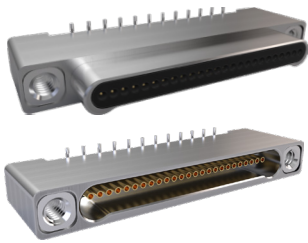


# SERIES 89 NANOMINIATURE Single-Row Rectangular Connectors



## 890-010 and 890-011 Vertical Surface Mount PCB Connectors

SINGLE-ROW RECTANGULAR CONNECTORS



**Vertical Surface Mount 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.

**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	
<b>Sample Part Number</b>	890-010 -37P A1 -BSS T
<b>Series</b>	890-010 = Plug, Pin Contacts, Single Row, Vertical SMT Nanominiature 890-011 = Receptacle, Socket Contacts, Single Row, Vertical SMT Nanominiature
<b>Insert Arrangement/ Contact Type</b>	Plugs (890-010): <b>5P, 9P, 15P, 21P, 25P, 31P, 37P, 51P</b> Receptacles (890-011): <b>5S, 9S, 15S, 21S, 25S, 31S, 37S, 51S</b>
<b>Shell Material and Finish</b>	<b>A1</b> = Aluminum Shell, Cadmium Plating <b>A2</b> =Aluminum Shell, Electroless Nickel Plating <b>A31</b> = Aluminum Shell, Zinc Nickel Plating, Black <b>A33</b> = Aluminum Shell, Nickel PTFE Plating <b>T</b> = Titanium Shell, Unplated <b>S</b> =Stainless Steel Shell, Passivated
<b>Termination Type</b>	<b>BSS</b> = Board Straight Surface Mount
<b>Hardware</b>	<b>T</b> = Female Thread, #0-80* *Stainless Steel Inserts installed in Aluminum Shells, tapped directly into Stainless Steel and Titanium Shells

PLUG HARDWARE	RECEPTACLE HARDWARE
T - Female Thread	T - Female Thread

### 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

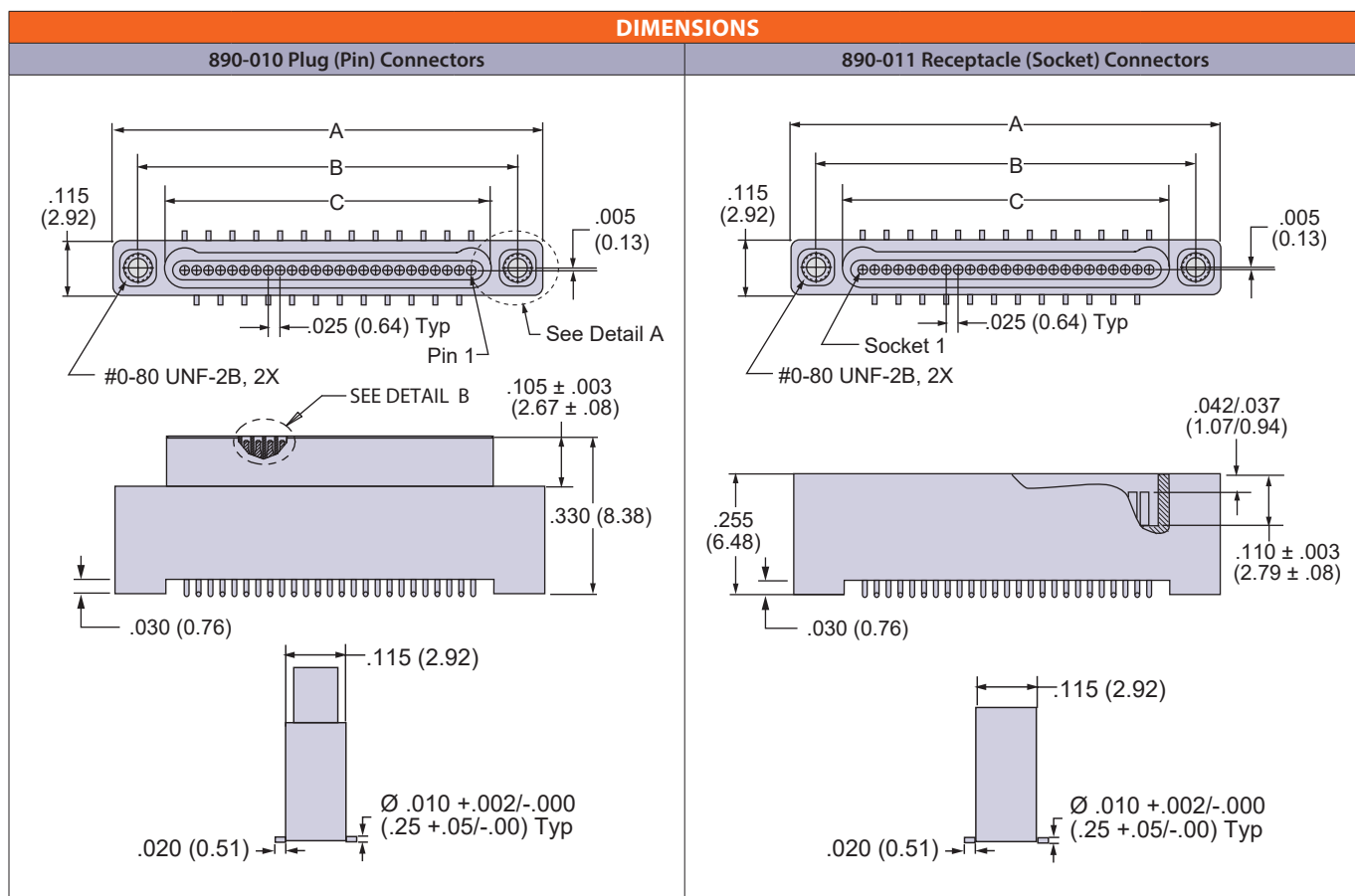
PERFORMANCE SPECIFICATIONS		
<b>Contact Spacing:</b> .025" (0.64) contact centers	<b>Contact Resistance:</b> 71 millivolt drop maximum, 1 AMP current, any catalog supported wire type	<b>Humidity:</b> 240 hours, IAW EIA-364-31, Test Condition B
<b>Current Rating:</b> 1 AMP maximum tested per EIA-364-70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

# SERIES 89 NANOMINIATURE Single-Row Rectangular Connectors



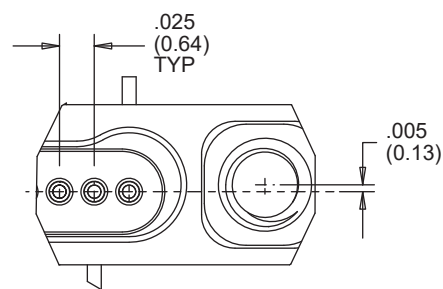
## 890-010 and 890-011 Vertical Surface Mount PCB Connectors

SINGLE-ROW RECTANGULAR CONNECTORS

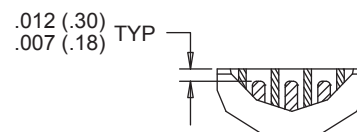


Layout	A ± .005 (0.127)	B BSC.	C BSC.
5P	.400 (10.16)	.295 (7.49)	.184 (4.67)
5S	.400 (10.16)	.295 (7.49)	.185 (4.70)
9P	.500 (12.70)	.395 (10.03)	.284 (7.21)
9S	.500 (12.70)	.395 (10.03)	.285 (7.24)
15P	.650 (16.51)	.545 (13.84)	.434 (11.02)
15S	.650 (16.51)	.545 (13.84)	.435 (11.05)
21P	.800 (20.32)	.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)

**DETAIL A**



**DETAIL B**



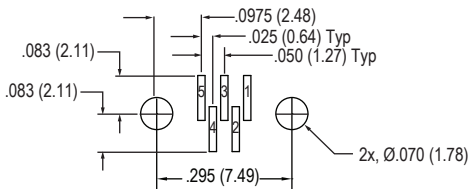
# SERIES 89 NANOMINIATURE Single-Row Rectangular Connectors



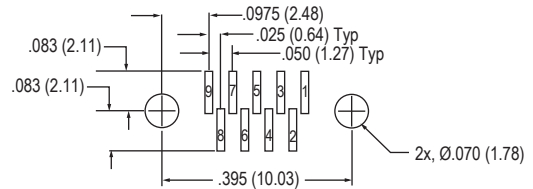
## 890-010 Vertical Surface Mount PCB Connectors - Plug Footprints

SINGLE-ROW RECTANGULAR CONNECTORS

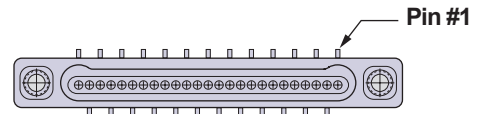
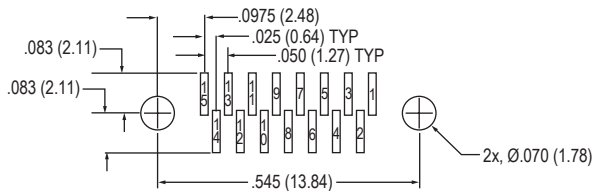
**5 Contacts**



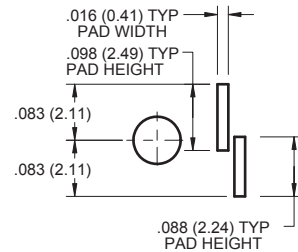
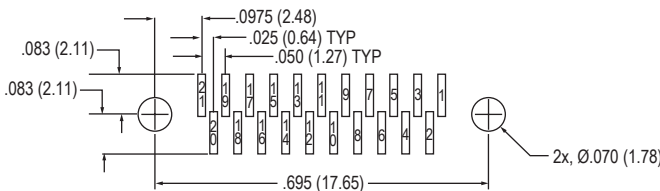
**9 Contacts**



**15 Contacts**

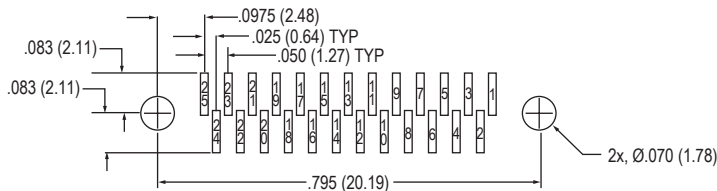


**21 Contacts**

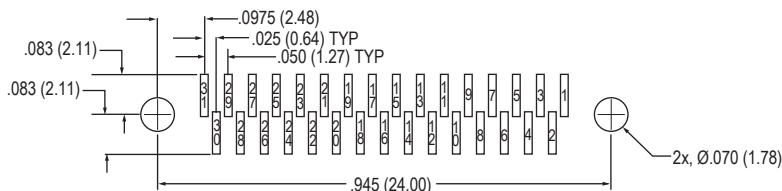


**Pad Footprint Detail**

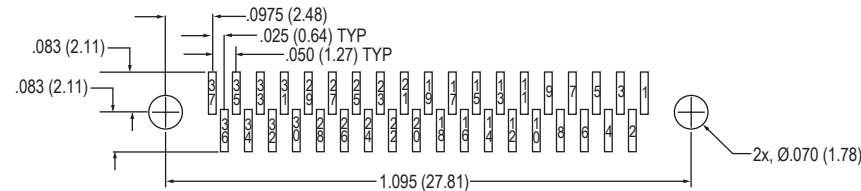
**25 Contacts**



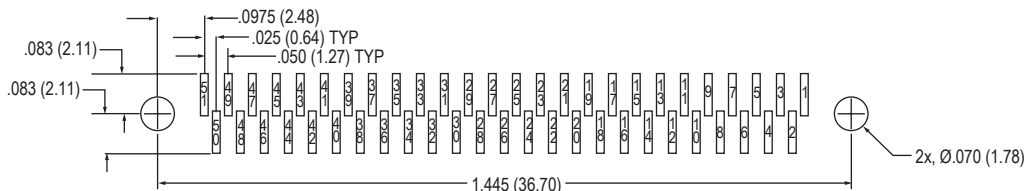
**31 Contacts**



**37 Contacts**



**51 Contacts**



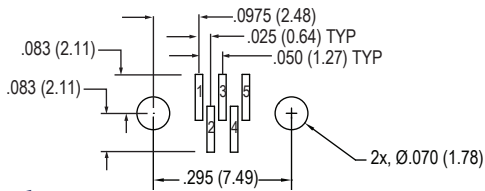
Layouts shown are for connector mounting side of PC Board.

# SERIES 89 NANOMINIATURE Single-Row Rectangular Connectors

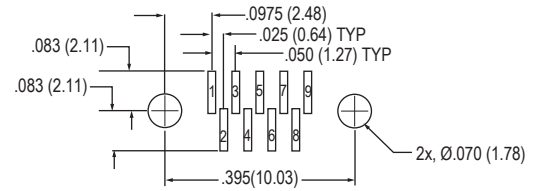


## 890-011 Vertical Surface Mount PCB Connectors - Receptacle Footprints

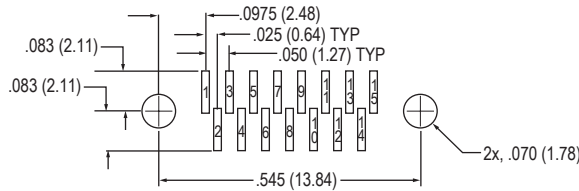
SINGLE-ROW RECTANGULAR CONNECTORS



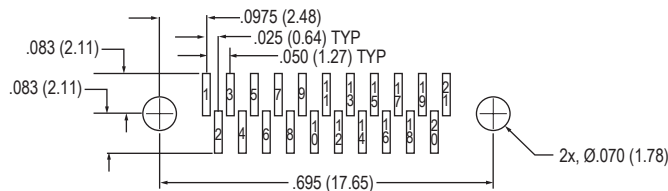
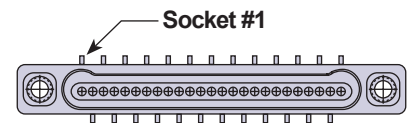
**5 Contacts**



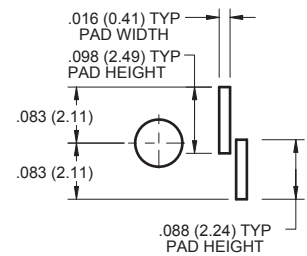
**9 Contacts**



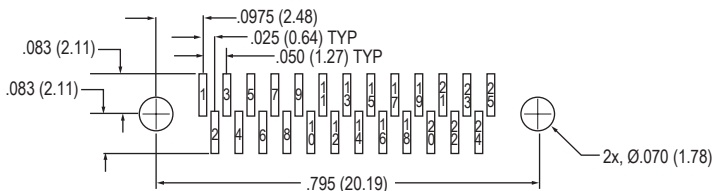
**15 Contacts**



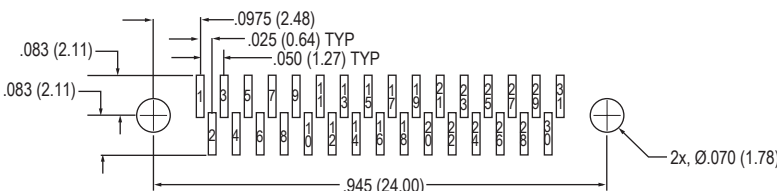
**21 Contacts**



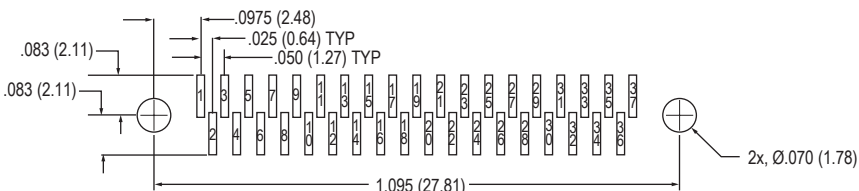
**Pad Footprint Detail**



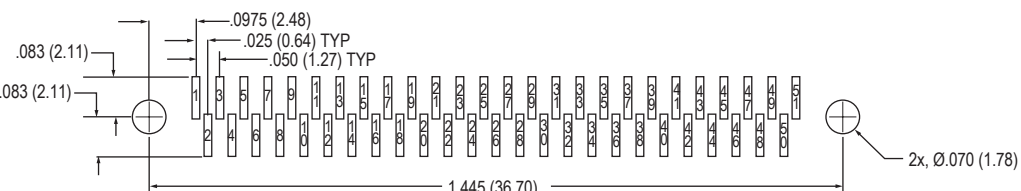
**25 Contacts**



**31 Contacts**



**37 Contacts**



**51 Contacts**

Layouts shown are for connector mounting side of PC Board.