



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 m 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](#)



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

RF Connectors Technical Data Sheet

PE4404

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 x sqrt(fGHz) dB max.
RF leakage: 90 dB min up to 1 GHz.

Mechanical Specifications

Size	
Length	0.489 in [12.42 mm]
Width/Dia.	0.312 in [7.92 mm]
Weight	0.008 lbs [3.63 g]
Mating Cycles	500 Cycles
Mating Torque	7 to 10 in-lbs [0.79 to 1.13 Nm]

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold over Nickel 50 µin minimum
Insulation	PTFE	
Body	Brass	Gold over Nickel 50 µin minimum
Coupling Nut	Brass	Nickel 50 µin 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%)

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](#)



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

RF Connectors Technical Data Sheet

PE4404

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: [SMA Male Precision Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL](#)
PE4404



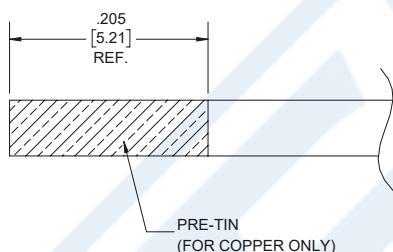
SMA Male Precision Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL

RF Connectors Technical Data Sheet

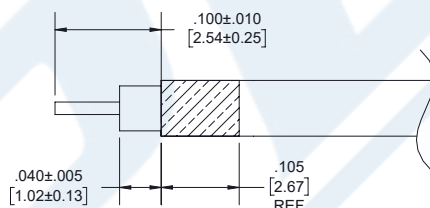
PE4404

Assembly Instruction

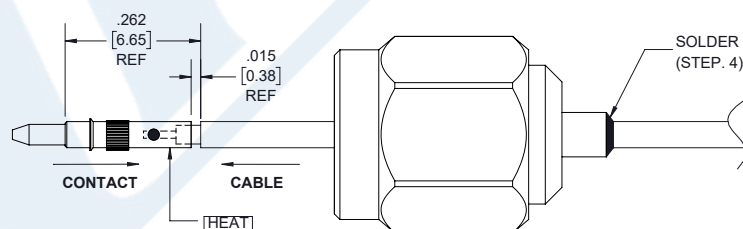
1. PRE-TIN CABLE JACKET TO THE REFERENCE LENGTH AS SHOWN. ONLY FOR COPPER OUTER CONDUCTOR CABLE.



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.

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](#)



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

RF Connectors Technical Data Sheet

PE4404

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.

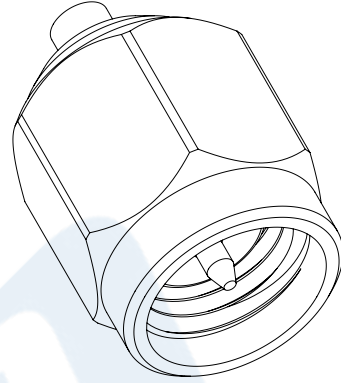
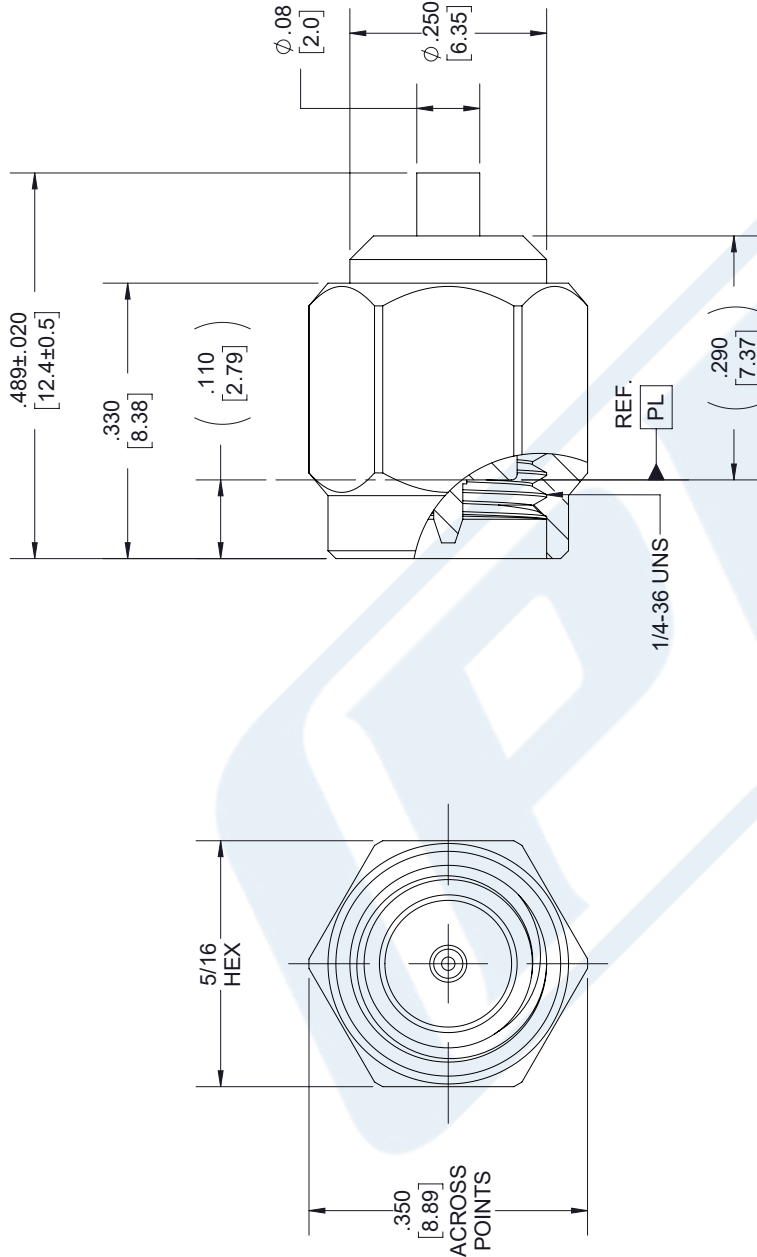
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Precision Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE4404](https://www.pasternack.com/sma-male-standard-pe-047sr-pe-sr047al-pe-sr047fl-connector-pe4404-p.aspx)

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



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DWG TITLE

PE4404

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].

CAGE CODE 53919

CAD FILE 010918

SCALE N/A

SIZE A

7361



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

RF Connectors Technical Data Sheet

PE44757

Configuration

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

Features

- Max. Operating Frequency 27 GHz
- Excellent VSWR of 1.2:1
- Gold over Nickel Plated Beryllium Copper Contact
- Contact plating according to MIL-G-45204

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE44757 SMA male 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 27 GHz and offers excellent VSWR of 1.2:1.

Our SMA male connector PE44757 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		27	GHz
VSWR			1.2:1	
Insertion Loss			0.26	dB

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

Mechanical Specifications

Size	
Length	0.437 in [11.1 mm]
Width/Dia.	0.312 in [7.92 mm]
Weight	0.012 lbs [5.44 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: [SMA Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE44757](#)



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

RF Connectors Technical Data Sheet

PE44757

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold over Nickel MIL-G-45204
Insulation	PTFE	
Body	Brass	Gold MIL-G-45204
Coupling Nut	Passivated Stainless Steel	ASTM-A380

Environmental Specifications

Temperature

Operating Range

Vibration

Salt Spray

-55 to +100 deg C

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

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

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

Plotted and Other Data

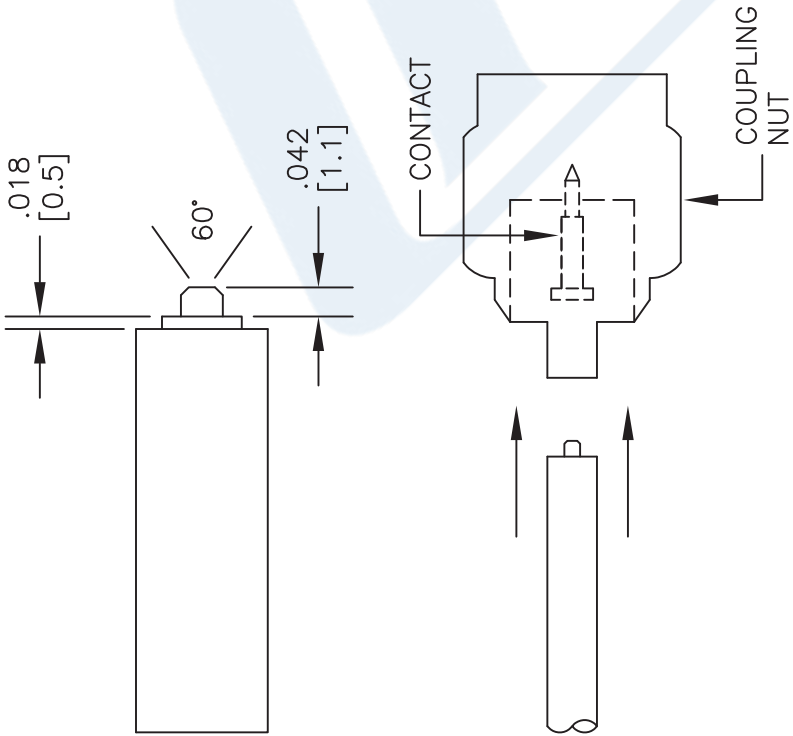
Notes:

SMA 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: [SMA Male Connector Solder Attachment for PE-047SR, PE-SR047AL, PE-SR047FL PE44757](#)

URL: <https://www.pasternack.com/sma-male-pe-047sr-pe-sr047al-pe-sr047fl-connector-pe44757-p.aspx>

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STRIPPING DIMENSIONS

ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN. DO NOT NICK CENTER CONDUCTOR.
2. FILE CHAMFER.
3. INSERT CABLE INTO CONNECTOR BODY. MATING THE CENTER CONDUCTOR IN TO CAPTIVATE CENTER PIN.
4. SOLDER CABLE TO CONNECTOR BODY.



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DWG TITLE

PE44757

FSCM NO. 53919

2233

SIZE A

SCALE N/A

CAD FILE 101112-A

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.

Formable 047 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor

RF Cables Technical Data Sheet

PE-SR047FL

Configuration

- Formable Cable
- 1 Shield(s)

Features

- Dimensionally and electrically the same as standard, solid outer conductor semi-rigid coax
- May be formed by hand and does not require special tools to bend
- May be formed more than once without damaging the outer conductor
- Tinned Copper Braid Outer Conductor
- Max Frequency 20 GHz

Applications

- Test and Measurement
- Communication Systems
- Wireless Systems
- Medical Equipment
- RADAR
- Low Loss Applications

Description

Formable semi-rigid coaxial cable is a hand formable version of standard semi-rigid that does not require complicated and costly preformed cable assemblies. Because the dimensions and electrical characteristics are so closely matched to semi-rigid coax, standard semi-rigid connectors can be used. Pasternack's PE-SR047FL is a formable .047 semi-rigid coax cable with tinned copper braid outer conductor, providing low loss and excellent RF shielding effectiveness. This semi-flexible cable has an FEP jacket to reduce the chance of shorting exposed contacts or circuit conductors. Pasternack's formable cable can be used as an alternative to semi-rigid coaxial cable in applications where flexibility is required without giving up high electrical performance level. PE-SR047FL datasheet specifications and outline drawing for this .047 semi-flexible hand formable cable are shown in the PDF below.

Pasternack carries a wide range of cables ready to ship same day to fit your needs. They are available in corrugated, flexible, formable or semi-rigid versions with different constructions of conductor materials, dielectric materials, shielding configurations and jacket materials. Our cables are designed to fit a wide range of performance criteria including attenuation, operating temperature, environmental factor, and power capability.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		20	GHz
Impedance		50		Ohms
Velocity of Propagation		69.5		%
Inner Conductor DC Resistance			207	Ohms/1000ft
Outer Conductor DC Resistance			8	Ohms/1000ft
Nominal Capacitance		32 [104.99]		pF/ft [pF/m]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Formable 047 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor PE-SR047FL](#)

Formable 047 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor

RF Cables Technical Data Sheet

PE-SR047FL

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	3	5	10	GHz
Attenuation, Typ	25	36	65	86	128	dB/100ft
	82.02	118.11	213.25	282.15	419.95	dB/100m

Description	F6	F7	F8	F9	F10	Units
Frequency	15	20				GHz
Attenuation, Typ	162	192				dB/100ft
	531.5	629.92				dB/100m

Mechanical Specifications

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Steel, Silver1	0.011 in 0.28 mm
Conductor Type	Solid	
Dielectric	PTFE	0.034 in 0.86 mm
Outer Conductor	Tinned Copper Braid	0.047 in 1.19 mm

Environmental Specifications

Temperature

Operating Range

-40 to +100 deg C

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Formable 047 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor PE-SR047FL](#)

Formable 047 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor

RF Cables Technical Data Sheet

PE-SR047FL

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

Plotted and Other Data

Notes:

Formable 047 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor 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.

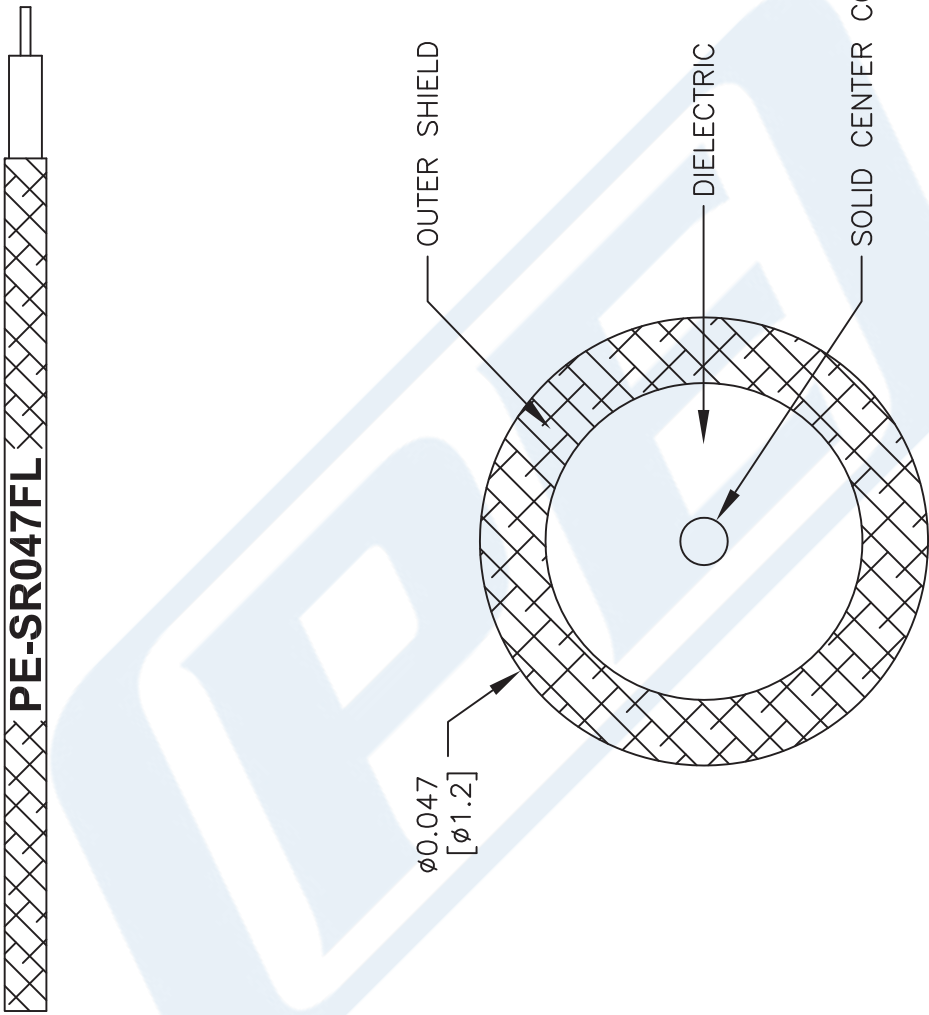
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Formable 047 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor PE-SR047FL](#)

URL: <https://www.pasternack.com/formable-0.047-semirigid-replacement-50-ohm-coax-cable-tinned-braid-pe-sr047fl-p.aspx>

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PE-SR047FL CAD Drawing

Formable 047 Semi-rigid Coax Cable with Tinned Copper Braid Outer Conductor



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DWG TITLE

PE-SR047FL

FSCM NO. 53919

CAD FILE 111716

SCALE N/A

SIZE A

41742

PE PASTERNAK
THE ENGINEER'S RF SOURCE

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