

# 7-16 Series Panel Mount Receptacles



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## 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



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## 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	-155 dBc minimum
solid wall interface	-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

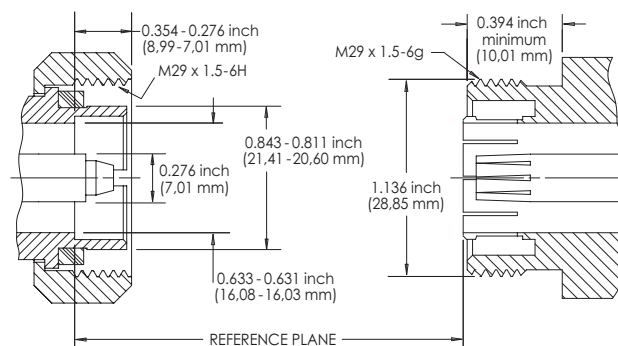
### Environmental

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

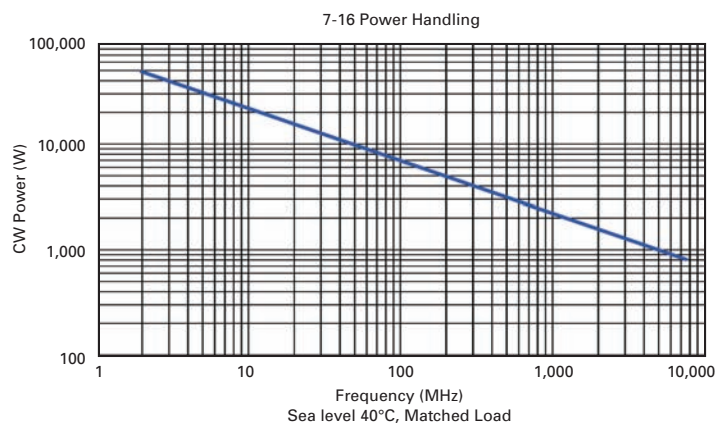
### Materials/Finishes

Body	Brass, tri-metal plating (Cu/Sn/Zn)
Contacts (inner)	Female Male
	Beryllium copper, silver plated Brass, silver plated
Contacts (outer)	Brass, silver plated
Contacts (slotted)	Beryllium copper, silver plated
Insulators	Teflon
Gaskets and Seals	Silicone rubber

## Interface Dimensions



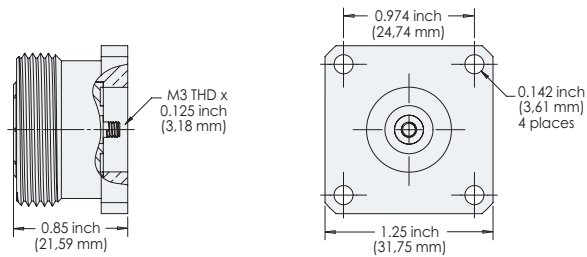
## Power Rating (7-16 Interface)



# 7-16 Series Panel Mount Receptacles

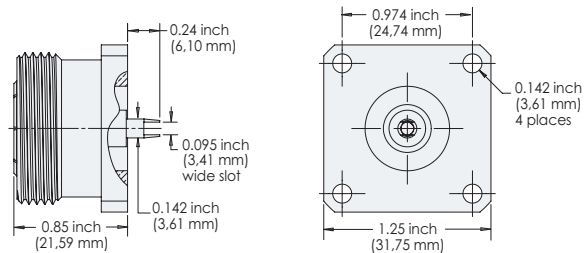


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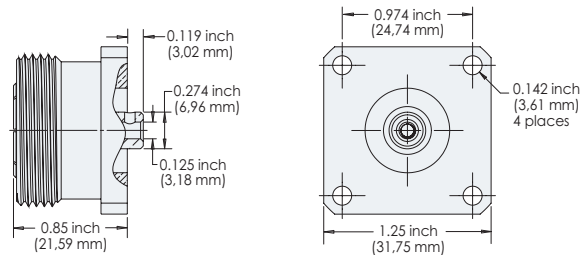
Flange mount jack receptacle, threaded contact

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



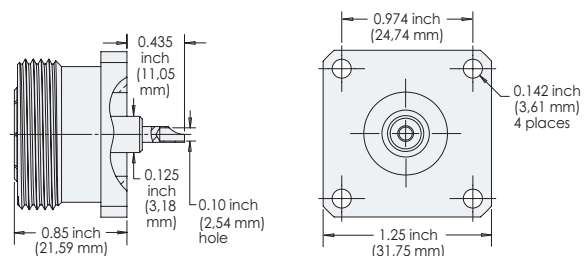
Flange mount jack receptacle, slotted contact

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



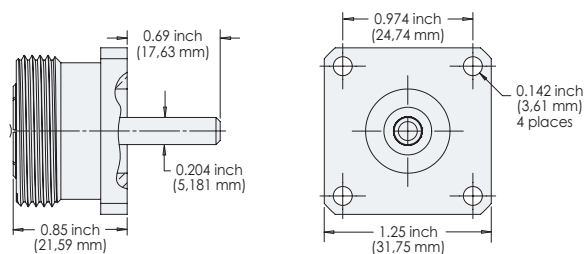
Flange mount jack receptacle, solder bushing contact

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

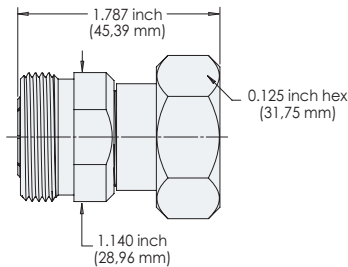
Part Number	Interface	Finish
TRU-7002-0001-05	Slotted finger	Tri-metal
TRU-7002-0002-05	Solid wall	Tri-metal

Dimensions shown are reference only.

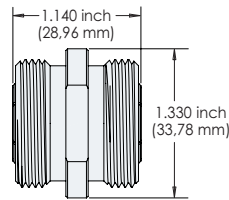
# 7-16 Series Adapters



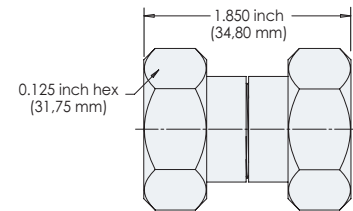
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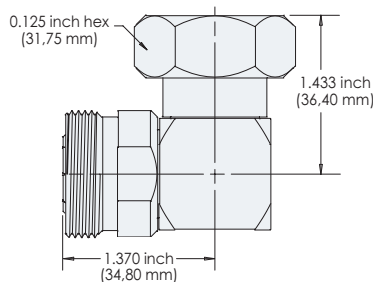
**7-16 (f) to 7-16 (m)**  
TRU-7750  
Silver Finish



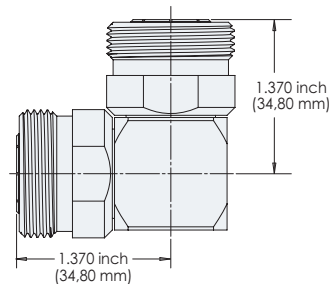
**7-16 (f) to 7-16 (f)**  
TRU-7657-SSX  
Silver Finish



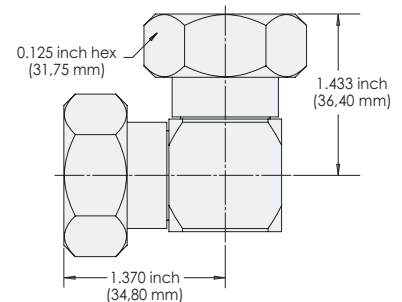
**7-16 (m) to 7-16 (m)**  
TRU-7701  
Silver Finish



**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.

