

SERIES 89 NANOMINIATURE Dual-Row Rectangular Connectors



891-027 and 891-028 Rear Panel Mount, Gasket-Sealed, Right-Angle Thru-Hole PCB Connector

DUAL-ROW RECTANGULAR CONNECTORS



Rear Panel Mount Right-Angle Thru-Hole Connectors feature gold alloy TwistPin contacts, offering premium performance and reliability for demanding applications. Available with female threads.

Gasket Seals fluorosilicone, Cho-Seal 1298 and Cho-Seal 6503 available. For replacement gaskets see 899-015.

Choose Titanium or Stainless Steel Shells in twelve layouts from 9 to 91 contacts. Intermateable with any MIL-DTL-32139 type connector or corresponding Glenair Series 891 Dual-Row metal shell nanominiature connector.

Pre-Tinned PC Tails are coated with Sn63Pb37 or Sn60Pb40 tin-lead for excellent solderability.

HOW TO ORDER

Sample Part Number	891-027	-25P	S	-BRT	1	T	-01	M
Series	891-027 = Rear Panel Mount Plug, Right-Angle Thru-Hole 891-028 = Rear Panel Mount Receptacle, Right-Angle Thru-Hole							
Insert Arrangement/Contact Type	Pins (891-027 Plug): 9P, 15P, 21P, 25P, 31P, 37P, 41P, 51P, 65P, 69P, 85P, 91P Sockets (891-028 Receptacle): 9S, 15S, 21S, 25S, 31S, 37S, 41S, 51S, 65S, 69S, 85S, 91S							
Shell Material and Finish	T = Titanium Shell, Unplated S = Stainless Steel Shell, Passivated							
Termination Type	BRT = Board Right-Angle Thru-Hole							
PC Tail Length	1 = .110 (2.79) 2 = .172 (4.37) 3 = .140 (3.56)							
Hardware Option	T = Female Threads (#0-80 for size 9-69, #2-56 for size 85 & 91)							
Gasket Material	Omit for No Gasket 01 = Fluorosilicone IAW MIL-DTL25988 Type II, Class I, Grade 60 02 = Passivated Silver Plated Aluminum Filled Fluorosilicone IAW MIL-DTL-83528, Type D (Cho-Seal 1298 or Equivalent) 03 = Nickel Plated Aluminum Filled Fluorosilicone, (Cho-Seal 6503 or Equivalent)							
Mounting Thread Option	Omit for #2-56 UNC-2B M = M2X0.4 6H							

PLUG HARDWARE



T - Female Thread

RECEPTACLE HARDWARE

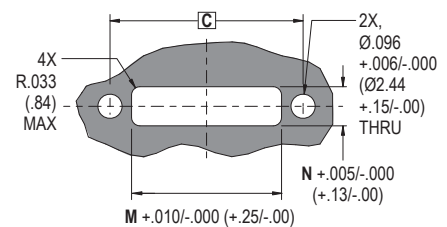


T - Female Thread

PERFORMANCE SPECIFICATIONS

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

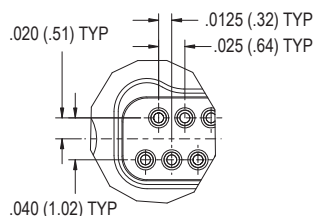
PANEL CUT-OUT DIMENSIONS



Shell Size	C	M	N
9	.566 (14.38)	.395 (10.03)	.155 (3.94)
15	.641 (16.28)	.470 (11.94)	.155 (3.94)
21	.716 (18.19)	.545 (13.84)	.155 (3.94)
25	.766 (19.46)	.595 (15.11)	.155 (3.94)
31	.841 (21.36)	.670 (17.02)	.155 (3.94)
37	.916 (23.27)	.745 (18.92)	.155 (3.94)
41	.966 (24.54)	.795 (20.19)	.155 (3.94)
51	1.091 (27.71)	.920 (23.37)	.155 (3.94)
65	1.266 (32.16)	1.095 (27.81)	.155 (3.94)
69	1.316 (33.43)	1.145 (29.08)	.155 (3.94)
85	1.568 (39.83)	1.397 (35.48)	.180 (4.57)
91	1.643 (41.73)	1.472 (37.39)	.180 (4.57)

Recommended Panel thickness .100 (2.54) max

DETAIL A



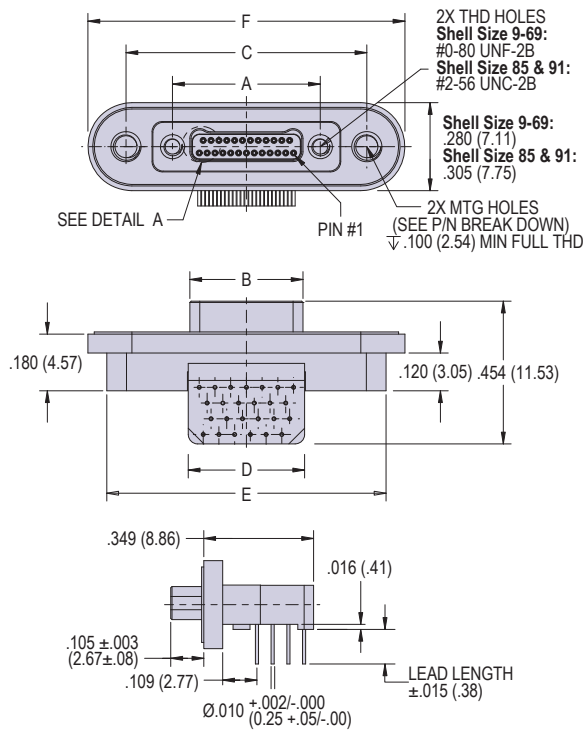
SERIES 89 NANOMINIATURE Dual-Row Rectangular Connectors



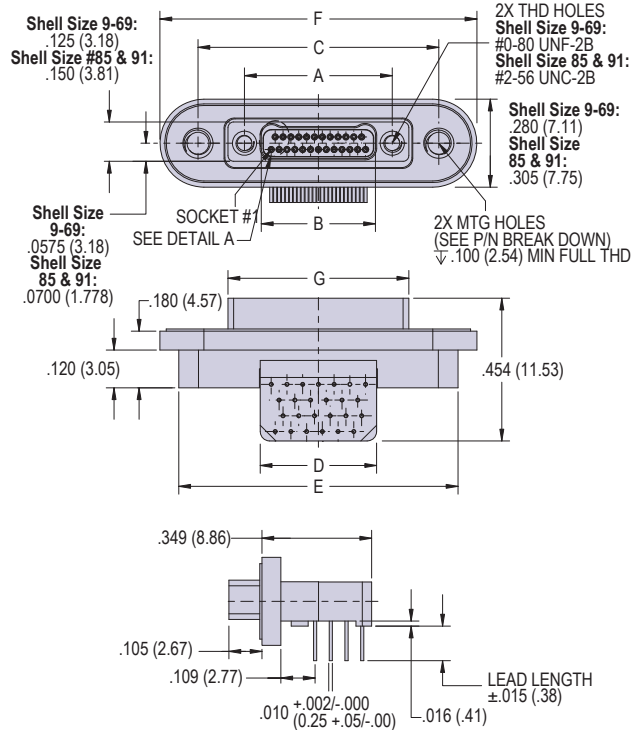
891-027 and 891-028 Rear Panel Mount, Gasket-Sealed, Right-Angle Thru-Hole PCB Connector

DIMENSIONS

891-027 Plug (Pin) Connectors



891-028 Receptacle (Socket) Connectors



Layout	A BSC.	B BSC.	C BSC.	D	E	F	G
9P	.270 (6.86)	.160 (4.06)	.566 (14.38)	.170 (4.32)	.688 (17.48)	.808 (20.52)	--
9S	.270 (6.86)	.163 (4.14)	.566 (14.38)	.170 (4.32)	.688 (17.48)	.808 (20.52)	.375 (9.52)
15P	.345 (8.76)	.235 (5.97)	.641 (16.28)	.245 (6.22)	.763 (19.38)	.883 (22.43)	--
15S	.345 (8.76)	.238 (6.05)	.641 (16.28)	.245 (6.22)	.763 (19.38)	.883 (22.43)	.450 (11.43)
21P	.420 (10.67)	.310 (7.87)	.716 (18.19)	.320 (8.13)	.838 (21.29)	.958 (24.33)	--
21S	.420 (10.67)	.313 (7.95)	.716 (18.19)	.320 (8.13)	.838 (21.29)	.958 (24.33)	.525 (13.34)
25P	.470 (11.94)	.360 (9.14)	.766 (19.46)	.370 (9.40)	.888 (22.56)	1.008 (25.60)	--
25S	.470 (11.94)	.363 (9.22)	.766 (19.46)	.370 (9.40)	.888 (22.56)	1.008 (25.60)	.575 (14.60)
31P	.545 (13.84)	.435 (11.05)	.841 (21.36)	.445 (11.30)	.963 (24.46)	1.083 (27.51)	--
31S	.545 (13.84)	.438 (11.13)	.841 (21.36)	.445 (11.30)	.963 (24.46)	1.083 (27.51)	.650 (16.51)
37P	.620 (15.75)	.510 (12.95)	.916 (23.27)	.520 (13.21)	1.038 (26.37)	1.158 (29.41)	--
37S	.620 (15.75)	.513 (13.03)	.916 (23.27)	.520 (13.21)	1.038 (26.37)	1.158 (29.41)	.725 (18.42)
41P	.670 (17.02)	.560 (14.22)	.966 (24.54)	.570 (14.48)	1.088 (27.64)	1.208 (30.68)	--
41S	.670 (17.02)	.563 (14.30)	.966 (24.54)	.570 (14.48)	1.088 (27.64)	1.208 (30.68)	.775 (19.68)
51P	.795 (20.19)	.685 (17.40)	1.091 (27.71)	.695 (17.65)	1.213 (30.81)	1.333 (33.86)	--
51S	.795 (20.19)	.688 (17.48)	1.091 (27.71)	.695 (17.65)	1.213 (30.81)	1.333 (33.86)	.900 (22.86)
65P	.970 (24.64)	.860 (21.84)	1.266 (32.16)	.870 (22.10)	1.388 (35.26)	1.508 (38.30)	--
65S	.970 (24.64)	.863 (21.92)	1.266 (32.16)	.870 (22.10)	1.388 (35.26)	1.508 (38.30)	1.075 (27.30)
69P	1.020 (25.91)	.910 (23.11)	1.316 (33.43)	.920 (23.37)	1.438 (36.53)	1.558 (39.57)	--
69S	1.020 (25.91)	.913 (23.19)	1.316 (33.43)	.920 (23.37)	1.438 (36.53)	1.558 (39.57)	1.125 (28.58)
85P	1.246 (31.65)	1.110 (28.19)	1.568 (39.83)	1.120 (28.45)	1.690 (42.93)	1.810 (45.97)	--
85S	1.246 (31.65)	1.113 (28.27)	1.568 (39.83)	1.120 (28.45)	1.690 (42.93)	1.810 (45.97)	1.377 (34.98)
91P	1.321 (33.55)	1.185 (30.10)	1.643 (41.73)	1.195 (30.35)	1.765 (44.83)	1.885 (47.88)	--
91S	1.321 (33.55)	1.188 (30.18)	1.643 (41.73)	1.195 (30.35)	1.765 (44.83)	1.885 (47.88)	1.452 (36.88)

NOTES

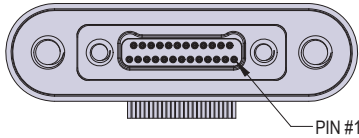
- Material and Finish:
 - Shell: see part number break down
 - Insulator: LCP/N/A
 - Contacts: gold alloy / unplated
 - Pre-tinned PC tails: Coated with Sn63Pb37 or Sn60Pb40 tin-lead
- Inspect and test IAW MIL-DTL-32139
- Interface dimensions per MIL-DTL-32139/3 and /4
- Panel cutout is sized to allow connector mounting with either lobes up or down orientation
- Recommended panel thickness .100 max
- See 899-015 for replacement gaskets

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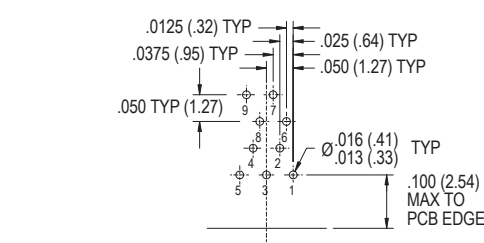
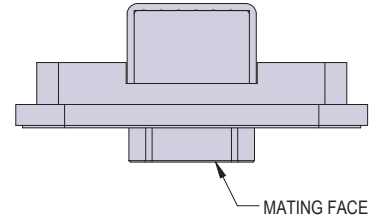


891-027 Rear Panel Mount, Gasket-Sealed, Right-Angle Thru-Hole PCB - PCB Plug Footprint

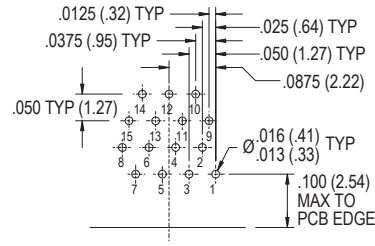
DUAL-ROW RECTANGULAR CONNECTORS



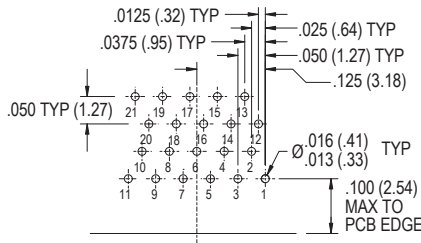
Right-angle plug (pin) connector layout patterns shown are for the connector mounting side of PC board



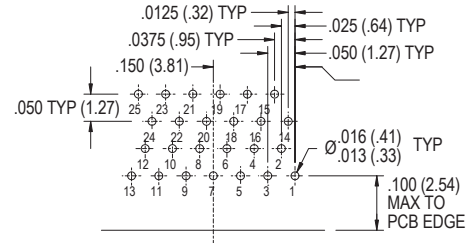
9 Contacts



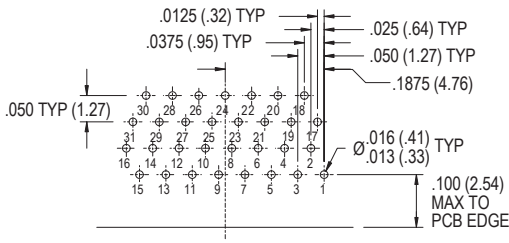
15 Contacts



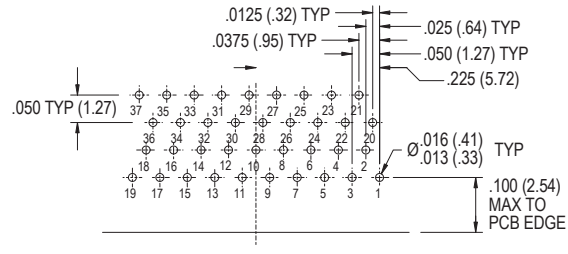
21 Contacts



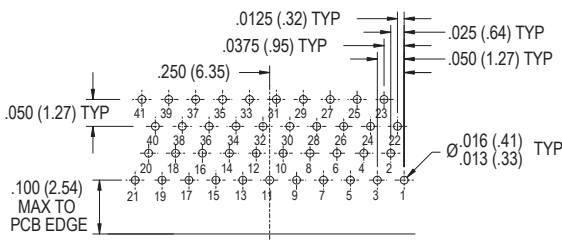
25 Contacts



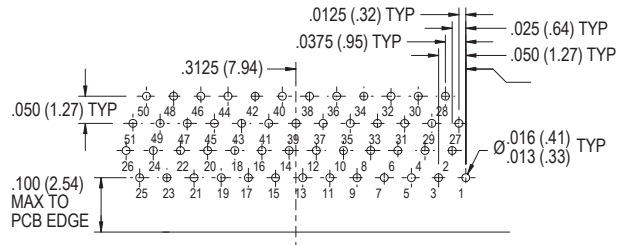
31 Contacts



37 Contacts



41 Contacts



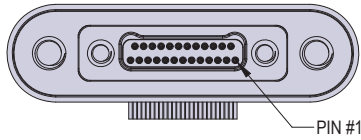
51 Contacts

Layouts shown are for connector mounting side of PC Board.

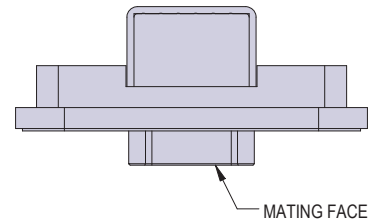
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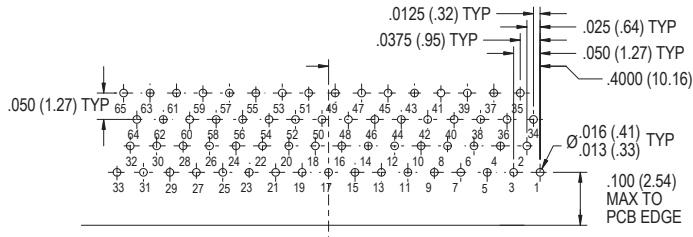
891-027 Rear Panel Mount, Gasket-Sealed, Right-Angle Thru-Hole PCB - PCB Plug Footprint



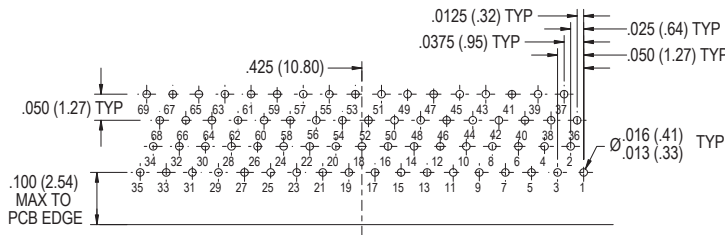
Right-angle plug (pin) connector layout patterns shown are for the connector mounting side of PC board



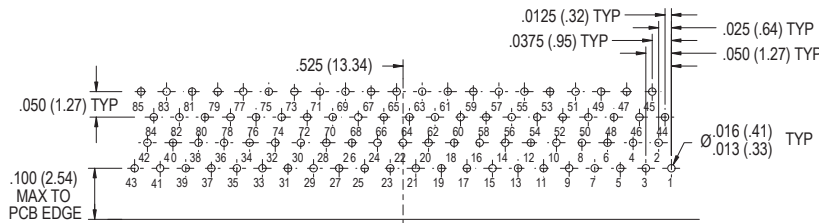
DUAL-ROW RECTANGULAR CONNECTORS



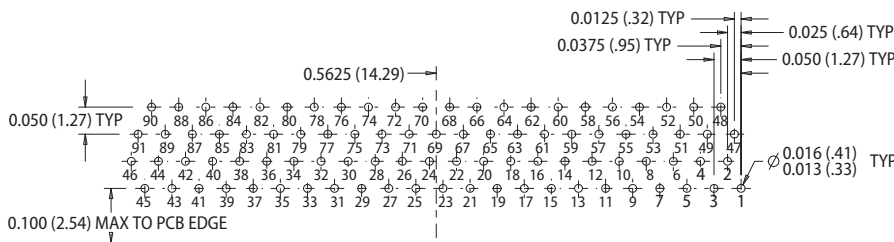
65 Contacts



69 Contacts



85 Contacts



91 Contacts

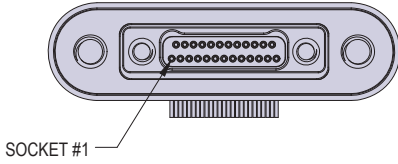
Layouts shown are for connector mounting side of PC Board.

SERIES 89 NANOMINIATURE Dual-Row Rectangular Connectors

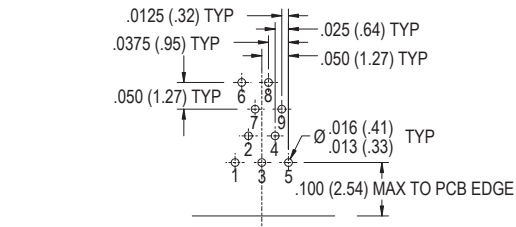
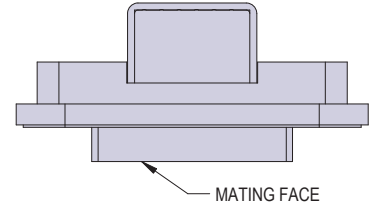


891-028 Rear Panel Mount, Gasket-Sealed, Right-Angle Thru-Hole PCB - PCB Receptacle Footprint

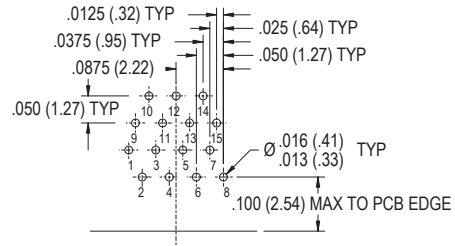
DUAL-ROW RECTANGULAR CONNECTORS



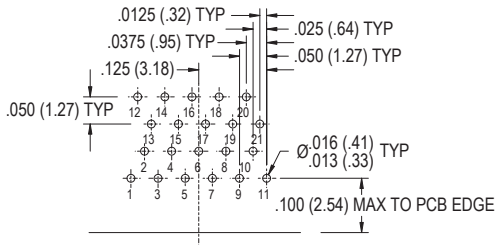
Right-angle receptacle (socket) connector layout patterns shown are for the connector mounting side of PC board



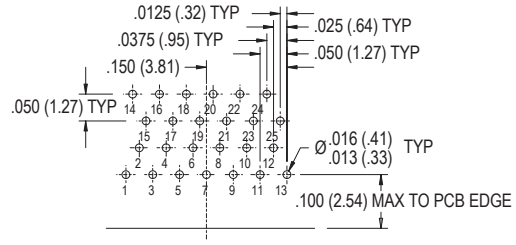
9 Contacts



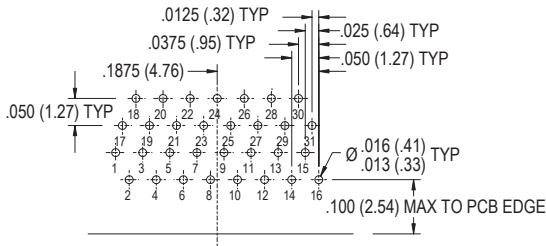
15 Contacts



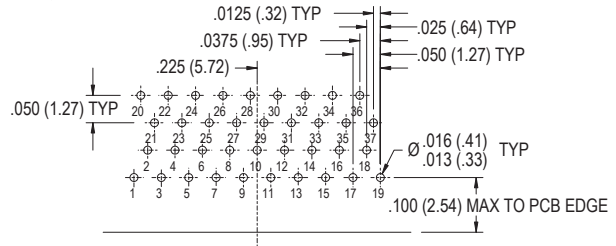
21 Contacts



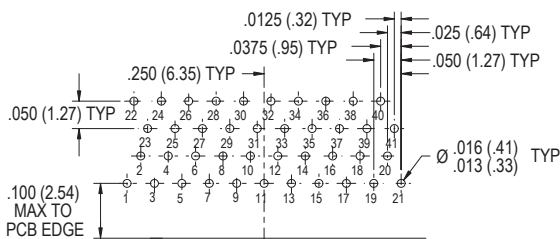
25 Contacts



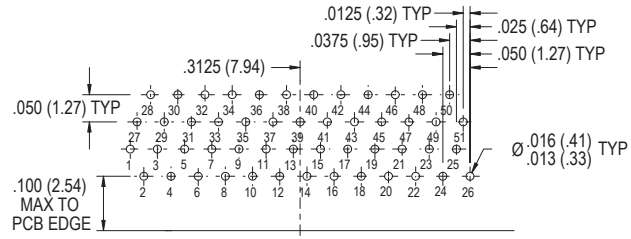
31 Contacts



37 Contacts



41 Contacts



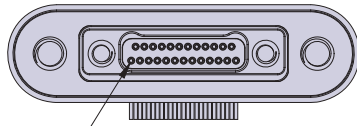
51 Contacts

Layouts shown are for connector mounting side of PC Board.

SERIES 89 NANOMINIATURE Dual-Row Rectangular Connectors

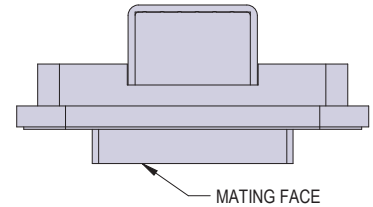


891-028 Rear Panel Mount, Gasket-Sealed, Right-Angle Thru-Hole PCB - PCB Receptacle Footprint



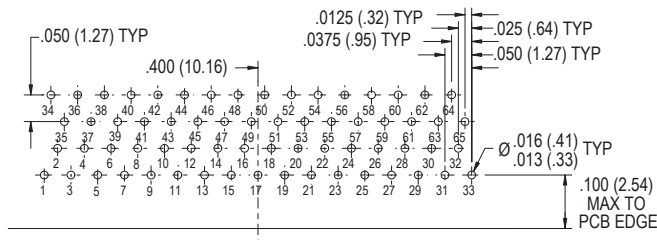
SOCKET #1

Right-angle receptacle (socket) connector layout patterns shown are for the connector mounting side of PC board

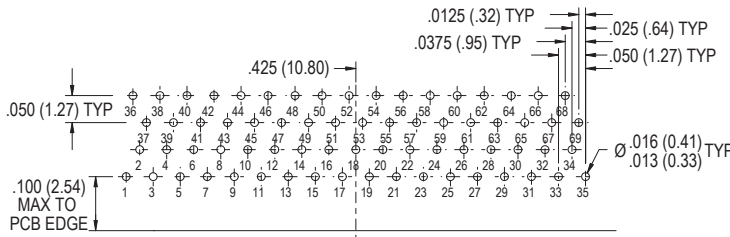


MATING FACE

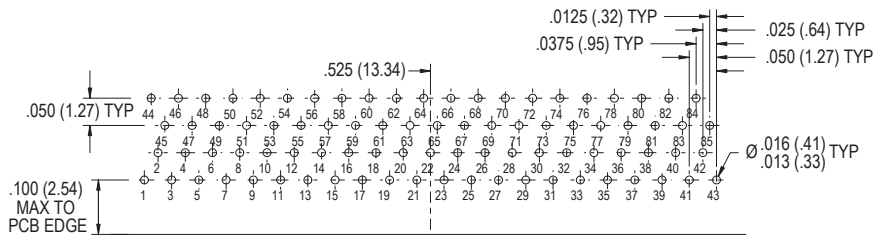
DUAL-ROW RECTANGULAR CONNECTORS



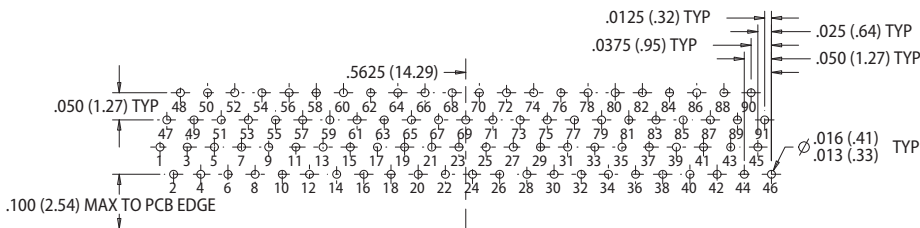
65 Contacts



69 Contacts



85 Contacts



91 Contacts

Layouts shown are for connector mounting side of PC Board.