

# SERIES 89 NANOMINIATURE Single-Row Rectangular Connectors



## 890-008 and 890-009 Plug and Receptacle Right-Angle Mount Thru-Hole PCB Connectors

SINGLE-ROW RECTANGULAR CONNECTORS



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

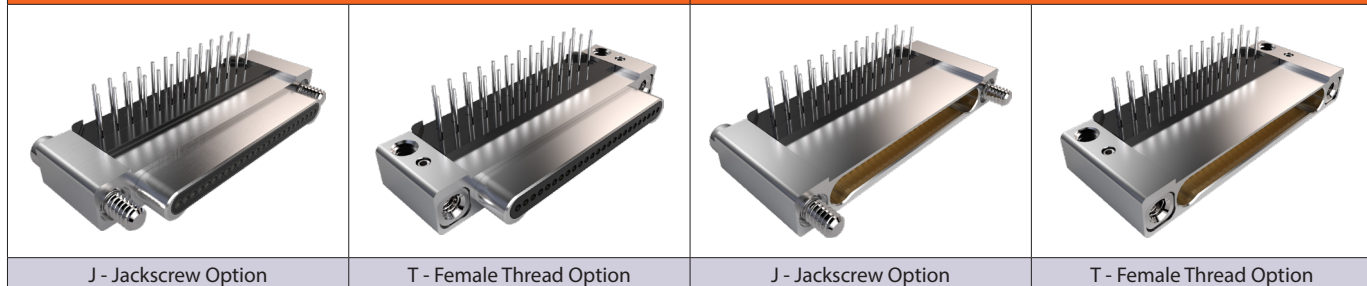
**Choose Aluminum, Titanium or Stainless Steel Shells** in eight layouts from 5 to 51 contacts. Complies to the requirements of MIL-DTL-32139. These connectors are intermateable with any corresponding Glenair Series 890 single row metal shell nanominiature connector.

### HOW TO ORDER

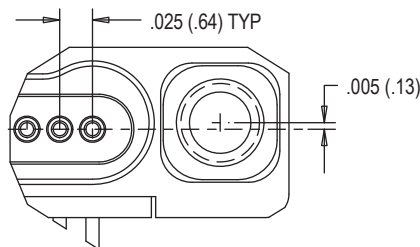
Sample Part Number	890-008	-51P	A2	-BRT	1	T
<b>Series</b>	890-008 = Plug, Pin Contacts, Single Row, Right-Angle Mount PCB		890-009 = Receptacle, Socket Contacts, Single Row, Right-Angle Mount PCB			
<b>Insert Arrangement/ Contact Type</b>	Plugs (890-008): <b>5P, 9P, 15P, 21P, 25P, 31P, 37P, 51P</b> Receptacles (890-009): <b>5S, 9S, 15S, 21S, 25S, 31S, 37S, 51S</b>					
<b>Shell Material and Finish</b>	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			
<b>Termination Type</b>	BRT = Board Right-Angle Thru-Hole					
<b>PC Tail Length</b>	1 = .110 (2.79)	2 = .172 (4.37)	3 = .140 (3.56)			
<b>Hardware</b>	J = Hex Head Jackscrew, #0-80		T = Female Thread, #0-80*			
*Stainless Steel Inserts installed in Aluminum Shells, tapped directly into Stainless Steel and Titanium Shells						

### PLUG HARDWARE

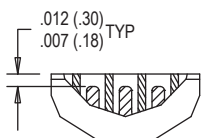
### RECEPTACLE HARDWARE



### DETAIL A



### DETAIL B



### PERFORMANCE SPECIFICATIONS

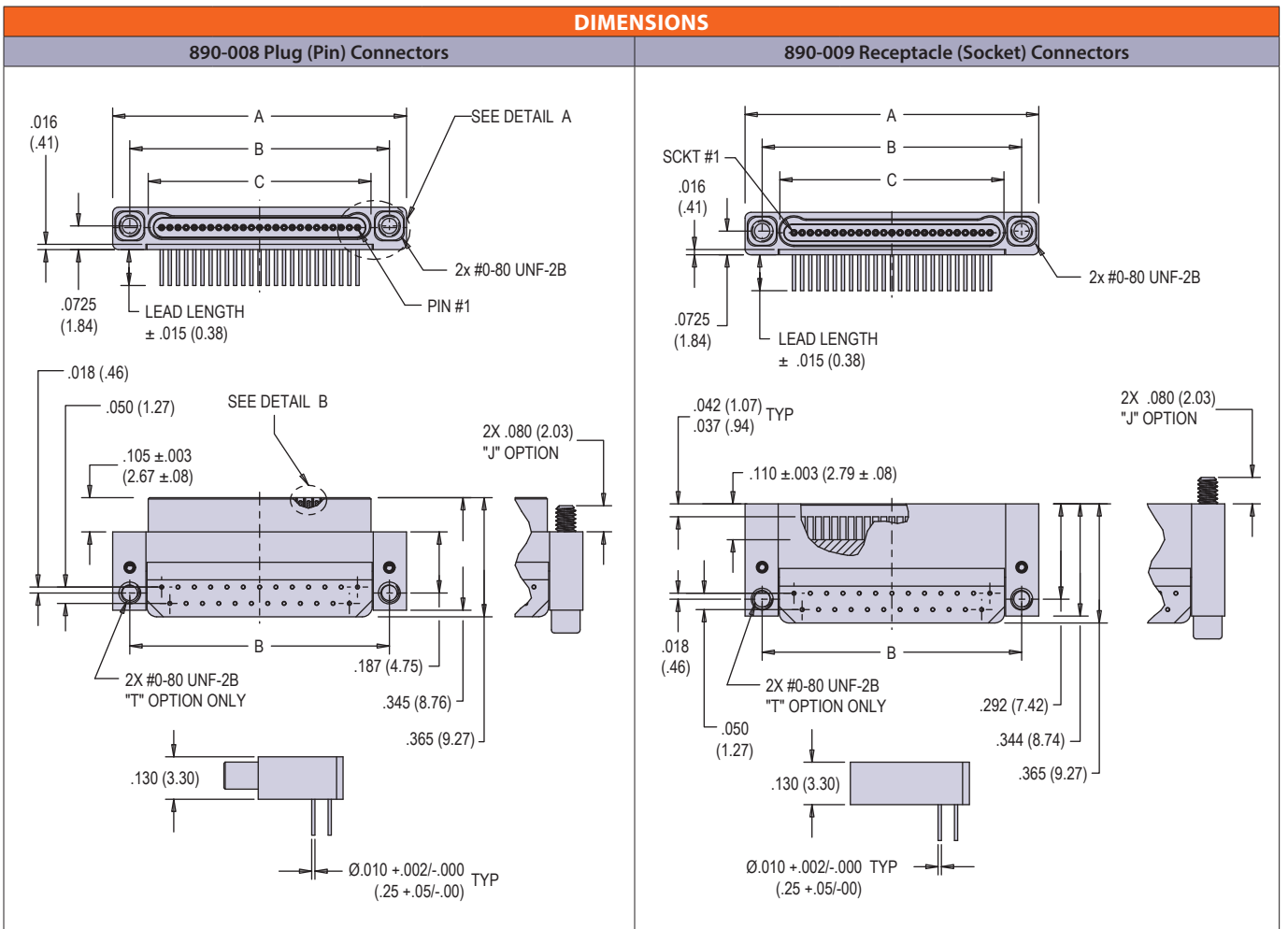
**Contact Spacing:** .025" (0.64) contact centers  
**Current Rating:** 1 AMP maximum tested per EIA-364-70  
**DWV:** 250 VAC RMS sea level, 100 VAC RMS 70,000 feet per EIA-364 Procedure 20  
**Insulation Resistance:** 5000 Megohms minimum test voltage 100 VDC, per EIA-364 Procedure 21  
**Operating 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

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Layout	A ± .005 (0.127)	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)

### 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-32139/7 and MIL-DTL-32139/8

SINGLE-ROW RECTANGULAR CONNECTORS

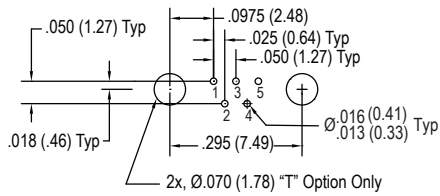
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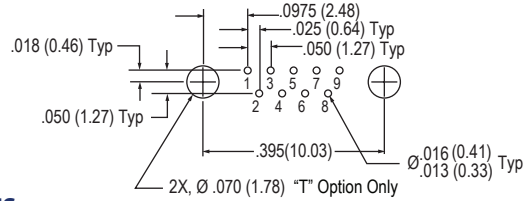
## 890-008 Right-Angle Mount Thru-Hole PCB Connectors - Plug Footprints

SINGLE-ROW RECTANGULAR CONNECTORS

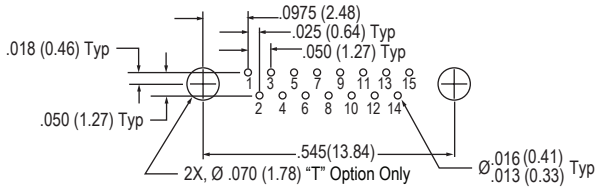
### 5 Contacts



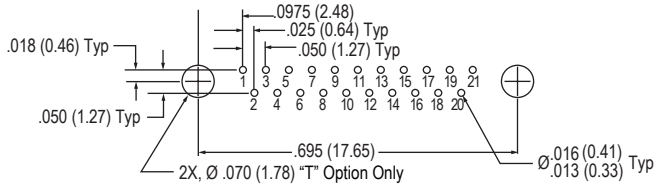
### 9 Contacts



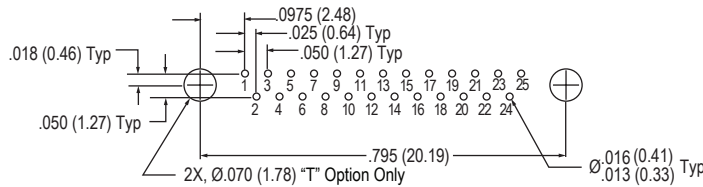
### 15 Contacts



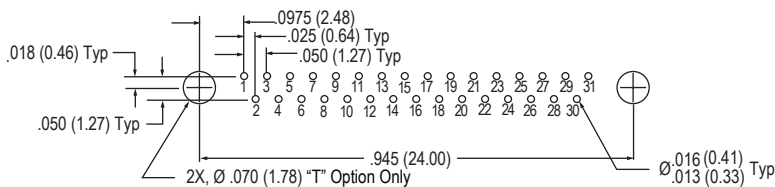
### 21 Contacts



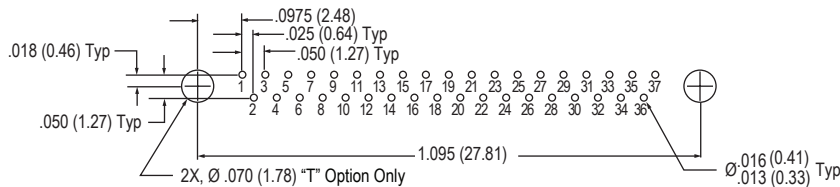
### 25 Contacts



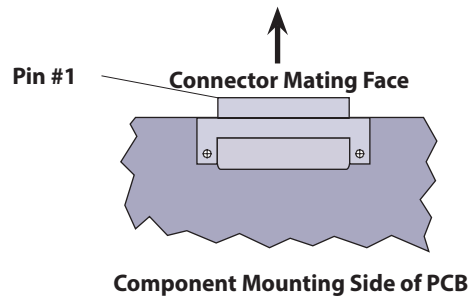
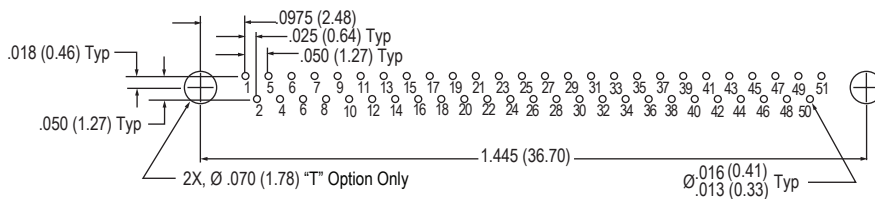
### 31 Contacts



### 37 Contacts



### 51 Contacts



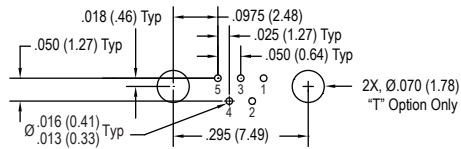
Layouts shown are for connector mounting side of PC Board.

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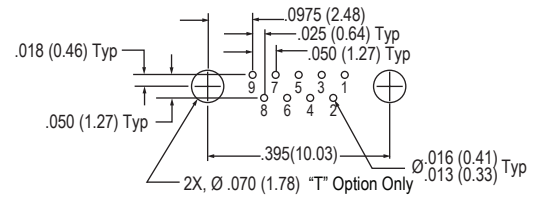


## 890-009 Right-Angle Mount Thru-Hole PCB Connectors - Receptacle Footprints

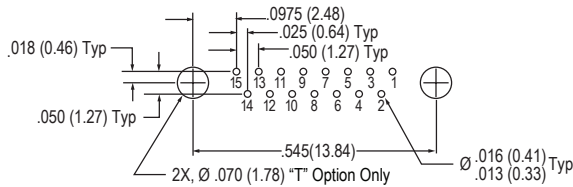
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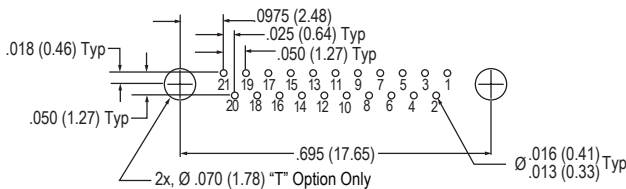
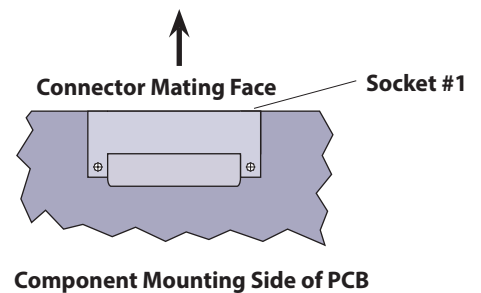
**5 Contacts**



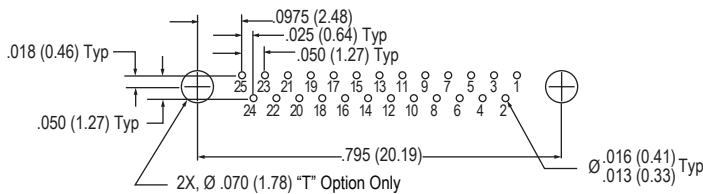
**9 Contacts**



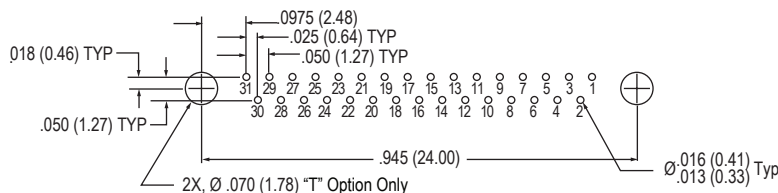
**15 Contacts**



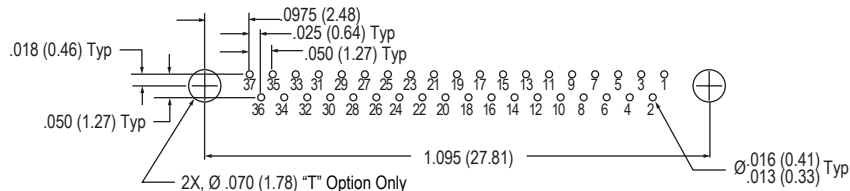
**21 Contacts**



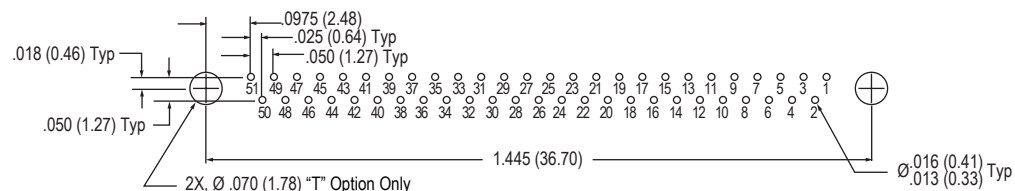
**25 Contacts**



**31 Contacts**



**37 Contacts**



**51 Contacts**

Layouts shown are for connector mounting side of PC Board.