

SERIES 89 NANOMINIATURE Dual-Row Rectangular Connectors



891-008 and 891-009 Right-Angle Mount Thru-Hole PCB Connectors

DUAL-ROW RECTANGULAR CONNECTORS



Right-Angle Mount Thru-Hole PCB Nano Connectors feature gold alloy TwistPin contacts. These nanominiature connectors offer premium performance and reliability for demanding applications. Available with female threads, or with jackscrews for use with printed circuits boards. Pre-Tinned PC Tails are coated with Sn63Pb37 or Sn60Pb40 tin-lead for excellent solderability.

Choose Aluminum, Titanium or Stainless Steel Shells. Twelve layouts from 9 to 91 contacts. Complies to the requirements of MIL-DTL-32139. These connectors are intermateable with any M32139 compliant connector or Glenair Series 891 Dual-Row metal shell nanominiature connector.

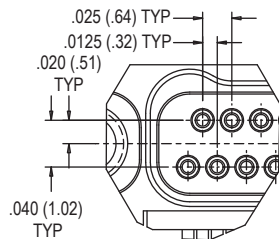
HOW TO ORDER												
Sample Part Number	<table border="1"> <tr> <td>891-009</td> <td>-25S</td> <td>A2</td> <td>-BRT</td> <td>1</td> <td>T</td> </tr> </table>						891-009	-25S	A2	-BRT	1	T
891-009	-25S	A2	-BRT	1	T							
Series	891-008 = Plug, Right-Angle PCB Connector 891-009 = Receptacle, Right-Angle PCB Connector											
Insert Arrangement/Contact Type	Pins (891-008 Plugs): 9P, 15P, 21P, 25P, 31P, 37P, 41P, 51P, 65P, 69P, 85P, 91P Sockets (891-009 Receptacles): 9S, 15S, 21S, 25S, 31S, 37S, 41S, 51S, 65S, 69S, 85S, 91S											
Shell Material and Finish	<table border="1"> <tr> <td>A1 = Aluminum Shell, Cadmium Plating</td> <td>A2 = Aluminum Shell, Electroless Nickel Plating</td> </tr> <tr> <td>A31 = Aluminum Shell, Zinc Nickel Plating, Black</td> <td>A33 = Aluminum Shell, Nickel PTFE Plating</td> </tr> <tr> <td>T = Titanium Shell, Unplated</td> <td>S = Stainless Steel Shell, Passivated</td> </tr> </table>						A1 = Aluminum Shell, Cadmium Plating	A2 = Aluminum Shell, Electroless Nickel Plating	A31 = Aluminum Shell, Zinc Nickel Plating, Black	A33 = Aluminum Shell, Nickel PTFE Plating	T = Titanium Shell, Unplated	S = Stainless Steel Shell, Passivated
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Termination Type	BRT = Board Right-Angle Thru-Hole											
PC Tail Length	1 = .110 (2.79) 2 = .172 (4.37) 3 = .140 (3.56)											
Hardware	J = Hex Head Jackscrew T = Female Thread (Stainless Steel Inserts installed in Aluminum Shells, tapped directly into Stainless Steel and Titanium Shells)											

PLUG HARDWARE		RECEPTACLE HARDWARE	
T - Female Thread	J - Jackscrew	T - Female Thread	J - Jackscrew

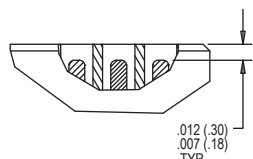
NOTES

- Inspect and test IAW MIL-DTL-32139
- Interface dimensions per MIL-DTL-32139/3 and /4
- Materials/finishes
 - Shell: see part number break down
 - Insulator: LCP/N/A
 - Contacts: gold alloy / unplated
 - Pre-tinned PC tails: coated with Sn63Pb37 or Sn60Pb40 tin-lead
 - Hardware: passivated stainless steel

DETAIL A



DETAIL B



PERFORMANCE SPECIFICATIONS

Contact Spacing: .025" (0.64) contact centers	Condition IV
Current Rating: 1 AMP maximum tested per EIA-364-70	Shock: 100 g's, IAW EIA-364-27, Condition G
DWV: 250 VAC RMS sea level, 100 VAC RMS 70,000 feet per EIA-364 Procedure 20	Durability: 200 mating cycles per test procedure EIA-364-09
Insulation Resistance: 5000 Megohms minimum test voltage 100 VDC, per EIA-364 Procedure 21	Corrosion Resistance: 48 hours salt spray IAW EIA-364-26, Condition B
Operating Temperature: -55° C. to +125° C.	Humidity: 240 hours, IAW EIA-364-31, Test Condition B
Contact Resistance: 71 millivolt drop maximum, 1 AMP current, any catalog supported wire type	Contact Engaging/Separation Force: 5 ounce maximum, 0.4 ounce minimum
Vibration: 20 g's, IAW EIA-364-28,	Thermal Vacuum Outgassing: Total mass loss (TML) 1.0% max., volatile condensable material (VCM) 0.1% max. IAW ASTM E595

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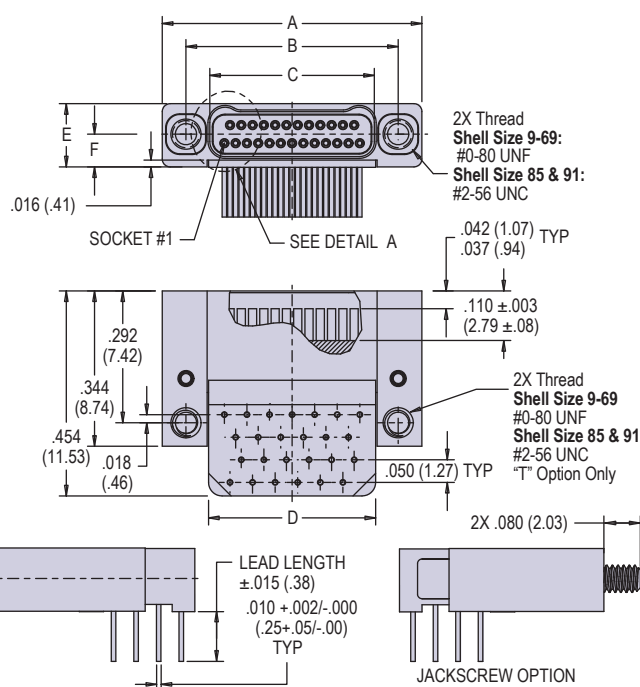
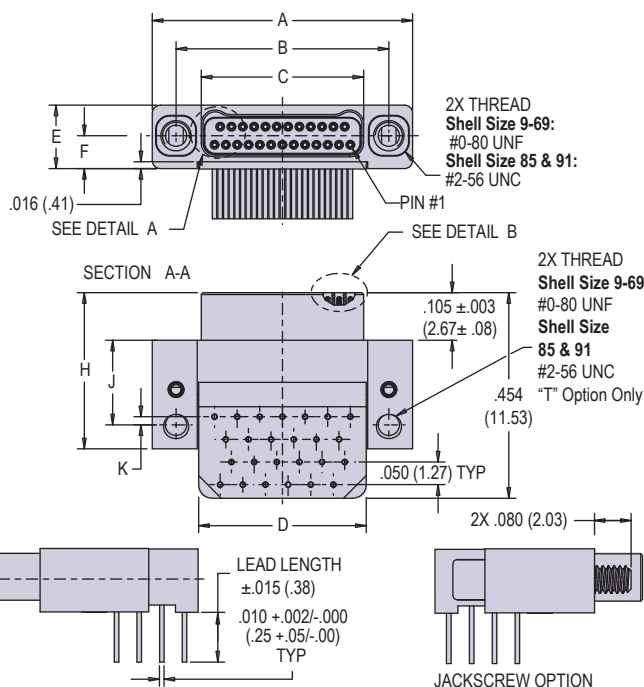


891-008 and 891-009 Right-Angle Mount Thru-Hole PCB Connectors

DIMENSIONS

891-008 Plug (Pin) Connector

891-009 Plug (Socket) Connector



Shell Size	A	B BSC.	C BSC.	D	E	F	H	J	K
9P	.375 (9.52)	.270 (6.86)	.160 (4.06)	.170 (4.32)	.140 (3.56)	.0725 (1.84)	.344 (8.74)	.187 (4.75)	.018 (0.46)
9S	.375 (9.52)	.270 (6.86)	.163 (4.14)	.170 (4.32)	.140 (3.56)	.0725 (1.84)	--	--	--
15P	.450 (11.43)	.345 (8.76)	.235 (5.97)	.245 (6.22)	.140 (3.56)	.0725 (1.84)	.344 (8.74)	.187 (4.75)	.018 (0.46)
15S	.450 (11.43)	.345 (8.76)	.238 (6.05)	.245 (6.22)	.140 (3.56)	.0725 (1.84)	--	--	--
21P	.525 (13.34)	.420 (10.67)	.310 (7.87)	.320 (8.13)	.140 (3.56)	.0725 (1.84)	.344 (8.74)	.187 (4.75)	.018 (0.46)
21S	.525 (13.34)	.420 (10.67)	.313 (7.95)	.320 (8.13)	.140 (3.56)	.0725 (1.84)	--	--	--
25P	.575 (14.60)	.470 (11.94)	.360 (9.14)	.370 (9.40)	.140 (3.56)	.0725 (1.84)	.344 (8.74)	.187 (4.75)	.018 (0.46)
25S	.575 (14.60)	.470 (11.94)	.363 (9.22)	.370 (9.40)	.140 (3.56)	.0725 (1.84)	--	--	--
31P	.650 (16.51)	.545 (13.84)	.435 (11.05)	.445 (11.30)	.140 (3.56)	.0725 (1.84)	.344 (8.74)	.187 (4.75)	.018 (0.46)
31S	.650 (16.51)	.545 (13.84)	.438 (11.13)	.445 (11.30)	.140 (3.56)	.0725 (1.84)	--	--	--
37P	.725 (18.42)	.620 (15.75)	.510 (12.95)	.520 (13.21)	.140 (3.56)	.0725 (1.84)	.344 (8.74)	.187 (4.75)	.018 (0.46)
37S	.725 (18.42)	.620 (15.75)	.513 (13.03)	.520 (13.21)	.140 (3.56)	.0725 (1.84)	--	--	--
41P	.775 (19.68)	.670 (17.02)	.560 (14.22)	.570 (14.48)	.140 (3.56)	.0725 (1.84)	.344 (8.74)	.187 (4.75)	.018 (0.46)
41S	.775 (19.68)	.670 (17.02)	.563 (14.30)	.570 (14.48)	.140 (3.56)	.0725 (1.84)	--	--	--
51P	.900 (22.86)	.795 (20.19)	.685 (17.40)	.695 (17.65)	.140 (3.56)	.0725 (1.84)	.344 (8.74)	.187 (4.75)	.018 (0.46)
51S	.900 (22.86)	.795 (20.19)	.688 (17.48)	.695 (17.65)	.140 (3.56)	.0725 (1.84)	--	--	--
65P	1.075 (27.30)	.970 (24.64)	.860 (21.84)	.870 (22.10)	.140 (3.56)	.0725 (1.84)	.344 (8.74)	.187 (4.75)	.018 (0.46)
65S	1.075 (27.30)	.970 (24.64)	.863 (21.92)	.870 (22.10)	.140 (3.56)	.0725 (1.84)	--	--	--
69P	1.125 (28.58)	1.020 (25.91)	.910 (23.11)	.920 (23.37)	.140 (3.56)	.0725 (1.84)	.344 (8.74)	.187 (4.75)	.018 (0.46)
69S	1.125 (28.58)	1.020 (25.91)	.913 (23.19)	.920 (23.37)	.140 (3.56)	.0725 (1.84)	--	--	--
85P	1.377 (34.98)	1.246 (31.65)	1.110 (28.19)	1.120 (28.45)	.165 (4.19)	.0850 (2.16)	.410 (10.41)	.244 (6.20)	.075 (1.90)
85S	1.377 (34.98)	1.246 (31.65)	1.113 (28.27)	1.120 (28.45)	.165 (4.19)	.0850 (2.16)	--	--	--
91P	1.452 (36.88)	1.321 (33.55)	1.185 (30.10)	1.195 (30.35)	.165 (4.19)	.0850 (2.16)	.410 (10.41)	.244 (6.20)	.075 (1.90)
91S	1.452 (36.88)	1.321 (33.55)	1.188 (30.18)	1.195 (30.35)	.165 (4.19)	.0850 (2.16)	--	--	--

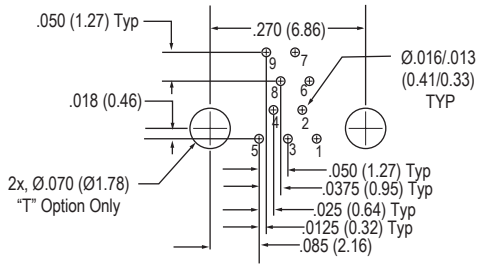
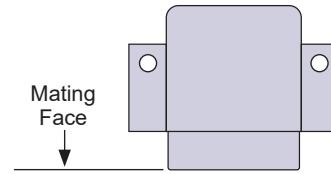
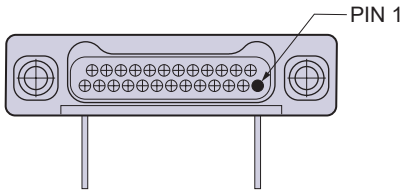
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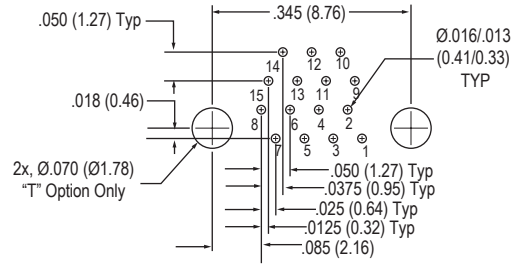


891-008 Right-Angle Mount Thru-Hole PCB Connectors - PCB Plug Footprint

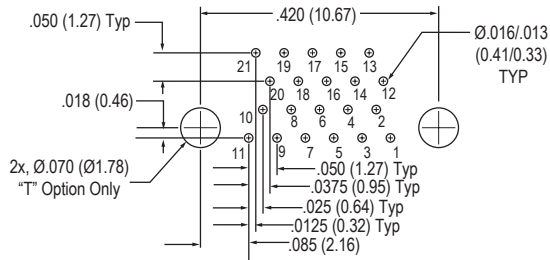
DUAL-ROW RECTANGULAR CONNECTORS



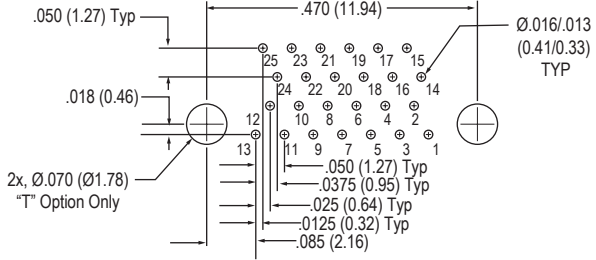
9 Contacts



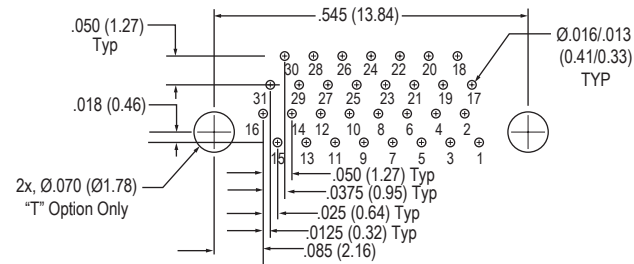
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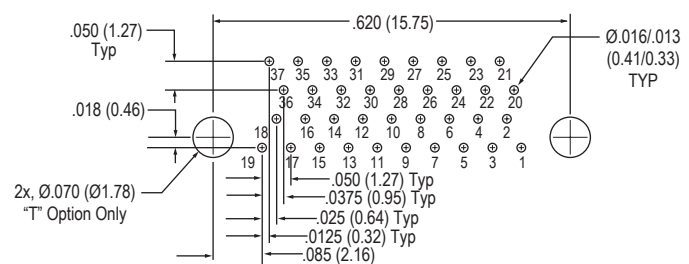
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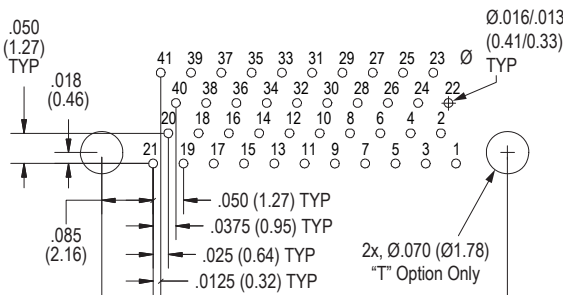
25 Contacts



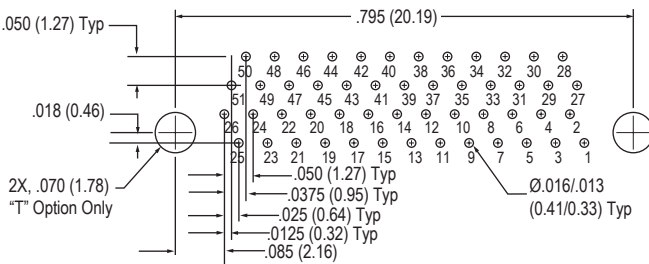
31 Contacts



37 Contacts



41 Contacts



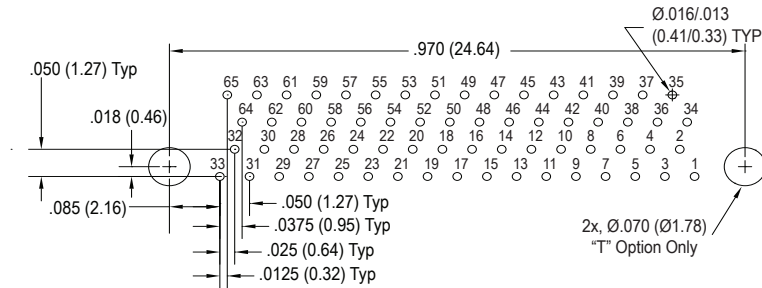
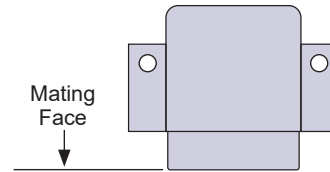
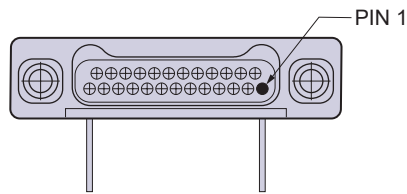
51 Contacts

Layouts shown are for connector mounting side of PC Board.

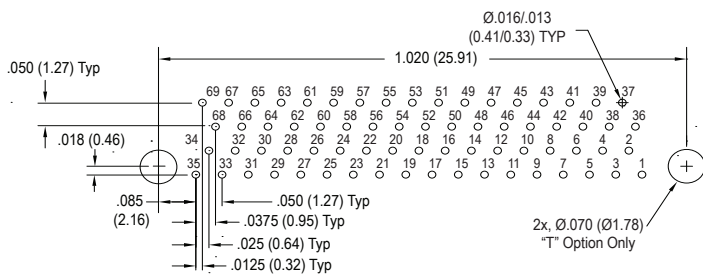
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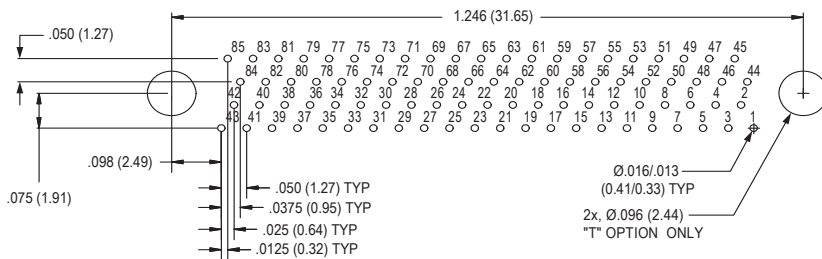
891-008 Right-Angle Mount Thru-Hole PCB Connectors - PCB Plug Footprint



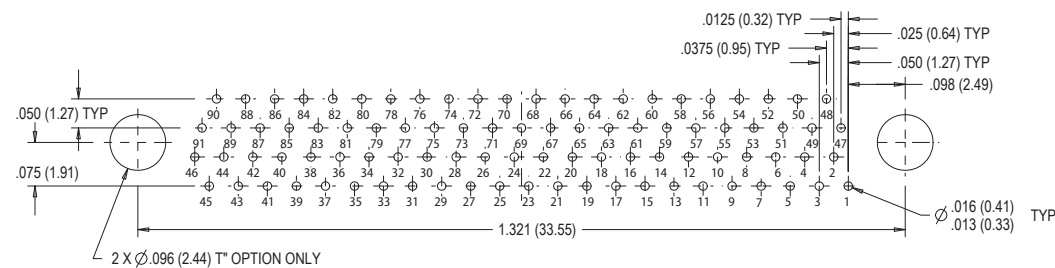
65 Contacts



69 Contacts



85 Contacts



91 Contacts

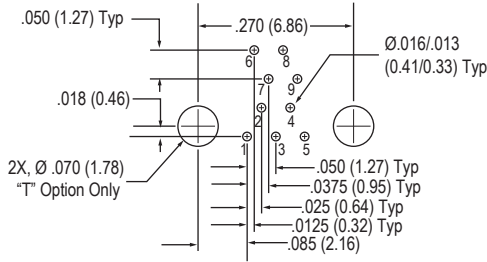
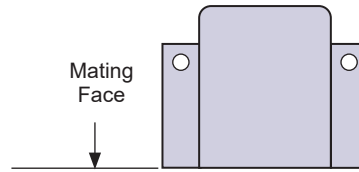
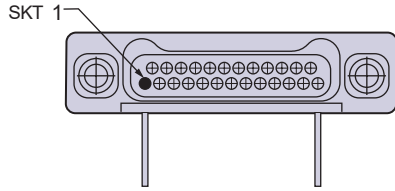
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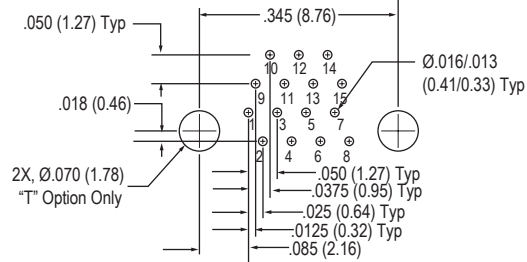


891-009 Right-Angle Mount Thru-Hole PCB Connectors - PCB Receptacle Footprint

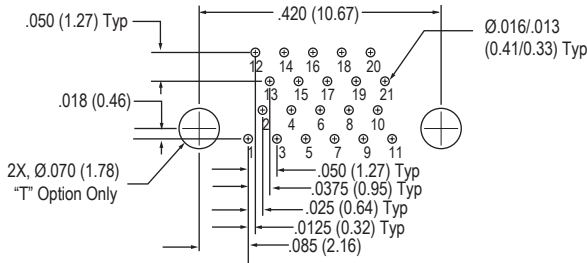
DUAL-ROW RECTANGULAR CONNECTORS



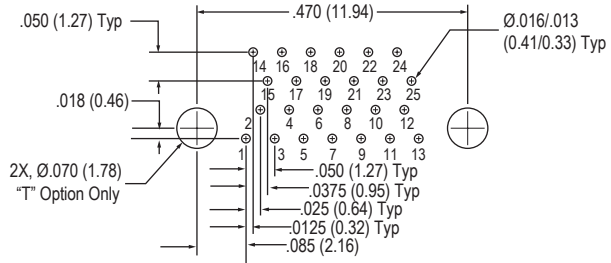
9 Contacts



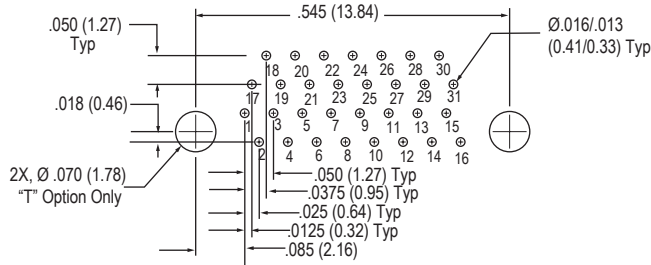
15 Contacts



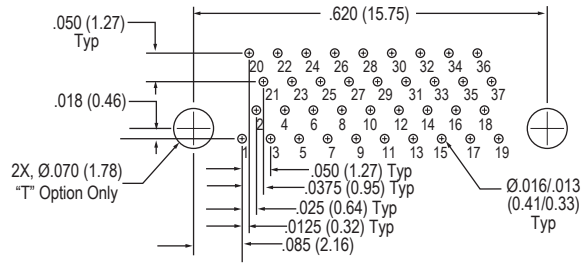
21 Contacts



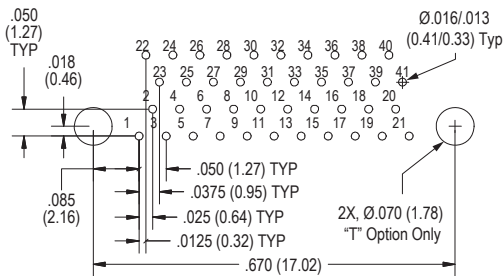
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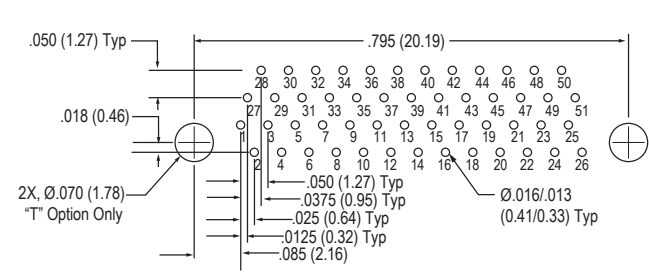
31 Contacts



37 Contacts



41 Contacts



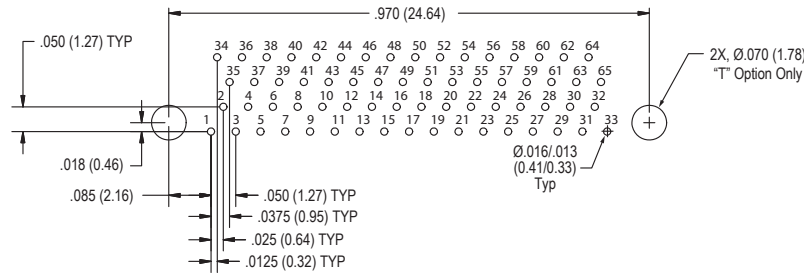
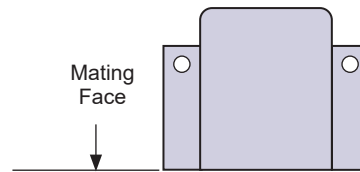
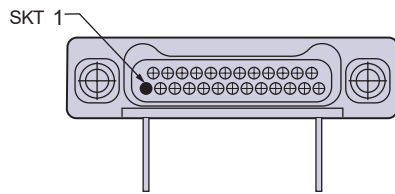
51 Contacts

Layouts shown are for connector mounting side of PC Board.

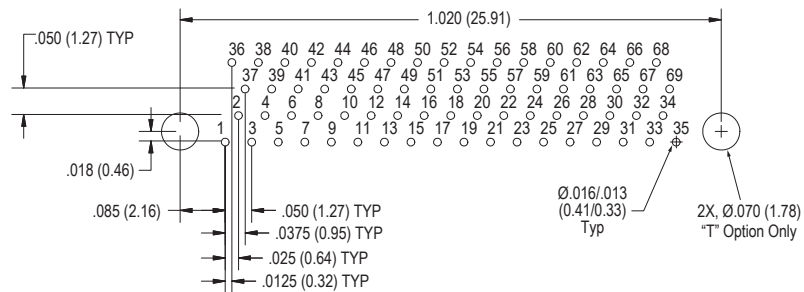
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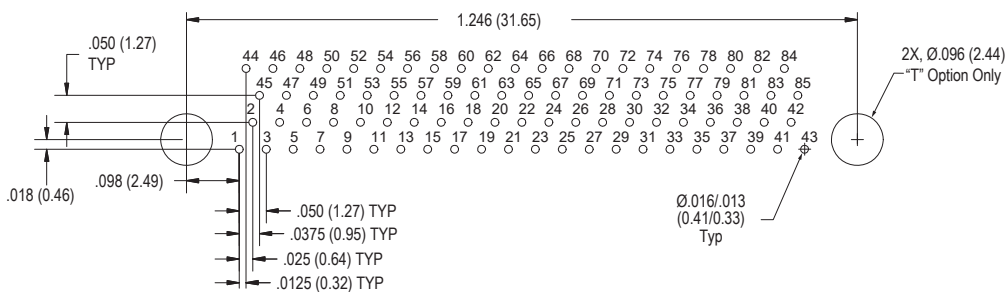
891-009 Right-Angle Mount Thru-Hole PCB Connectors - PCB Receptacle Footprint



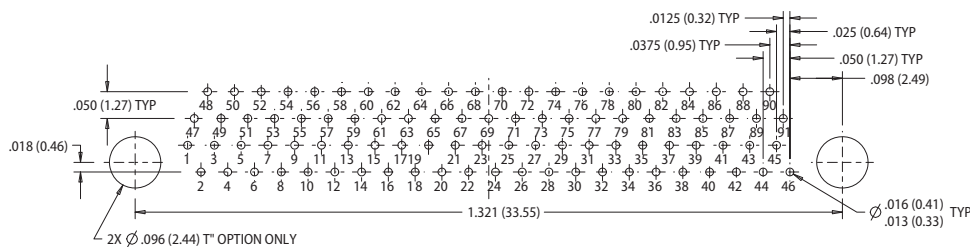
65 Contacts



69 Contacts



85 Contacts



91 Contacts

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