

## 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 =  $0.04 * \text{SQRT}(F(\text{GHz}))$  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

#### Temperature

Operating Range  
Thermal Shock

-40 to +165 deg C  
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.

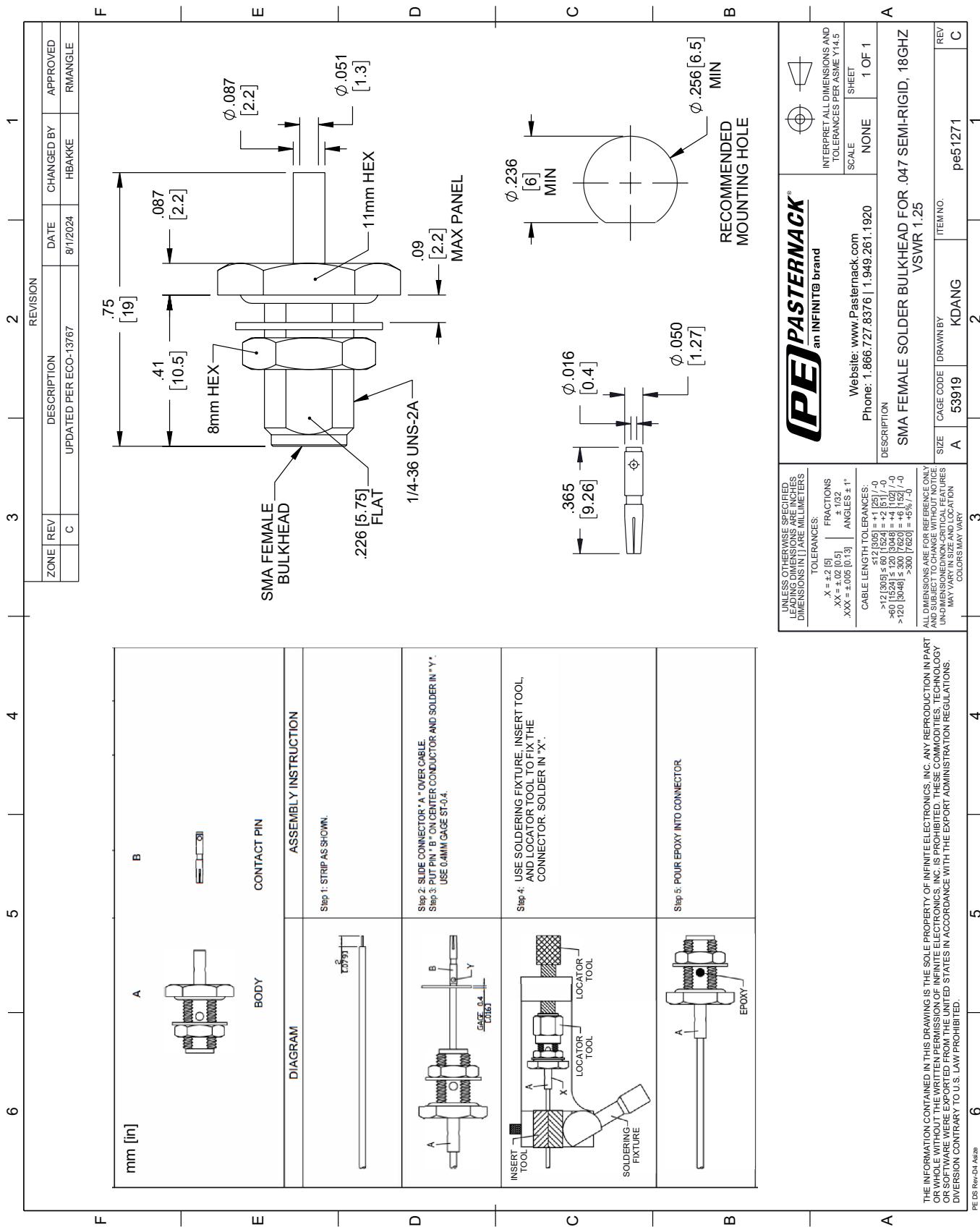
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female Bulkhead Mount Connector Solder Attachment for PE-047SR, PE-P047, PE-P047LL, PE-SR047AL, PE-SR047FL, .047 Semi-Rigid PE51271](#)

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



## Mini SMP Male VITA 67 Connector Solder Attach for PE-047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL



### PE45539

#### Configuration

- Mini SMP Male Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: PE-P047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL
- VITA 67 Design

#### Features

- Max. Operating Frequency 40 GHz
- Good VSWR of 1.45:1
- Gold Plated Beryllium Copper Contact
- Contact plating according to ASTM B488
- Blind Mate Connector
- Coaxial interconnects on VPX platforms
- Standard MIL-STD-348 SMPM interface
- Rugged Stainless Steel construction
- Accepts 0.047" and 0.086" cable contacts for end-to-end solution

#### Applications

- General Purpose Test
- Custom Cable Assemblies
- Robust and Rugged high speed cabled solution
- VITA 67 Backplane
- High Density Applications

#### Description

Pasternack's PE45539 4-position block housing is part of our full line of VITA 67 Backplane solutions and is available for same-day shipping. Pasternack introduces 4 position (VITA 67.1) and 8 position (VITA 67.2) RF connector housings designed for 3U and 6U formats within the OpenVPX architecture. These blocks are machined from stainless steel for a rugged solution. The blocks are designed to accept both PE45535 (0.047" cable contact) & PE45536 (.086" cable contact) used in flexible or semi-rigid cables. These blocks are ideal for blind mating daughtercards to motherboards as the RF contacts provide +/- .010" radial misalignment tolerance and have excellent return loss up to 40 GHz.

The SMPM (Mini-SMP) 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. The block's right angle body geometry allows for easier connections in tight spaces.

Our SMPM (Mini-SMP) right angle block PE45539 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		40	GHz
VSWR			1.45:1	
Dielectric Withstanding Voltage (AC)			325	Vrms
Inner Conductor DC Resistance			6	mOhms
Outer Conductor DC Resistance			5	mOhms
Insulation Resistance	5,000			MOhms

Mini SMP Male VITA 67 Connector Solder Attach for PE-047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL



## PE45539

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Impedance		50		Ohms

### Mechanical Specifications

Size	
Length	0.74 in [18.8 mm]
Width	0.548 in [13.92 mm]
Height	0.39 in [9.91 mm]
Weight	0.0016 lbs [0.73 g]
Mating Cycles	500 Cycles
Engagement Force	4.25lbs [1.93kg]
Disengagement Force	3.5lbs [1.59kg]

### Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold ASTM B488
Insulation	PEI	
Body	Brass	Gold ASTM B488
Retaining Ring	Beryllium Copper	Nickel SAE-AMS-QQ-N-290

### Environmental Specifications

Temperature	
Operating Range	-55 to +125 deg C
Humidity	1,000 megohms within 5 minutes after removal from humidity, tested per MIL-STD-202, Method 106
Shock	Sawtooth pulse of 100 g 6ms per MIL-STD-202, Method 213, Condition I
Vibration	MIL-STD-202, Method 214, Test Condition I, Curve D
Thermal Shock	MIL-STD-202, Method 107, Test Condition A

### Compliance Certifications

(see product page for current document)

### Plotted and Other Data

Notes:

Mini SMP Male VITA 67 Connector Solder Attach for PE-047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL



## PE45539

Mini SMP Male VITA 67 Connector Solder Attach for PE-047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL 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.

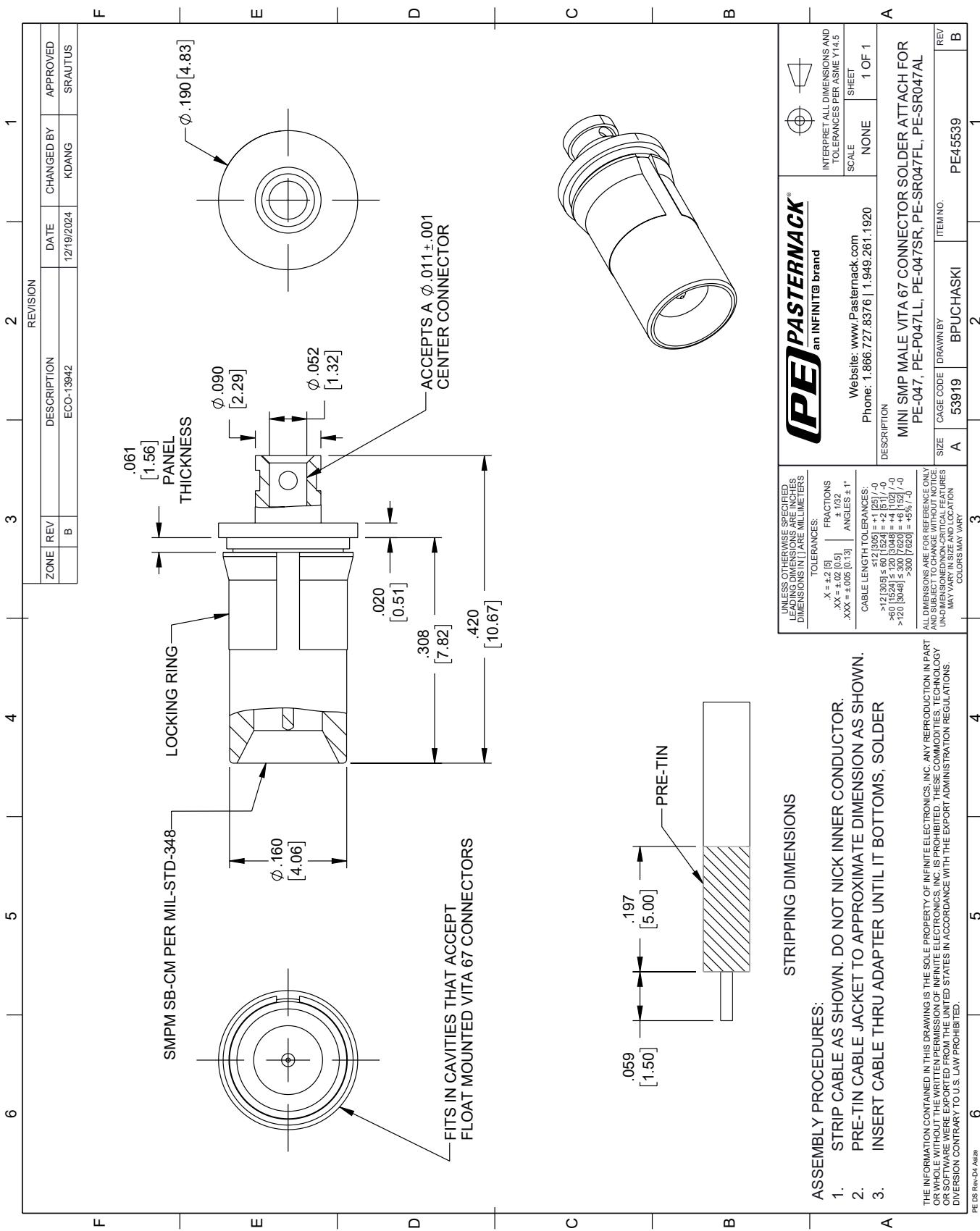
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PE45539 CAD Drawing

Mini SMP Male VITA 67 Connector Solder Attach for PE-047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL





## 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:

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

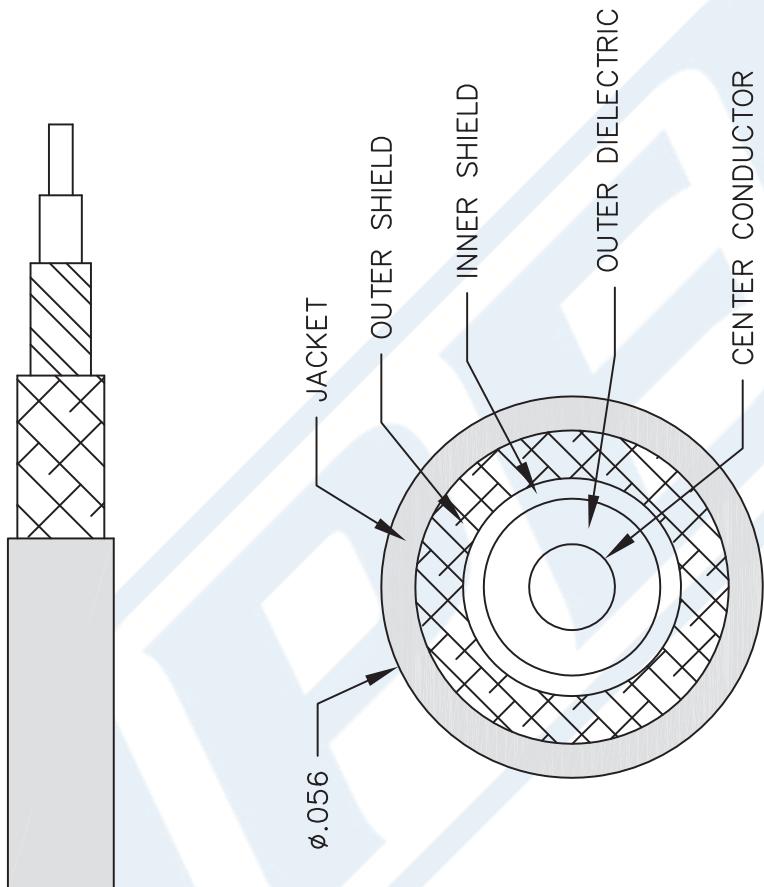
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible PE-P047 Coax Cable Double Shielded with Blue FEP Jacket PE-P047](#)

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



**PASTERNACK®**  
THE ENGINEER'S RF SOURCE

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DWG TITLE	PE-P047
FSCM NO.	53919

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].

SCALE	N/A	SIZE	A
		41742	