

# SERIES 89 NANOMINIATURE Dual-Row Rectangular Connectors



## 891-051 Front Panel Mount, Straddle Mount Receptacle

DUAL-ROW RECTANGULAR CONNECTORS

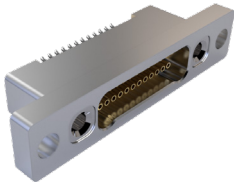


**Front Panel Mount, Straddle Mount Connectors** offer premium performance and reliability for demanding applications. Available with female threads for use with flexible circuits. Pre-Tinned PC Tails are coated with Sn63Pb37 or Sn60Pb40 tin-lead for excellent solderability.

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

HOW TO ORDER						
<b>Sample Part Number</b>	<b>891-051</b>	<b>-25S</b>	<b>A2</b>	<b>-STM</b>	<b>T</b>	<b>C</b>
<b>Series</b>	891-051 = Receptacle, Straddle Mount					
<b>Insert Arrangement/ Contact Type</b>	Sockets (Receptacle): <b>9S, 15S, 21S, 25S, 31S, 37S, 41S, 51S, 65S, 69S, 85S, 91S</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>	STM = Straddle Mount					
<b>Hardware</b>	T = Female Thread (#0-80 for size 9-69, #2-56 for size 85) (Stainless steel inserts installed in aluminum shells, tapped directly into stainless steel and titanium shells)					
<b>Mounting Hole Option</b>	C = Thru-Hole    T = Female Thread					

### RECEPTACLE HARDWARE

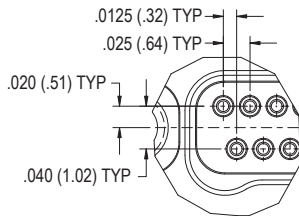


T - Female Thread Hardware  
C - Thru-Hole Mount

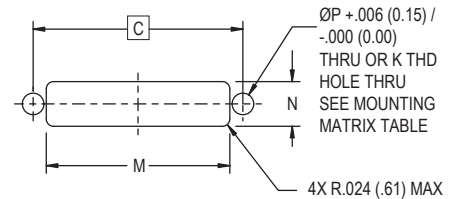


T - Female Thread Hardware  
C - Female Thread Mount

### DETAIL A



### PANEL CUT-OUT DIMENSIONS



### PANEL MOUNT CONNECTOR MOUNTING MATRIX

Connector Holes	Panel Holes	Mounting Location
Tapped	Clearance	Rear Panel Mount
Clearance	Tapped	Front Panel Mount
Clearance	Clearance	Front or Rear Panel Mount with screw and nut

Shell Size	C	K	M	N	P
9	.480 (12.19)	#0-80 UNF-2B	.395 (10.03)	.145 (3.68)	.070 (1.78)
15	.555 (14.10)	#0-80 UNF-2B	.470 (11.94)	.145 (3.68)	.070 (1.78)
21	.630 (16.00)	#0-80 UNF-2B	.545 (13.84)	.145 (3.68)	.070 (1.78)
25	.680 (17.27)	#0-80 UNF-2B	.595 (15.11)	.145 (3.68)	.070 (1.78)
31	.755 (19.18)	#0-80 UNF-2B	.670 (17.02)	.145 (3.68)	.070 (1.78)
37	.830 (21.08)	#0-80 UNF-2B	.745 (18.92)	.145 (3.68)	.070 (1.78)
41	.880 (22.35)	#0-80 UNF-2B	.795 (20.19)	.145 (3.68)	.070 (1.78)
51	1.005 (25.53)	#0-80 UNF-2B	.920 (23.37)	.145 (3.68)	.070 (1.78)
65	1.180 (29.97)	#0-80 UNF-2B	1.095 (27.81)	.145 (3.68)	.070 (1.78)
69	1.230 (31.24)	#0-80 UNF-2B	1.145 (29.08)	.145 (3.68)	.070 (1.78)
85	1.527 (38.79)	#2-56 UNC-2B	1.397 (35.48)	.170 (4.32)	.096 (2.44)
91	1.602 (40.69)	#2-56 UNC-2B	1.472 (37.39)	.170 (4.32)	.096 (2.44)

### 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

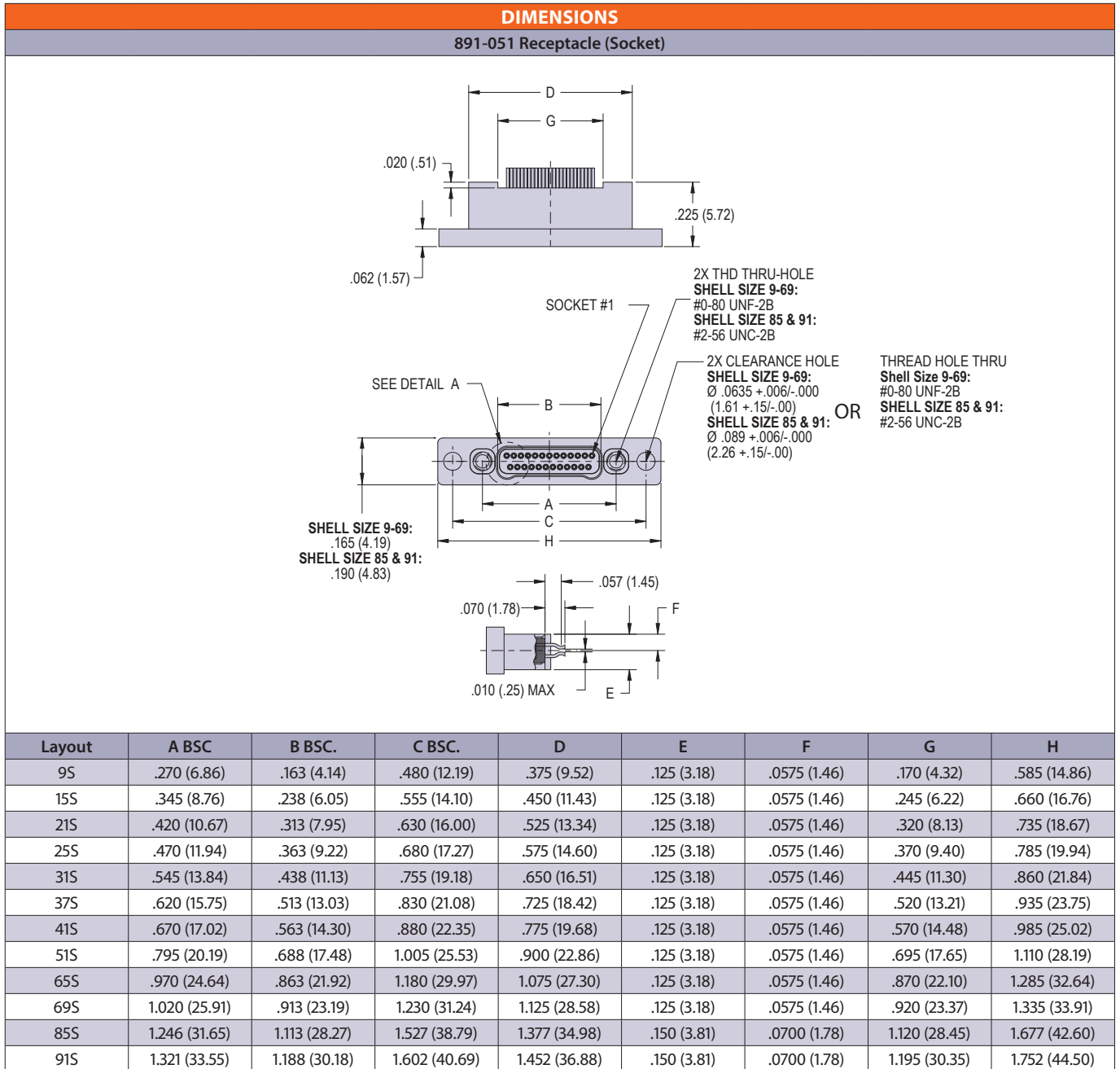
**Shock:** 100 g's, IAW EIA-364-27, Condition G  
**Durability:** 200 mating cycles per test procedure EIA-364-09  
**Corrosion Resistance:** 48 hours salt spray IAW EIA-364-26, Condition B  
**Humidity:** 240 hours, IAW EIA-364-31, Test Condition B  
**Contact Engaging/Separation Force:** 5 ounce maximum, 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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### NOTES

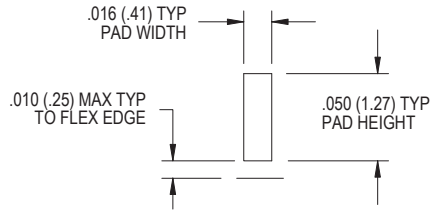
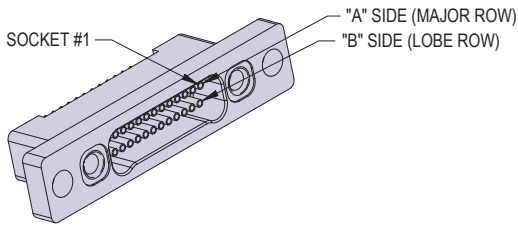
- Inspect and Test IAW MIL-DTL-32139
- Interface dimensions per MIL-DTL-32139/4
- Panel cutout is sized to allow connector mounting with either lobe up or down orientation.
- Connector may be mounted to front or back of panel depending on selected mount hole option
- Recommended panel thickness: .100 (2.54)
- Material and Finish
  - Shell: see part number break down
  - Insulator: LCP/N/A
  - Contacts: gold alloy / unplated
  - Wire: see part number break down
  - Jacking hardware: see part number break down

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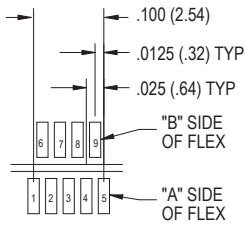


## 891-051 Front Panel Mount, Straddle Mount Receptacle - Receptacle Pad Footprint

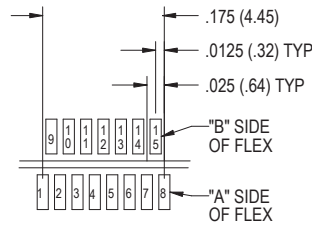
DUAL-ROW RECTANGULAR CONNECTORS



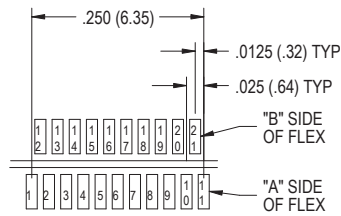
PAD FOOTPRINT DETAIL



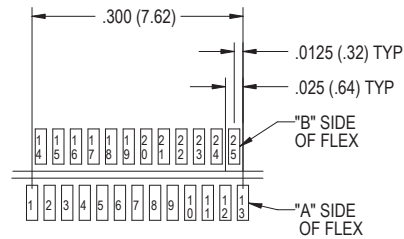
**9 Contacts**



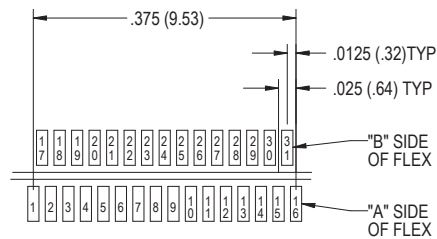
**15 Contacts**



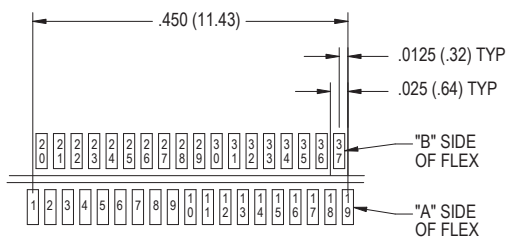
**21 Contacts**



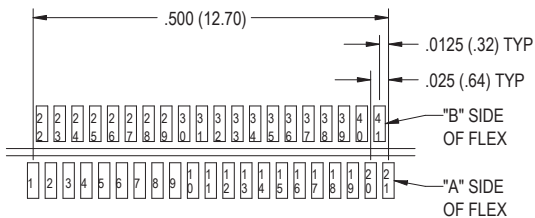
**25 Contacts**



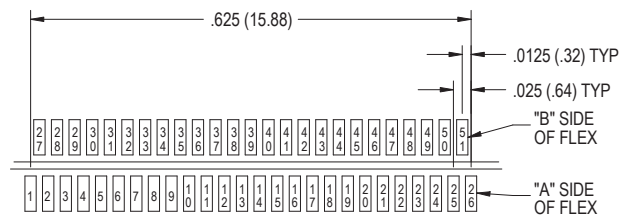
**31 Contacts**



**37 Contacts**



**41 Contacts**



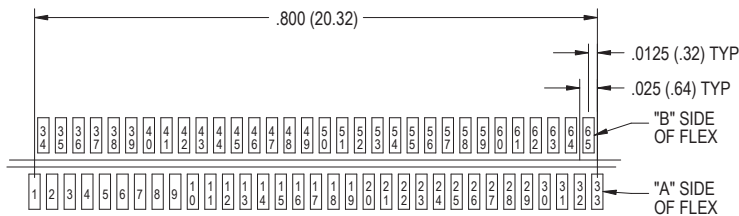
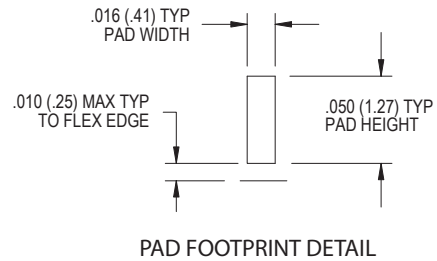
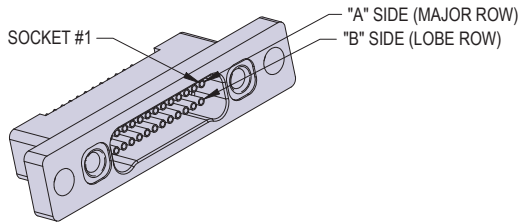
**51 Contacts**

Layouts shown are for connector mounting side of PC Board.

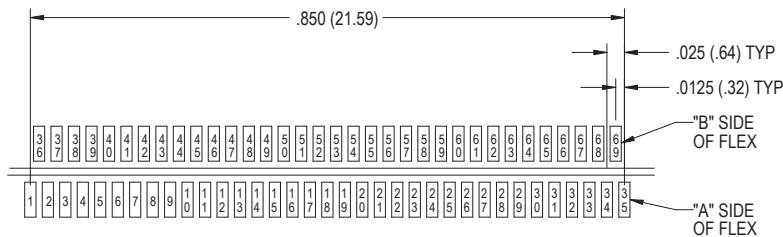
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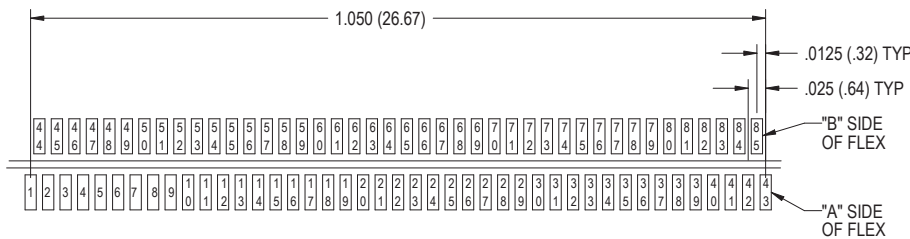
## 891-051 Front Panel Mount, Straddle Mount Receptacle - Receptacle Pad Footprint



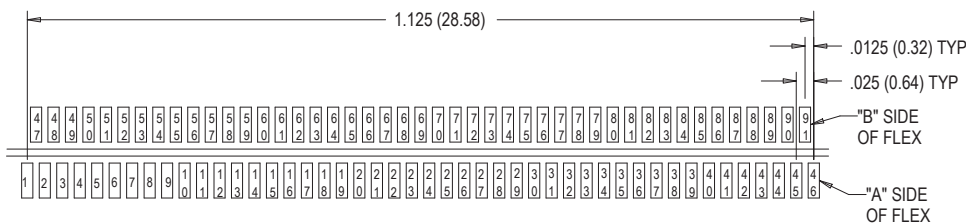
### 65 Contacts



### 69 Contacts



### 85 Contacts



### 91 Contacts

Layouts shown are for connector mounting side of PC Board.