



SMA Male Precision Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

RF Connectors Technical Data Sheet

PE4404

Configuration

- SMA Male Connector
- MIL-STD-348
- 50 Ohms
- Straight Body Geometry

- PE-047SR, PE-SR047AL, PE-SR047FL Interface Type
- Solder/Solder Attachment
- 5/16 inch Hex
- Precision Design

Features

- Max. Operating Frequency 18 GHz
- Excellent VSWR of 1.2:1

- Gold over Nickel Plated Beryllium Copper Contact
- 50 μ in minimum contact plating

Applications

- General Purpose Test
- Precision Test & Measurement
- Custom Cable Assemblies

Description

Pasternack's PE4404 SMA male precision connector with solder/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 SMA male connector operates up to a maximum frequency of 18 GHz and offers excellent VSWR of 1.2:1.

Our SMA male connector PE4404 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		18	GHz
VSWR			1.2:1	
Insertion Loss			0.17	dB
Operating Voltage (AC)			500	Vrms
Dielectric Withstanding Voltage (AC)			1,500	Vrms
High Potential Voltage 5 to 7.5 MHz			1,000	Vrms
Corona Discharge at 70,000 ft			375	Vrms
Insulation Resistance	5,000			MOhms

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Precision Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE4404](#)



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Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 14	14 to 18				GHz
VSWR, Max	1.13:1	1.2:1				

Electrical Specification Notes:

Insertion loss: $0.04 \times \sqrt{f\text{GHz}}$ dB max.
RF leakage: 90 dB min up to 1 GHz.

Mechanical Specifications

Size

Length
Width/Dia.

0.489 in [12.42 mm]
0.312 in [7.92 mm]

Weight

0.008 lbs [3.63 g]

Mating Cycles
Mating Torque

500 Cycles
7 to 10 in-lbs [0.79 to 1.13 Nm]

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold over Nickel 50 μ in minimum
Insulation	PTFE	
Body	Brass	Gold over Nickel 50 μ in minimum
Coupling Nut	Brass	Nickel 50 μ in minimum

Environmental Specifications

Temperature

Operating Range	-65 to +165 deg C
Humidity	MIL-STD-202, Method 106, No Vibration
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%)

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PE4404



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

Plotted and Other Data

Notes:

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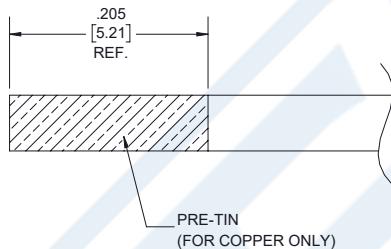
SMA Male Precision Connector Solder Attachment
for PE-047SR, PE-SR047AL, PE-SR047FL

RF Connectors Technical Data Sheet

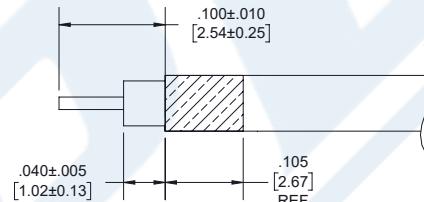
PE4404

Assembly Instruction

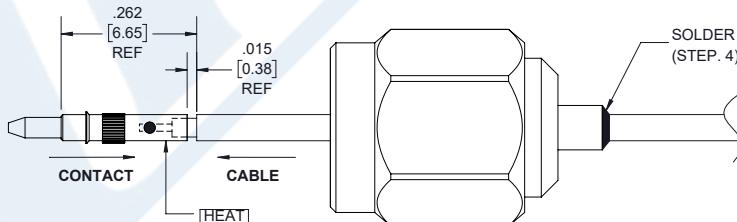
1. PRE-TIN CABLE JACKET TO THE REFERENCE LENGTH AS SHOWN. ONLY FOR COPPER OUTER CONDUCTOR CABLE.



2. A. STRIP CABLE TO THE DIMENSIONS AS SHOWN TO EXPOSE CENTER CONDUCTOR AND DIELECTRIC.
B. PRE-TIN CABLE CENTER CONTACT.
C. SLIDE CONNECTOR THROUGH CABLE.



3. INSERT CENTER CONDUCTOR INTO CONTACT UNTIL DIELECTRIC BOTTOMS INSIDE CONTACT. SOFT SOLDER CONTACT TO CENTER CONDUCTOR. DO NOT OVER HEAT DIELECTRIC.



4. USING ASSEMBLY TOOL, PRESS CONTACT FULLY INTO INSULATOR. SOLDER OUTER CONDUCTOR TO BODY.

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SMA Male Precision Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

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SMA Male Precision 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.

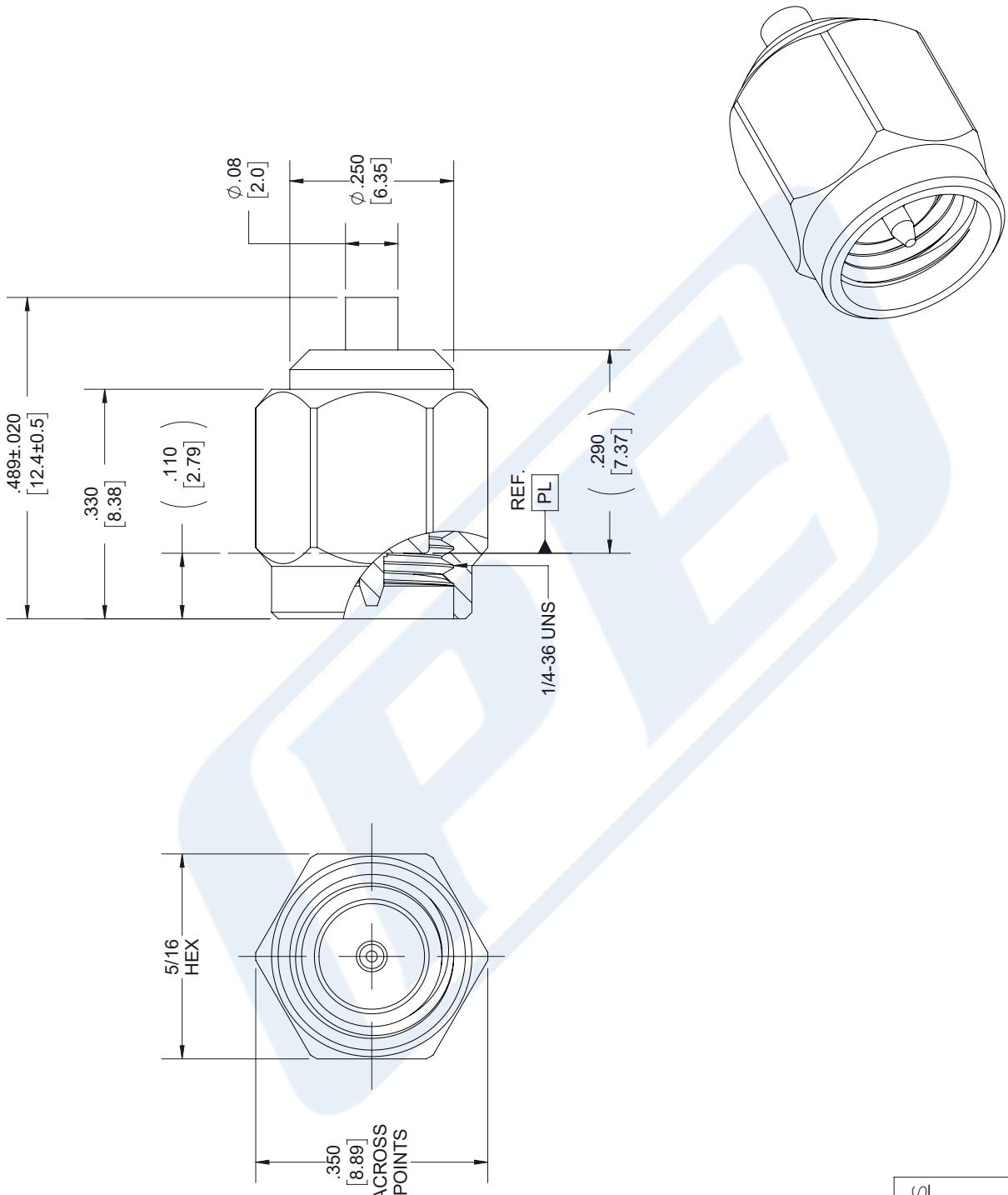
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Precision Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE4404](#)

URL: <https://www.pasternack.com/sma-male-standard-pe-047sr-pe-sr047al-pe-sr047fl-connector-pe4404-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.

PE4404 CAD Drawing

SMA Male Precision Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL



STANDARD TOLERANCES	
.X	±0.2
.XX	±0.01
.XXX	±0.005

*STANDARD TOLERANCES APPLY
ONLY TO DIMENSIONS IN INCHES

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 | E-Mail: 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
PE4404	53919	010918	N/A	A



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

TECHNICAL DATA SHEET

PE44971

Configuration

Connector	Mini SMP Female
Connector Specification	MIL-STD-348
Connector Interface Type	PE-047SR, PE-SR047FL
Attachment Method (Shield/Contact)	Solder
Body Style	Straight

Electrical Specifications

Impedance	50 Ohms
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Mechanical Specifications

Size	
Length	0.29 in [7.37 mm]
Width/Dia.	0.125 in [3.18 mm]
Weight	0.082 lbs [37.19 g]

Connector

Type	Mini SMP Female
Contact Material and Plating	Beryllium Copper, Gold
Contact Plating Specification	MIL-G-45204
Body Material and Plating	Beryllium Copper, Gold
Body Plating Specification	MIL-G-45204
Dielectric Type	PTFE

Compliance Certifications

 (visit www.Pasternack.com for current document)

RoHS Compliant

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-SR047FL PE44971](#)



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

TECHNICAL DATA SHEET

PE44971

Plotted and Other Data

Notes:

- Values at +25 °C, sea level

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

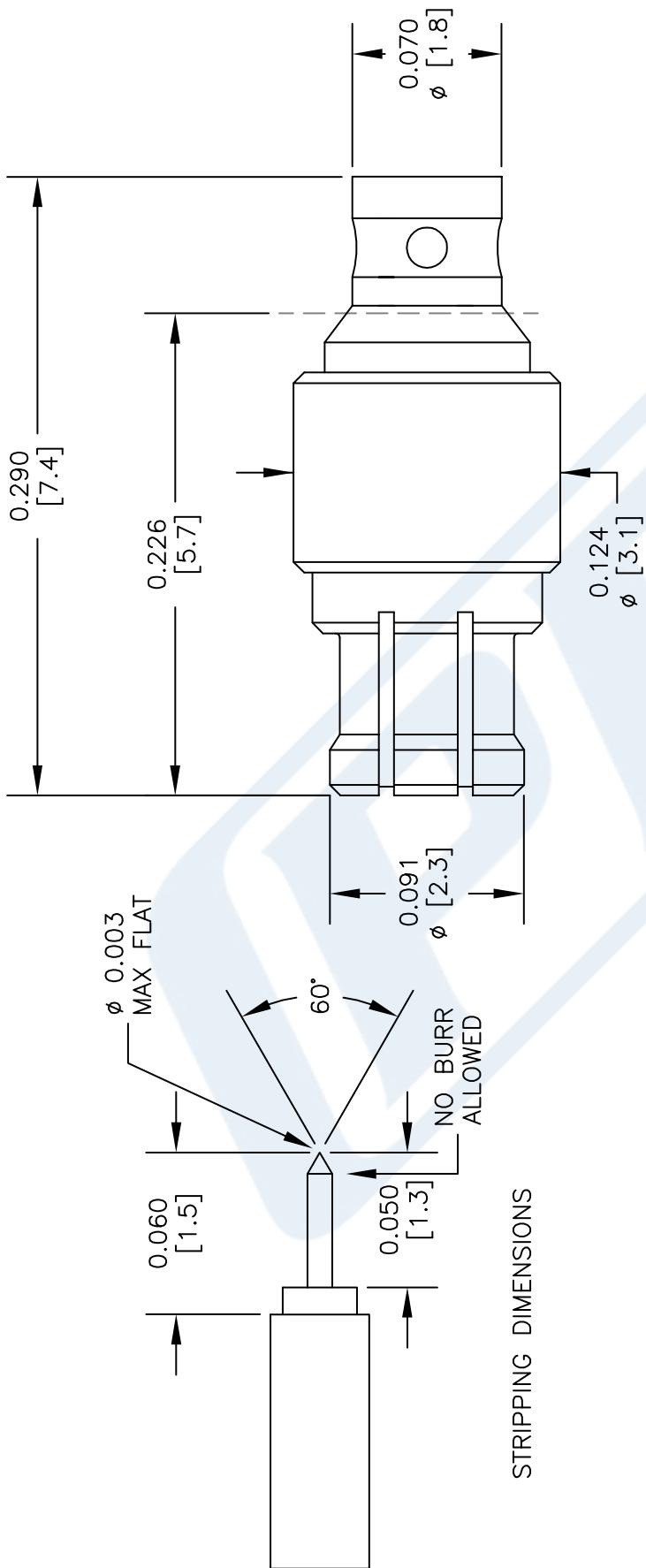
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URL: <http://www.pasternack.com/mini-smp-female-standard-pe-047sr-pe-sr047fl-connector-pe44971-p.aspx>

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PE44971 CAD Drawing

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



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

DWG TITLE	PE44971
FSCM NO. 53919	CAD FILE 110413 SCALE N/A SIZE A 150

PASTERNACK® Pasternack Enterprises, Inc. P.O. Box 16759 Irvine CA 92623 Phone: (949) 261-1920 Fax: (949) 261-7451 Website: www.pasternack.com E-Mail: sales@pasternack.com

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

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• Values at +25 °C, sea level

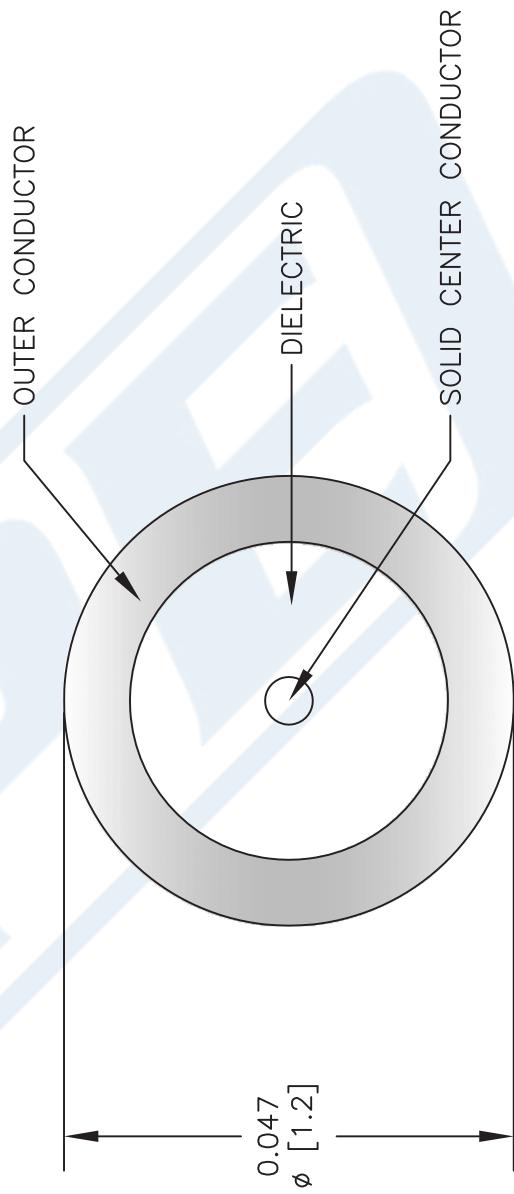
047 Semi-rigid Coax Cable with Copper Outer Conductor from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

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](http://www.pasternack.com/semirigid-0.047-50-ohm-coax-cable-copper-pe-047sr-p.aspx)

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

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PE-047SR



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DWG TITLE
PE-047SR

PE PASTERNACK
Pasternack Enterprises, Inc.
P.O. Box 16759 | Irvine | CA | 92623

Phone: (949) 261-1920 | Fax: (949) 261-7451

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

FSCM NO.	CAD FILE	SCALE	SIZE	REV
53919	073113	N/A	A	2233