**PeeWee SERIES**

PeeWee is one of a family of subminiature, high-voltage connectors for use in high voltage applications where dense electronic packaging is required. The PeeWee connector uses a unique method of sealing high voltage at reduced atmospheric pressure, which allows the connector to be rated at 12 kVDC at 70,000 ft with a temperature range of -55° to 125°C.

**MODULARIZATION**

By using PeeWee connectors, it is possible to package or re-package a high voltage power supply into multiple modules which can be easily and reliably mated and un-mated with one another.

The packaging technique permits the pre-testing of individual modules as they are being manufactured and the ability to replace modules or perform routine maintenance in the field when necessary.

**RECEPTACLES**

(Dimensions shown as in/mm)

**Non-Sealed, Front Mount†**

178-6544 (Replaces 178-7937)
- Recommend bonding into epoxy G-10 plate .080” or .120” thick
- Mounting: 243° (6.17 mm) diameter hole

**Ceramic-to-Metal, Brazed, Hermetic†**

467-7022
- Mounting: Weld Flange

467-7024
- Mounting: Solder Flange
- Sealed for 1 ATM differential pressure
- Max. Leak Rate: 1x10⁻⁷ cc/s He
- @1 ATM differential pressure

**Threaded, Non-Sealed, Rear Mount‡†**

178-8621
- Max. Panel Thickness
- .250”-40 UNS-2A Flange dia.
- Mounting Hole
- Panel Mounting Torque: 5 to 6 in-lbs
- Mounting: .258” (6.55 mm) diameter hole

**Double-Ended, Plug Adapter‡**

178-8009
- .115”-24 Flange dia. with flats
- 30°, Hex
- Ø .250” (6.35 mm)

*Contact pot will accomodate 24 AWG wire. Do not exceed 400°F when soldering. Use SN 60 solder.

**Cable Assembly Ordering Information:** All cable assembly cable lengths are to be specified in inches only. For example, to order part number 178-6027 with a cable length of 10 feet 8 inches, the cable assembly part number would be specified as 178-6027.10.8.

*Note: Product numbers and specs subject to change without notice. *Products listed represent only a small selection of Teledyne Reynolds’ products please visit www.teledynereynolds.com for the most up to date product information. *Contact Teledyne Reynolds’ Engineering to discuss custom designs. **WARNING:** Connectors should NEVER be handled mated or un-mated when voltage is applied.

**Typical cross-section of modularized power supply utilizing PeeWee connectors and cable assemblies.**

**PLUG CABLE ASSEMBLIES**

**Push-Pull Coupling‡**

<table>
<thead>
<tr>
<th>WIRE TYPE</th>
<th>WIRE P/N</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRAIGHT</td>
<td>178-8166 178-8169 Etched FEP 178-8111</td>
</tr>
<tr>
<td>STRAIGHT</td>
<td>178-8425 178-8426 Silicone Coated FEP 178-8066</td>
</tr>
<tr>
<td>RT. ANGLE</td>
<td>178-8172 178-8160 Etched FEP 178-8111</td>
</tr>
<tr>
<td>RT. ANGLE</td>
<td>178-8423 178-8424 Silicone Coated FEP 178-8066</td>
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**Threaded Coupling‡†**

<table>
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<tr>
<th>WIRE TYPE</th>
<th>WIRE P/N</th>
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<tr>
<td>STRAIGHT</td>
<td>178-8398 178-8402 Etched FEP 178-8118</td>
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<tr>
<td>STRAIGHT</td>
<td>178-8399 178-8403 Silicone Coated FEP 178-8066</td>
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<tr>
<td>RT. ANGLE</td>
<td>178-9345 178-9349 Etched FEP NOMEX® Jacket 178-8118</td>
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<tr>
<td>RT. ANGLE</td>
<td>178-9346 178-9350 Silicone Coated FEP NOMEX® Jacket 178-5789</td>
</tr>
</tbody>
</table>

†† Mates with non-threaded PeeWee series plug assemblies.
‡‡ Mates with threaded plug assemblies.
Mates with all non-threaded PeeWee series plug assemblies.

Mates with threaded plug assemblies.

Nomex is a registered trademark of DuPont. Kovar is a registered trademark of the Carpenter Technology Corporation.

**PLUG DIMENSIONS**

(Dimensions shown as in/mm)

**RECEPTACLE DIMENSIONS**

Note: Refer to the Teledyne Reynolds’ Multi-pin High Voltage Connectors catalog for the 2-pin version of the PeeWee Series. Refer to the Space Qualified (SQ) Connectors catalog for the SQ PeeWee designs.

**SERIES SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Series</th>
<th>Voltage Rating (kVDC)</th>
<th>Altitude Rating (ft)</th>
<th>Operating Temp. (ºC)</th>
<th>Current Rating (Amp)</th>
<th>Receptacle Insulator Material</th>
<th>Plug Insulator Material</th>
<th>Coupling Style</th>
<th>Coupling Nut Material/Finish</th>
<th>Plug Contact Material/Finish (Socket)</th>
<th>Recept Contact Material/Finish (Pin)</th>
<th>Wire Type</th>
<th>Wire Insulation</th>
<th>Braid Terminiation</th>
<th>Test Voltage @ 70,000 ft</th>
<th>Test Voltage @ Sea Level</th>
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<tbody>
<tr>
<td>PeeWee</td>
<td>12</td>
<td>70,000</td>
<td>-55 to 125</td>
<td>1.6</td>
<td>Plastic or Ceramic</td>
<td>Plastic</td>
<td>Push-Pull or Threaded</td>
<td>BeCu/Au with CRES hood</td>
<td>Brass/Au or Kovar® Non-Shielded</td>
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**WIRE SPECIFICATIONS**

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<tr>
<th>Part #</th>
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<th>AWG</th>
<th>Strands</th>
<th>Plating</th>
<th>Insulation Material</th>
<th>ø in/mm</th>
<th>Shielding Material</th>
<th>ø in/mm</th>
<th>Jacket Material</th>
<th>ø in/mm</th>
<th>Impedance @ 25ºC</th>
<th>Attenuation @ 400mhz</th>
<th>Capacitance pF/FT (Nom.) @1k HZ</th>
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<tr>
<td>178-5789</td>
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<td>24</td>
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<td>•</td>
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<td>Silicone Coated FEP</td>
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<td>Etched FEP</td>
<td>0.050 / 1.27</td>
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<td>NOMEX®</td>
<td>TBD</td>
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08