

## Mini SMP Female Connector Solder Attachment for PE-047SR, PE-P047, PE-P047LL, PE- SR047AL, PE-SR047FL, .047 Semi-Rigid



### PE51282

#### Configuration

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

#### Features

- Max. Operating Frequency 40 GHz
- Good VSWR of 1.4:1
- Gold over Nickel Plated Beryllium Copper Contact
- Blind Mate Connector

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE51282, Mini SMP, Standard, Connector is part of our full line of RF components available for same-day shipping. Our Mini SMP female connector operates up to a maximum frequency of 40 GHz and offers good VSWR of 1.4:1. The Pasternack 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.

Our Mini SMP female connector PE51282 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		40	GHz
VSWR			1.4:1	
Insertion Loss			0.632	dB
Dielectric Withstanding Voltage (DC)			325	Vdc
Inner Conductor DC Resistance			6	mOhms
Outer Conductor DC Resistance			2	mOhms
Insulation Resistance	5,000			MOhms
Impedance		50		Ohms

Electrical Specification Notes:

Insertion loss is =  $0.1 * \text{SQRT}(F(\text{GHz}))$  dB

#### Mechanical Specifications

##### Size

Length	0.108268 in [2.75 mm]
Width	0.108268 in [2.75 mm]
Height	0.38189 in [9.7 mm]
Weight	0.015 lbs [6.8 g]
Cable Retention Force	1.5 lbs [680.39 g]
Engagement Force	5lbs [2.27kg]

Mini SMP Female Connector Solder Attachment  
for PE-047SR, PE-P047, PE-P047LL, PE-  
SR047AL, PE-SR047FL, .047 Semi-Rigid



**PE51282**

Disengagement Force 1.5lbs [680.39g]

**Material Specifications**

Description	Material	Plating
Contact	Beryllium Copper	Gold over Nickel
Insulation	PEI	
Body	Beryllium Copper	Gold over Nickel

Mechanical Specification Notes:  
Mating cycles: 1000 (smooth bore), 100 (full detent) minimum.

**Environmental Specifications**

**Temperature**  
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:

Mini SMP Female 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.

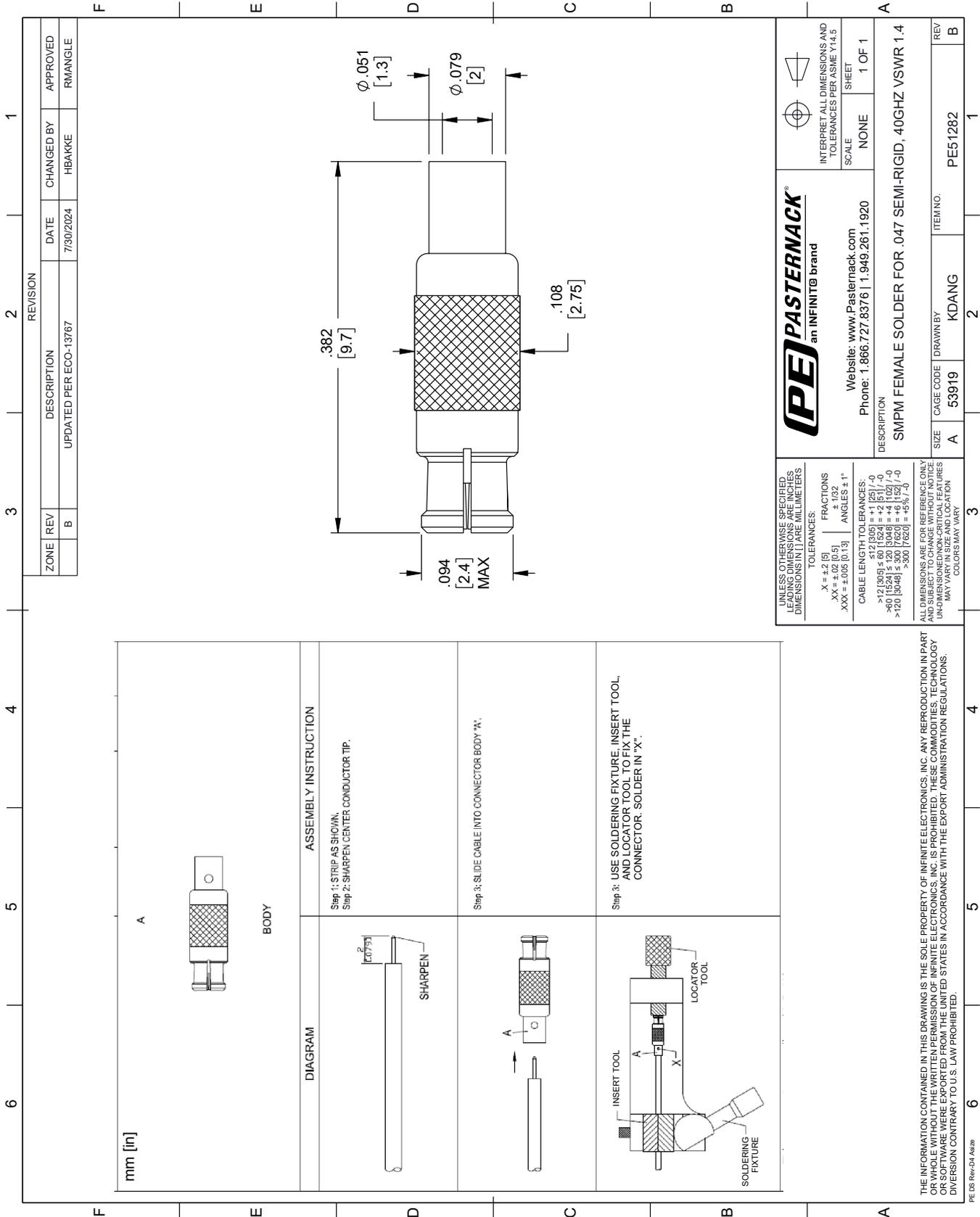
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Mini SMP Female Connector Solder Attachment for PE-047SR, PE-P047, PE-P047LL, PE-SR047AL, PE-SR047FL, .047 Semi-Rigid PE51282](#)

URL: <https://www.pasternack.com/mini-smp-female-pe-047sr-pe-p047-pe-sr047al-connector-pe51282-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 impliment 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.

# PE51282 CAD Drawing

Mini SMP Female Connector Solder Attachment for PE-047SR, PE-P047, PE-P047LL, PE-SR047AL, PE-SR047FL, .047 Semi-Rigid



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.

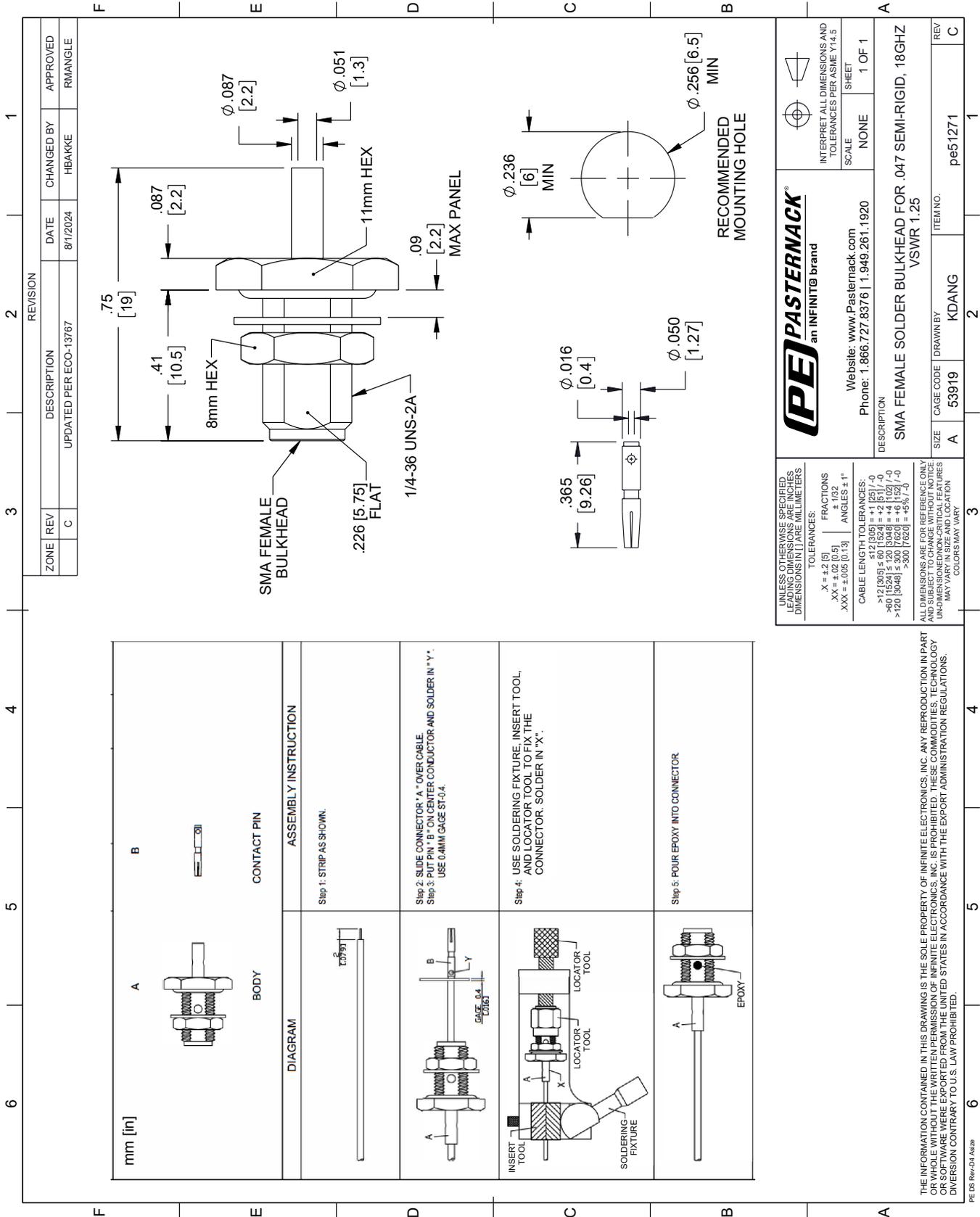
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female Bulkhead Mount Connector Solder Attachment for PE-047SR, PE-P047, PE-P047LL, PE-SR047AL, PE-SR047FL, .047 Semi-Rigid PE51271](#)

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

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# 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

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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

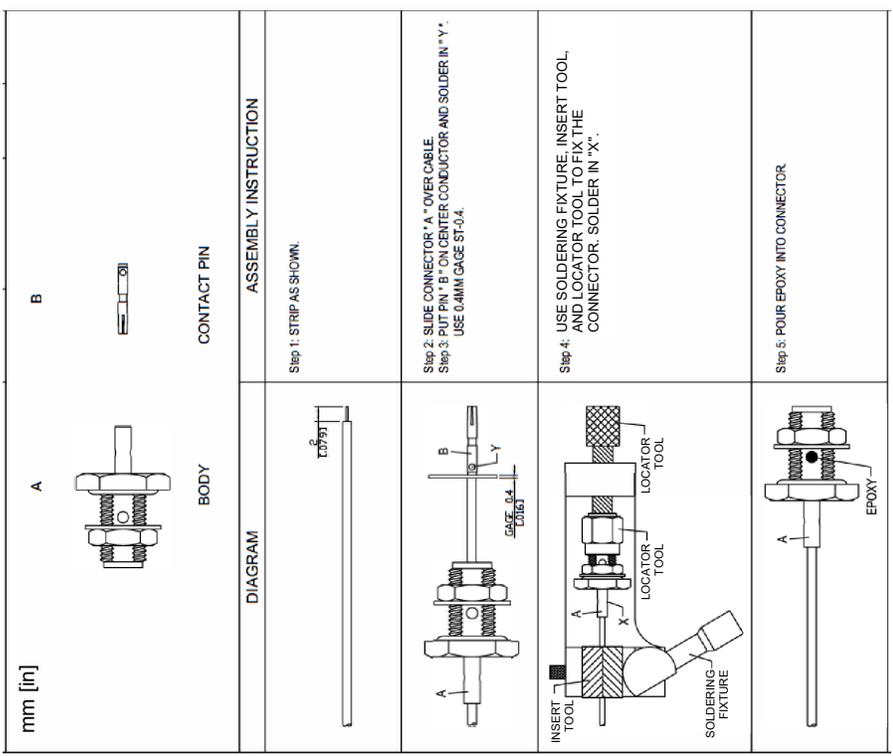
SIZE: A  
CAGE CODE: 53919  
DRAWN BY: KDANG  
ITEM NO.: pe51271

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND TRAILING DIMENSIONS ARE IN MILLIMETERS

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

CABLE LENGTH TOLERANCES:  
 ≤ 12 [305] ≤ 60 [1524] = ±.1 [2.5] / -0  
 > 60 [1524] ≤ 120 [3048] = ±.4 [10.2] / -0  
 > 120 [3048] ≤ 300 [7620] = ±.8 [20.3] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES AND TRAILING DIMENSIONS ARE IN MILLIMETERS. DIMENSIONS OF NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.



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PE DS Rev-04 Add2



## 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.

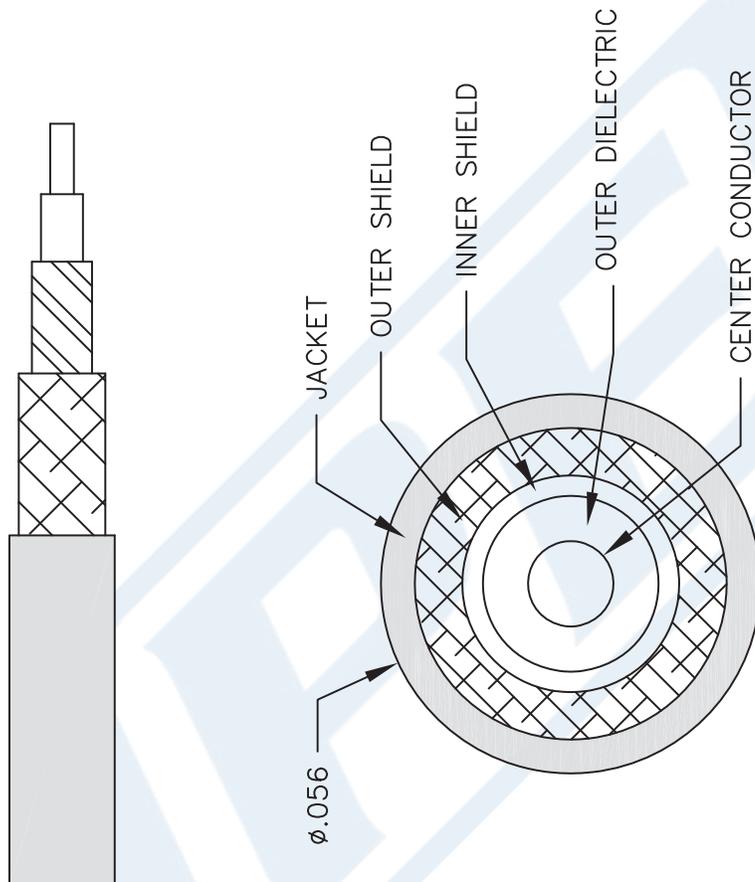
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible PE-P047 Coax Cable Double Shielded with Blue FEP Jacket PE-P047](#)

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



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	PE-P047		
FSCM NO.	53919	CAD FILE	111716
SCALE	N/A	SIZE	A
			41742

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