



Mini SMP Female Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

RF Connectors Technical Data Sheet

PE44491

Configuration

- Mini SMP Female Connector
- MIL-STD-348A
- 50 Ohms
- Straight Body Geometry
- PE-047SR, PE-SR047AL, PE-SR047FL Interface Type
- Solder Attachment

Features

- Max. Operating Frequency 65 GHz
- Good VSWR of 1.68:1
- Gold Plated Beryllium Copper Contact
- Blind Mate Connector

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE44491 Mini SMP female 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 Mini SMP female connector operates up to a maximum frequency of 65 GHz and offers good VSWR of 1.68:1. The Pasternack blind mate connector is ideal for applications where direct visual or tactile access to the connection point is not possible, for example, when two circuit boards need to be mated.

Our Mini SMP female connector PE44491 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			1.68:1	
Operating Voltage (AC)			325	Vrms
Inner Conductor DC Resistance			6	mOhms
Outer Conductor DC Resistance			2	mOhms
Insulation Resistance	5,000			MOhms

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 18	18 to 40	40 to 65			GHz
VSWR, Max	1.11:1	1.33:1	1.68:1			

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Mini SMP Female Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE44491](#)



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Electrical Specification Notes:
Insertion loss = 0.04 x sqrt(fGHz) dB max up to 26.5 GHz.

Mechanical Specifications

Size

Length 0.26 in [6.6 mm]
Width/Dia. 0.13 in [3.30 mm]
Weight 0.006 lbs [2.72 g]

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold
Insulation	PTFE	
Body	Beryllium Copper	Gold

Mechanical Specification Notes:
Mating cycles: 500 (smooth bore), 100 (full detent) minimum.

Environmental Specifications

Temperature

Operating Range -55 to +155 deg C
Humidity MIL-STD-202, Method 106
Shock MIL-STD-202, Method 213, Condition A
Vibration MIL-STD-202, Method 204, Condition A
Thermal Shock MIL-STD-202, Method 107, Condition B

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Mini SMP Female Connector Solder Attachment
for PE-047SR, PE-SR047AL, PE-SR047FL

RF Connectors Technical Data Sheet

PE44491

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

Plotted and Other Data

Notes:

Mini SMP Female 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% availability and are part of the broadest selection in the industry.

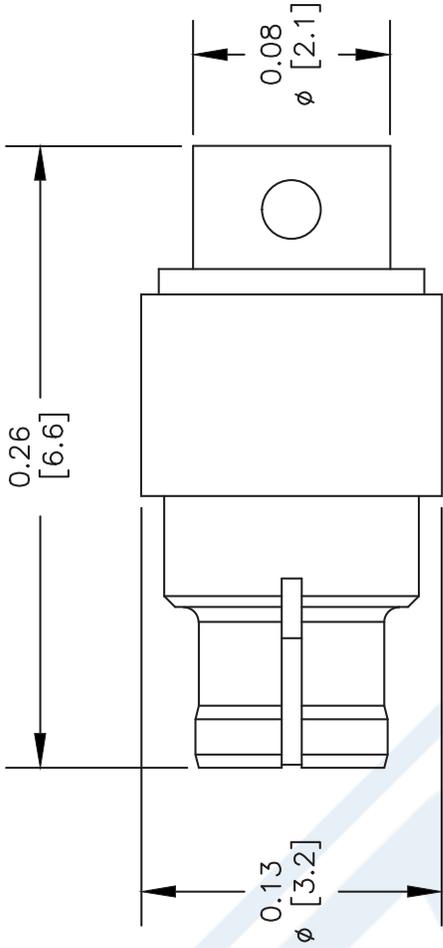
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Mini SMP Female Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE44491](#)

URL: <https://www.pasternack.com/mini-smp-female-standard-pe-047sr-pe-sr047al-pe-sr047fl-connector-pe44491-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.

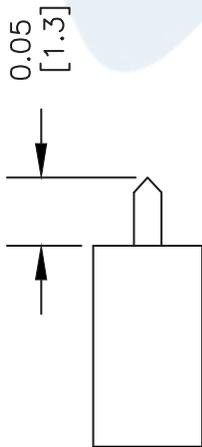
PE44491 CAD Drawing

Mini SMP Female Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

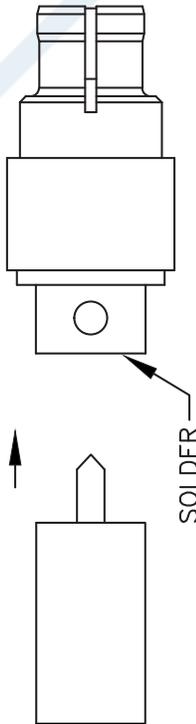


ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN. DO NOT NICK CENTER CONDUCTOR.



2. INSERT CABLE AND CONTACT INTO CONNECTOR BODY UNTIL FULLY ENGAGED. SOLDER BODY TO CABLE.



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

PE44491

REV. A

FSCM NO. 53919

CAD FILE 020212

SCALE N/A

SIZE A

2233



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

TECHNICAL DATA SHEET

PE44799

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

Configuration

Connector	1.85mm Male
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]	0.585 [14.86]
Width/Dia., in [mm]	0.35 [8.89]

Connector

Type	1.85mm Male
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
Hex Size, Inch	5/16
Torque, in-lbs [Nm]	8 [0.9]
Body Material and Plating	Passivated Stainless Steel
Body Plating Specification	SAE-AMS-2700
Dielectric Type	PEI

Compliance Certifications (visit www.Pasternack.com for current document)

RoHS Compliant	Yes
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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 Precision Connector Clamp/Solder Attachment For PE-047SR, PE-SR047AL, PE-SR047FL PE44799](#)

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

TECHNICAL DATA SHEET

PE44799

Plotted and Other Data

Notes:

Values at 25 °C, sea level

1.85mm Male 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.

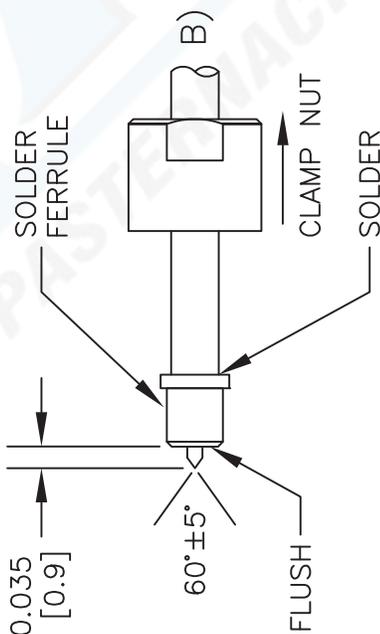
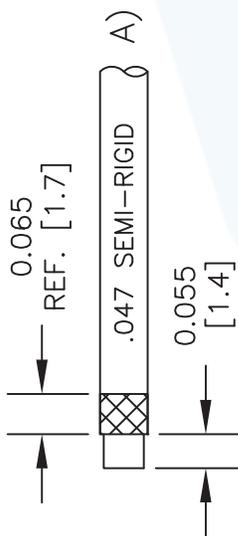
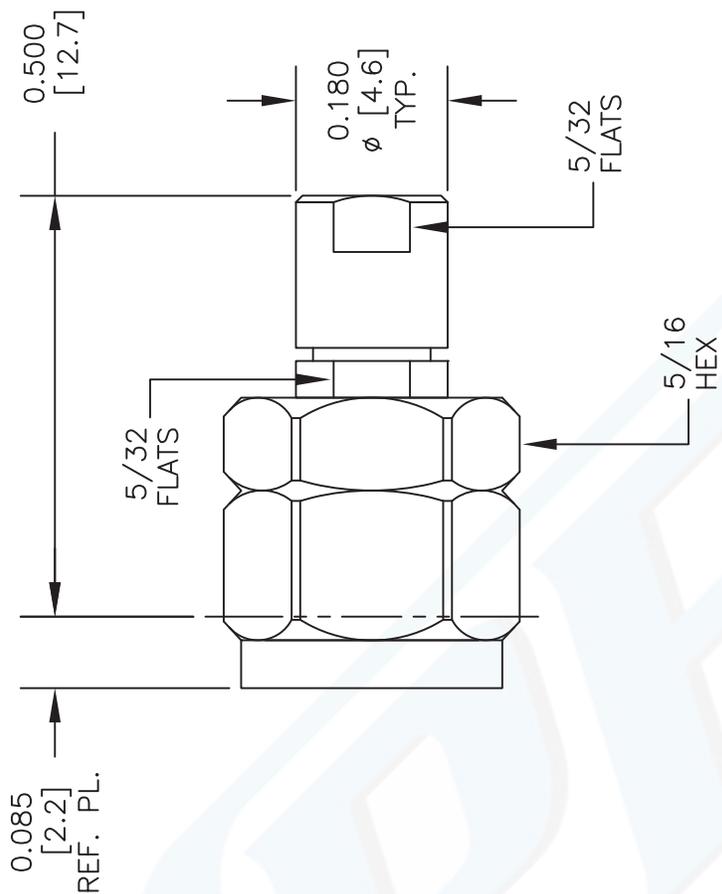
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PE44799 CAD Drawing

1.85mm Male 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

PE44799

NOTES:
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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.

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
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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 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.

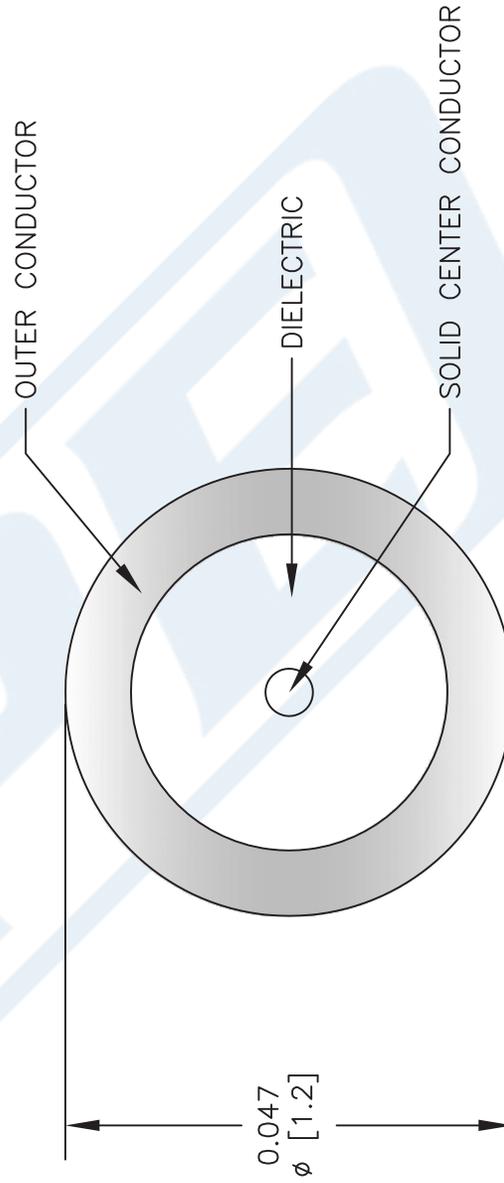
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URL: <http://www.pasternack.com/semirigid-0.047-50-ohm-coax-cable-copper-pe-047sr-p.aspx>

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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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