7-16 Series
Panel Mount Receptacles

a division of WINCHESTER ELECTRONICS

7-16 Series — Panel Mount Receptacles

- Standard designs from stock
- Customized modular back-end launch designs
- Tri-metal, non-magnetic plating
- Slotted finger and solid wall interface designs
- PIM (-175 dBc min)

TRU Corporation offers a broad range of standard 7-16 series panel mount receptacles for use in both commercial and military applications. These standard designs offer outstanding quality, performance and rapid availability.

Our standard 7-16 series designs are available with either a slotted finger or a solid wall interface design to optimize your performance requirements. A slotted finger interface provides mechanically robust resistance against shock and vibration. A solid wall interface offers benefits of lower passive intermodulation (PIM) performance. Our PIM performance is enhanced with standard tri-metal plating that eliminates the magnetic material in the finish.

The back-end launch designs of this series are modular and allow for rapid customization of the contact geometry in a cost effective manner. In addition to the standard product included in this brochure, our design team can make a custom configuration for your individual application challenge.

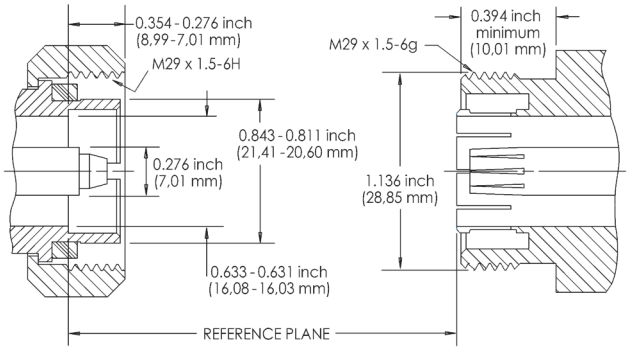
Visit our website or contact your local authorized Distribution office for additional support and product information.

7-16 Series
Panel Mount Receptacles

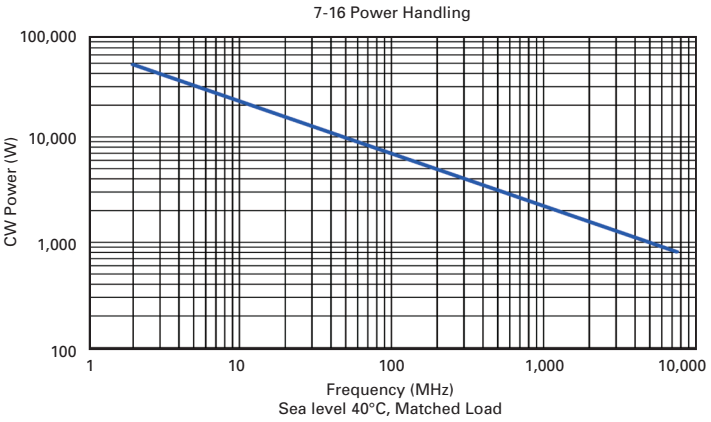
7-16 Specifications

Electrical		
Nominal Impedance		50 Ohms
Frequency Range		DC to 7.5 GHz
Voltage Range		2,700 volts rms
Dielectric Withstanding Voltage		4,000 volts rms
Passive Intermod: slotted finger interface solid wall interface		 -155 dBc minimum -175 dBc minimum
Mechanical		
Mating Characteristics		per IEC 169-4 or DIN 47223 as applicable
Connector Durability		500 cycles minimum
Recommended Torque		246 in-lbs. (27.8 N-m) nominal
Environmental		
Temperature Range		-85 to +329°F (-65°C to +165°C)
Vibration		MIL-STD-202 Method 204
Shock		MIL-STD-202 Method 213
Moisture Resistance		MIL-STD-202 Method 106
Corrosion (salt spray)		MIL-STD-202 Method 101
Materials/Finishes		
Body		Brass, tri-metal plating (Cu/Sn/Zn)
Contacts (inner)	Female	Beryllium copper, silver plated
	Male	Brass, silver plated
Contacts (outer)		Brass, silver plated
Contacts (slotted)		Beryllium copper, silver plated
Insulators		Teflon
Gaskets and Seals		Silicone rubber

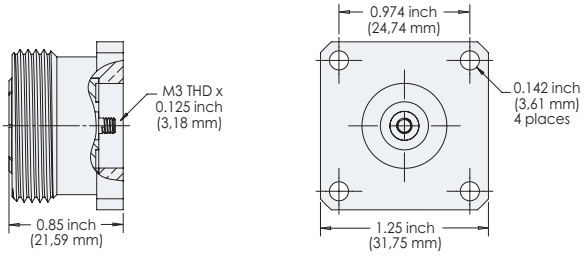
Interface Dimensions



Power Rating (7-16 Interface)

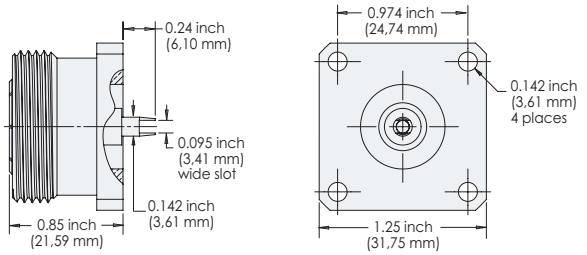


7-16 Series
Panel Mount Receptacles



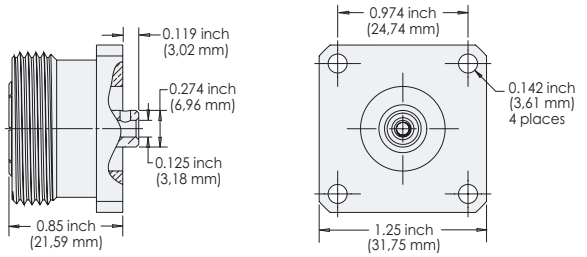
Flange mount jack receptacle, threaded contact

Part Number	Interface	Finish
TRU-7002-0001-01	Slotted finger	Tri-metal
TRU-7002-0002-01	Solid wall	Tri-metal



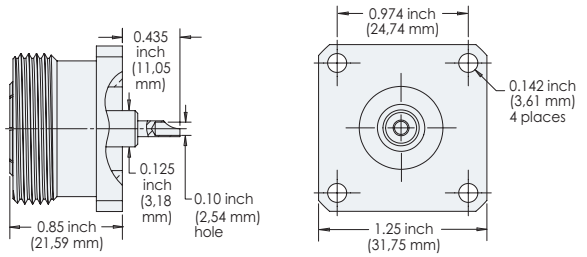
Flange mount jack receptacle, slotted contact

Part Number	Interface	Finish
TRU-7002-0001-02	Slotted finger	Tri-metal
TRU-7002-0002-02	Solid wall	Tri-metal



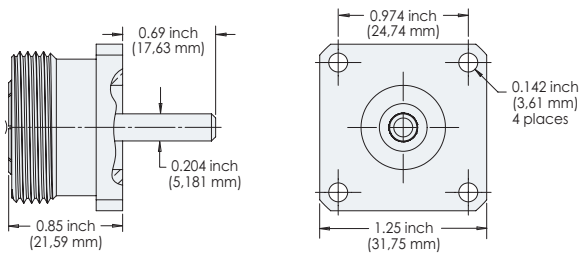
Flange mount jack receptacle, solder bushing contact

Part Number	Interface	Finish
TRU-7002-0001-03	Slotted finger	Tri-metal
TRU-7002-0002-03	Solid wall	Tri-metal



Flange mount jack receptacle, solder pot contact

Part Number	Interface	Finish
TRU-7002-0001-04	Slotted finger	Tri-metal
TRU-7002-0002-04	Solid wall	Tri-metal

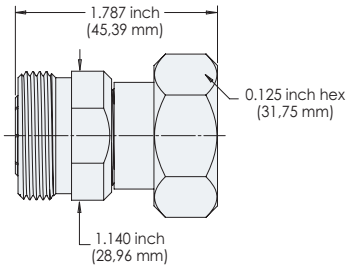


Flange mount jack receptacle, terminal post contact

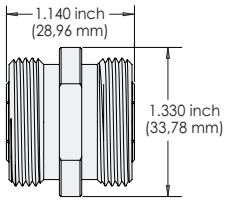
Part Number	Interface	Finish
TRU-7002-0001-05	Slotted finger	Tri-metal
TRU-7002-0002-05	Solid wall	Tri-metal

Dimensions shown are reference only.

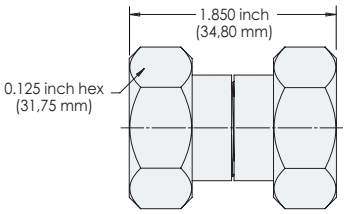
7-16 Series



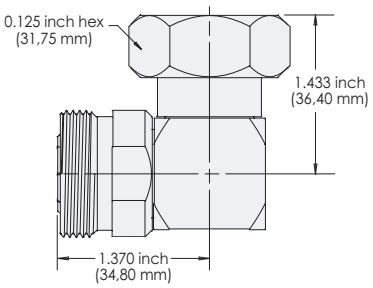
7-16 (f) to 7-16 (m)
TRU-7750
Silver Finish



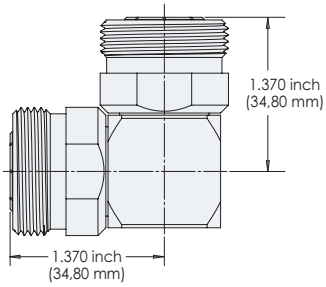
7-16 (f) to 7-16 (f)
TRU-7657-SSX
Silver Finish



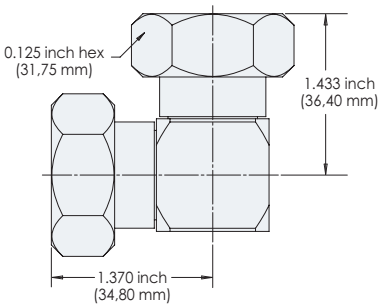
7-16 (m) to 7-16 (m)
TRU-7701
Silver Finish



Right Angle, 7-16 (f) to 7-16 (m)
TRU-7703
Silver Finish



Right Angle, 7-16 (f) to 7-16 (f)
TRU-7704
Silver Finish



Right Angle, 7-16 (m) to 7-16 (m)
TRU-7702
Silver Finish

Dimensions shown are reference only.

TRUlustre™ (Tri-metal) Plating

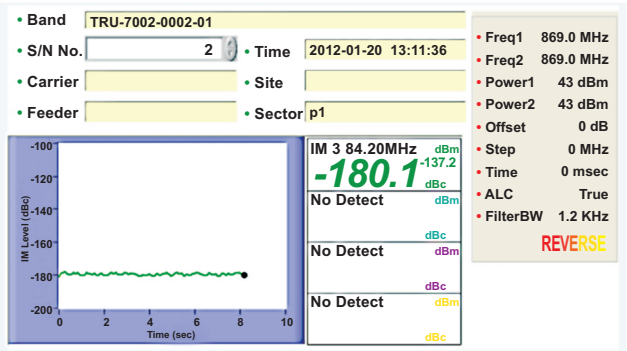
TRUlustre™ or equivalent industry tri-metal finishes are used on the 7-16 panel mount receptacle series to provide superior durability, high resistance to tarnishing and a material composition that minimizes passive intermodulation (PIM). Tri-metal plating is a bright, white, copper-tin-zinc alloy with a color similar to stainless steel.

Tri-metal plating has low contact resistance, high abrasion resistance and good ductility, making it an excellent choice for use in RF connectors. Tri-metal plating is non-magnetic (does not contain nickel) and is highly corrosion resistant. Tri-metal plating successfully passes the 96-hour salt spray requirement of MIL-STD-202, method 101C.

Appearance	Fully bright white color
Alloy	53-60% copper, 23-28% tin, 14-20% zinc
Density	7.9-8.1 g/cm
Hardness	330-380 VHN

Passive Intermodulation (PIM)

TRU 7-16 panel mount receptacles have been designed to minimize PIM distortion when used in critical communication applications. Our products typically achieve (-175 dBc minimum) using a solid wall interface design and (-155 dBc minimum) for a slotted finger interface. Tri-metal composition plating (copper/tin/zinc) is specified for our standard products to minimize PIM by eliminating ferrous magnetic properties associated with common plating such as nickel.



TRU Corporation
Peabody, Massachusetts
trucorporation.com