

### **RF Solutions**

The Johnson<sup>™</sup> Angled Precision RF PCB Mount Connectors are designed to offer mid-board launch of RF signals in tight enclosures as well as board to board applications, where there may be height restrictions for vertical mount and width restrictions for an end launch connector.

The mmWave connectors (1.85mm, 2.4mm, and 2.92mm) are designed for tight enclosures, utilizing a solderless contact to the PCB surface and two screws for quick and easy mounting to save on installation time and support frequencies up to 67 GHz. The SMA connectors support frequencies up to 26.5 GHz (30° connector and 45° connector, solderless) and to 18 GHz (45° connector, soldered, thru-hole)

### **Features**

- Mating interfaces: 1.85mm, 2.4mm, 2.92mm, and SMA
- Gold-plated beryllium copper body
- Rated to 500 mating cycles
- Field-replaceable
- 30° Angled Precision RF PCB Mount Connectors
  Frequency range:
  - 67 GHz for the 1.85mm, 50 GHz for the 2.4mm, 40 GHz for the 2.92mm, and 26.5 GHz for the SMA
  - $\circ~$  VSWR performance: 1.35 max from 50 to 67 GHz and
  - 1.30 max from DC to 50 GHz
- 45° Angled Precision RF PCB Mount ConnectorsFrequency range:
  - 67 GHz for the 1.85mm, 50 GHz for the 2.4mm, 40 GHz for the 2.92mm, and 26.5/18 GHz for the SMA
  - VSWR performance: 1.5 max from DC to 67 GHz

### **Applications**

- Test & measurement vector network analyzer (VNA)
- Instrumentation test fixture equipment
- Design validation testing
- Board characterization
- Semiconductor
- Military/defense
- Radar/satellite







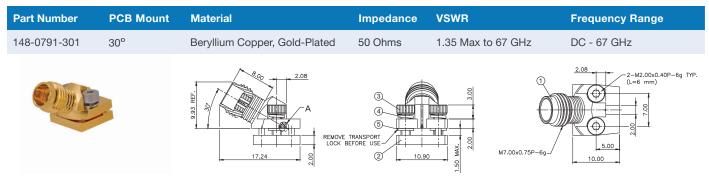






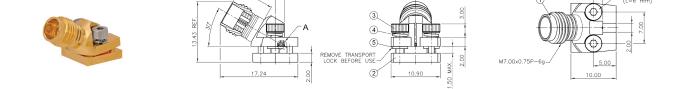


#### 1.85 mm Jack, Solderless PCB Mount



#### 2.4 mm Jack, Solderless PCB Mount

Part Number	PCB Mount	Material	Impedance	VSWR	Frequency Range
147-0791-301	30°	Beryllium Copper, Gold-Plated	50 Ohms	1.30 Max to 50 GHz	DC - 50 GHz
		\$00 - 2.08			2.08 -2-M2.00x0.40P-6g TYP. (L=6 mm)

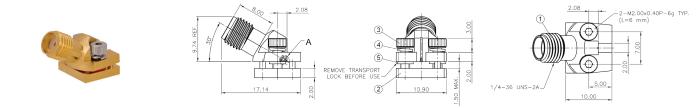


#### 2.92 mm Jack, Solderless PCB Mount

Part Number	PCB Mount	Material	Impedance	VSWR	Frequency Range
145-0791-301	30°	Beryllium Copper, Gold-Plated	50 Ohms	1.30 Max to 40 GHz	DC - 40 GHz
		Bu to the second	3 () () () () () () () () () ()	00 00 00 00 00 1/4-36 UN5-2/	2.08 (L=6 mm) 2.08 (L=6 mm) 2.09 (L=6 mm) 2.09 (L=6 mm) 2.00 (L=6 mm) 2.

#### SMA Jack, Solderless PCB Mount

142-0791-301      30°      Beryllium Copper, Gold-Plated      50 Ohms      1.30 Max to 26.5 GHz      DC - 26.5 GHz	Part Number	PCB Mount	Material	Impedance	VSWR	Frequency Range
	142-0791-301	30°	Beryllium Copper, Gold-Plated	50 Ohms	1.30 Max to 26.5 GHz	DC - 26.5 GHz





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#### 1.85 mm Jack, Solderless PCB Mount

Part Number	PCB Mount	Material	Impedance	VSWR	Frequency Range
148-0701-221	45°	Beryllium Copper, Gold-Plated	50 Ohms	1.5 Max to 67 GHz	DC - 67 GHz
		456 13 <sup>-</sup>	-SEE DETAIL A		2X 10-8005

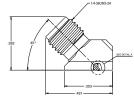
#### 2.4 mm Jack, Solderless PCB Mount

Part Number	PCB Mount	Material	Impedance	VSWR	Frequency Range
147-0701-281	45°	Beryllium Copper, Gold-Plated	50 Ohms 1.5 Max to 50 GHz		DC - 50 GHz
				.062 .08±.001	2x 40-8008

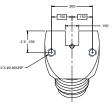
#### 2.92 mm Jack, Solderless PCB Mount

Part Number	PCB Mount	Material	Impedance	VSWR	Frequency Range
145-0701-221	45°	Beryllium Copper, Gold-Plated	50 Ohms	1.25 Max to 26.5 GHz 1.5 Max to 40 GHz	DC - 40 GHz













#### SMA Jack, Solderless PCB Mount

Part Number	PCB Mount	Material	Impedance	VSWR	Frequency Range
142-0711-281	45°	Beryllium Copper, Gold-Plated	50 Ohms	1.5 Max	DC - 26.5 GHz
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#### SMA Jack, Solderless PCB Mount

Part Number	PCB Mount	Material	Impedance	VSWR	Frequency Range
142-0711-271	45°	Beryllium Copper, Gold-Plated	50 Ohms	1.5 Max	DC - 18 GHz
		5X .020 4X .070	-		D.200±.003 + X .100±.003 + Ø .067±.003 Ø .054±.003 (SOLDER PAD) - HOLINTING LAYOUT

MOUNTING LAYOUT

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