



1.85mm Female Solderless 2 hole PCB Mount 70GHz VSWR1.92, Metal Contact Ring with Gap

RF Connectors Technical Data Sheet

PE45945

Configuration

- 1.85mm Female Connector
- 50 Ohms
- Straight Body Geometry

Features

- Max. Operating Frequency 70 GHz
- Good VSWR of 1.92:1
- Gold Plated Beryllium Copper Contact

Applications

- General Purpose Test
- PCB Applications

Description

PE45944 1.85mm female PCB RF connector has a 50 Ohms impedance. Our 1.85mm female PCB connector provides a maximum frequency of 70 GHz. Our high-quality radio frequency coaxial connector is used for general purpose tests and printed circuit board applications. This 1.85mm female RF connector is stocked to be readily available for same business day shipment.

The Pasternack 1.85mm female PCB connector has a maximum VSWR of 1.92:1. The Pasternack 1.85mm PCB connector has a stainless steel body. Our PE45944 1.85mm connector uses a stainless steel outer conductor. Pasternack's 1.85mm female connector has a maximum operating voltage of 150 Vrms and a dielectric withstanding voltage of 500 Vrms.

Pasternack RF connector has a maximum inner conductor and outer conductor resistance of 4 mOhms and 2.5 mOhms respectively. The radio frequency connector is made from stainless steel material and has a contact life of 500 cycles or more. The Pasternack PE45944 1.85mm connector operates at a temperature range of -40 to +165 deg C. Our female RF connector with PCB termination has a 0.353 dB maximum insertion loss.

This Pasternack 1.85mm female connector will ship the same business day as purchased. Our 1.85mm female connector is part of RF, microwave, and millimeter wave components in stock for local, domestic, and international shipment. For further information on similar products, our expert technical support and trained sales team can get you the ideal RF connector as per your requirements.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		70	GHz
VSWR			1.92:1	
Insertion Loss			0.353	dB
Operating Voltage (AC)			150	Vrms
Impedance		50		Ohms
Dielectric Withstanding Voltage (AC)			500	Vrms
Inner Conductor DC Resistance			4	mOhms
Outer Conductor DC Resistance			2.5	mOhms
Insulation Resistance	5,000			MOhms
RF Leakage	100			dB

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1.85mm Female Solderless 2 hole PCB Mount 70GHz VSWR1.92, Metal Contact Ring with Gap PE45945](#)



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Mechanical Specifications

Size

Length	0.44 in [11.18 mm]
Width	0.40 in [10.16 mm]
Height	0.40 in [10.16 mm]
Weight	0.01 lbs [4.54 g]
Mating Cycles	500 Cycles
Mating Torque	9.74 to 15 in-lbs [1.10 to 1.70 Nm]
Cable Retention Force	4.5 lbs 2.04 kg

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold
Outer Conductor	Stainless Steel	
Body	Stainless Steel	

Environmental Specifications

Temperature

Operating Range	-50 to +125 deg C
Humidity	MIL-STD-202, Method 106
Thermal Shock	MIL-STD-202, Method 107, Condition B
Salt Spray	MIL-STD-202, Method 101, Condition B

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

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1.85mm Female Solderless 2 hole PCB Mount 70GHz VSWR1.92, Metal Contact Ring with Gap from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1.85mm Female Solderless 2 hole PCB Mount 70GHz VSWR1.92, Metal Contact Ring with Gap PE45945](https://www.pasternack.com/1.85mm-female-pcb-connector-pe45945-p.aspx)

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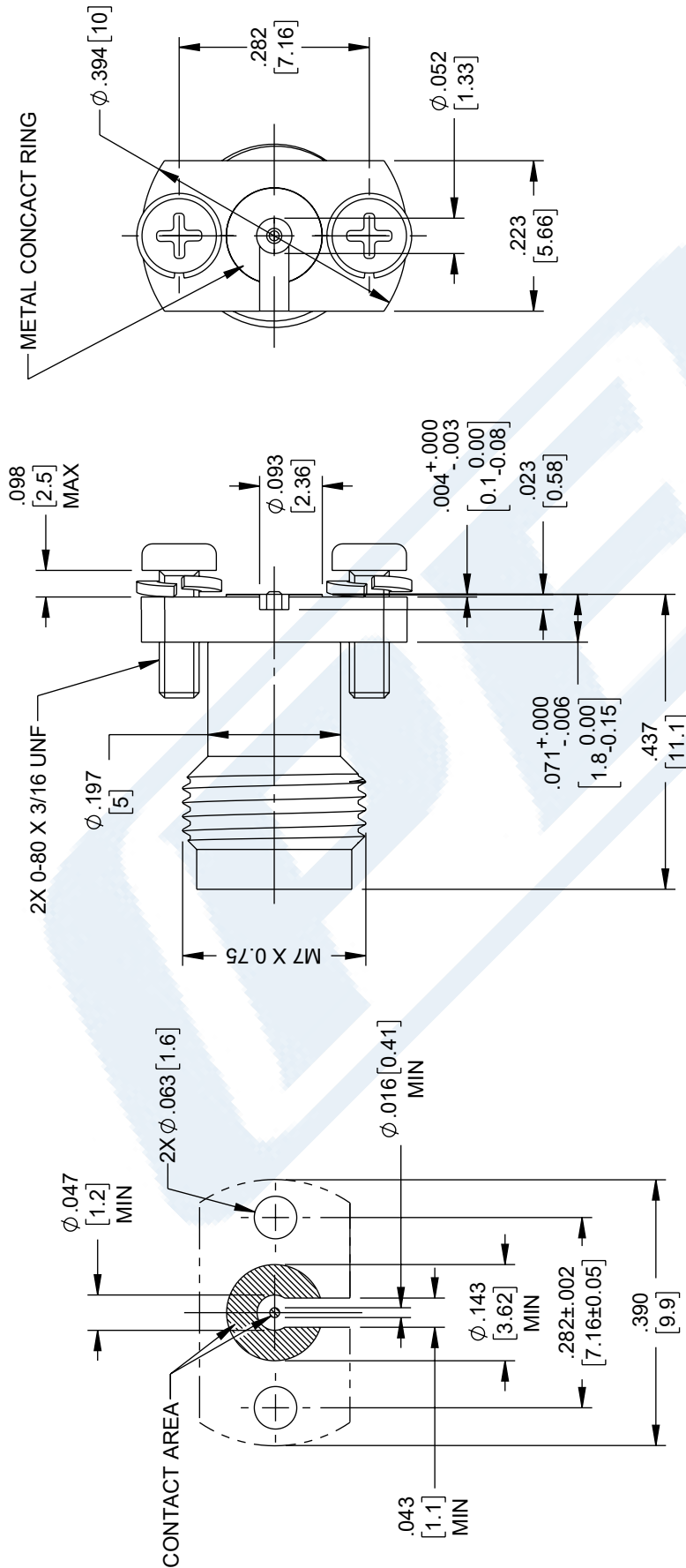
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

PE45945 CAD Drawing

1.85mm Female Solderless 2 hole PCB Mount 70GHz
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ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	09/11/2023	KGLEBOVA	AGANWANI

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RECOMMENDED
PCB LAYOUT
FOR REFERENCE ONLY

<div>UNLESS OTHERWISE SPECIFIED, DIMENSIONS IN [] ARE MILLIMETERS DIMENSIONS IN [] ARE INCHES</div>		<div>PE PASTERNAK® an INFINITI® brand</div>		<div></div> <div>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</div>		<div></div> <div>1 OF 1</div>																	
<div>TOLERANCES</div> <table><tr><td>X = ±.2 [5]</td><td>FRACTIONS</td></tr><tr><td>XX = ±.02 [0.5]</td><td>± 1/32</td></tr><tr><td>XXX = ±.005 [0.13]</td><td>ANGLES ± 1°</td></tr></table> <div>CABLE LENGTH TOLERANCES:</div> <table><tr><td><12 [305]</td><td>±.1 [25]</td></tr><tr><td>>12 [305] <= 120 [3048]</td><td>±.1 [25]</td></tr><tr><td>>60 [1524] <= 120 [3048]</td><td>±.1 [25]</td></tr><tr><td>>120 [3048] <= 300 [7620]</td><td>±.1 [25]</td></tr><tr><td>>300 [7620]</td><td>±.1 [25]</td></tr></table>		X = ±.2 [5]	FRACTIONS	XX = ±.02 [0.5]	± 1/32	XXX = ±.005 [0.13]	ANGLES ± 1°	<12 [305]	±.1 [25]	>12 [305] <= 120 [3048]	±.1 [25]	>60 [1524] <= 120 [3048]	±.1 [25]	>120 [3048] <= 300 [7620]	±.1 [25]	>300 [7620]	±.1 [25]	<div>Website: www.Pasternack.com</div> <div>Phone: 1.866.727.8376 1.949.261.1920</div>		<div>SCALE</div> <div>NONE</div>		<div>SHEET</div> <div>1 OF 1</div>	
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<div>DESCRIPTION</div> <div>1.85 mm JACK SOLDERLESS PCB MOUNT 2 HOLE FLANGE</div> <div>TEMP RATED 85 DEG C 70 GHz VSWR 1.92</div>																							
SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV																			
A	53919	KGLEBOVA	PE45945	A																			
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ALL DIMENSIONS ARE FOR REFERENCE ONLY. DIMENSIONS ARE NOT TO BE USED TO CHANGE WITHOUT NOTICE AND SUBJECT TO CHANGE WITHOUT NOTICE. UNDIMENSIONED/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.		THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.	