



2.92mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

RF Connectors Technical Data Sheet

PE45412

Configuration

- 2.92mm Male Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: PE-047SR, PE-SR047AL, PE-SR047FL
- 5/16 inch Hex

Features

- Max. Operating Frequency 45 GHz
- Excellent VSWR of 1.14:1
- Gold over Nickel Plated Beryllium Copper Contact
- 50 µin minimum contact plating

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE45412 2.92mm 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 2.92mm male connector operates up to a maximum frequency of 45 GHz and offers excellent VSWR of 1.14:1.

Our 2.92mm male connector PE45412 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		45	GHz
VSWR			1.14:1	
Insertion Loss			0.268	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: [2.92mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE45412](#)



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Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 18	18 to 26.5	26.5 to 45			GHz
VSWR, Max	1.1:1	1.12:1	1.14:1			

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

Mechanical Specifications

Size

Length	0.54 in [13.72 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 µin minimum
Insulation	PEI	
Body	Beryllium Copper	Gold over Nickel 50 µin minimum
Coupling Nut	Passivated Stainless Steel	ASTM-A582
Retaining Ring	Beryllium Copper	
Gasket	Silicone Rubber	

Environmental Specifications

Temperature

Operating Range	-65 to +165 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

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

Plotted and Other Data

Notes:

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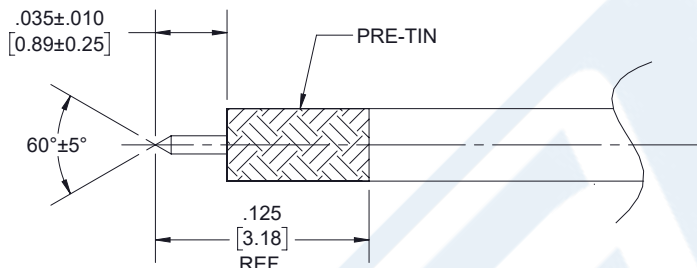


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Assembly Instruction

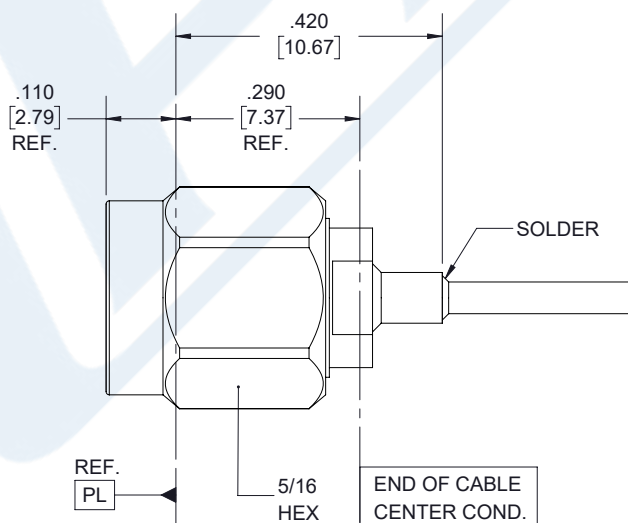


STEP 1:

- 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.



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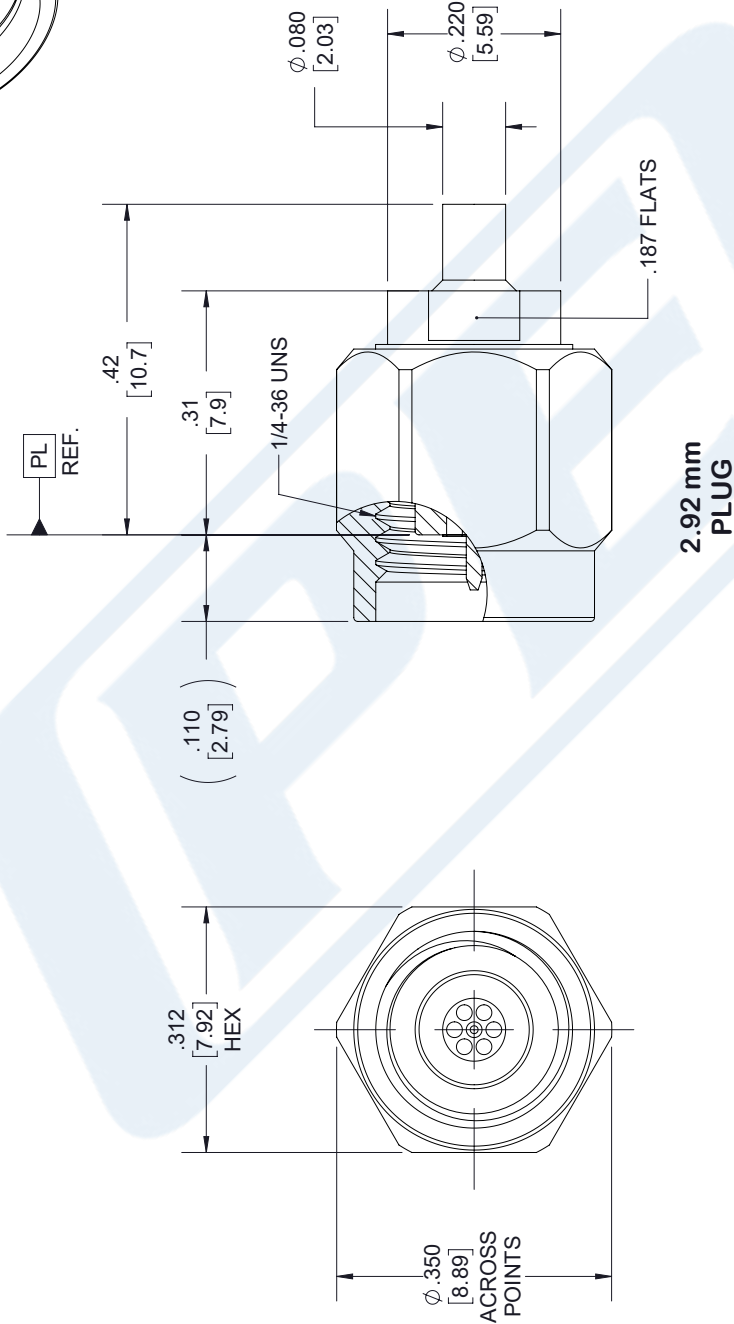
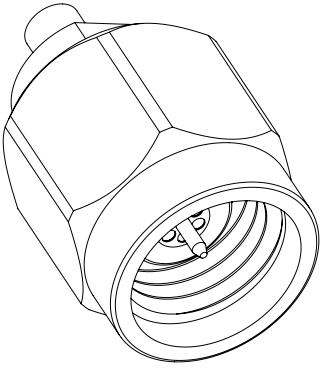
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PE45412 CAD Drawing

2.92mm Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL



STANDARD TOLERANCES

.X ±0.2
.XX ±0.02
.XXX ±0.005

*STANDARD TOLERANCES APPLY
ONLY TO DIMENSIONS IN INCHES



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Website: www.pasternack.com | E-Mail: sales@pasternack.com

DWG TITLE

PE45412

CAGE CODE 53919

CAD FILE 110217

SCALE N/A

SIZE A

7361

NOTES:
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RF Connectors
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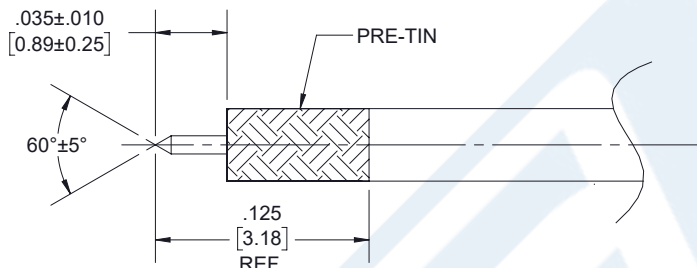


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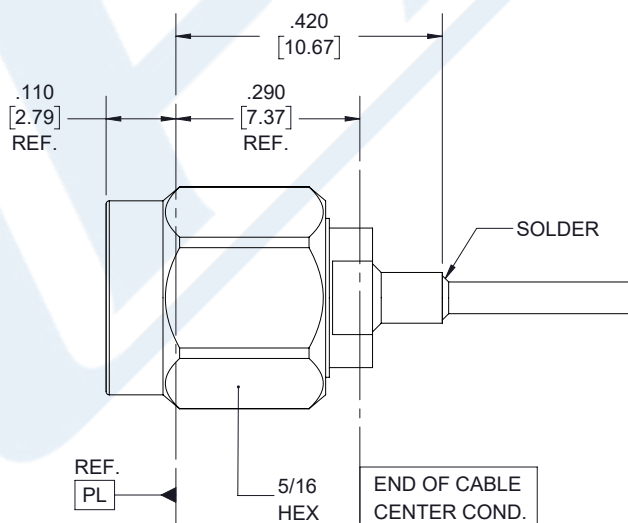


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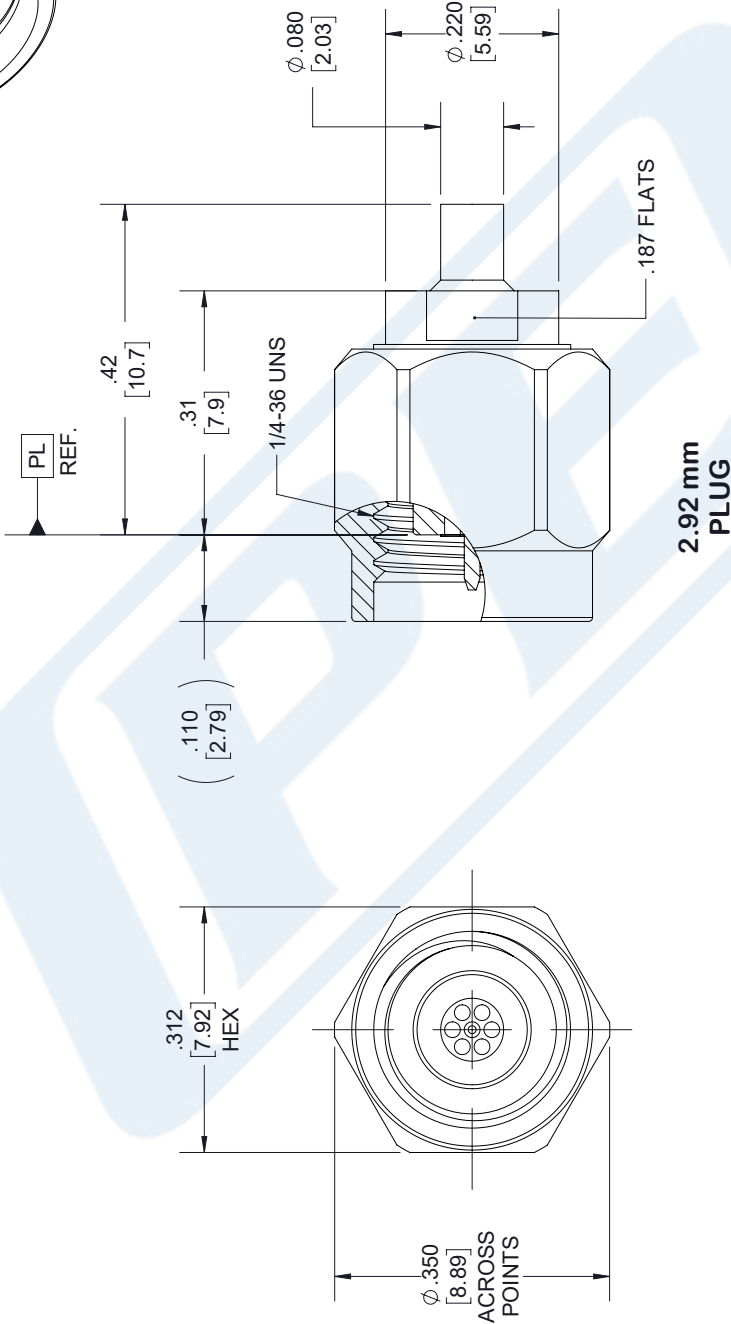
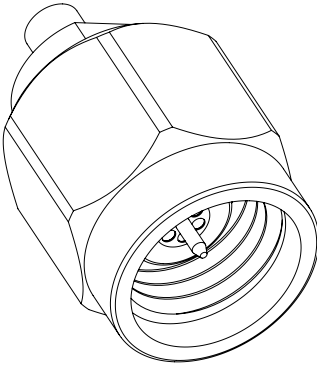
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PE45412 CAD Drawing

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2.92 mm
PLUG

STANDARD TOLERANCES

.X ±0.2
.XX ±0.02
.XXX ±0.005

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ONLY TO DIMENSIONS IN INCHES



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DWG TITLE

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CAGE CODE 53919

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CAD FILE 110217

SCALE N/A

SIZE A

7361

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:

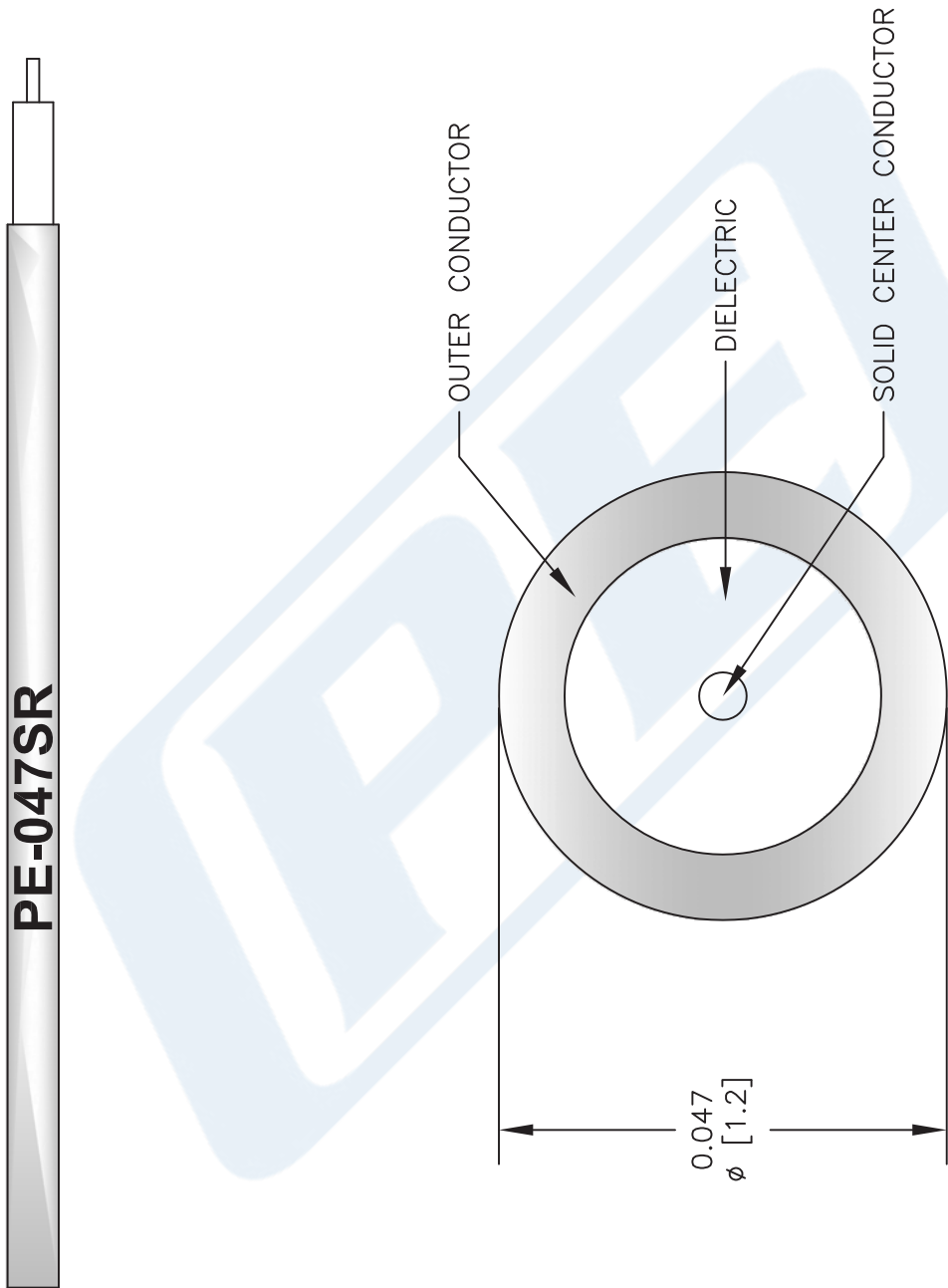
- Values at +25 °C, sea level

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CAD FILE	073113	SCALE	N/A
SIZE	A		2233

DWG TITLE PE-047SR	
FSCM NO.	53919

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