### General Information

Glenair's Series 805 Connector Offers Outstanding EMI Protection and Vibration Resistance in a Miniaturized Package

The Series 805 connector was developed to provide several performance enhancements compared to other "Mighty Mouse" versions. A ratchet mechanism in the coupling nut prevents de-mating under severe vibration. EMI performance is improved with a serpentine ground spring on the plug barrel. This nickel plated beryllium copper spring assures low shell-to-shell resistance. The Series 805, although larger than other Series 80 versions, saves size and weight compared to MIL-DTL-38999 connectors with no compromise in performance.

### Outstanding EMI Shielding

Nickel-plated beryllium copper ground spring and metal-to-metal bottoming for excellent EMI performance.

### Triple-Start Coupling

Rugged ACME threads resist cross-threading and allow fast mating.

### Environmentally Sealed

Meets MIL-STD-810 Method 512 immersion.

### Anti-Decoupling

Ratcheting anti-decoupling mechanism prevents coupling nut backoff when subjected to high vibration.

### Specifications

- **Current Rating**
  - #23–5 A, #20HD–7.5 A, #16–13 A, #12–23 A

- **D.W.V.**
  - #23–750 VAC, #20HD–1000 VAC, #12 and #16–1800 VAC

- **I.R.**
  - 5000 megohms minimum

- **Operating Temperature**
  - -65° C. to +175° C.

- **Shock**
  - 300 g.

- **Vibration**
  - 37 g.

- **Shielding Effectiveness**
  - 55 dB minimum low frequency from 100MHz to 1000MHz, and 65 dB minimum high frequency from 1 GHz to 10GHz.

- **Magnetic Permeability**
  - 2.0 µ maximum

- **Durability**
  - 500 mating cycles

### Size Comparison: Series 805 Versus D38999 Series III

<table>
<thead>
<tr>
<th>Layout</th>
<th>Number of Contacts</th>
<th>Maximum Plug Diameter (Series 805)</th>
<th>Maximum Jam-Nut Receptacle Diameter (Series 805)</th>
<th>% Reduction</th>
<th>Maximum Plug Diameter (D38999)</th>
<th>Maximum Jam-Nut Receptacle Diameter (D38999)</th>
<th>% Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-7</td>
<td>7 #23</td>
<td>0.707 (17.96)</td>
<td>0.859 (21.82)</td>
<td>17%</td>
<td>0.775 (19.68)</td>
<td>1.201 (30.51)</td>
<td>35%</td>
</tr>
<tr>
<td>10-13</td>
<td>13 #23</td>
<td>0.804 (20.42)</td>
<td>0.969 (24.61)</td>
<td>18%</td>
<td>0.895 (22.73)</td>
<td>1.386 (35.20)</td>
<td>35%</td>
</tr>
<tr>
<td>11-19</td>
<td>19 #23</td>
<td>0.933 (23.70)</td>
<td>1.141 (28.98)</td>
<td>20%</td>
<td>0.960 (24.38)</td>
<td>1.512 (38.40)</td>
<td>36%</td>
</tr>
<tr>
<td>12-26</td>
<td>26 #23</td>
<td>0.999 (25.37)</td>
<td>1.391 (35.33)</td>
<td>29%</td>
<td>1.075 (27.30)</td>
<td>1.764 (44.81)</td>
<td>39%</td>
</tr>
<tr>
<td>15-37</td>
<td>37 #23</td>
<td>1.113 (28.27)</td>
<td>1.266 (32.16)</td>
<td>13%</td>
<td>1.218 (30.94)</td>
<td>1.638 (41.61)</td>
<td>26%</td>
</tr>
<tr>
<td>18-55</td>
<td>55 #23</td>
<td>1.308 (33.22)</td>
<td>1.391 (35.33)</td>
<td>7%</td>
<td>1.404 (35.66)</td>
<td>1.764 (44.81)</td>
<td>20%</td>
</tr>
<tr>
<td>19-85</td>
<td>85 #23</td>
<td>1.328 (33.73)</td>
<td>1.625 (41.28)</td>
<td>19%</td>
<td>1.465 (37.21)</td>
<td>2.075 (52.71)</td>
<td>29%</td>
</tr>
<tr>
<td>23-130</td>
<td>130 #23</td>
<td>1.577 (40.06)</td>
<td>1.875 (47.63)</td>
<td>16%</td>
<td>1.720 (43.69)</td>
<td>2.323 (59.00)</td>
<td>26%</td>
</tr>
</tbody>
</table>

Dimensions in Inches (millimeters) are subject to change without notice.