



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

## RF Connectors Technical Data Sheet

PE44335

### Configuration

- 1.85mm Male Connector
- 50 Ohms
- Straight Body Geometry
- PE-047SR, PE-SR047AL, PE-SR047FL Interface Type
- Clamp/Solder Attachment
- 5/16 inch Hex

### Features

- Max. Operating Frequency 65 GHz
- Good VSWR of 1.33:1
- Gold over Nickel Plated Beryllium Copper Contact
- Contact plating according to MIL-G-45204

### Applications

- General Purpose Test
- Custom Cable Assemblies

### Description

Pasternack's PE44335 1.85mm male connector with clamp/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 65 GHz and offers good VSWR of 1.33:1.

Our 1.85mm male connector PE44335 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      |         | 65      | GHz   |
| VSWR            |         |         | 1.33:1  |       |
| Insertion Loss  |         |         | 0.41    | dB    |

Electrical Specification Notes:  
 Insertion loss:  $0.05 \times \sqrt{f(\text{GHz})}$  dB.

### Mechanical Specifications

|               |                                  |
|---------------|----------------------------------|
| <b>Size</b>   |                                  |
| Length        | 0.85 in [21.59 mm]               |
| Width/Dia.    | 0.312 in [7.92 mm]               |
| Weight        | 0.014 lbs [6.35 g]               |
| Mating Cycles | 500 Cycles                       |
| Mating Torque | 8 to 10 in-lbs [0.90 to 1.13 Nm] |

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 Clamp/Solder Attachment for PE-047SR, PE-SR047AL, PE-SR-047FL PE44335](#)



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

## RF Connectors Technical Data Sheet

PE44335

### Material Specifications

| Description  | Material                   | Plating                         |
|--------------|----------------------------|---------------------------------|
| Contact      | Beryllium Copper           | Gold over Nickel<br>MIL-G-45204 |
| Insulation   | PPO                        |                                 |
| Body         | Passivated Stainless Steel | ASTM-A380                       |
| Coupling Nut | Passivated Stainless Steel | ASTM-A380                       |

### Environmental Specifications

#### Temperature

Operating Range

-55 to +100 deg C

Vibration

MIL-STD-202, Method 204, Condition D (20 G's)

Salt Spray

MIL-STD-202, Method 101, Condition B, 5% salt solution

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

### Plotted and Other Data

Notes:

1.85mm Male Connector Clamp/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% availability and are part of the broadest selection in the industry.

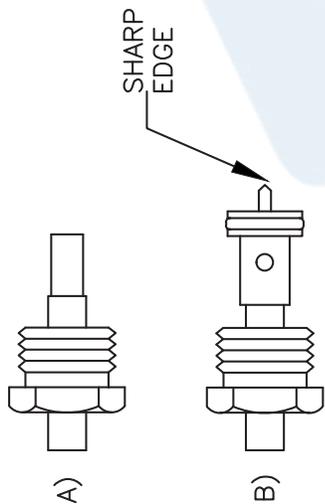
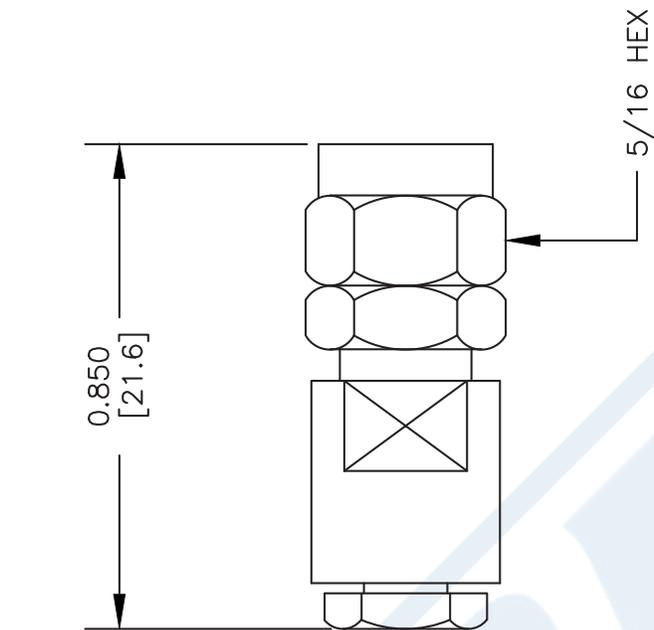
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URL: <https://www.pasternack.com/1.85mm-male-standard-pe-047sr-pe-sr047al-pe-sr047fl-connector-pe44335-p.aspx>

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.

# PE44335 CAD Drawing

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



### ASSEMBLY PROCEDURES

1. SLIDE CLAMP NUT OVER CABLE. STRIP CABLE AS SHOWN IN (A). DO NOT NICK DIELECTRIC.
2. INSERT CABLE THRU ADAPTER UNTIL IT BOTTOMS OUT. SOLDER OUTER CONDUCTOR TO ADAPTER & TRIM DIELECTRIC AS SHOWN IN (B).
3. SCREW ASSEMBLY INTO BODY & TIGHTEN NUT.

DWG TITLE

**PE44335**

FSCM NO. 53919

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].  
 4. FITS MIL-C-17 AND EQUIVALENT CABLES.

CAD FILE 030704

SCALE N/A

SIZE A

127



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1.85mm Female Precision Connector Clamp/Solder Attachment For PE-047SR, PE-SR047AL, PE-SR047FL

TECHNICAL DATA SHEET

PE44800

**1.85mm Female Precision Connector Clamp/Solder Attachment For PE-047SR, PE-SR047AL, PE-SR047FL**

**Configuration**

|  |                                  |
|--|----------------------------------|
| Connector                                | 1.85mm Female                    |
| Connector Interface Type                 | PE-047SR, PE-SR047AL, PE-SR047FL |
| Cable Attachment Method (Shield/Contact) | Clamp/Solder                     |
| Connector Design                         | Precision                        |
| Body Style                               | Straight                         |

**Electrical Specifications**

|                      |          |
|----------------------|----------|
| Frequency Range, GHz | DC to 65 |
| Impedance, Ohms      | 50       |
| Maximum VSWR         | 1.35:1   |

**Mechanical Specifications**

**Size**

|                     |              |
|---------------------|--------------|
| Length, in [mm]     | 0.61 [15.49] |
| Width/Dia., in [mm] | 0.3 [7.62]   |

**Connector**

|                                    |                            |
|------------------------------------|----------------------------|
| Type                               | 1.85mm Female              |
| Contact Material and Plating       | Beryllium Copper, Gold     |
| Contact Plating Specification      | 50µ Inches.                |
| Coupling Nut Material and Plating  | Passivated Stainless Steel |
| Coupling Nut Plating Specification | SAE-AMS-2700               |
| Body Material and Plating          | Passivated Stainless Steel |
| Body Plating Specification         | SAE-AMS-2700               |

**Compliance Certifications** (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)

|                |     |
|----------------|-----|
| RoHS Compliant | Yes |
|----------------|-----|

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 Precision Connector Clamp/Solder Attachment For PE-047SR, PE-SR047AL, PE-SR047FL PE44800](#)

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1.85mm Female Precision Connector Clamp/Solder  
Attachment For PE-047SR, PE-SR047AL, PE-SR047FL

TECHNICAL DATA SHEET

PE44800

**Plotted and Other Data**

Notes:

Values at 25 °C, sea level

1.85mm Female Precision Connector Clamp/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 fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

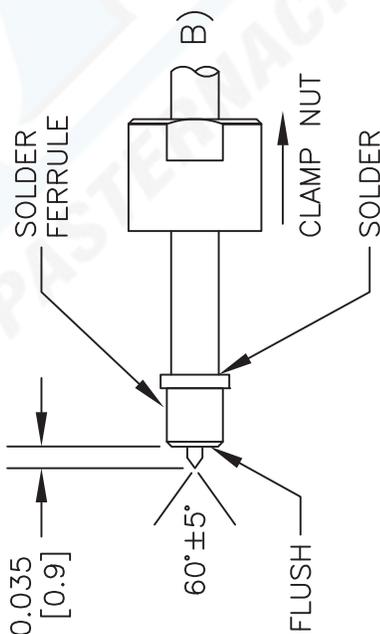
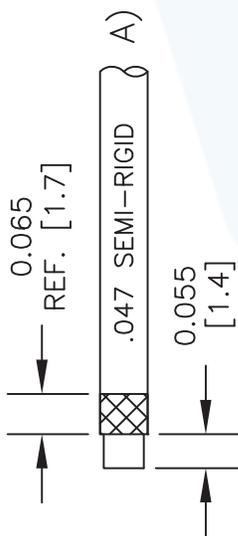
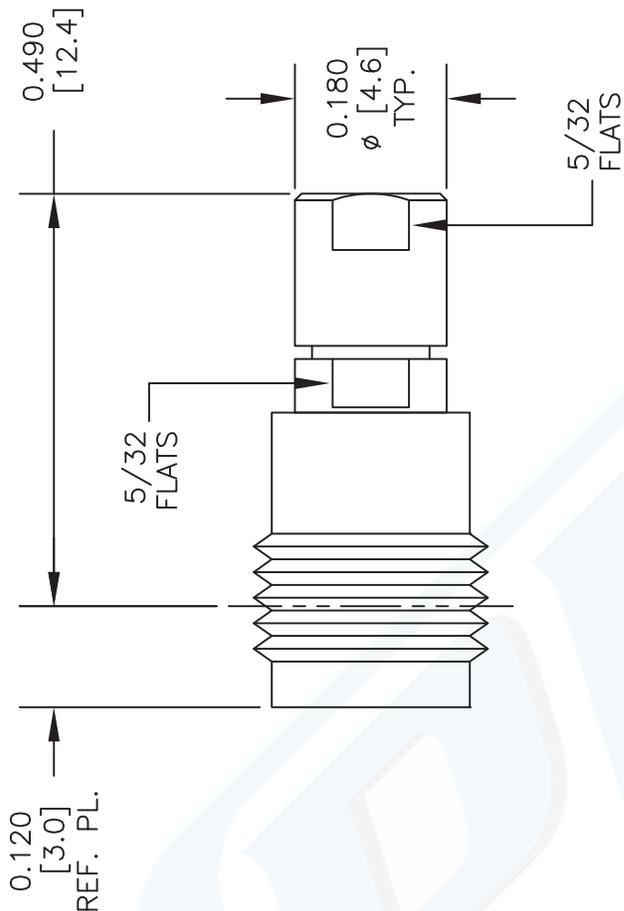
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# PE44800 CAD Drawing

1.85mm Female Precision Connector Clamp/Solder Attachment  
For PE-047SR, PE-SR047AL, PE-SR047FL



## STRIPPING DIMENSIONS

## ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN IN (A). DO NOT NICK DIELECTRIC.
2. PRE-TIN CABLE JACKET TO APPROXIMATE DIMENSION AS SHOWN IN (A).
3. INSERT CABLE THRU ADAPTER UNTIL IT BOTTOMS OUT. SOLDER OUTER CONDUCTOR TO ADAPTER & TRIM DIELECTRIC AS SHOWN IN (B).
4. SCREW ASSEMBLY INTO BODY & TIGHTEN NUT.

DWG TITLE

**PE44800**

NOTES:  
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3. DIMENSIONS ARE IN INCHES [mm].  
4. FITS MIL-C-17 AND EQUIVALENT CABLES.

FSCM NO. 53919

CAD FILE 042413

SCALE N/A

SIZE A

2233



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## 047 Semi-rigid Coax Cable with Copper Outer Conductor

### TECHNICAL DATA SHEET

PE-047SR

#### Configuration

|                                      |                           |
|--------------------------------------|---------------------------|
| Inner Conductor Material and Plating | Copper Clad Steel, Silver |
| Dielectric Type                      | PTFE                      |
| Shield Materials                     | Copper                    |

#### Electrical Specifications

|                                       |       |
|---------------------------------------|-------|
| Impedance, Ohms                       | 50    |
| Maximum Operating Frequency, GHz      | 40    |
| Dielectric Withstanding Voltage, Vrms | 2,000 |

#### Electrical Specifications by Frequency

##### Frequency 1

|                                 |             |
|---------------------------------|-------------|
| Frequency, MHz                  | 1000        |
| Attenuation, dB/100ft [dB/100m] | 40 [131.23] |
| Power Handling, Watts           | 32          |

##### Frequency 2

|                                 |              |
|---------------------------------|--------------|
| Frequency, GHz                  | 10           |
| Attenuation, dB/100ft [dB/100m] | 130 [426.51] |
| Power Handling, Watts           | 9            |

##### Frequency 3

|                                 |              |
|---------------------------------|--------------|
| Frequency, GHz                  | 20           |
| Attenuation, dB/100ft [dB/100m] | 190 [623.36] |
| Power Handling, Watts           | 6.5          |

#### Mechanical Specifications

##### Temperature

|                        |             |
|------------------------|-------------|
| Operating Range, deg C | -55 to +100 |
|------------------------|-------------|

##### Inner Conductor

|                   |                   |
|-------------------|-------------------|
| Number of Strands | 1                 |
| Material          | Copper Clad Steel |
| Plating           | Silver            |
| Diameter, in [mm] | 0.011 [0.28]      |

##### Dielectric:

|                   |              |
|-------------------|--------------|
| Type              | PTFE         |
| Diameter, in [mm] | 0.037 [0.94] |

##### Shield:

|                   |              |
|-------------------|--------------|
| Number of         | 1            |
| Material 1        | Copper       |
| Diameter, in [mm] | 0.047 [1.19] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [047 Semi-rigid Coax Cable with Copper Outer Conductor PE-047SR](#)

## 047 Semi-rigid Coax Cable with Copper Outer Conductor

### TECHNICAL DATA SHEET

PE-047SR

**Jacket:**

|                                       |              |
|---------------------------------------|--------------|
| Diameter, in [mm]                     | 0.047 [1.19] |
| One Time Minimum Bend Radius, in [mm] | 0.05 [1.27]  |
| Weight, lbs/ft [Kg/m]                 | 0.005 [0.01] |

**Compliance Certifications** (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)

|                 |            |
|-----------------|------------|
| RoHS Compliant  |            |
| REACH Compliant | 12/19/2011 |

**Plotted and Other Data**

Notes:

- Values at +25 °C, sea level

047 Semi-rigid Coax Cable with Copper Outer Conductor from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

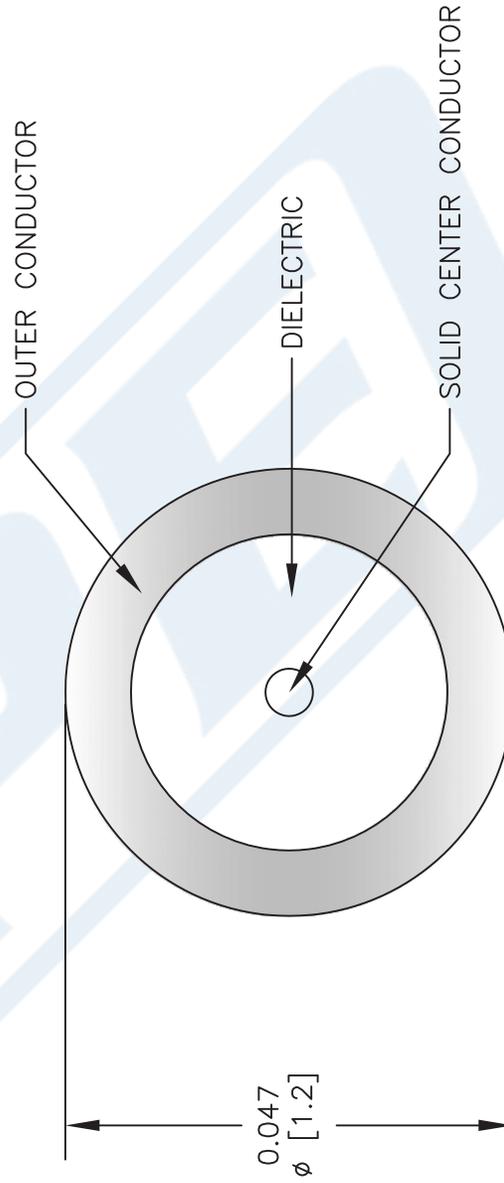
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URL: <http://www.pasternack.com/semirigid-0.047-50-ohm-coax-cable-copper-pe-047sr-p.aspx>

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# PE-047SR CAD Drawing

047 Semi-rigid Coax Cable with Copper Outer Conductor



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DWG TITLE  
**PE-047SR**

FSCM NO. 53919

CAD FILE 073113

SCALE N/A

SIZE A

2233

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