

# SERIES 89 NANOMINIATURE Single-Row Rectangular Connectors



## 890-019 and 890-020 Right-Angle, Surface Mount PCB Connectors with Jackscrews

SINGLE-ROW RECTANGULAR CONNECTORS



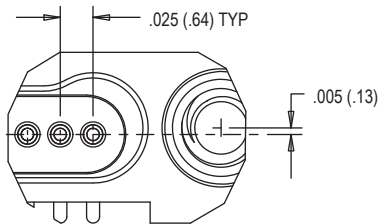
**Right-Angle SMT PCB Nano Connectors** feature gold alloy TwistPin contacts. These nanominiature connectors offer premium performance and reliability for demanding applications. Available with #0-80 female mounting threads and #0-80 jackscrew threads. Pre-Tinned PC Tails are coated with Sn60Pb40 or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

**Choose Aluminum, Titanium or Stainless Steel Shells** in eight layouts from 5 to 51 contacts. These connectors are intermateable with any corresponding Glenair Series 890 single row metal shell nanominiature connectors.

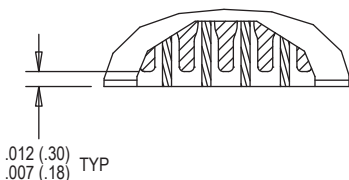
HOW TO ORDER						
<b>Sample Part Number</b>		<b>890-019</b>	<b>-25P</b>	<b>A2</b>	<b>-BRS</b>	<b>J</b>
<b>Series</b>	<b>890-019</b> = Right-Angle, Surface Mount PCB Plug <b>890-020</b> = Right-Angle, Surface Mount PCB Receptacle					
<b>Insert Arrangement/ Contact Type</b>	Plugs (890-019): <b>5P, 9P, 15P, 21P, 25P, 31P, 37P, 51P</b> Receptacles (890-020): <b>5S, 9S, 15S, 21S, 25S, 31S, 37S, 51S</b>					
<b>Shell Material and Finish</b>	<b>A1</b> = Aluminum Shell, Cadmium Plating <b>A31</b> = Aluminum Shell, Zinc Nickel Plating <b>S</b> = Stainless Steel Shell, Passivated	<b>A2</b> = Aluminum Shell, Electroless Nickel Plating <b>A33</b> = Aluminum Shell, Nickel PTFE Plating <b>T</b> = Titanium Shell, Unplated				
<b>Termination Type</b>	<b>BRS</b> = Board Right-Angle Surface Mount					
<b>Hardware</b>	<b>J</b> = Hex Head Jackscrew					

PLUG HARDWARE	RECEPTACLE HARDWARE
J - Jackscrew	J - Jackscrew

### DETAIL A



### DETAIL B



### 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

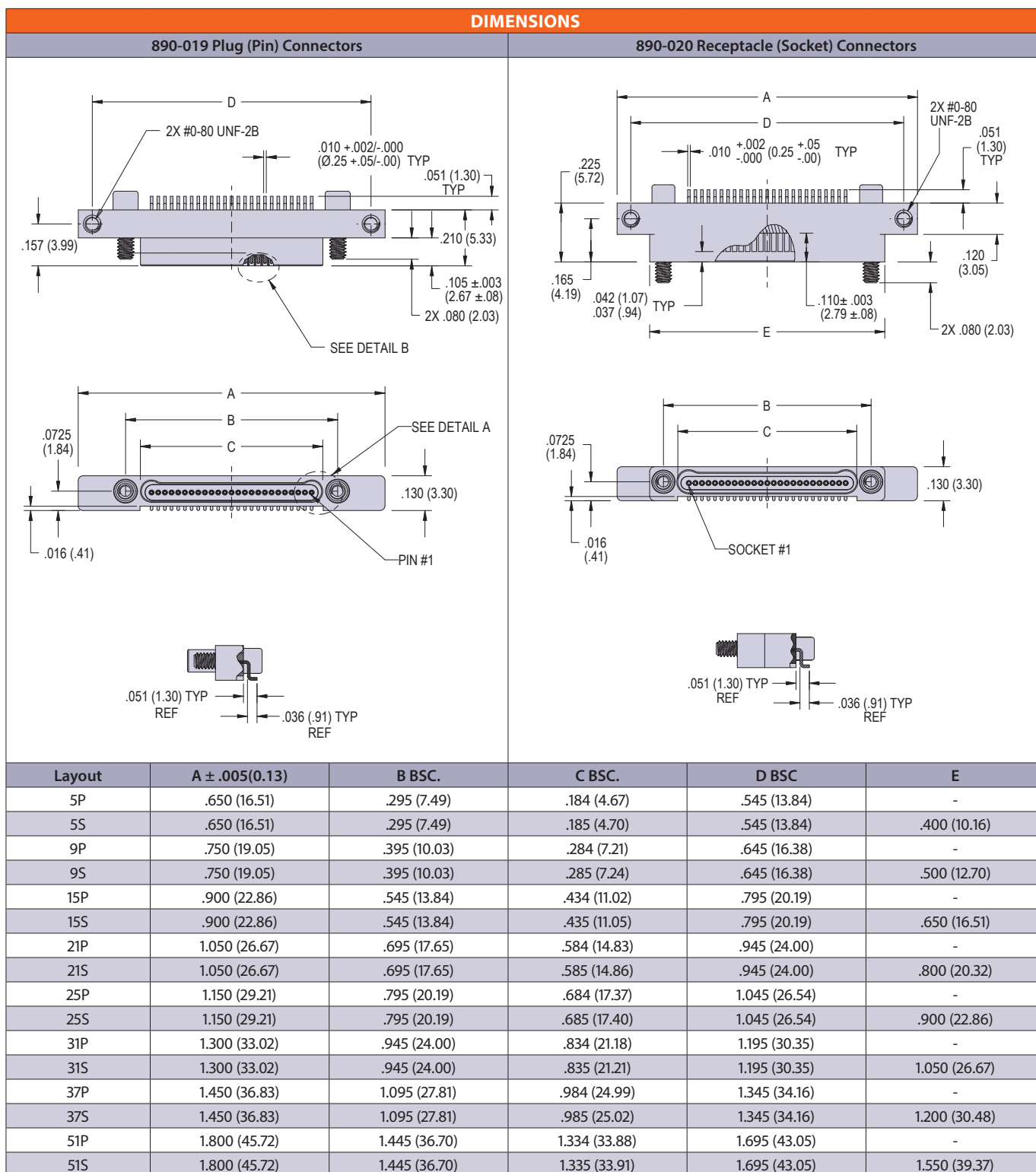
**Contact Spacing:** .025" (0.64) contact centers  
**Current Rating:** 1 AMP maximum tested per EIA-364-70  
**DWV:** 250 VAC RMS sea level, 100 VAC RMS 70,000 feet per EIA-364 Procedure 20  
**Insulation Resistance:** 5000 Megohms minimum test voltage 100 VDC, per EIA-364 Procedure 21  
**Operating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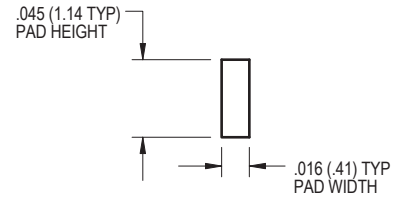
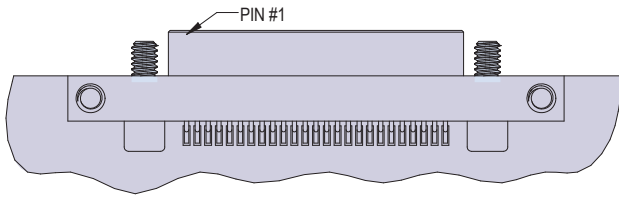


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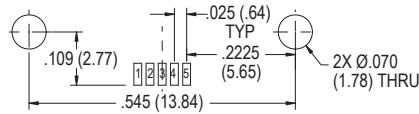
## 890-019 Right-Angle Surface Mount PCB with Jackscrews - Plug Footprints

SINGLE-ROW RECTANGULAR CONNECTORS

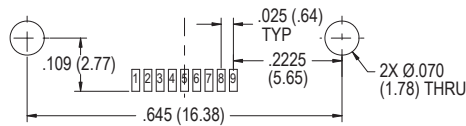


PAD FOOTPRINT DETAIL

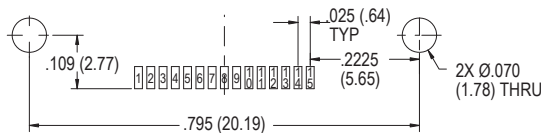
### 5 Contacts



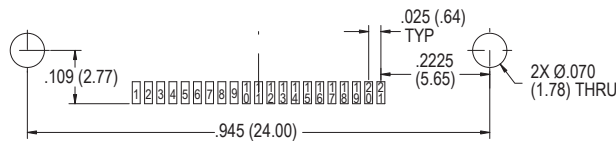
### 9 Contacts



### 15 Contacts



### 21 Contacts

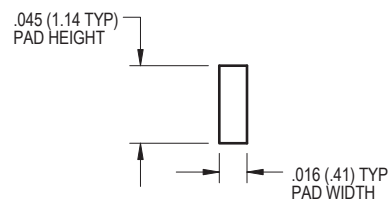
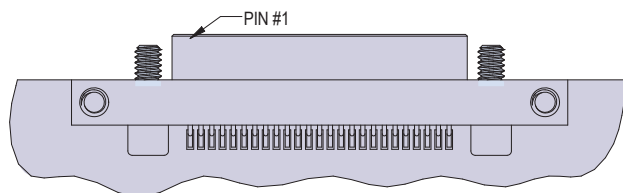


Layouts shown are for connector mounting side of PC Board.

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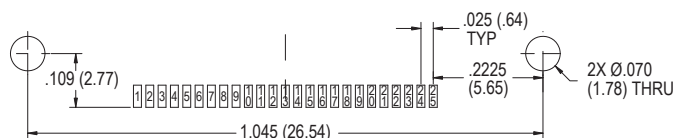


## 890-019 Right-Angle Surface Mount PCB with Jackscrews - Plug Footprints

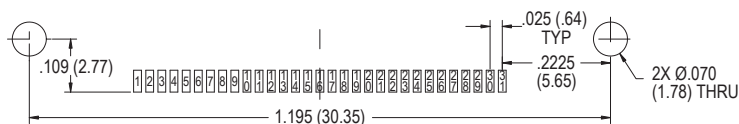


PAD FOOTPRINT DETAIL

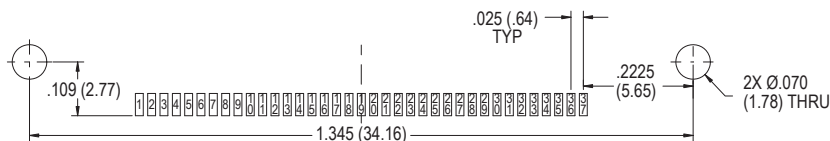
### 25 Contacts



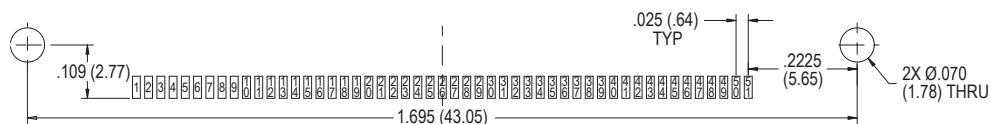
### 31 Contacts



### 37 Contacts



### 51 Contacts



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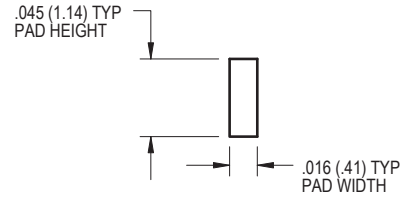
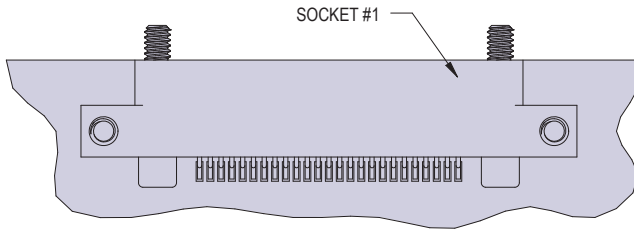
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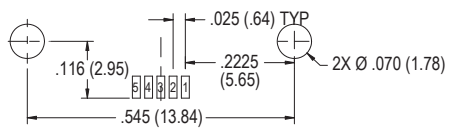
## 890-020 Right-Angle Surface Mount PCB with Jackscrews - Receptacle Footprints

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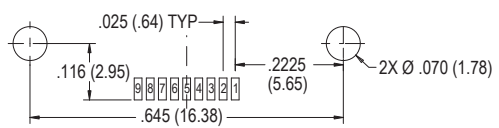


PAD FOOTPRINT DETAIL

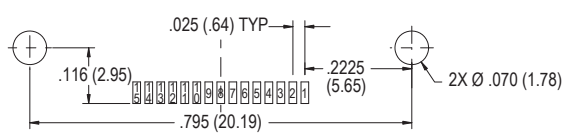
### 5 Contacts



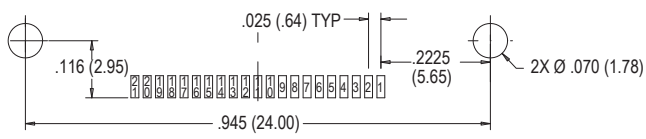
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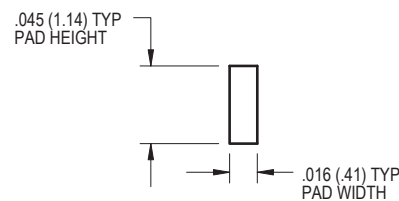
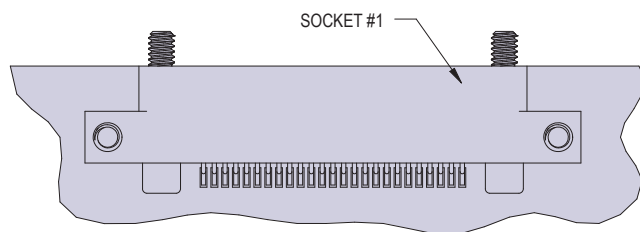


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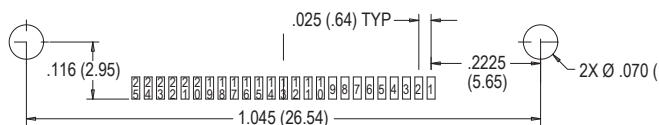


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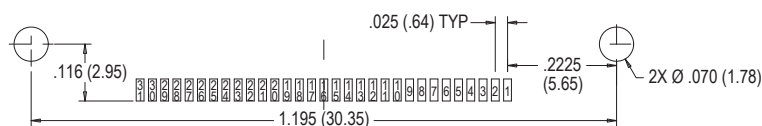


PAD FOOTPRINT DETAIL

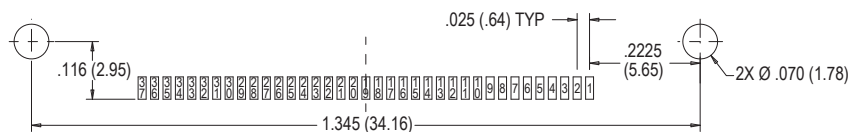
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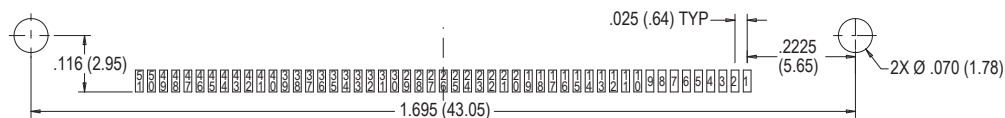
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