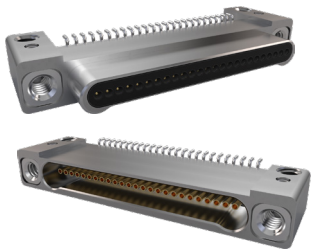


SERIES 89 NANOMINIATURE Single-Row Rectangular Connectors



890-012 and 890-013 Right-Angle, Surface Mount PCB Connectors

SINGLE-ROW RECTANGULAR CONNECTORS



Right-Angle SMT PCB Nano Connectors feature gold alloy TwistPin contacts. These nanominiature connectors offer premium performance and reliability for demanding applications. Available with #0-80 female mounting threads. Pre-Tinned PC Tails are coated with Sn60Pb40 or Sn63Pb37 tin-lead for excellent solderability.

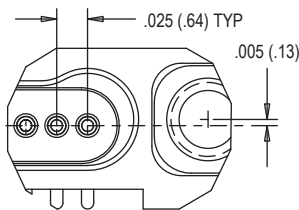
Choose Aluminum, Titanium or Stainless Steel Shells in eight layouts from 5 to 51 contacts. Complies to the requirements of MIL-DTL-32139. These connectors are intermateable with any corresponding Glenair Series 890 single row metal shell nanominiature connector.

HOW TO ORDER					
Sample Part Number	890-012	-25P	A2	-BRS	T
Series	890-012 = Plug, Pin Contacts, Single Row, Right-Angle SMT Nanominiature 890-013 = Receptacle, Socket Contacts, Single Row, Right-Angle SMT Nanominiature				
Insert Arrangement/ Contact Type	Plugs (890-012): 5P, 9P, 15P, 21P, 25P, 31P, 37P, 51P , Receptacles (890-013): 5S, 9S, 15S, 21S, 25S, 31S, 37S, 51S				
Shell Material and Finish	A1 = Aluminum Shell, Cadmium Plating A31 = Aluminum Shell, Zinc Nickel Plating, Black S = Stainless Steel Shell, Passivated		A2 = Aluminum Shell, Electroless Nickel Plating A33 = Aluminum Shell, Nickel PTFE Plating T = Titanium Shell, Unplated		
Termination Type	BRS = Board Right-Angle Surface Mount				
Hardware	T = Female Thread, #0-80 (Stainless steel inserts installed in aluminum shells, tapped directly into stainless steel and titanium shells)				



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

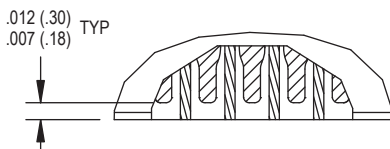
DETAIL A



NOTES

- Material and finish:
 - Shell: see part number breakdown
 - Insulator: LCP N/A
 - Contacts: gold alloy/unplated
 - Pre-tinned PC tails: coated with Sn63Pb37 or Sn60Pb40 tin-lead
 - Hardware: stainless steel, passivated
- Inspect and Test IAW MIL-DTL-32139
- Interface dimensions per MIL-DTL-32139/1 and MIL-DTL-32139/2

DETAIL B



SERIES 89 NANOMINIATURE Single-Row Rectangular Connectors



890-012 and 890-013 Right-Angle, Surface Mount PCB Connectors

DIMENSIONS			
890-012 Plug (Pin) Connectors		890-013 Receptacle (Socket) Connectors	
<p>Technical drawing of 890-012 Plug (Pin) Connectors. Dimensions include: B (overall width), $.010 + .002 / -.000$ (TYP) $(.25 + .05 / -.00)$ (pitch), $.051$ (1.30) TYP (height), $.187$ (4.75) (height), $.345$ (8.76) (height), $.105 \pm .003$ (2.67 \pm .08) (height), $.225$ (5.72) (height), A (overall length), B (pitch length), C (pitch length), $.0725$ (1.84) (height), $.130$ (3.30) (height), $.016$ (.41) (height), $2X \#0-80$ UNF-2B (mounting holes), PIN #1 (pin), $.051$ (1.30) TYP REF (height), $.036$ (.91) TYP REF (height).</p>		<p>Technical drawing of 890-013 Receptacle (Socket) Connectors. Dimensions include: B (overall width), $.010 + .002 / -.000$ (TYP) $(.25 + .05 / -.00)$ (pitch), $.051$ (1.30) TYP (height), $.187$ (4.75) (height), $.042$ (1.07) TYP (height), $.037$ (.94) (height), $.110 \pm .003$ (2.79 \pm .08) (height), $.225$ (5.72) (height), A (overall length), B (pitch length), C (pitch length), $.0725$ (1.84) (height), $.130$ (3.30) (height), $.016$ (.41) (height), SOCKET #1 (socket), $2X \#0-80$ UNF-2B (mounting holes), $.051$ (1.30) TYP REF (height), $.036$ (.91) TYP REF (height).</p>	
Layout	A \pm .005 (0.13)	B BSC.	C BSC.
5P	.400 (10.16)	.295 (7.49)	.184 (4.67)
5S	.400 (10.16)	.295 (7.49)	.185 (4.70)
9P	.500 (12.70)	.395 (10.03)	.284 (7.21)
9S	.500 (12.70)	.395 (10.03)	.285 (7.24)
15P	.650 (16.51)	.545 (13.84)	.434 (11.02)
15S	.650 (16.51)	.545 (13.84)	.435 (11.05)
21P	.800 (20.32)	.695 (17.65)	.584 (14.83)
21S	.800 (20.32)	.695 (17.65)	.585 (14.86)
25P	.900 (22.86)	.795 (20.19)	.684 (17.37)
25S	.900 (22.86)	.795 (20.19)	.685 (17.40)
31P	1.050 (26.67)	.945 (24.00)	.834 (21.18)
31S	1.050 (26.67)	.945 (24.00)	.835 (21.21)
37P	1.200 (30.48)	1.095 (27.81)	.984 (24.99)
37S	1.200 (30.48)	1.095 (27.81)	.985 (25.02)
51P	1.550 (39.37)	1.445 (36.70)	1.334 (33.88)
51S	1.550 (39.37)	1.445 (36.70)	1.335 (33.91)

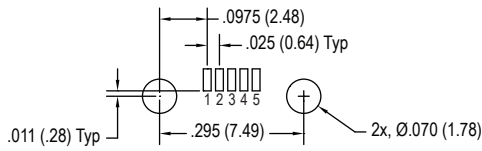
SINGLE-ROW RECTANGULAR CONNECTORS

SERIES 89 NANOMINIATURE Single-Row Rectangular Connectors

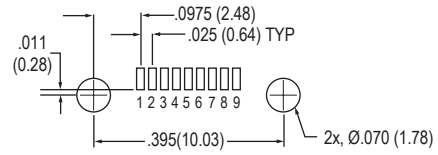


890-012 Right-Angle, Surface Mount PCB Connectors - Plug Footprints

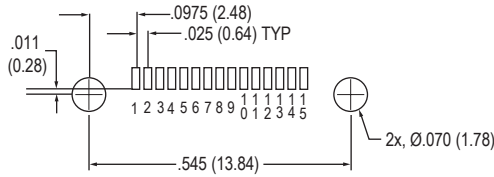
SINGLE-ROW RECTANGULAR CONNECTORS



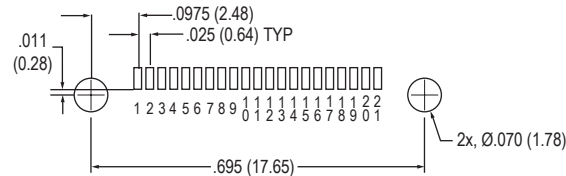
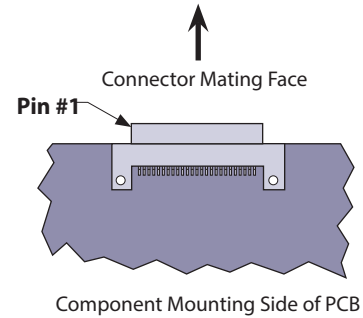
5 Contacts



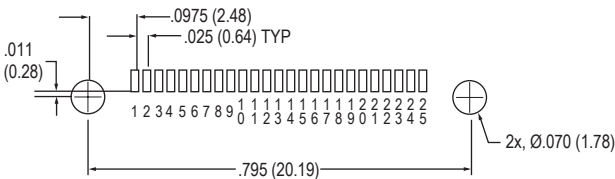
9 Contacts



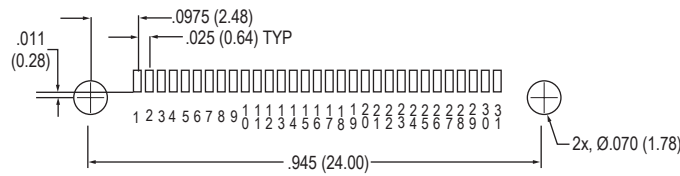
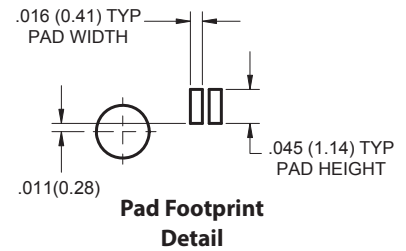
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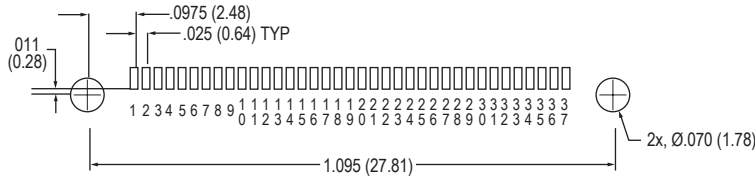
21 Contacts



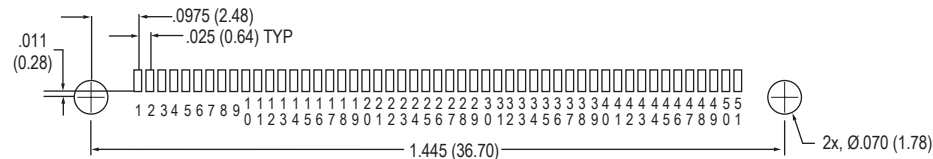
25 Contacts



31 Contacts



37 Contacts



51 Contacts

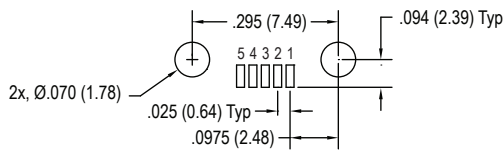
Layouts shown are for connector mounting side of PC Board.

SERIES 89 NANOMINIATURE Single-Row Rectangular Connectors

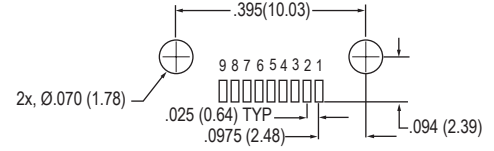


890-013 Right-Angle, Surface Mount PCB Connectors - Receptacle Footprints

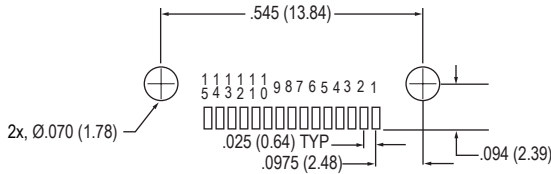
SINGLE-ROW RECTANGULAR CONNECTORS



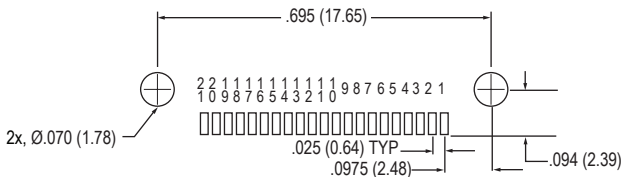
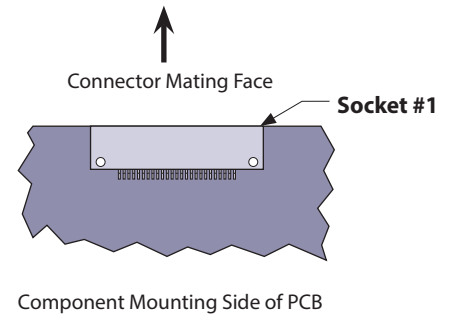
5 Contacts



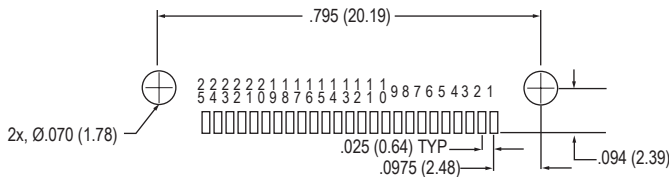
9 Contacts



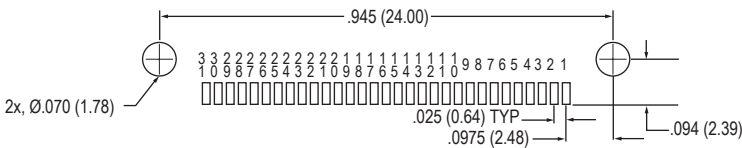
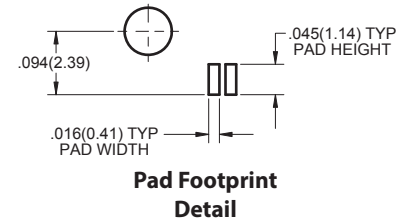
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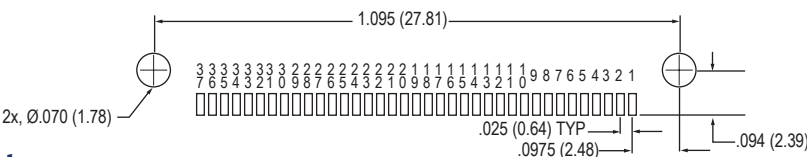
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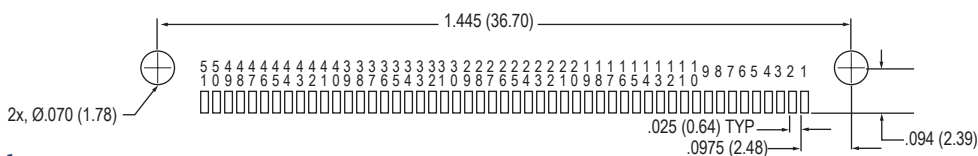
25 Contacts



31 Contacts



37 Contacts



51 Contacts

Layouts shown are for connector mounting side of PC Board.