FOR USE WITH PLUG PATTERN

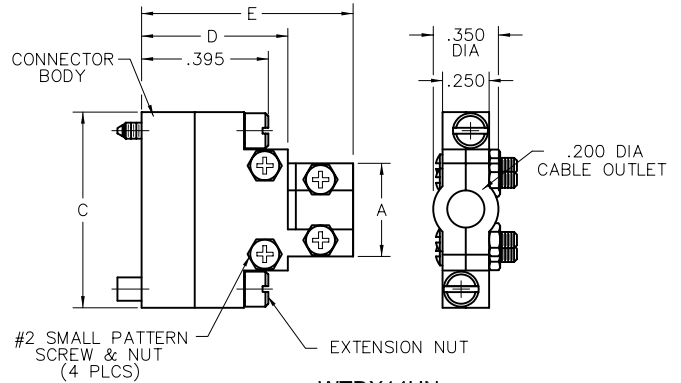


WTD10H

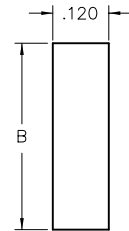


WTD26H

WTDX HOODS
FOR USE WITH RECEPTACLE PATTERN



WTDX14HN



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 $\pm .015$ $-.025$	C	D	E	F	PART NO.	A	B $\pm .015$ $-.025$	C	D	E	F
WTD10H	.450	—	.850	.500	.850	.200	WTDX10H	.450	—	.850	.500	.850	—
WTD14H	.500	—	1.050				WTDX14H	.500	—	1.050			
WTD26H	1.090	.540	1.650		.915		WTDX26H	1.250	.600	1.650		.915	.200

NOTES:

- DIMENSIONS ARE SYMMETRICAL ABOUT CENTER LINE.
- HOODS ARE SUPPLIED UNASSEMBLED.
- HOOD MATERIAL: POLYETHYLENE, HIGH DENSITY CLAMPING SCREWS AND NUTS: STAINLESS STEEL
- THE TOP CLAMPS ARE FLEXIBLE TO ACCOMMODATE MAXIMUM CABLE BUNDLE.
- CHECK WITH SALES DEPARTMENT FOR SIZES NOT LISTED.
- SEE PAGE WA-5 FOR WTA-WTAX SERIES HOODS.
- IF USED WITH WTA OR WTAX CONNECTORS IS DESIRED, LEAD DRESS AREA WILL BE AT A MINIMUM.
- SCREWS SUPPLIED ARE CROSS-RECESS ONLY.
- TOLERANCES: $\pm .015$
- SIZES 10 & 14 USE #2 SMALL PATTERN SCREW & NUT. SIZE 26 USE #4 SMALL PATTERN SCREW & NUT.
- HOODS CANNOT BE USED ON CONNECTORS SPECIFYING THE -C45 OPTION CODE.

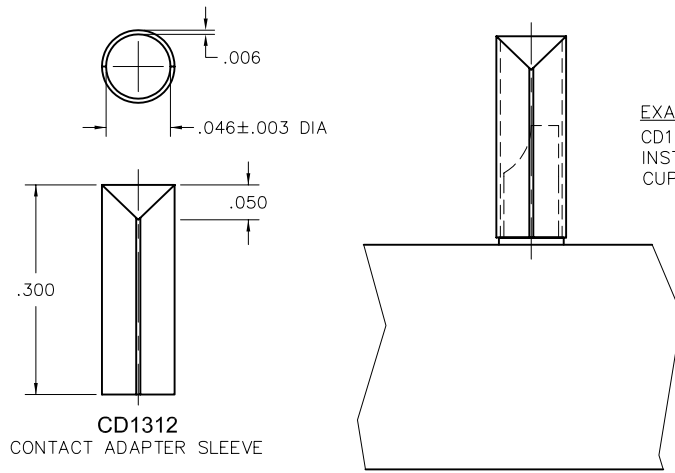
EXAMPLES:

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.

Accessories

Adapter Sleeve for
Solder Cup Contacts



EXAMPLE:
CD1312 ADAPTER SLEEVE
INSTALLED OVER SOLDER
CUP CONTACT

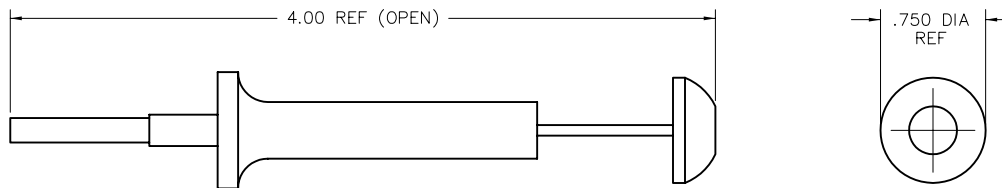
CD1312
CONTACT ADAPTER SLEEVE

NOTES:

1. MATERIAL: BeCu PER ASTM-B194.
FINISH: GOLD PLATE PER MIL-G-45204
2. CONTACT ADAPTER SLEEVE IS DESIGNED TO ACCEPT #20 WIRE.
3. WITH USE OF THE ADAPTER SLEEVE, EFFECTIVE DIAMETER IS EXPANDED TO .050 I.D.
4. THE CD1312 WILL ALSO ACCEPT: 3 TWISTED OF #28 WIRE
2 TWISTED OF #26 WIRE

Accessories

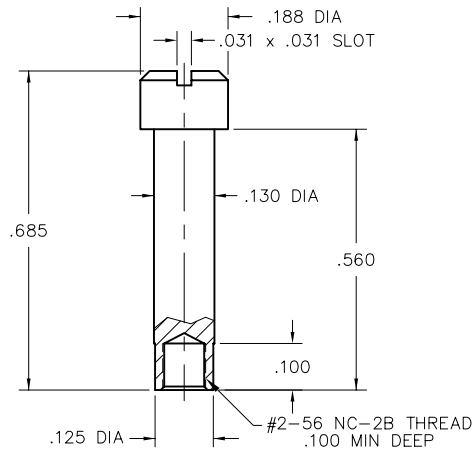
Coax Removal Tool
for WTC Contacts



TR2679
REMOVAL TOOL

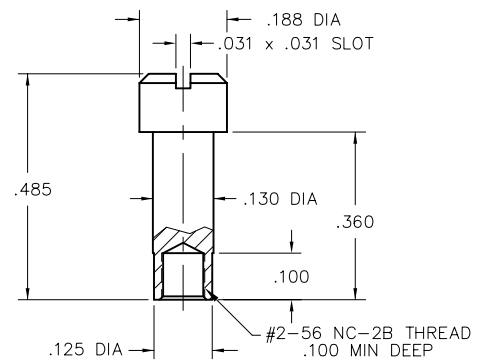
Accessories

Extension Nuts



WTAHN

FOR USE WITH WTAH & WTAXH
HOODS. SEE PAGE WA-5.



WTDHN

FOR USE WITH WTDH & WTDXH
HOODS. SEE PAGE WA-6.

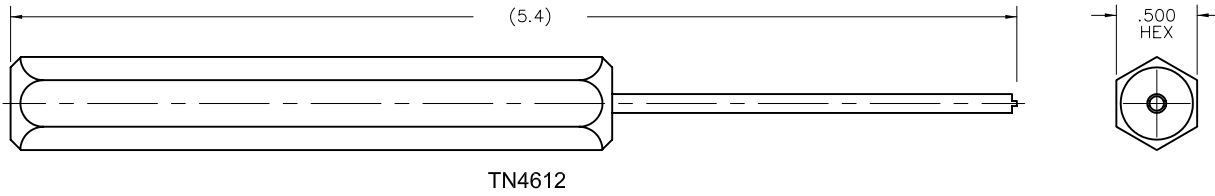
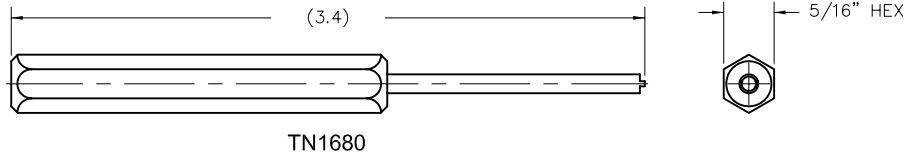
NOTES:

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.

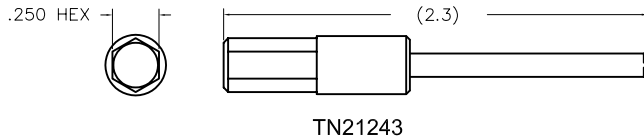


Accessories

Nut Spanner Wrenches



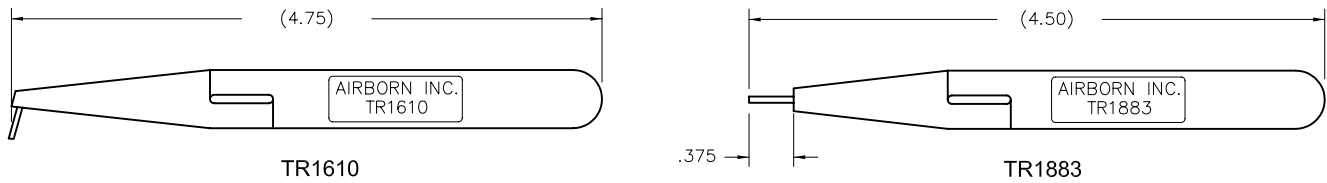
USING EITHER OF THE SPANNER WRENCHES SHOWN ABOVE, GUIDE SETS MAY BE REMOVED AND REPOSITIONED IN ANY OF THE 64 POLARIZING POSITIONS. REFER TO PAGE WA-18 FOR POLARIZATION CHART.
 CAUTION: WHEN POLARIZED POSITIONS ARE CHANGED, APPLY LOCTITE 242® TO THREADS.
 IF SPANNER NUTS ARE DIFFICULT TO REMOVE DUE TO 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

Accessories

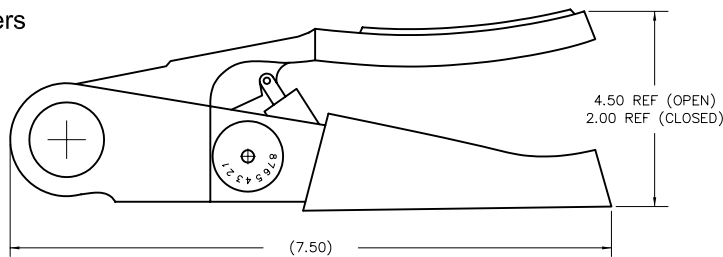
Insertion & Removal Tools



Accessories

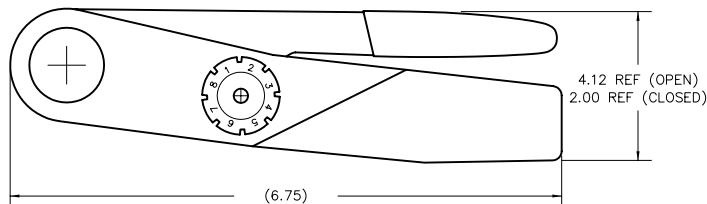
Crimp Tools & Positioners

TC2963 - CRIMP TOOL
 REF M22520/2-01
TP1696 - POSITIONER
 REF M22520/2-06
 (REF ASTRO TOOL CORP.)



INSULATION STRIPPING
 EXPOSE .135/.145 BARE WIRE LENGTH FOR INSERTION INTO CONTACT.

TC1652 - CRIMP TOOL
 REF M22520/2-01
TP1653 - POSITIONER
 REF M22520/2-06
 (REF DANIELS MFG. CORP.)

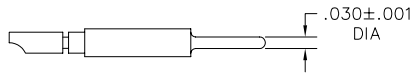


TOOL SELECTION TABLE		
CONTACT	TOOL NO.	POSITIONER
WTK2222PA		TP1985
WTK2222S	TC1652 OR TC2963	TP1653 OR TP1696
WTK2220S657		TP2435

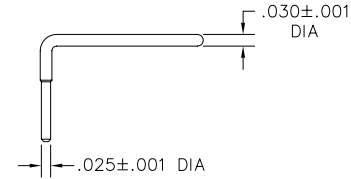
Contacts

#22 Pins & Sockets
for WT, WTA, WTB, WTK,
WG & WGA Series

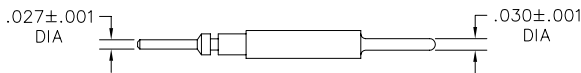
PINS



PC Pin, straight, solder cup



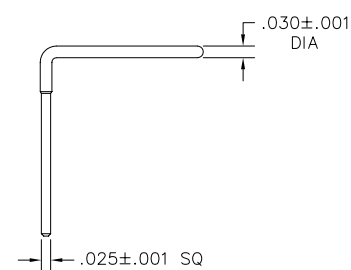
PR
PR5 Pin, right angle, dip solder, .081" x .025" dia
PR7 Pin, right angle, dip solder, .109" x .025" dia
PR9 Pin, right angle, dip solder, .140" x .025" dia
PR11 Pin, right angle, dip solder, .172" x .025" dia
PR15 Pin, right angle, dip solder, .234" x .025" dia
PRD4 Pin, right angle, dip solder, .063"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



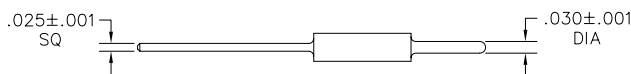
PD
PD9 Pin, straight, dip solder, .140"
PD11 Pin, straight, dip solder, .172"



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

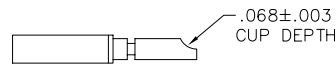


PRW
PRW32 Pin, right angle, wire wrap®, .500"
PRW34 Pin, right angle, wire wrap®, .531"
PRW40 Pin, right angle, wire wrap®, .625"

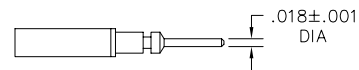


PW
PW40 Pin, straight, wire wrap®, .625"

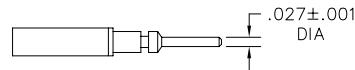
SOCKETS



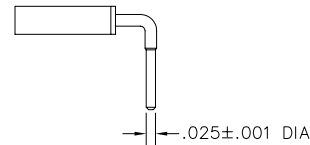
SAC Socket, straight, solder cup, closed entry



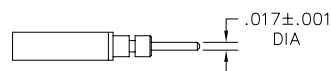
SAG
SAG7 Socket, straight, dip solder, .109"
SAG9 Socket, straight, dip solder, .140"
SAG11 Socket, straight, dip solder, .172"



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"



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



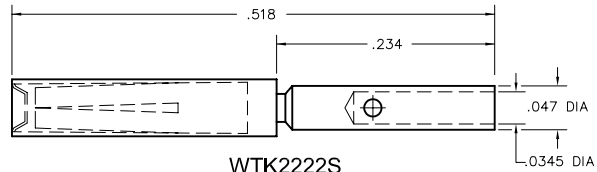
SAF
SAF3 Socket, straight, flex circuit, .050"
SAF6 Socket, straight, flex circuit, .093"



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

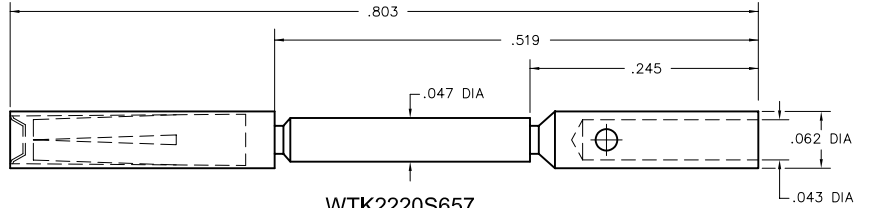
Contacts

Crimp Removable for
 WTDX, WTDXA, WTK, WTKA Series
 WGDx, WGDxA, WGK, WGKA Series

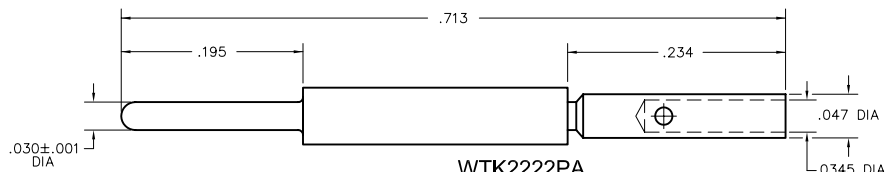


WTK2222S
 SOCKET, CRIMP REMOVABLE

WTK2222SA
 SOCKET, LOW FORCE, CRIMP REMOVABLE,
 22 GAGE BARREL



WTK2220S657
 SOCKET, CRIMP REMOVABLE,
 20 GAGE BARREL

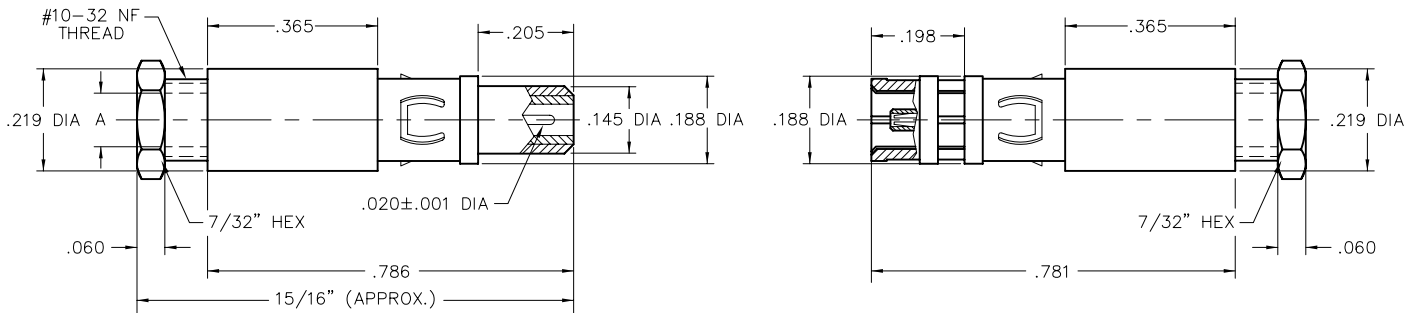


WTK2222PA
 PIN, CRIMP REMOVABLE,
 22 GAGE BARREL

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

Contacts

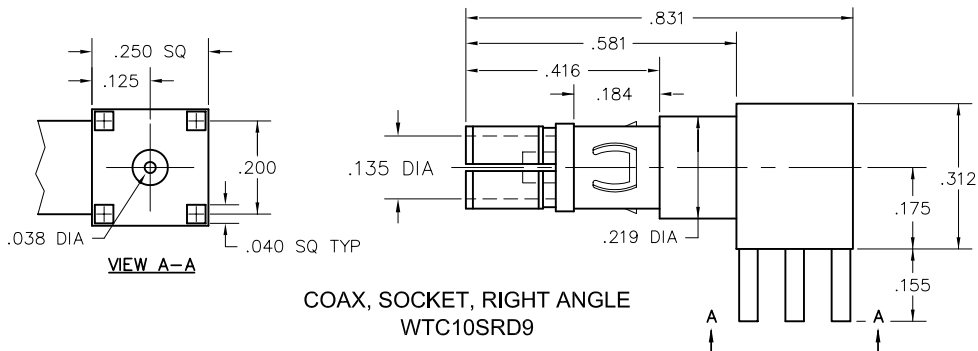
Coax



COAX, MALE

COAX, FEMALE

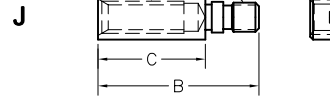
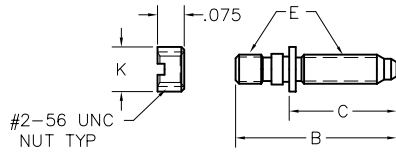
PART #	DESCRIPTION	DIA "A"	CABLE TYPE	PART #	DESCRIPTION
WTC188P	COAX, STRAIGHT, PIN	.115	RG174, RG188, RG316	WTC188S	COAX, STRAIGHT, SOCKET
WTC196P		.089	RG178, RG196	WTC196S	
WTC085P			SEMI-RIGID, .085-50 OHM	WTC085S	



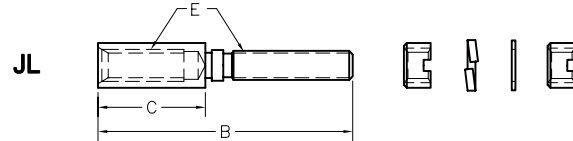
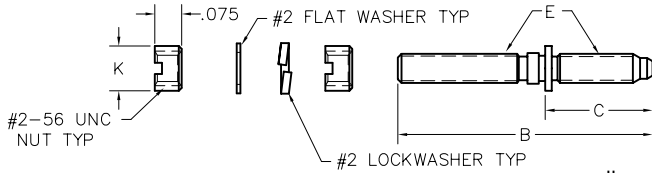
COAX, SOCKET, RIGHT ANGLE
 WTC10SRD9

Jacksets

Fixed Jacksets

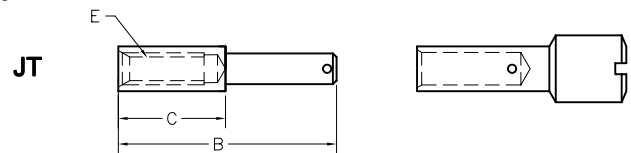
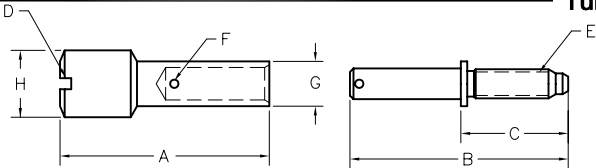


- J** Fixed jackset
JFF Two fixed jacksockets
JFM Fixed jackset, reversed
JMM Two fixed jackscrews

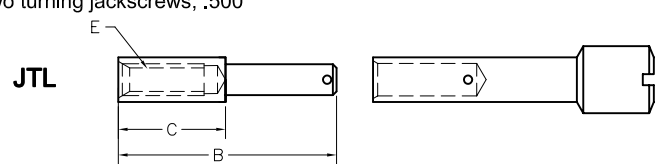
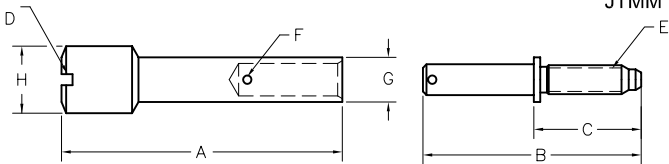


- JL** Fixed jackset, long
JLFF Two fixed jacksockets, long
JLFM Fixed jackset, long, reversed
JLMM Two fixed jackscrews, long

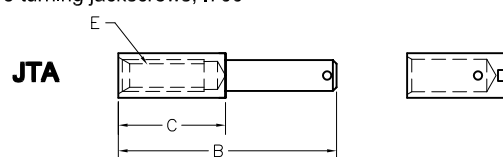
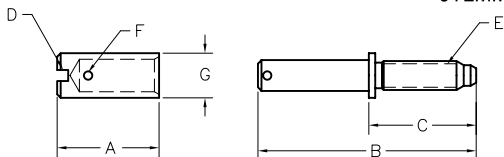
Turning Jacksets



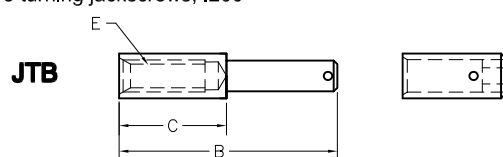
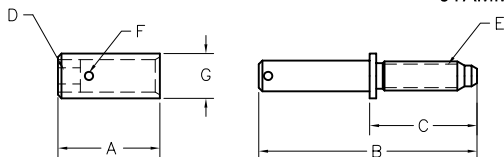
- JT** Turning jackset, .500"
JTFF Two turning jacksockets, .500"
JTFM Turning jackset, reversed, .500"
JTMM Two turning jackscrews, .500"



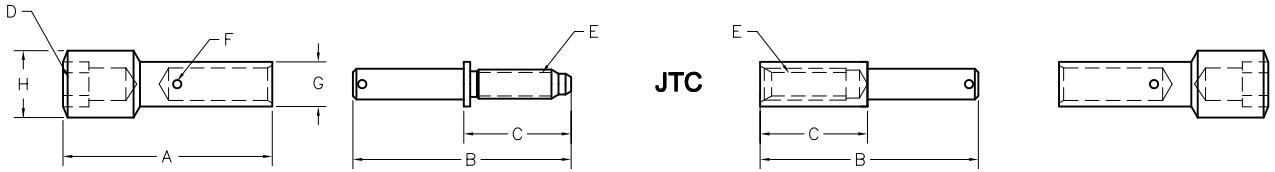
- JTL** Turning jackset, .700"
JTLFF Two turning jacksockets, .700"
JTLFM Turning jackset, reversed, .700"
JTLMM Two turning jackscrews, .700"



- JTA** Turning jackset, .200"
JTAFF Two turning jacksockets, .200"
JTAFM Turning jackset, reversed, .200"
JTAMM Two turning jackscrews, .200"



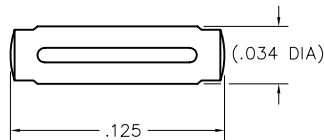
- JTB** Turning jackset, .200"
JTBFF Two turning jacksockets, .200"
JTBFM Turning jackset, reversed, .200"
JTBMM Two turning jackscrews, .200"



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

GROOVE PIN

SEE NOTE 1



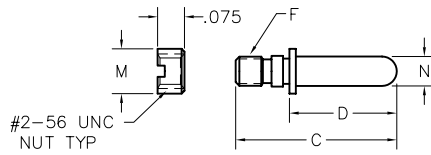
Notes:

1. Groove pin secures knob to jackscrew and jackscket 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.

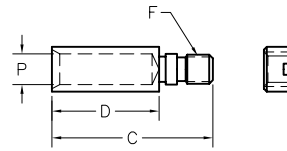
DIMENSIONS											
HARDWARE TYPE	FOR MOLDING TYPE	A	B	C	D	E	F	G	H	K	
J	WTA, WTB	—	.450	.300	—	#2-56 UNC THD	—	—	—	.125 DIA	
JL	WTA, WTB	—	.712		—		—	—	—	—	.125 DIA
JT	WTA, WTB WTDX, WTK	.585	.610 .860		.031 x .031 SLOT		.187 DIA	—	—	—	—
JTA	WTA, WTB WTDX, WTK	.285	.610 .860		.031 x .031 SLOT		.125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

Guide Sets

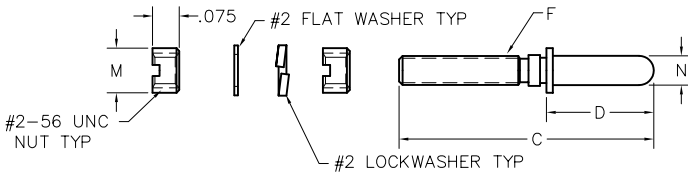
Guide Sets



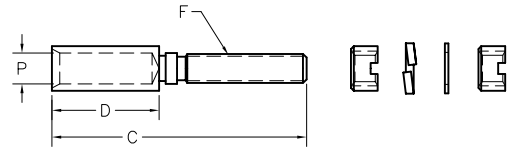
SY



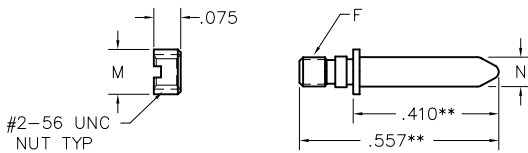
SY Guide set
 SYFF Two guide sockets
 SYFM Guide set, reversed
 SYMM Two guide pins



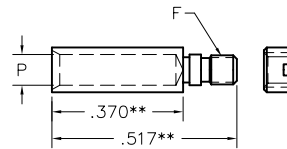
SYL



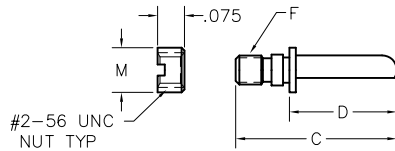
SYL Guide set
 SYLFF Two guide sockets
 SYLFM Guide set, reversed
 SYLMM Two guide pins



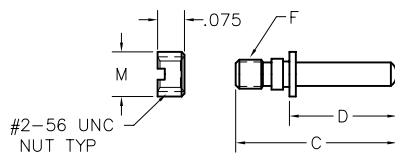
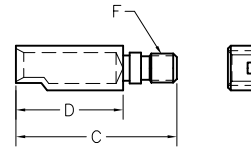
SC



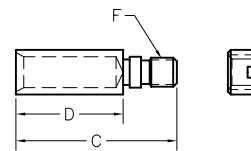
Guide Sets, Polarized



SY-
 SEE NOTE 1



SY-
 SEE NOTE 2



Notes:

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

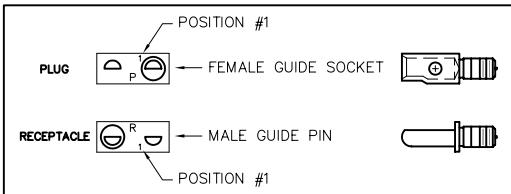
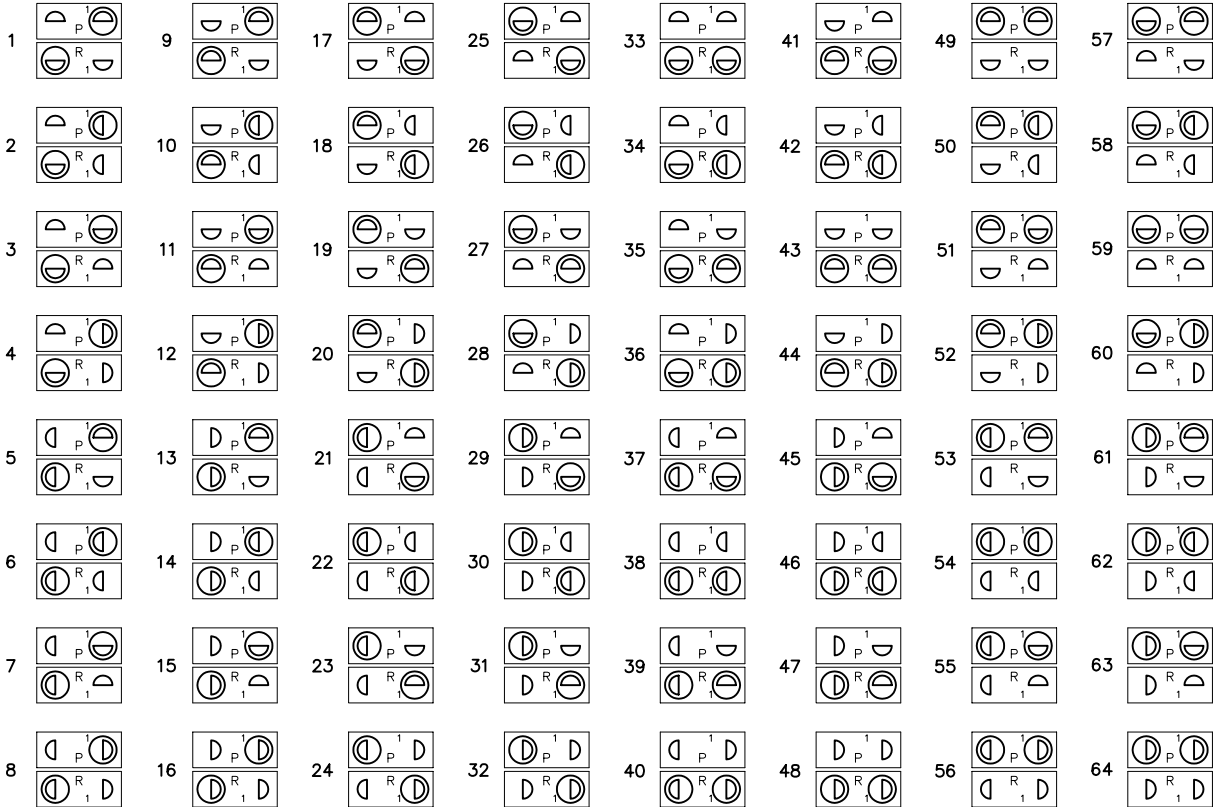
DIMENSIONS							
PART NUMBER	FOR MOLDING TYPE	C	D	F	M	N	P
WTBSC	WTB COAX	**	**	#2-56 UNC THD	.125 DIA	.082 DIA	.086 DIA
WTBSY	WTA,WTB,WG,WGA	.450	.300				
WTBSY	WTBT	.653					
WTKSY	WTK	.712					
WTBSYL	WTA,WTB,WG						

Hardware Availability by Connector Series

WTA / B WG - Receptacle											Body Height = .335		
Style:	J	JL	SY	SY-*	SYL	SYL-*	JTA	JTB	JTD	JT	JTC	JTL	
Mating:	.130	.130	.130	.130	.130	.130	.130	.130	.130	.130	.130	.130	
Termn:	----	.247	----	----	.247	.247	.200	.200	.230	.500	.500	.700	
WTB / WG - Plug											Body Height = .400		
Style:	J	JL	SY	SY-*	SYL	SYL-*	JTA	JTB	JTD	JT	JTC	JTL	
Mating:	.130	.130	.130	.130	.130	.130	.130	.130	.130	.130	.130	.130	
Termn:	----	.182	----	----	.182	.182	.135	.135	.165	.435	.435	.635	
WGA - Receptacle											Body Height = .375		
Style:	J	JL	SY	SY-*	SYL	SYL-*	JTA	JTB	JTD	JT	JTC	JTL	
Mating:	.130	.130	.130	.130	.130	.130	.130	.130	.130	.130	.130	.130	
Termn:	----	.207	----	----	.207	.207	.160	.160	.190	.460	.460	.660	
WGA - Plug											Body Height = .400		
Style:	J	JL	SY	SY-*	SYL	SYL-*	JTA	JTB	JTD	JT	JTC	JTL	
Mating:	.130	.130	.130	.130	.130	.130	.130	.130	.130	.130	.130	.130	
Termn:	----	.182	----	----	.182	.182	.135	.135	.165	.435	.435	.635	
WGR92 - Receptacle											Body Height = .375		
Style:	J	JL	SY	SY-*	SYL	SYL-*	JTA	JTB	JTD	JT	JTC	JTL	
Mating:	.130	.130	.130	.130	.130	.130	.130	.130	.130	.130	.130	.130	
Termn:	----	.207	----	----	.207	.207	.160	.160	.190	.460	.460	.660	
WGR92 - Plug											Body Height = .350		
Style:	JCL	SYCL	SYCL-*				JTA	JTB	JT	JTL			
Mating:	.130	.130	.130				.130	.130	.130	.130			
Termn:	.247	.120	.120				.205	.205	.505	.705			
WRD122 - Receptacle											Body Height = .375		
Style:	J	JL	SY	SY-	SYL	SYL-*	L-D65	JTA	JTB	JTC	JT	JTL	
Mating:	.130	.130	.130	.130	.130	.130	----	.130	.130	.130	.130	.130	
Termn:	----	.207	----	----	.207	.207	.230	.160	.160	.460	.460	.660	
WRD122 - Plug											Body Height = .635		
Style:	JCL	SYCL	SYCL-*										
Mating:	.130	.130	.010										
Termn:	----	----	----										
WRF100 - Receptacle											Body Height = .534		
Style:	J	JL											
Mating:	.130	.130											
Termn:	----	.250											
WRF100 - Plug											Body Height = .430		
Style:								JTB				JTL	
Mating:								.130				.130	
Termn:								.190				.705	
WRTBT - Receptacle											Body Height = .525		
Style:	J		SY	SY-*			JTA	JTB	JTD	JT	JTC	JTL	
Mating:	.130		.130	.130			.130	.130	.130	.130	.130	.130	
Termn:	----		----	----			.175	.175	.205	.475	.500	.675	
PA - Receptacle											Body Height = .375		
Style:	SY	J						JTB		JT			
Mating:	.175	.160						.175		.175			
Termn:	.200	.277						.314		1.054			
PA - Plug											Body Height = .375		
Style:	SY	J						JTB		JT		JTL	
Mating:	.210	.160						.160		.160		.175	
Termn:	.273	.277						.314		1.054		1.170	

Hardware Availability by Connector Series

WTK / WTDX - Plug or Receptacle											Body Height = .585	
Style:	J	JL	SY	SY-*			JTA	JTB	JTD	JT	JTC	JTL
Mating:	.130	.130	.130	.130			.130	.130	.130	.130	.130	.130
Termn:	----	.247	----	----			.200	.200	.230	.500	.500	.700
WTA59											Body Height = .285	
Style:	J						JTA	JTB				
Mating:	.130						.130	.130				
Termn:	----						.135	.135				
WRBC - Receptacle											Body Height = .530	
Style:		SC	SC-*									
Mating:		.145	.145									
Termn:		----	----									
WRBC - Plug											Body Height = .515	
Style:		SC	SC-*									
Mating:		.185	.185									
Termn:		----	----									
WTB Coax - Receptacle											Body Height = .335	
Style:	J	JL	SY	SY-*			JTA	JTB		JT		
Mating:	.130	.130	.130	.130			.130	.130		.130		
Termn:	----	.247	----	----			.200	.200		.500		
WTB Coax - Plug											Body Height = .400	
Style:	J	SY	SY-*				JTA	JTB		JT		
Mating:	.130	.130	.130				.130	.130		.130		
Termn:	----	----	----				.135	.135		.435		
WTB Coax - Receptacle with SC hardware (guide socket)											Body Height = .335	
Style:			SC	SC-*								
Mating:			.145	.145								
Termn:			.040	.040								
WTB Coax - Plug with SC hardware (guide pin)											Body Height = .400	
Style:			SC	SC-*								
Mating:			.185	.185								
Termn:			----	----								
WTB Coax - Receptacle with SC hardware (guide pin)											Body Height = .335	
Style:			SC	SC-*								
Mating:			.185	.185								
Termn:			.040	.040								
WTB Coax - Plug with SC hardware (guide socket)											Body Height = .400	
Style:			SC	SC-*								
Mating:			.145	.145								
Termn:			----	----								



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 WA-9.

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 For positions -33 thru -48
- 67R
- 68P For positions -49 thru -64
- 68R

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)

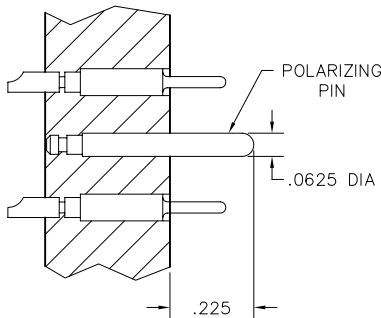
Polarization

Polarizing Pin Applications

PIN CONTACT

—STRAIGHT THRU—
CONNECTOR BODY

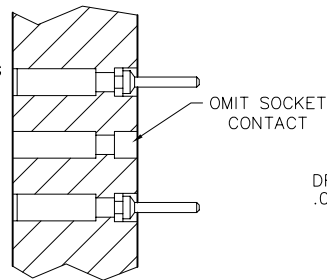
WT, WTA
WTAV, WTBV



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

SOCKET CONTACT

WT, WTA, WTAX,
WTB, WTBX

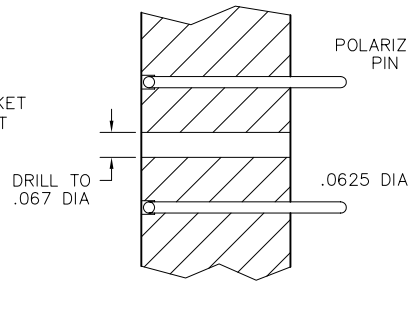


WTA**SAD9JL444-1, -2...

PIN CONTACT

—RIGHT ANGLE—
CONNECTOR BODY

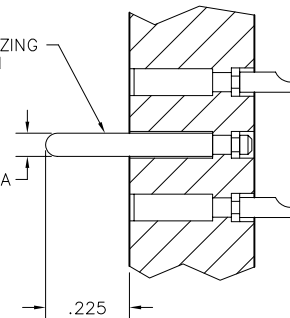
WG, WGA, WGE,
WT, WTB



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

SOCKET CONTACT

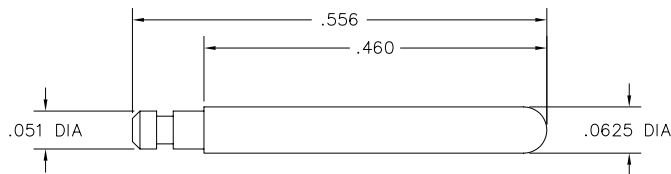
WG, WGA, WGE,
WT, WTA, WTAX,
WTB, WTDXA, WTKA



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

Notes:

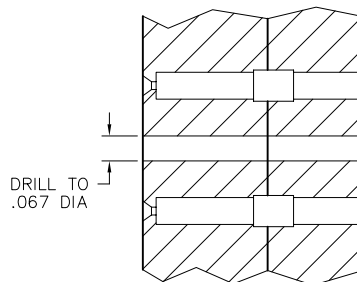
1. CODE 443 - Polarizing pin installed in contact position noted by dash number.
2. CODE 444 - Contact position noted by dash number is left open.
3. Either pin or socket contacts can be used with 443 or 444.
4. ** = connector size
5. For additional dimensions and other information, refer to catalog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



STAINLESS STEEL
POLARIZING PIN

SOCKET CONTACT

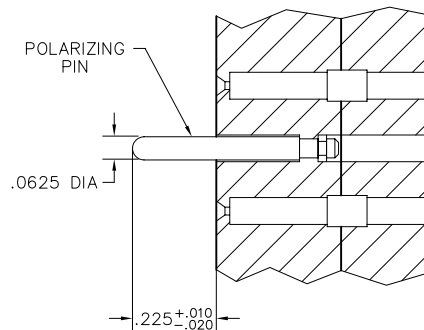
WTDXA, WTKA



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

SOCKET CONTACT

WTDXA, WTKA



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

MIL-C-55302/55 thru MIL-C-55302/57 Cross Reference Chart

## Indicates Number of Contacts: 10, 14, 20, 24, 26, 30, 36, 40, 44, 50, 54, 56, 60, 66 or 70		## Indicates Number of Contacts: 10, 14, 20, 24, 26, 30, 36, 40, 44, 50, 54, 56, 60, 66 or 70	
MIL-C-55302/55 - Standard Insertion Force Contacts - or - MIL-C-55302/55L - Low Insertion Force Contacts		MIL-C-55302/57	
MIL Number	W Series	MIL Number	W Series
/55-A##L /55-A##M /55-A##S /55-A##H	WTA##SACJTL WTA##SACJT WTA##SACJTA WTA##SACJTB	/57A##X /57A##Y /57A##Y-2 thru -64 /57A##Y-0 /57A##S /57A##H	WTB##PR7SY WTB##PR7SY-1 WTB##PR7SY-2 thru -64 WTB##PR7SY-0 WTB##PR7JTA WTB##PR7JTB
/55-B##L /55-B##M /55-B##S /55-B##H	WTA##SAD9JTL WTA##SAD9JT WTA##SAD9JTA WTA##SAD9JTB	/57B##X /57B##Y /57B##Y-2 thru -64 /57B##Y-0 /57B##S /57B##H	WTB##PR9SY WTB##PR9SY-1 WTB##PR9SY-2 thru -64 WTB##PR9SY-0 WTB##PR9JTA WTB##PR9JTB
/55-C##L /55-C##M /55-C##S /55-C##H	WTA##SAD11JTL WTA##SAD11JT WTA##SAD11JTA WTA##SAD11JTB	/57C##X /57C##Y /57C##Y-2 thru -64 /57C##Y-0 /57C##S /57C##H	WTB##PR11SY WTB##PR11SY-1 WTB##PR11SY-2 thru -64 WTB##PR11SY-0 WTB##PR11JTA WTB##PR11JTB
/55-D##L /55-D##M /55-D##S /55-D##H	WTA##SAF3JTL WTA##SAF3JT WTA##SAF3JTA WTA##SAF3JTB	/57-01	TN1680 Spanner Nut Wrench
/55-E##L /55-E##M /55-E##S /55-E##H	WTA##SAD15JTL WTA##SAD15JT WTA##SAD15JTA WTA##SAD15JTB		
/55-F##L /55-F##M /55-F##S /55-F##H	WTA##SAF6JTL WTA##SAF6JT WTA##SAF6JTA WTA##SAF6JTB		
MIL-C-55302/56			
/56A## /56B## /56C## /56D## /56E## /56F##	WTA##PCJL WTA##PD9JL WTA##PD11JL WTA##PW40JL WTA##PF3JL WTA##PF6JL		

## Indicates Number of Contacts: 10, 14, 20, 24, 26, 30, 36, 40, 44, 50, 54, 56, 60, 66 or 70		## Indicates Number of Contacts: 10, 14, 20, 24, 26, 30, 36, 40, 44, 50, 54, 56, 60, 66 or 70	
MIL-C-55302/58 - Standard Insertion Force Contacts - or - MIL-C-55302/58L - Low Insertion Force Contacts		MIL-C-55302/58	
MIL Number	W Series	MIL Number	W Series
/58-A##X /58-A##Y /58-A##Y-2 thru -64 /58-A##Y-0 /58-A##F /58-A##S /58-A##H	WTB##SACSY WTB##SACSY-1 WTB##SACSY-2 thru -64 WTB##SACSY-0 WTB##SACJ WTB##SACJTA WTB##SACJTB	/58-H##X /58-H##Y /58-H##Y-2 thru -64 /58-H##Y-0 /58-H##F /58-H##S /58-H##H	WTB##SAF6SY WTB##SAF6SY-1 WTB##SAF6SY-2 thru -64 WTB##SAF6SY-0 WTB##SAF6J WTB##SAF6JTA WTB##SAF6JTB
/58-B##X /58-B##Y /58-B##Y-2 thru -64 /58-B##Y-0 /58-B##F /58-B##S /58-B##H	WTB##SAD9SY WTB##SAD9SY-1 WTB##SAD9SY-2 thru -64 WTB##SAD9SY-0 WTB##SAD9J WTB##SAD9JTA WTB##SAD9JTB	/59 ### Indicates Number of Contacts: 90, 100 or 120	
/58-C##X /58-C##Y /58-C##Y-2 thru -64 /58-C##Y-0 /58-C##F /58-C##S /58-C##H	WTB##SAD11SY WTB##SAD11SY-1 WTB##SAD11SY-2 thru -64 WTB##SAD11SY-0 WTB##SAD11J WTB##SAD11JTA WTB##SAD11JTB	/59A###X /59A###Y /59A###Y-2 thru -64 /59A###Y-0 /59A###F /59A###S /59A###H	WTB###PR7SY WTB###PR7SY-1 WTB###PR7SY-2 thru -64 WTB###PR7SY-0 WTB###PR7J WTB###PR7JTA WTB###PR7JTB
/58-D##X /58-D##Y /58-D##Y-2 thru -64 /58-D##Y-0 /58-D##F /58-D##S /58-D##H	WTB##SAW40SY WTB##SAW40SY-1 WTB##SAW40SY-2 thru -64 WTB##SAW40SY-0 WTB##SAW40J WTB##SAW40JTA WTB##SAW40JTB	/59B###X /59B###Y /59B###Y-2 thru -64 /59B###Y-0 /59B###F /59B###S /59B###H	WTB###PR9SY WTB###PR9SY-1 WTB###PR9SY-2 thru -64 WTB###PR9SY-0 WTB###PR9J WTB###PR9JTA WTB###PR9JTB
/58-E##X /58-E##Y /58-E##Y-2 thru -64 /58-E##Y-0 /58-E##F /58-E##S /58-E##H	WTB##SAF3SY WTB##SAF3SY-1 WTB##SAF3SY-2 thru -64 WTB##SAF3SY-0 WTB##SAF3J WTB##SAF3JTA WTB##SAF3JTB	/59C###X /59C###Y /59C###Y-2 thru -64 /59C###Y-0 /59C###F /59C###S /59C###H	WTB###PR11SY WTB###PR11SY-1 WTB###PR11SY-2 thru -64 WTB###PR11SY-0 WTB###PR11J WTB###PR11JTA WTB###PR11JTB
/58-F##X /58-F##Y /58-F##Y-2 thru -64 /58-F##Y-0 /58-F##F /58-F##S /58-F##H	WTB##SAD15SY WTB##SAD15SY-1 WTB##SAD15SY-2 thru -64 WTB##SAD15SY-0 WTB##SAD15J WTB##SAD15JTA WTB##SAD15JTB		

## Indicates Number of Contacts: 90, 100 or 120		## Indicates Number of Contacts: 10, 14, 20, 24, 26, 30, 36, 40, 44, 50, 54, 56, 60, 66 or 70	
MIL-C-55302/60 - Standard Insertion Force Contacts - or - MIL-C-55302/60L - Low Insertion Force Contacts		MIL-C-55302/62	
MIL Number	W Series	MIL Number	W Series
/60-A###X	WTB###SACSY	/62-A##L	WTAX##SACJTL
/60-A###Y	WTB###SACSY-1	/62-A##M	WTAX##SACJT
/60-A###Y-2 thru -64	WTB###SACSY-2 thru -64	/62-A##S	WTAX##SACJTA
/60-A###Y-0	WTB###SACSY-0	/62-A##H	WTAX##SACJTB
/60-A###F	WTB###SACJ		
/60-A###S	WTB###SACJTA		
/60-A###H	WTB###SACJTB		
		/62-B##L	WTAX##SAD9JTL
		/62-B##M	WTAX##SAD9JT
		/62-B##S	WTAX##SAD9JTA
		/62-B##H	WTAX##SAD9JTB
/60-B###X	WTB###SAD9SY		
/60-B###Y	WTB###SAD9SY-1		
/60-B###Y-2 thru -64	WTB###SAD9SY-2 thru -64		
/60-B###Y-0	WTB###SAD9SY-0	/62-C##L	WTAX##SAD11JTL
/60-B###F	WTB###SAD9J	/62-C##M	WTAX##SAD11JT
/60-B###S	WTB###SAD9JTA	/62-C##S	WTAX##SAD11JTA
/60-B###H	WTB###SAD9JTB	/62-C##H	WTAX##SAD11JTB
/60-C###X	WTB###SAD11SY	/62-D##L	WTAX##SAF3JTL
/60-C###Y	WTB###SAD11SY-1	/62-D##M	WTAX##SAF3JT
/60-C###Y-2 thru -64	WTB###SAD11SY-2 thru -64	/62-D##S	WTAX##SAF3JTA
/60-C###Y-0	WTB###SAD11SY-0	/62-D##H	WTAX##SAF3JTB
/60-C###F	WTB###SAD11J		
/60-C###S	WTB###SAD11JTA		
/60-C###H	WTB###SAD11JTB		
		/62-E##L	WTAX##SAD15JTL
		/62-E##M	WTAX##SAD15JT
		/62-E##S	WTAX##SAD15JTA
		/62-E##H	WTAX##SAD15JTB
/60-D###X	WTB###SAW40SY		
/60-D###Y	WTB###SAW40SY-1		
/60-D###Y-2 thru -64	WTB###SAW40SY-2 thru -64		
/60-D###Y-0	WTB###SAW40SY-0	/62-F##L	WTAX##SAF6JTL
/60-D###F	WTB###SAW40J	/62-F##M	WTAX##SAF6JT
/60-D###S	WTB###SAW40JTA	/62-F##S	WTAX##SAF6JTA
/60-D###H	WTB###SAW40JTB	/62-F##H	WTAX##SAF6JTB
/60-E###X	WTB###SAD15SY		
/60-E###Y	WTB###SAD15SY-1		
/60-E###Y-2 thru -64	WTB###SAD15SY-2 thru -64		
/60-E###Y-0	WTB###SAD15SY-0		
/60-E###F	WTB###SAD15J		
/60-E###S	WTB###SAD15JTA		
/60-E###H	WTB###SAD15JTB		
## Indicates Number of Contacts: 10, 14, 20, 24, 26, 30, 36, 40, 44, 50, 54, 56, 60, 66 or 70		MIL-C-55302/63	
MIL-C-55302/61			
/61A##	WTB##PR7J	/63A##L	WTA##PCJTL
/61B##	WTB##PR9J	/63A##M	WTA##PCJT
/61C##	WTB##PR11J	/63A##S	WTA##PCJTA
		/63A##H	WTA##PCJTB
		/63A##F	WTAV##PCJL
		/63A##X	WTAV##PCSYL
		/63A##Y	WTAV##PCSYL-1
		/63A##Y-2 thru -64	WTAV##PCSYL-2 thru -64
		/63A##Y-0	WTAV##PCSYL-0

## Indicates Number of Contacts: 10, 14, 20, 24, 26, 30, 36, 40, 44, 50, 54, 56, 60, 66 or 70		## Indicates Number of Contacts: 10, 14, 20, 24, 26, 30, 36, 40, 44, 50, 54, 56, 60, 66 or 70	
MIL-C-55302/63		MIL-C-55302/64 - Standard Insertion Force Contacts - or - MIL-C-55302/64L - Low Insertion Force Contacts	
MIL Number	W Series	MIL Number	W Series
/63B##L /63B##M /63B##S /63B##H /63B##F	WTA##PD9JTL WTA##PD9JT WTA##PD9JTA WTA##PD9JTB WTAV##PD9JL	/64-A##F /64-A##X /64-A##Y /64-A##Y-2 thru -64 /64-A##Y-0	WTA##SACJL WTAX##SACSYL WTAX##SACSYL-1 WTAX##SACSYL-2 thru -64 WTAX##SACSYL-0
/63B##X /63B##Y /63B##Y-2 thru -64 /63B##Y-0	WTAV##PD9SYL WTAV##PD9SYL-1 WTAV##PD9SYL-2 thru -64 WTAV##PD9SYL-0	/64-B##F /64-B##X /64-B##Y /64-B##Y-2 thru -64 /64-B##Y-0	WTA##SAD9JL WTAX##SAD9SYL WTAX##SAD9SYL-1 WTAX##SAD9SYL-2 thru -64 WTAX##SAD9SYL-0
/63C##L /63C##M /63C##S /63C##H /63C##F	WTA##PD11JTL WTA##PD11JT WTA##PD11JTA WTA##PD11JTB WTAV##PD11JL	/64-C##F /64-C##X /64-C##Y /64-C##Y-2 thru -64 /64-C##Y-0	WTA##SAD11JL WTAX##SAD11SYL WTAX##SAD11SYL-1 WTAX##SAD11SYL-2 thru -64 WTAX##SAD11SYL-0
/63C##X /63C##Y /63C##Y-2 thru -64 /63C##Y-0	WTAV##PD11SYL WTAV##PD11SYL-1 WTAV##PD11SYL-2 thru -64 WTAV##PD11SYL-0	/64-D##F /64-D##X /64-D##Y /64-D##Y-2 thru -64 /64-D##Y-0	WTA##SAW40JL WTAX##SAW40SYL WTAX##SAW40SYL-1 WTAX##SAW40SYL-2 thru -64 WTAX##SAW40SYL-0
/63D##L /63D##M /63D##S /63D##H /63D##F	WTA##PF3JTL WTA##PF3JT WTA##PF3JTA WTA##PF3JTB WTAV##PF3JL	/64-E##F /64-E##X /64-E##Y /64-E##Y-2 thru -64 /64-E##Y-0	WTA##SAF3JL WTAX##SAF3SYL WTAX##SAF3SYL-1 WTAX##SAF3SYL-2 thru -64 WTAX##SAF3SYL-0
/63D##X /63D##Y /63D##Y-2 thru -64 /63D##Y-0	WTAV##PF3SYL WTAV##PF3SYL-1 WTAV##PF3SYL-2 thru -64 WTAV##PF3SYL-0	/64-F##F /64-F##X /64-F##Y /64-F##Y-2 thru -64 /64-F##Y-0	WTA##SAF6JL WTAX##SAF6SYL WTAX##SAF6SYL-1 WTAX##SAF6SYL-2 thru -64 WTAX##SAF6SYL-0
/63E##L /63E##M /63E##S /63E##H /63E##F	WTA##PF6JTL WTA##PF6JT WTA##PF6JTA WTA##PF6JTB WTAV##PF6JL		
/63E##X /63E##Y /63E##Y-2 thru -64 /63E##Y-0	WTAV##PF6SYL WTAV##PF6SYL-1 WTAV##PF6SYL-2 thru -64 WTAV##PF6SYL-0		

## Indicates Number of Contacts: 10, 14, 20, 24, 26, 30, 36, 40, 44, 50, 54, 56, 60, 66 or 70		Number of Contacts: 160	
MIL-C-55302/65 and /66 - Standard Insertion Force Contacts - or - MIL-C-55302/65L and /66L - Low Insertion Force Contacts		MIL-C-55302/139	
MIL Number	W Series	MIL Number	W Series
/65-##X /65-##Y /65-##Y-2 thru -64 /65-##Y-0 /65-##F /65-##S /65-##H	WTKA##SASY WTKA##SASY-1 WTKA##SASY-2 thru -64 WTKA##SASY-0 WTKA##SAJ WTKA##SAJTA WTKA##SAJTB	/139B160X /139B160Y /139B160Y-2 thru -64 /139B160Y-0 /139B160F /139B160S /139B160H	WG160SAD7SY WG160SAD7SY-1 WG160SAD7SY-2 thru -64 WG160SAD7SY-0 WG160SAD7J WG160SAD7JTA WG160SAD7JTB
/65-01 Crimp Contact /65-02 Crimp Contact /66-##L /66-##M /66-##S /66-##F /66-##H	WTK2222S WTK2222SA Low Force Socket WTDXA##SAJTL WTDXA##SAJT WTDXA##SAJTA WTDXA##SAJ WTDXA##SAJTB	/139C160X /139C160Y /139C160Y-2 thru -64 /139C160Y-0 /139C160F /139C160S /139C160H	WG160SAD9SY WG160SAD9SY-1 WG160SAD9SY-2 thru -64 WG160SAD9SY-0 WG160SAD9J WG160SAD9JTA WG160SAD9JTB
MIL-C-55302/138		Number of Contacts: 160	
/138A160X /138A160Y /138A160Y-2 thru -64 /138A160Y-0 /138A160F /138A160S /138A160H	WG160PR7SY WG160PR7SY-1 WG160PR7SY-2 thru -64 WG160PR7SY-0 WG160PR7J WG160PR7JTA WG160PR7JTB	/139D160X /139D160Y /139D160Y-2 thru -64 /139D160Y-0 /139D160F /139D160S /139D160H	WG160SAW40SY WG160SAW40SY-1 WG160SAW40SY-2 thru -64 WG160SAW40SY-0 WG160SAW40J WG160SAW40JTA WG160SAW40JTB
/138B160X /138B160Y /138B160Y-2 thru -64 /138B160Y-0 /138B160F /138B160S /138B160H	WG160PR9SY WG160PR9SY-1 WG160PR9SY-2 thru -64 WG160PR9SY-0 WG160PR9J WG160PR9JTA WG160PR9JTB	/139E160X /139E160Y /139E160Y-2 thru -64 /139E160Y-0 /139E160F /139E160S /139E160H	WG160SAD11SY WG160SAD11SY-1 WG160SAD11SY-2 thru -64 WG160SAD11SY-0 WG160SAD11J WG160SAD11JTA WG160SAD11JTB
/138C160X /138C160Y /138C160Y-2 thru -64 /138C160Y-0 /138C160F /138C160S /138C160H	WG160PR11SY WG160PR11SY-1 WG160PR11SY-2 thru -64 WG160PR11SY-0 WG160PR11J WG160PR11JTA WG160PR11JTB	/139F160X /139F160Y /139F160Y-2 thru -64 /139F160Y-0 /139F160F /139F160S /139F160H	WG160SAF3SY WG160SAF3SY-1 WG160SAF3SY-2 thru -64 WG160SAF3SY-0 WG160SAF3J WG160SAF3JTA WG160SAF3JTB
MIL-C-55302/139		Number of Contacts: 160	
/139A160X /139A160Y /139A160Y-2 thru -64 /139A160Y-0 /139A160F /139A160S /139A160H	WG160SACSY WG160SACSY-1 WG160SACSY-2 thru -64 WG160SACSY-0 WG160SACJ WG160SACJTA WG160SACJTB	/139H160X /139H160Y /139H160Y-2 thru -64 /139H160Y-0 /139H160F /139H160S /139H160H	WG160SAF6SY WG160SAF6SY-1 WG160SAF6SY-2 thru -64 WG160SAF6SY-0 WG160SAF6J WG160SAF6JTA WG160SAF6JTB

"WB" SERIES - .050"
MIL-C-55302



Contents

"WB" Series

.050" Rectangular Plastic Board Level Connectors

WB-1	Contents
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WB-3	Performance
WB-4	Part number description
	2-Row Connectors - PC Card or SMT to Board, Sizes: 20-132
WB-5	WB Plug, right angle, with mounting ears
	WB Receptacle, straight, with mounting ears
WB-7	WBB, WBA Plug, straight, surface mount, with mounting ears
	WB Receptacle, straight, with mounting ears
WB-9	Hardware
WB-10	WB Board layout - plug, right angle
WB-11	WB Board layout - receptacle, straight
WB-12	WBB, WBA Board layout - plug, straight, surface mount
	Military Cross Reference
WB-13	Chart

Specifications

Materials and Finishes *

Pin Contacts:	Phosphor Bronze per ASTM B 139
Socket Contacts:	BeCu per MIL-C-55302
Contact Finish:	Au per ASTM B 488-, SAE AMS 2422. Localized finish over MIL-C-55302
Molded Insulators:	Glass filled polyphenylene sulfide per MIL-M-24519, Type GST-40F
Keying Features:	Polarized octagonal guides can be a molded integral part of the insulator or separate stainless steel hardware.
Tolerances:	Unless otherwise specified: Fractions = $\pm 1/64$ " Decimals = ± 0.010 " Angles = $\pm 5^\circ$

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

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



Performance Reference MIL-C-55302

Contact Rating:	1.5 amperes
Solderability:	Tested to MIL-STD-202, Method 208
Operating Temperature:	-65° to +125° C or -85° to +257° F
Contact Engagement Force:	2.0 oz. maximum with .0189/.0190 diameter test pin in accordance with SAE AS 31971
Contact Separation Force:	.10 oz. maximum with .0169/.0170 diameter test pin in accordance with SAE AS 31971

<u>Category:</u>	<u>Requirements:</u>	<u>Test Method Per:</u> <u>SAE AS 13441</u>
Test Voltage:	600 V, RMS, 60 Hz @ sea level 150 V, RMS, 60 Hz @ 70,000 feet	#3001
Insulation Resistance:	5,000 megohms minimum @ 500 VDC	#3003
Durability:	500 connector mating cycles	
Contact Resistance:	.0375 volt maximum drop @ 1.5 amperes - (.025 ohms)	#3004
Contact Resistance:	.0375 volt maximum drop @ 1.5 amperes -	

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.

Note:

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

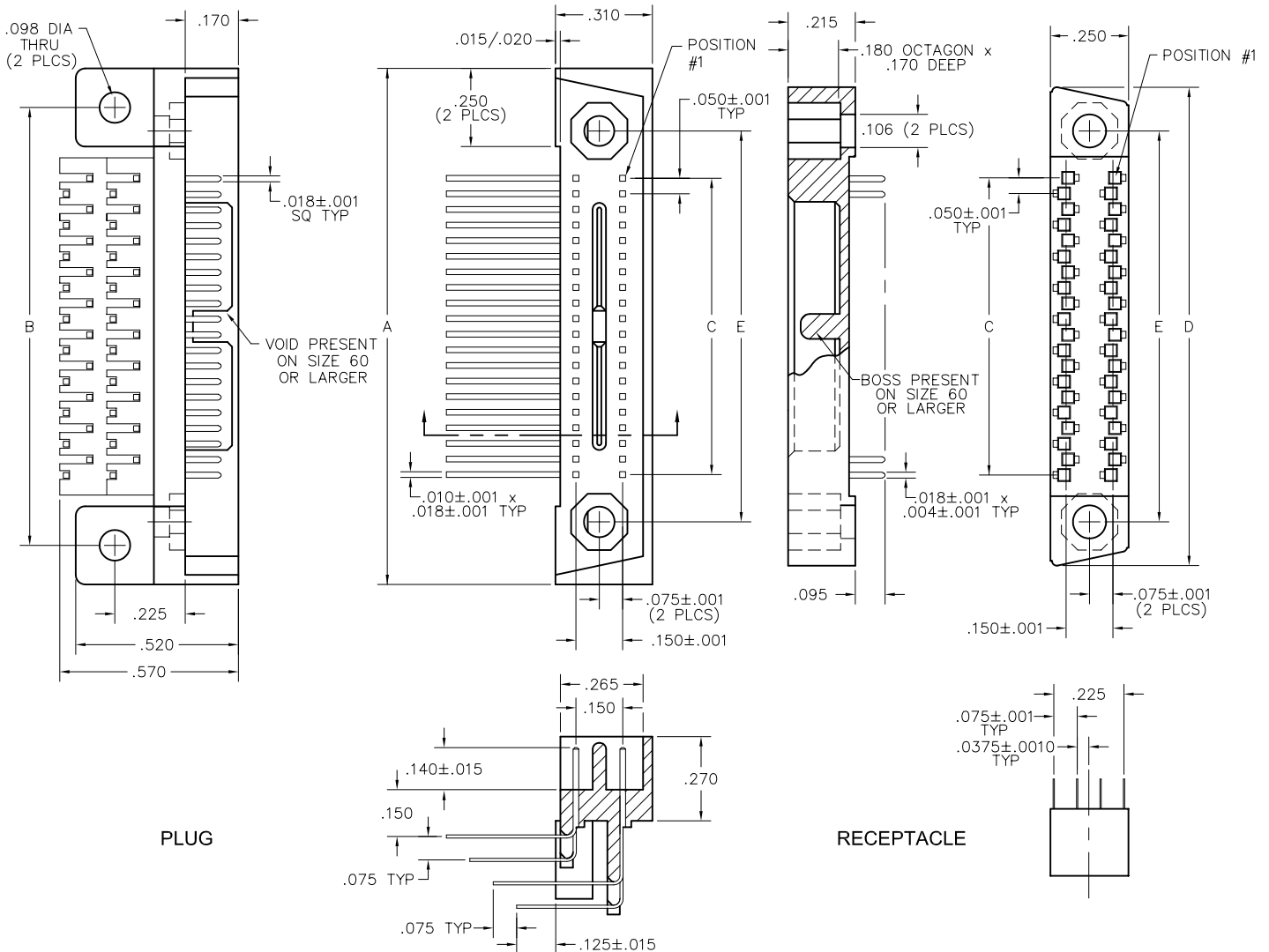
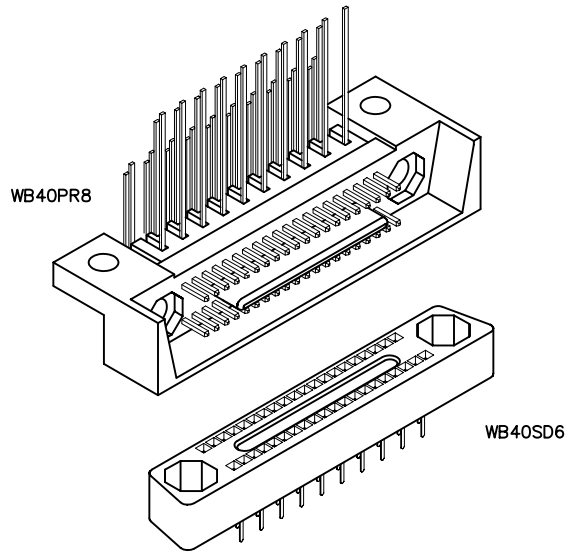


2 · ROW PC Card to Chassis or Board

.050"

WB - WB

20 thru 132 Contacts



PLUG: WB40PR8
 RECEPTACLE: WB40SD6
 XXXXXXXXXXXX

PLUG	SERIES	RECEPTACLE
WB 2 row, right angle, plug, with mounting ears		WB 2 row, straight, receptacle, with mounting ears
SIZE		
20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 128, 132		20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 128, 132
CONTACTS		
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"
HARDWARE		
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 jackscrews

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



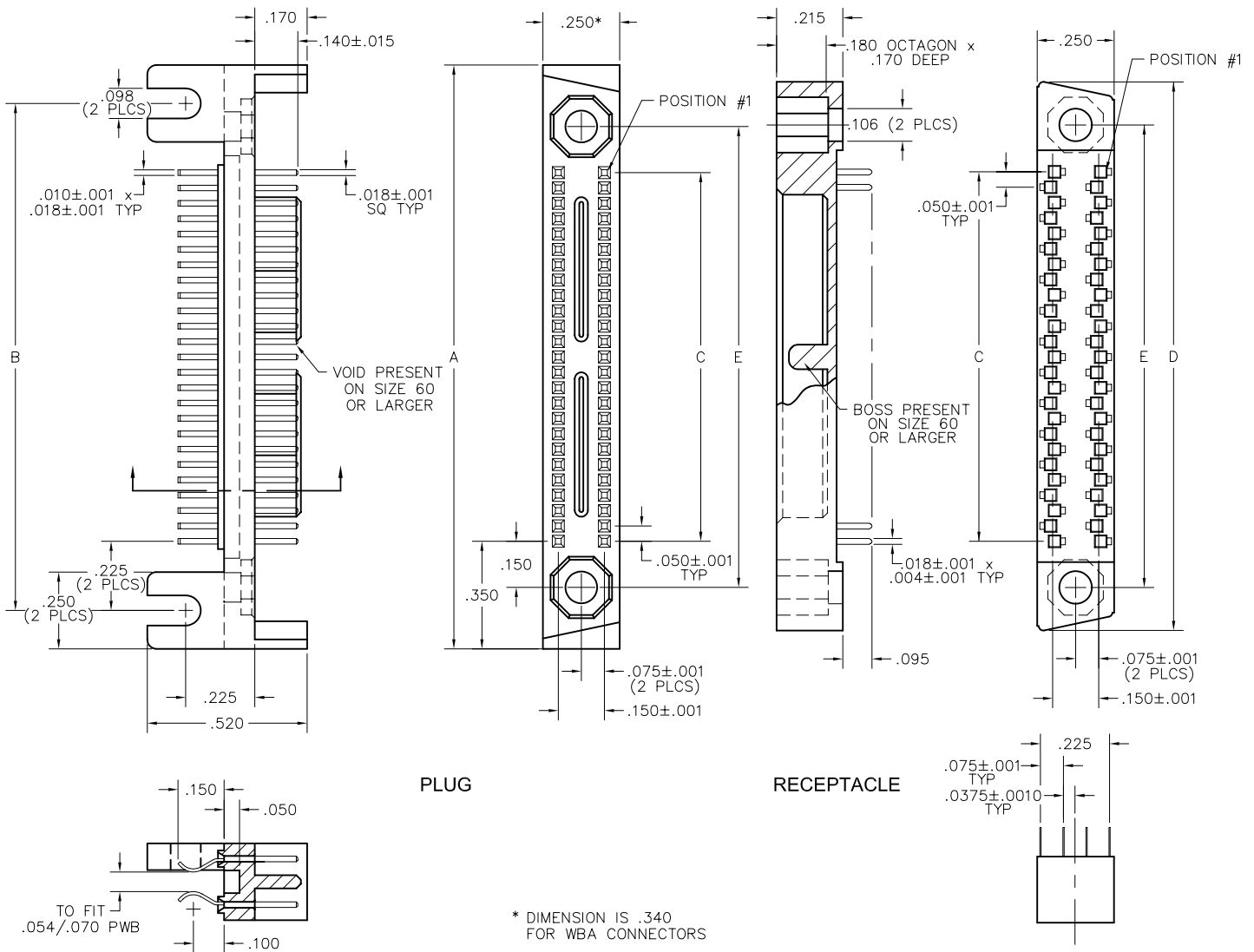
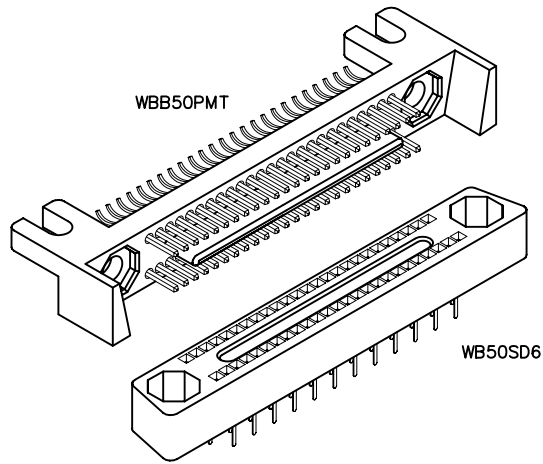
2 · ROW SMT Card to Chassis or Board

.050"

WBB - WB

WBA - WB

20 thru 132 Contacts



PLUG: WBB50PMT
 RECEPTACLE: WB50SD6
 XXXXXXXXXXXXX

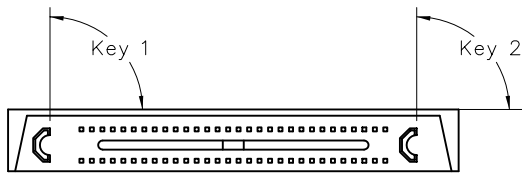
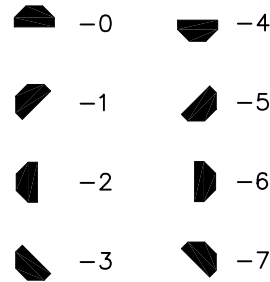
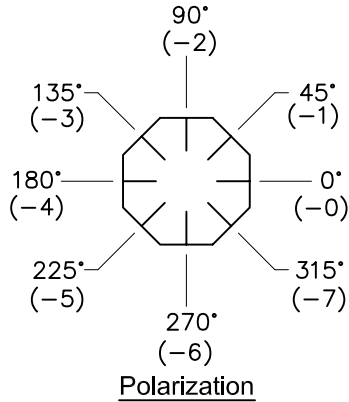
PLUG		RECEPTACLE	
SERIES			
WBB	2 row, SMT, plug, with mounting ears	WB	2 row, straight, receptacle, with mounting ears
WBA	2 row, SMT, plug, full skirt, with mounting ears		
SIZE			
20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 128, 132		20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 128, 132	
CONTACTS			
TYPE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

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

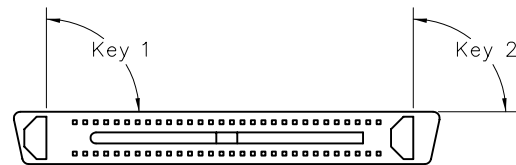
Hardware

Polarization

Integral Keying Guides



Example: WB**PR8K2-2
(Plug)



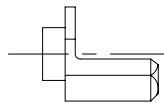
Example: WB**SD6K2-2
(Receptacle)

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:

Hardware Style: KY* - *



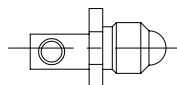
Stainless Steel Polarized Guide

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

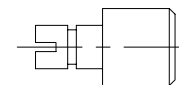


Fixed Jackscrew
(#4-40 UNC-2A)

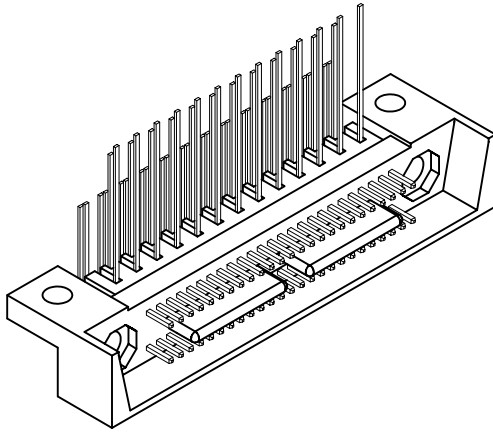
Hardware Style: JTFF (Receptacle only)



E-Ring



Turning Jacksocket



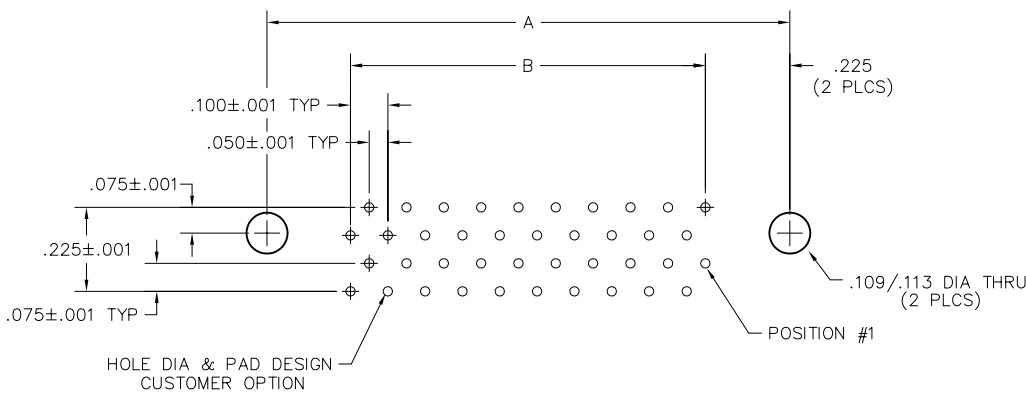
2 • ROW Right Angle PTH Plug

.050"

WB

20 thru 132 Contacts

Recommended
Board Layout



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	60	59 57	100	99 97
	20 18 16 14 12		33 31		53 51
30	9 7 5 3 1	70	60 58	110	100 98
	10 8 6 4 2		34 32		54 52
40	30 28 26 24 22 20 18 16	80	29 27	128	49 47
	15 13 11 9 7 5 3 1		3 1		3 1
50	14 12 10 8 6 4 2	90	30 28	132	50 48
	39 37		4 2		4 2
60	40 38	100	79 77	110	110 108
	19 17		3 1		58 56
70	20 18	110	80 78	128	109 107
	4 2		4 2		59 57
80	3 1	128	39 37	132	55 53
	4 2		4 2		54 52
90	4 2	132	3 1	110	67 65
	4 2		4 2		68 66
100	4 2	110	4 2	128	3 1
	4 2		4 2		4 2
110	4 2	128	4 2	132	4 2
	4 2		4 2		4 2
128	4 2	132	4 2	110	4 2
	4 2		4 2		4 2
132	4 2	110	4 2	128	4 2
	4 2		4 2		4 2



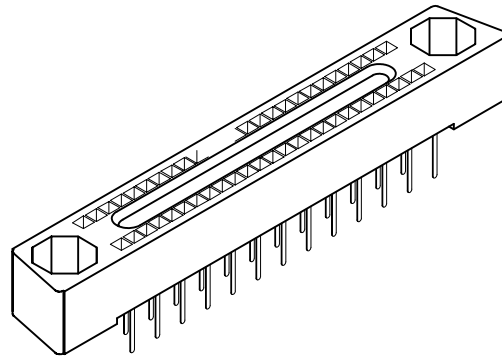
2 • ROW Straight PTH Rcpt

.050"

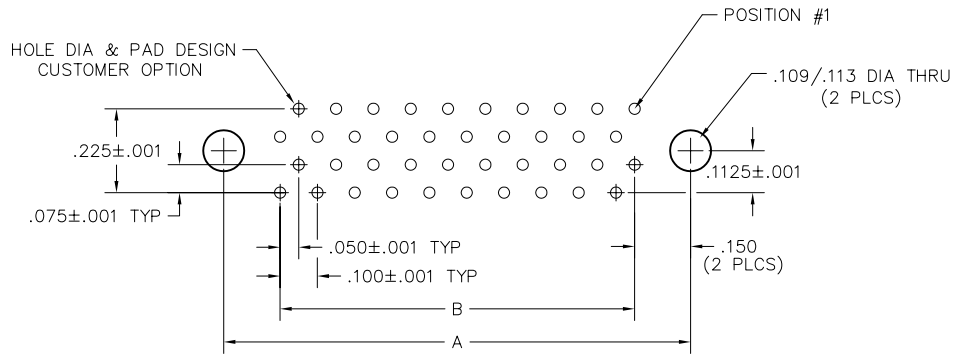
WB

20 thru 132 Contacts

Recommended
Board Layout



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		60		100	
30		70		110	
40		80		128	
50		90		132	

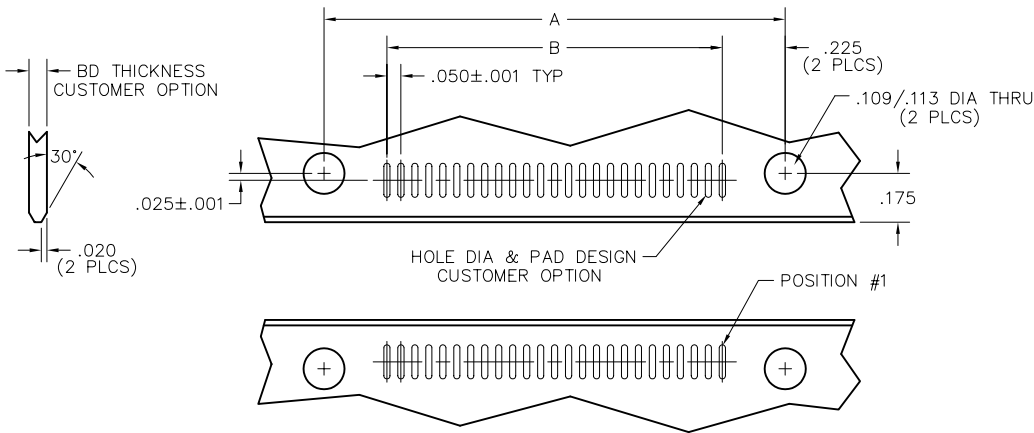
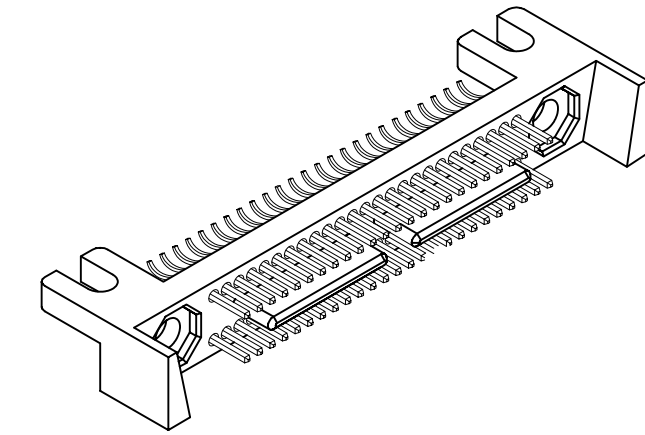
2 • ROW Straight SMT Plug

.050"

WBB, WBA

20 thru 132 Contacts

Recommended
Board Layout



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

STRAIGHT SMT PLUG

SIZE	CONTACT ID	SIZE	CONTACT ID	SIZE	CONTACT ID
20	C 20	60	C 60	100	C 100
	C 19		C 59		C 99
	C 18		C 58		C 98
	C 17				
	C 16				
	C 15				
	C 14				
	C 13				
	C 12				
	C 11				
30	C 30	70	C 70	110	C 110
	C 29		C 69		C 109
	C 28		C 68		C 108
40	C 40	80	C 80	128	C 128
	C 39		C 79		C 127
	C 38		C 78		C 126
50	C 50	90	C 90	132	C 132
	C 49		C 89		C 131
	C 48		C 88		C 130

Military Cross Reference Chart

MIL Number	WB Series	Size	Description
M55302/117-01	WB20PR8	20	Right angle plug, 3/4 skirt
M55302/117-02	WB30PR8	30	Right angle plug, 3/4 skirt
M55302/117-03	WB40PR8	40	Right angle plug, 3/4 skirt
M55302/117-04	WB50PR8	50	Right angle plug, 3/4 skirt
M55302/117-05	WB60PR8	60	Right angle plug, 3/4 skirt
M55302/117-06	WB70PR8	70	Right angle plug, 3/4 skirt
M55302/117-07	WB80PR8	80	Right angle plug, 3/4 skirt
M55302/117-08	WB90PR8	90	Right angle plug, 3/4 skirt
M55302/117-09	WB100PR8	100	Right angle plug, 3/4 skirt
M55302/117-10	WB110PR8	110	Right angle plug, 3/4 skirt
M55302/117-11	WB128PR8	128	Right angle plug, 3/4 skirt
M55302/118-01	WBB20PMT	20	Surface mount, no skirt
M55302/118-02	WBB30PMT	30	Surface mount, no skirt
M55302/118-03	WBB40PMT	40	Surface mount, no skirt
M55302/118-04	WBB50PMT	50	Surface mount, no skirt
M55302/118-05	WBB60PMT	60	Surface mount, no skirt
M55302/118-06	WBB70PMT	70	Surface mount, no skirt
M55302/118-07	WBB80PMT	80	Surface mount, no skirt
M55302/118-08	WBB90PMT	90	Surface mount, no skirt
M55302/118-09	WBB100PMT	100	Surface mount, no skirt
M55302/118-10	WBB110PMT	110	Surface mount, no skirt
M55302/118-11	WBB128PMT	128	Surface mount, no skirt
M55302/118-12	WBA20PMT	20	Surface mount, full skirt
M55302/118-13	WBA30PMT	30	Surface mount, full skirt
M55302/118-14	WBA40PMT	40	Surface mount, full skirt
M55302/118-15	WBA50PMT	50	Surface mount, full skirt
M55302/118-16	WBA60PMT	60	Surface mount, full skirt
M55302/118-17	WBA70PMT	70	Surface mount, full skirt
M55302/118-18	WBA80PMT	80	Surface mount, full skirt
M55302/118-19	WBA90PMT	90	Surface mount, full skirt
M55302/118-20	WBA100PMT	100	Surface mount, full skirt
M55302/118-21	WBA110PMT	110	Surface mount, full skirt
M55302/118-22	WBA128PMT	128	Surface mount, full skirt
M55302/119-01	WB20SD9/12	20	Receptacle, .140 and .190 lead length
M55302/119-02	WB30SD9/12	30	Receptacle, .140 and .190 lead length
M55302/119-03	WB40SD9/12	40	Receptacle, .140 and .190 lead length
M55302/119-04	WB50SD9/12	50	Receptacle, .140 and .190 lead length
M55302/119-05	WB60SD9/12	60	Receptacle, .140 and .190 lead length
M55302/119-06	WB70SD9/12	70	Receptacle, .140 and .190 lead length
M55302/119-07	WB80SD9/12	80	Receptacle, .140 and .190 lead length
M55302/119-08	WB90SD9/12	90	Receptacle, .140 and .190 lead length
M55302/119-09	WB100SD9/12	100	Receptacle, .140 and .190 lead length
M55302/119-10	WB110SD9/12	110	Receptacle, .140 and .190 lead length
M55302/119-11	WB128SD9/12	128	Receptacle, .140 and .190 lead length
M55302/119-12	WB100SD19	100	Receptacle, .300 lead length
M55302/119-13	WB110SD19	110	Receptacle, .300 lead length
M55302/119-14	WB128SD12	128	Receptacle, .190 lead length

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