

SMA Female Bulkhead Mount Connector Solder Attachment for PE-047SR, PE-P047, PE-P047LL, PE-SR047AL, PE-SR047FL, .047 Semi-Rigid



**PE51271**

**Configuration**

- SMA Female Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: PE-047SR, PE-P047, PE-P047LL, PE-SR047AL, PE-SR047FL, .047 Semi-Rigid
- Bulkhead

**Features**

- Max. Operating Frequency 18 GHz
- Excellent VSWR of 1.25:1
- Gold over Nickel Plated Beryllium Copper Contact

**Applications**

- General Purpose Test
- Rack and Panel Mount Applications
- Custom Cable Assemblies

**Description**

Pasternack's PE51271 , SMA, Standard, Connector is part of our full line of RF components available for same-day shipping. Our SMA female connector operates up to a maximum frequency of 18 GHz and offers excellent VSWR of 1.25:1. This SMA bulkhead connector allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications.

Our SMA female bulkhead connector PE51271 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			1.25:1	
Insertion Loss			0.17	dB
Operating Voltage (AC)			250	Vrms
Dielectric Withstanding Voltage (AC)			750	Vrms
Inner Conductor DC Resistance			3	mOhms
Outer Conductor DC Resistance			2	mOhms
Insulation Resistance	5,000			MOhms
Impedance		50		Ohms

Electrical Specification Notes:  
Insertion loss is = 0.04\*SQRT(F(GHz)) dB

**Mechanical Specifications**

**Size**

- Length 0.433071 in [11 mm]
- Width 0.433071 in [11 mm]
- Height 0.748031 in [19 mm]
- Weight 0.015 lbs [6.8 g]

SMA Female Bulkhead Mount Connector Solder Attachment for PE-047SR, PE-P047, PE-P047LL, PE-SR047AL, PE-SR047FL, .047 Semi-Rigid



**PE51271**

Mating Cycles	100 Cycles
Mating Torque	4 to 5.3 in-lbs [[0.45 to 0.60 Nm]]
Cable Retention Force	6.1 lbs [2.77 kg]

**Material Specifications**

Description	Material	Plating
Contact	Beryllium Copper	Gold over Nickel
Insulation	Teflon	
Body	Brass	Gold over Nickel
Coupling Nut	Brass	Gold over Nickel
Gasket	Silicone	
Washer	Brass	Gold over Nickel

**Environmental Specifications**

<b>Temperature</b>	
Operating Range	-40 to +165 deg C
Thermal Shock	MIL-STD-202, Method 107, Condition B

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

**Plotted and Other Data**

Notes:

SMA Female Bulkhead Mount Connector Solder Attachment for PE-047SR, PE-P047, PE-P047LL, PE-SR047AL, PE-SR047FL, .047 Semi-Rigid 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.

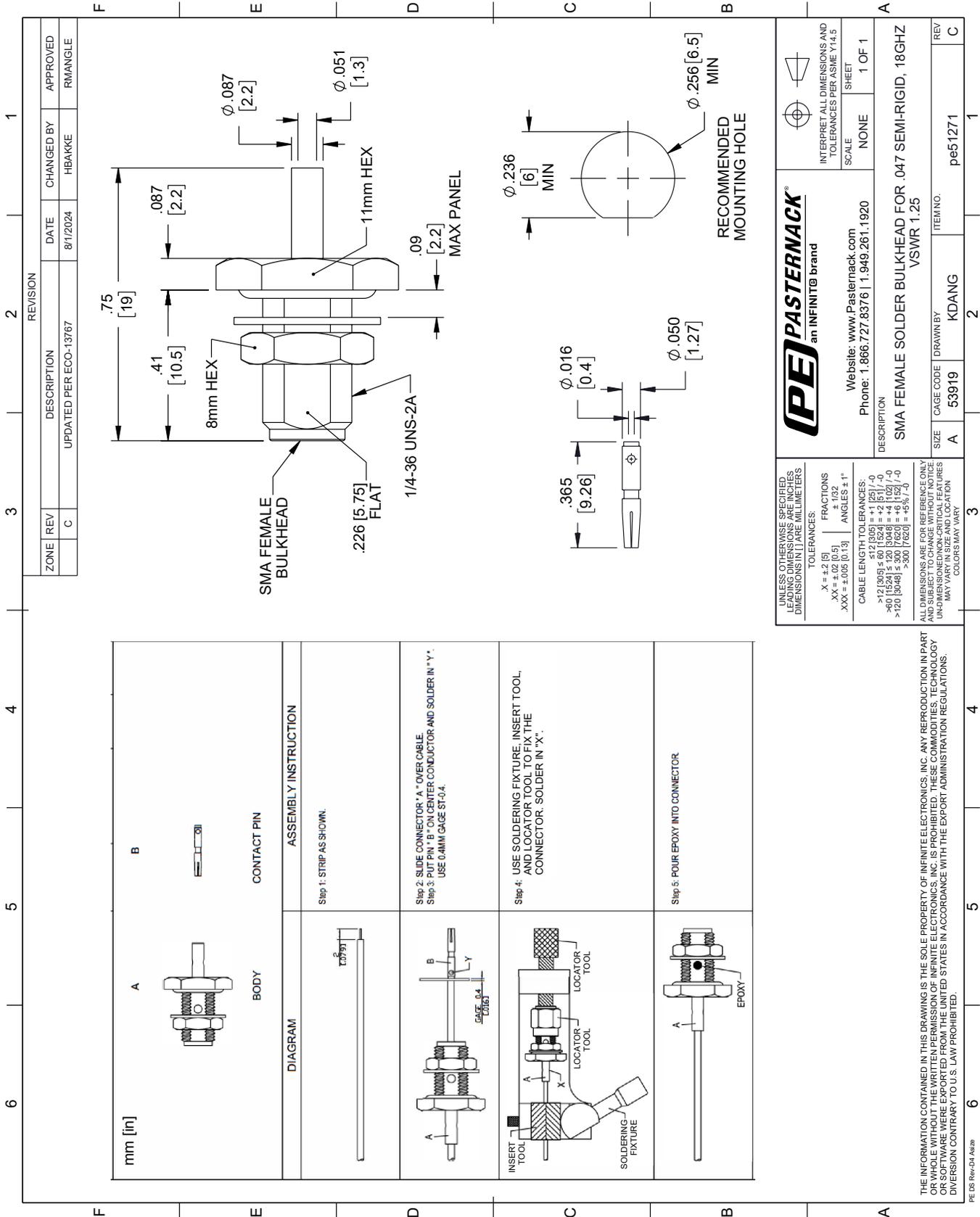
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female Bulkhead Mount Connector Solder Attachment for PE-047SR, PE-P047, PE-P047LL, PE-SR047AL, PE-SR047FL, .047 Semi-Rigid PE51271](#)

URL: <https://www.pasternack.com/sma-female-pe-047sr-pe-p047-pe-sr047al-connector-pe51271-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

# PE51271 CAD Drawing

SMA Female Bulkhead Mount Connector Solder Attachment for PE-047SR, PE-P047, PE-P047LL, PE-SR047AL, PE-SR047FL, .047 Semi-Rigid



ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	C	UPDATED PER ECO-13767	8/1/2024	HBAKKE	RMANGLE

mm [in]	A	B	ASSEMBLY INSTRUCTION
			<b>CONTACT PIN</b>
			<b>ASSEMBLY INSTRUCTION</b>
			Step 1: STRIP AS SHOWN.
			Step 2: SLIDE CONNECTOR 'A' OVER CABLE. Step 3: PUT PIN 'B' ON CENTER CONDUCTOR AND SOLDER IN 'Y'. USE 0.4MM GAGE ST-04.
			Step 4: USE SOLDERING FIXTURE, INSERT TOOL, AND LOCATOR TOOL TO FIX THE CONNECTOR. SOLDER IN 'X'.
			Step 5: POUR EPOXY INTO CONNECTOR.

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an INFINITE brand

Website: [www.Pasternack.com](http://www.Pasternack.com)  
Phone: 1.866.727.8376 | 1.949.261.1920

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE  
SHEET: 1 OF 1

DESCRIPTION: SMA FEMALE SOLDER BULKHEAD FOR .047 SEMI-RIGID, 18GHZ VSWR 1.25

SIZE: A  
CAGE CODE: 53919  
DRAWN BY: KDANG  
ITEM NO.: pe51271

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS.

TOLERANCES:  
X = ±.2 [5]      FRACTIONS ± 1/32  
XX = ±.02 [0.5]      ANGLES ± 1°  
XXX = ±.005 [0.13]

CABLE LENGTH TOLERANCES:  
≤ 12 [305] ≤ 60 [1524] = ±.1 [2.5] / -0  
> 60 [1524] ≤ 120 [3048] = ±.4 [10.2] / -0  
> 120 [3048] ≤ 300 [7620] = ±.6 [15.2] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/UNCLEAR FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

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PE DS Rev-04 As2z

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Thermal Shock	MIL-STD-202, Method 107, Condition B

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

**Plotted and Other Data**

Notes:

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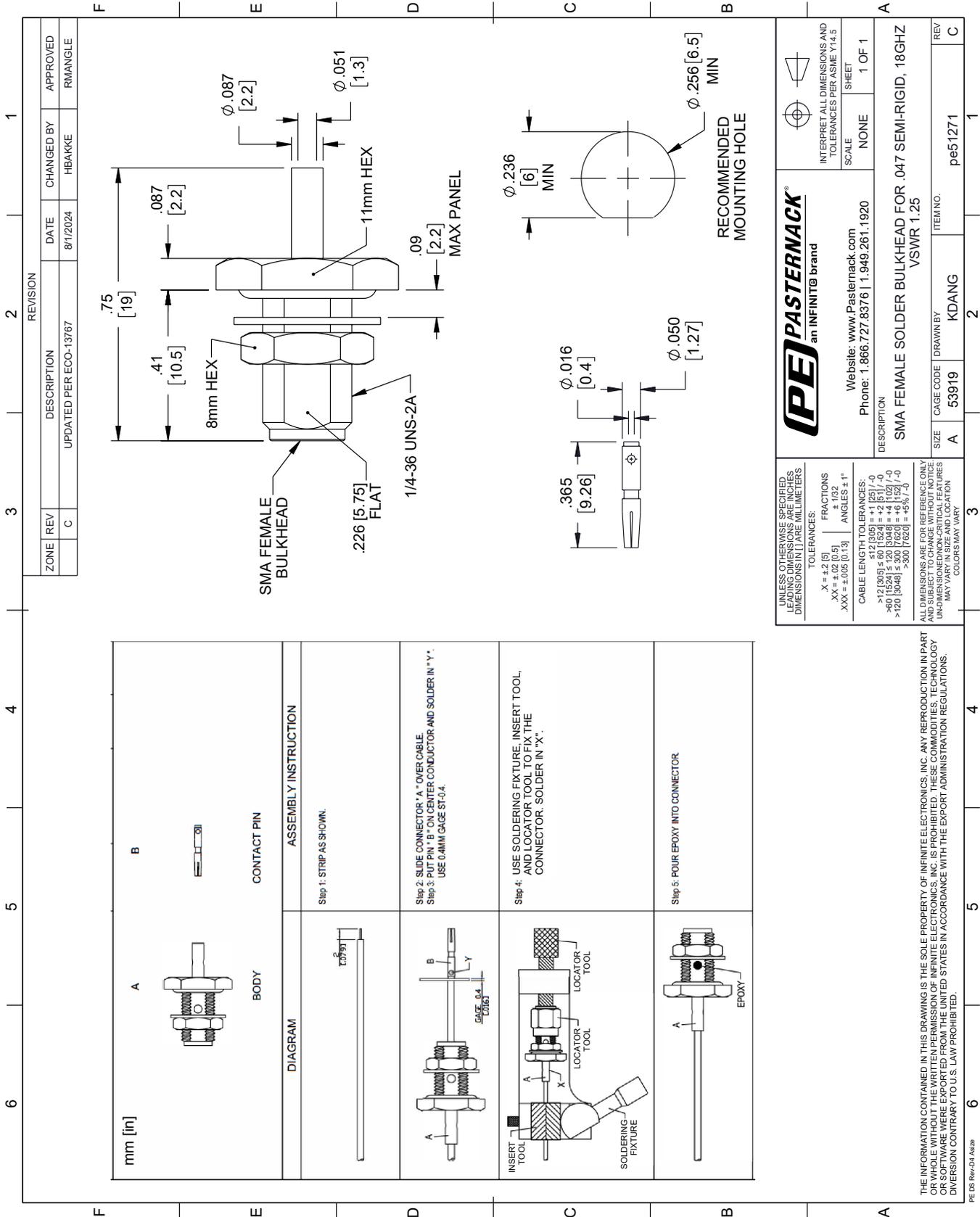
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URL: <https://www.pasternack.com/sma-female-pe-047sr-pe-p047-pe-sr047al-connector-pe51271-p.aspx>

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## Flexible PE-P047 Coax Cable Double Shielded with Blue FEP Jacket

### RF Cables Technical Data Sheet

PE-P047

#### Configuration

- Flexible Cable
- 2 Shield(s)

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		50	GHz
Impedance		50		Ohms
Velocity of Propagation		70		%
Shielding Effectiveness	90			dB
Nominal Capacitance		29 [95.14]		pF/ft [pF/m]

#### Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	4	8	12	GHz
Attenuation, Typ	33.54	48.41	70.42	103.5	130.43	dB/100ft
	110.04	158.83	231.04	339.57	427.92	dB/100m

Description	F6	F7	F8	F9	F10	Units
Frequency	18	26	34	40	50	GHz
Attenuation, Typ	165.27	205.9	242.57	268.31	308.79	dB/100ft
	542.22	675.52	795.83	880.28	1,013.09	dB/100m

#### Mechanical Specifications

Diameter	0.056 in [1.42 mm]
Weight	0.037 lbs/ft [0.06 kg/m]
Min. Bend Radius (Installation)	0.2 in [5.08 mm]
Min. Bend Radius (Repeated)	0.4 in [10.16 mm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible PE-P047 Coax Cable Double Shielded with Blue FEP Jacket PE-P047](#)



## Flexible PE-P047 Coax Cable Double Shielded with Blue FEP Jacket

### RF Cables Technical Data Sheet

PE-P047

#### Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper, Silver, 1 Strand	0.011 in [0.28 mm]
Conductor Type	Solid	
Dielectric	FEP	0.036 in [0.91 mm]
First Shield	Silver Plated Copper Tape	[ ]
Second Shield	Silver Plated Copper Braid 89% coverage	0.046 in [1.17 mm]
Jacket	FEP, Blue	0.056 in [1.42 mm]

#### Environmental Specifications

##### Temperature

Operating Range

-65 to +165 deg C

Storage Range

-65 to +200 deg C

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

#### Plotted and Other Data

Notes:

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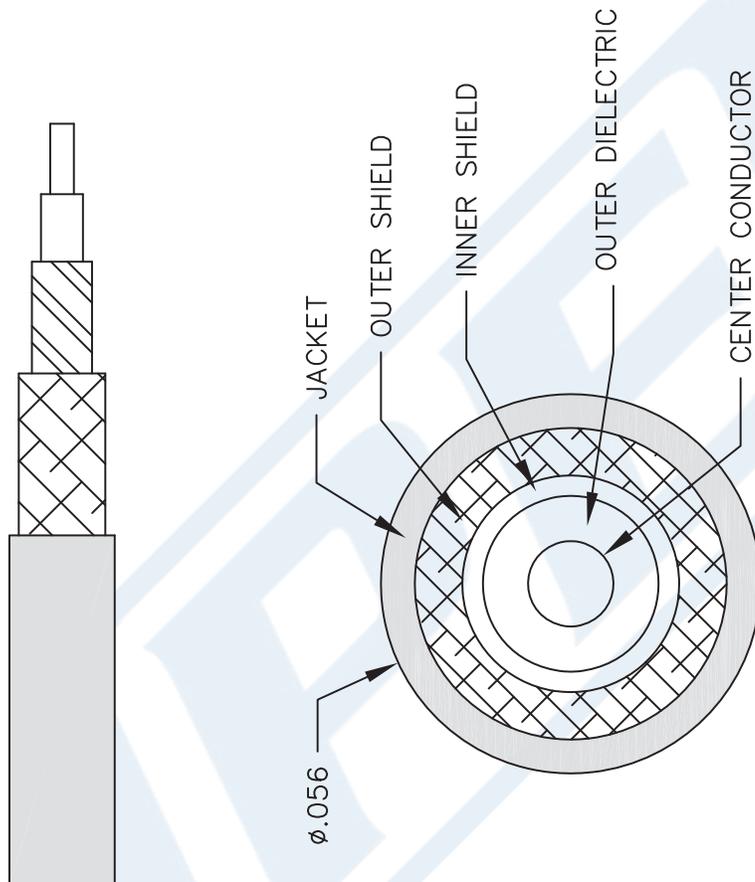
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URL: <https://www.pasternack.com/precision-0.056-semirigid-replacement-50-ohm-coax-cable-fep-jacket-pe-p047-p.aspx>

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# PE-P047 CAD Drawing

Flexible PE-P047 Coax Cable Double Shielded with Blue FEP Jacket



NOTES:  
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 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  
 3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE  
**PE-P047**

FSCM NO. 53919

CAD FILE 111716

SCALE N/A

SIZE A

41742

**PE PASTERNAK**  
 THE ENGINEER'S RF SOURCE

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