



## 1.85mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

### RF Connectors Technical Data Sheet

**PE45410**

#### Configuration

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

- Connector Interface Types: PE-047SR, PE-SR047AL, PE-SR047FL
- 5/16 inch Hex

#### Features

- Max. Operating Frequency 70 GHz
- Excellent VSWR of 1.18:1

- Gold over Nickel Plated Beryllium Copper Contact
- 50  $\mu$ in minimum contact plating

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE45410 1.85mm male connector with solder attachment for PE-047SR, PE-SR047AL and PE-SR047FL is part of our full line of RF components available for same-day shipping. Our 1.85mm male connector operates up to a maximum frequency of 70 GHz and offers excellent VSWR of 1.18:1.

Our 1.85mm male connector PE45410 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		70	GHz
VSWR			1.18:1	
Insertion Loss		0.335		dB
Operating Voltage (AC)			170	Vrms
Dielectric Withstanding Voltage (AC)			500	Vrms
High Potential Voltage 5 to 7.5 MHz			325	Vrms
Corona Discharge at 70,000 ft			125	Vrms
Insulation Resistance	5,000			MOhms
RF Leakage	-90			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 Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE45410](#)



## 1.85mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

### RF Connectors Technical Data Sheet

**PE45410**

#### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 26.5	26.5 to 40	40 to 50	50 to 70		GHz
VSWR, Max	1.12:1	1.14:1	1.16:1	1.18:1		

Electrical Specification Notes:  
Insertion loss:  $0.04 \times \text{sqrt}(f\text{GHz})$  dB.

#### Mechanical Specifications

##### Size

Length 0.56 in [14.22 mm]  
Width/Dia. 0.312 in [7.92 mm]  
Height 0.35 in [8.89 mm]

Mating Cycles 500 Cycles  
Mating Torque 8 to 10 in-lbs [0.90 to 1.13 Nm]

#### Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold over Nickel 50 $\mu$ in minimum
Insulation	PEI	
Body	Beryllium Copper	Gold over Nickel 50 $\mu$ in minimum
Coupling Nut	Passivated Stainless Steel	ASTM-A582
Retaining Ring	Beryllium Copper	
Gasket	Silicone Rubber	

#### Environmental Specifications

##### Temperature

Operating Range -65 to +150 deg C  
Shock MIL-STD-202, Method 213, Condition I  
Vibration MIL-STD-202, Method 204, Condition D  
Thermal Shock MIL-STD-202, Method 107, Condition B  
Salt Spray MIL-STD-202, Method 101, Condition B, 5% salt solution

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1.85mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL](#)  
**PE45410**



## 1.85mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

### RF Connectors Technical Data Sheet

PE45410

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

#### Plotted and Other Data

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1.85mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE45410](#)



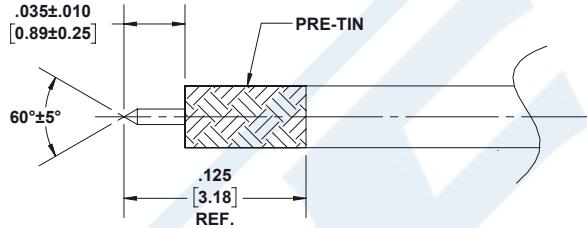
## 1.85mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

### RF Connectors Technical Data Sheet

PE45410

#### Assembly Instruction

### Assembly Instructions

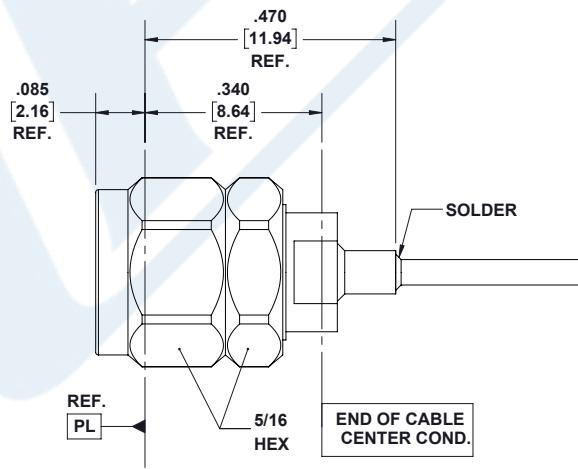


#### STEP 1:

- PRE-TIN CABLE OUTER JACKET OVER APPROX. LENGTH SHOWN.
- TRIM CABLE TO EXPOSE CENTER CONDUCTOR AS SHOWN.
- POINT CENTER CONDUCTOR AS INDICATED.

#### STEP 2:

- INSERT CABLE INTO CONNECTOR UNTIL CENTER CONDUCTOR PLUGS IN AND CABLE SEATS IN CONNECTOR BORE.
- SOLDER CABLE JACKET TO BODY WHERE SHOWN APPLYING HEAT TO EXTENDED BODY TAIL.



Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1.85mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE45410](#)



## 1.85mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

### RF Connectors Technical Data Sheet

PE45410

1.85mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL 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.

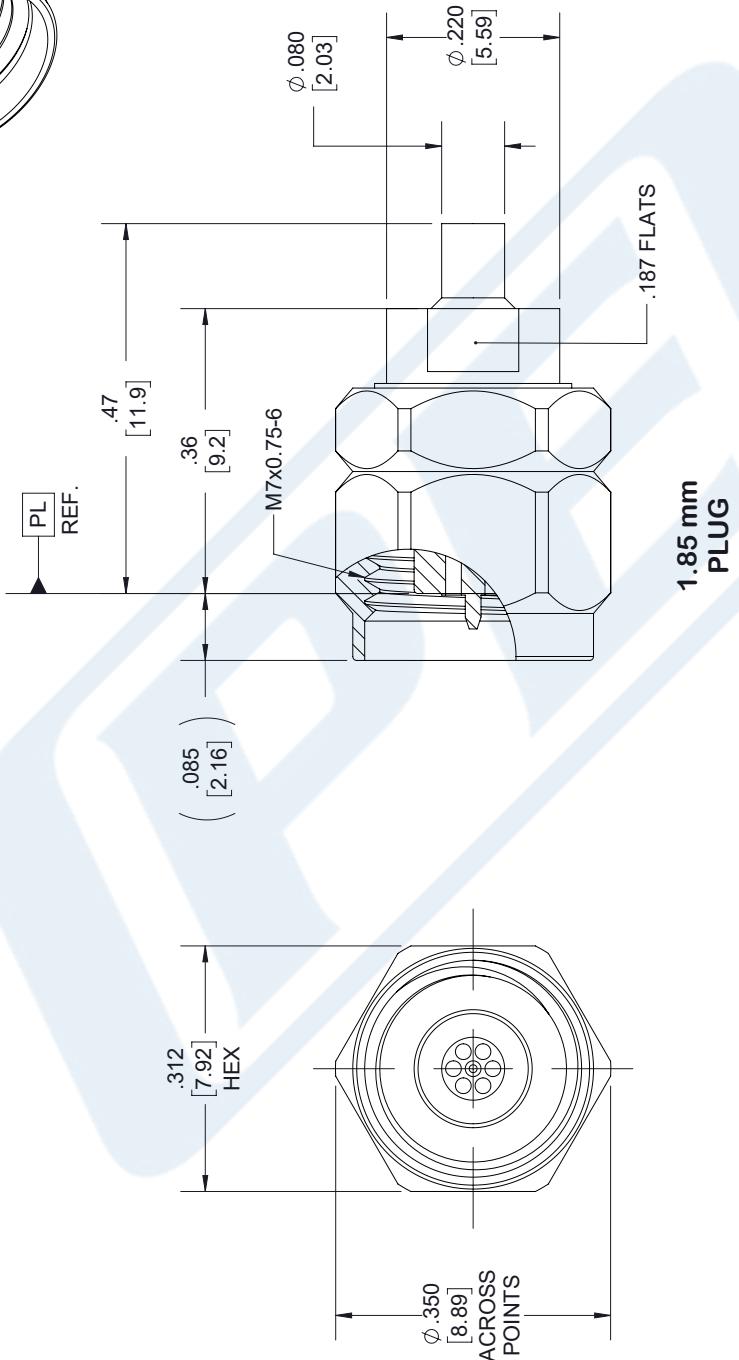
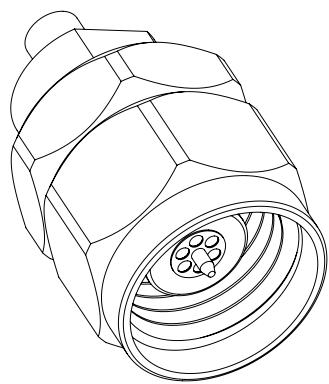
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1.85mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE45410](https://www.pasternack.com/1.85mm-male-pe-047sr-pe-sr047al-pe-sr047fl-connector-pe45410-p.aspx)

URL: <https://www.pasternack.com/1.85mm-male-pe-047sr-pe-sr047al-pe-sr047fl-connector-pe45410-p.aspx>

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.

# PE45410 CAD Drawing

1.85mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL



**STANDARD TOLERANCES**  
 X  $\pm 0.2$   
 .XX  $\pm 0.02$   
 .XXX  $\pm 0.005$

**ONLY TO DIMENSIONS IN INCHES**

**PE PASTERNACK**  
 THE ENGINEER'S RESOURCE

Pasterнак Enterprises, Inc.  
 P.O. Box 16759 | Irvine | CA | 92623

Phone: (949) 261-1920 | Fax: (949) 261-7451  
 Website: [www.pasterнак.com](http://www.pasterнак.com) | E-Mail: [sales@pasterнак.com](mailto:sales@pasterнак.com)

**NOTES:**  
 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  
 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  
 3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE	CAGE CODE	CAD FILE	SCALE	SIZE
PE45410	53919	110217	N/A	A