



Mini SMP (SMPM) Male Smooth Bore VITA 67.3 Connector Solder
Attachment for PE-P047, PE-P047HF, PE-P047LL, PE-P047FLX

RF Connectors
Technical Data Sheet

PE49819

Configuration

- Smooth Bore Mini SMP Male Connector
- 50 Ohms
- Straight Body Geometry

- Connector Interface Types: PE-P047, PE-P047HF, PE-P047LL, PE-P047FLX
- VITA 67.3 Design

Features

- Max. Operating Frequency 40 GHz
- Good VSWR of 1.4:1

- Gold Plated Beryllium Copper Contact
- Blind Mate Connector

Applications

- General Purpose Test
- Custom Cable Assemblies
- VITA 67.3 Plug-In
- High Density Applications

Description

Pasternack's PE49819 Mini SMP male smooth bore VITA 67.3 connector with solder attachment for PE-P086, PE-P086HF, PE-P086LL, and PE-P086FLX is part of our full line of RF components available for same-day shipping. Our Mini SMP male smooth bore VITA 67.3 connector operates up to a maximum frequency of 40 GHz and offers excellent 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 male smooth bore VITA 67.3 connector PE49819 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	
Impedance		50		Ohms

Mechanical Specifications

Size	
Length	0.45 in [11.43 mm]
Width	0.17 in [4.32 mm]
Height	0.17 in [4.32 mm]
Weight	0.00 lbs [0.73 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Mini SMP \(SMPM\) Male Smooth Bore VITA 67.3 Connector Solder Attachment for PE-P047, PE-P047HF, PE-P047LL, PE-P047FLX PE49819](#)



Mini SMP (SMPM) Male Smooth Bore VITA 67.3 Connector Solder Attachment for PE-P047, PE-P047HF, PE-P047LL, PE-P047FLX

RF Connectors Technical Data Sheet

PE49819

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold
Insulation	PTFE	
Outer Conductor	Passivated Stainless Steel	
Body	Passivated Stainless Steel	

Mechanical Specification Notes:
500 mating cycles when mated with a Smooth Bore connector.

Environmental Specifications

Temperature

Operating Range

-65 to +165 deg C

Humidity

MIL-STD-202, Method 106, Less Step 7B

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

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

Plotted and Other Data

Notes:

- PE49819 works with PE49823 Mini SMP VITA 67.3 10 Port Plug-In Module C and PE49825 Mini SMP VITA 67.3 14 Port Plug-In Module C

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Mini SMP \(SMPM\) Male Smooth Bore VITA 67.3 Connector Solder Attachment for PE-P047, PE-P047HF, PE-P047LL, PE-P047FLX PE49819](#)



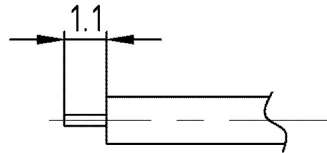
Mini SMP (SMPM) Male Smooth Bore VITA 67.3 Connector Solder Attachment for PE-P047, PE-P047HF, PE-P047LL, PE-P047FLX

RF Connectors Technical Data Sheet

PE49819

Assembly Instruction

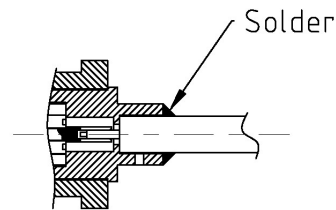
Cable Assembly Instructions



Trim insulator and outer conductor to dimensions shown.
Be careful not to nick the center conductor.

NOTE:

To minimize cable dielectric growth during soldering operation,
normalize cable thermal cycle per MIL-DTL-17 prior to final trim.



Insert cable into body, until outer conductor flush with body.
Solder outer conductor to body.

NOTE:

For PE49817, PE49819 and PE49829

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Mini SMP \(SMPM\) Male Smooth Bore VITA 67.3 Connector Solder Attachment for PE-P047, PE-P047HF, PE-P047LL, PE-P047FLX PE49819](#)



Mini SMP (SMPM) Male Smooth Bore VITA 67.3 Connector Solder
Attachment for PE-P047, PE-P047HF, PE-P047LL, PE-P047FLX

RF Connectors
Technical Data Sheet

PE49819

Mini SMP (SMPM) Male Smooth Bore VITA 67.3 Connector Solder Attachment for PE-P047, PE-P047HF, PE-P047LL, PE-P047FLX 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.

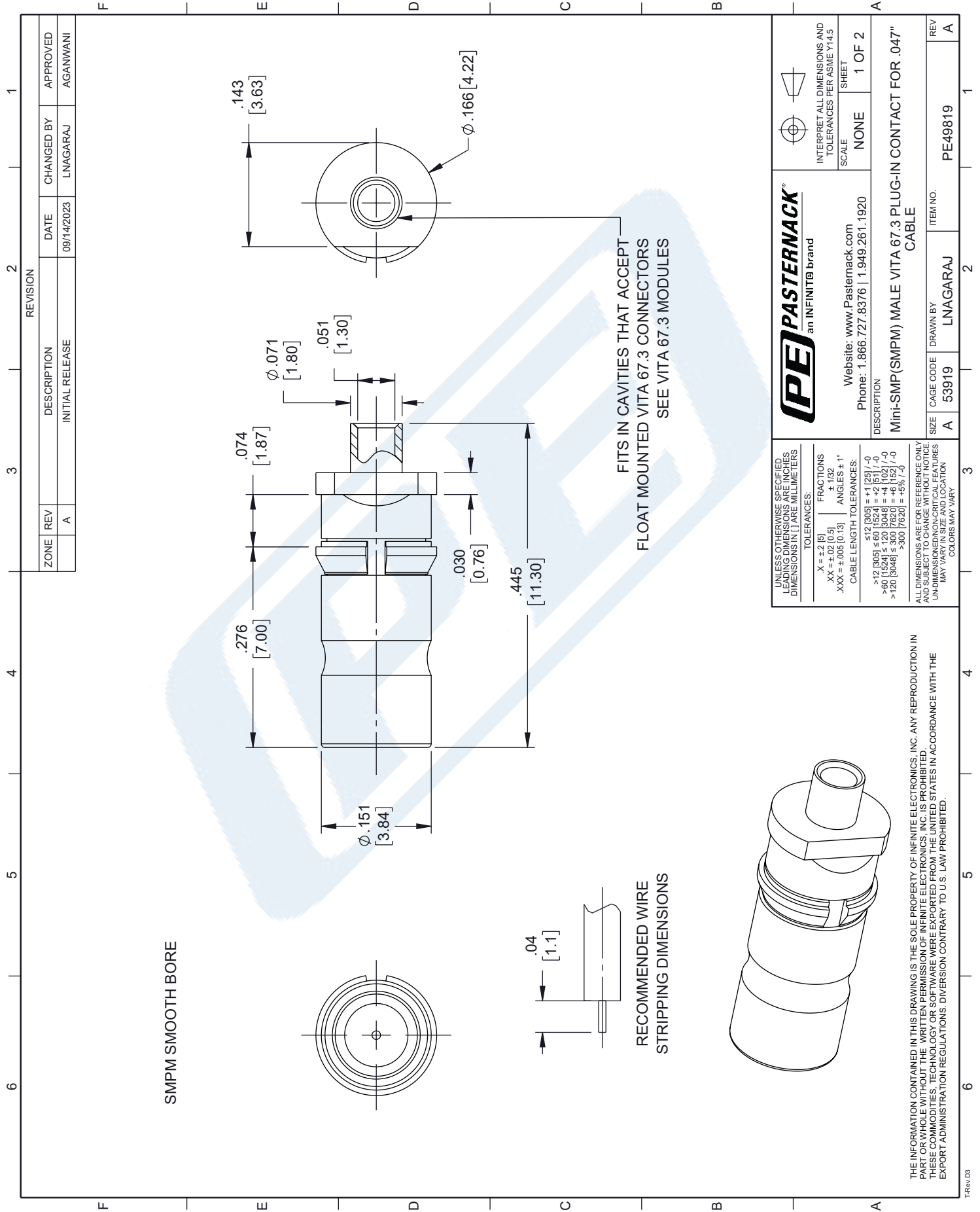
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Mini SMP \(SMPM\) Male Smooth Bore VITA 67.3 Connector Solder Attachment for PE-P047, PE-P047HF, PE-P047LL, PE-P047FLX PE49819](https://www.pasternack.com/mini-smp-male-smooth-bore-pe-p047-pe-p047hf-connector-pe49819-p.aspx)

URL: <https://www.pasternack.com/mini-smp-male-smooth-bore-pe-p047-pe-p047hf-connector-pe49819-p.aspx>

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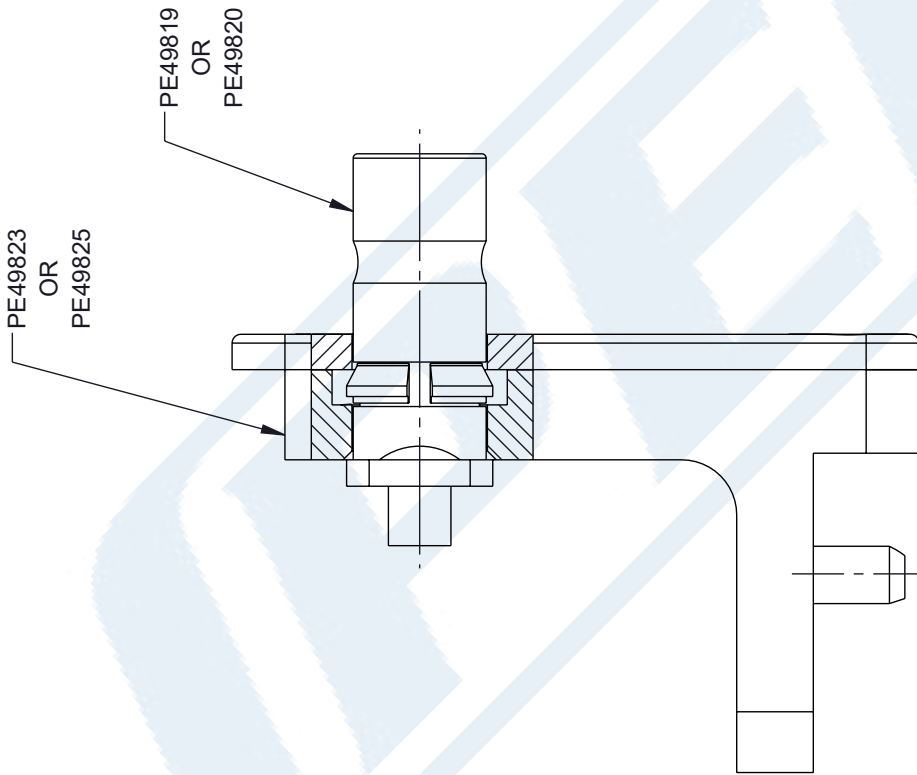
PE49819 CAD Drawing

Mini SMP (SMPM) Male Smooth Bore VITA 67.3 Connector Solder
Attachment for PE-P047, PE-P047HF, PE-P047LL, PE-P047FLX



PE49819 CAD Drawing

Mini SMP (SMPM) Male Smooth Bore VITA 67.3 Connector Solder Attachment for PE-P047, PE-P047HF, PE-P047LL, PE-P047FLX



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

TOLERANCES:

.X = ±.2 [5]	FRACTIONS
.XX = ±.02 [0.5]	± 1/32
.XXX = ±.005 [0.13]	ANGLES ± 1°
CABLE LENGTH TOLERANCES:	
<12 [305]	±.1 [25] / -0
>12 [305] ≤ 60 [1524]	±.2 [51] / -0
>60 [1524] ≤ 120 [3048]	±.4 [102] / -0
>120 [3048] ≤ 300 [7620]	±.6 [152] / -0
>300 [7620]	±.5% / -0

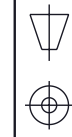
ALL DIMENSIONS ARE FOR REFERENCE ONLY
ALL DIMENSIONS ARE TO BE TAKEN FROM THE
UNDIMENSIONED NON-CRITICAL FEATURES
MAY VARY IN SIZE AND LOCATION
COLORS MAY VARY



Website: www.Pasternack.com
Phone: 1.866.727.8376 | 1.949.261.1920

DESCRIPTION

Mini-SMP(SMPM) MALE VITA 67.3 PLUG-IN CONTACT FOR .047" CABLE



INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE NONE

SHEET 2 OF 2

ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	09/14/2023	LNAGARAJ	AGANWANI

2.92mm Male Right Angle Connector Clamp/Solder Attachment for PE-047SR, PE-P047, PE-P047LL, PE-SR047AL, PE-SR047FL, .047 Semi-Rigid



PE51272

Configuration

- 2.92mm Male Connector
- 50 Ohms
- Right Angle 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 1.35:1
- Gold over Nickel Plated Beryllium Copper Contact

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE51272 Right Angle, 2.92mm, Standard, Connector is part of our full line of RF components available for same-day shipping. Our 2.92mm male connector operates up to a maximum frequency of 40 GHz and offers good VSWR of 1.35:1. Its right angle body geometry allows for easier connections in tight spaces.

Our 2.92mm male right angle connector PE51272 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			1.35:1	
Insertion Loss			0.253	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
RF Leakage	100			dB
Impedance		50		Ohms

Electrical Specification Notes:
Insertion loss is = $0.04 \cdot \sqrt{F(\text{GHz})}$ dB

Mechanical Specifications

Size

Length	0.704724 in [17.9 mm]
Width	0.291339 in [7.4 mm]
Height	0.80315 in [20.4 mm]
Weight	0.015 lbs [6.8 g]

2.92mm Male Right Angle Connector Clamp/Solder Attachment for PE-047SR, PE-P047, PE-P047LL, PE-SR047AL, PE-SR047FL, .047 Semi-Rigid



PE51272

Mating Cycles	5,000 Cycles
Mating Torque	11.47 to 15 in-lbs [[1.30 to 1.70 Nm]]
Cable Retention Force	4.9 lbs [2.22 kg]

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold over Nickel
Insulation	PPO	
Body	Stainless Steel	Passivated
Coupling Nut	Stainless Steel	Passivated
Retaining Ring	Beryllium Copper	Copper-Tin-Zinc Alloy
Gasket	Silicone	
Solder Sleeve	Brass	Tri-Metal

Environmental Specifications

Temperature	
Operating Range	-55 to +105 deg C
Thermal Shock	MIL-STD-202, Method 107, Condition B

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

Plotted and Other Data

Notes:

2.92mm Male Right Angle Connector Clamp/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.

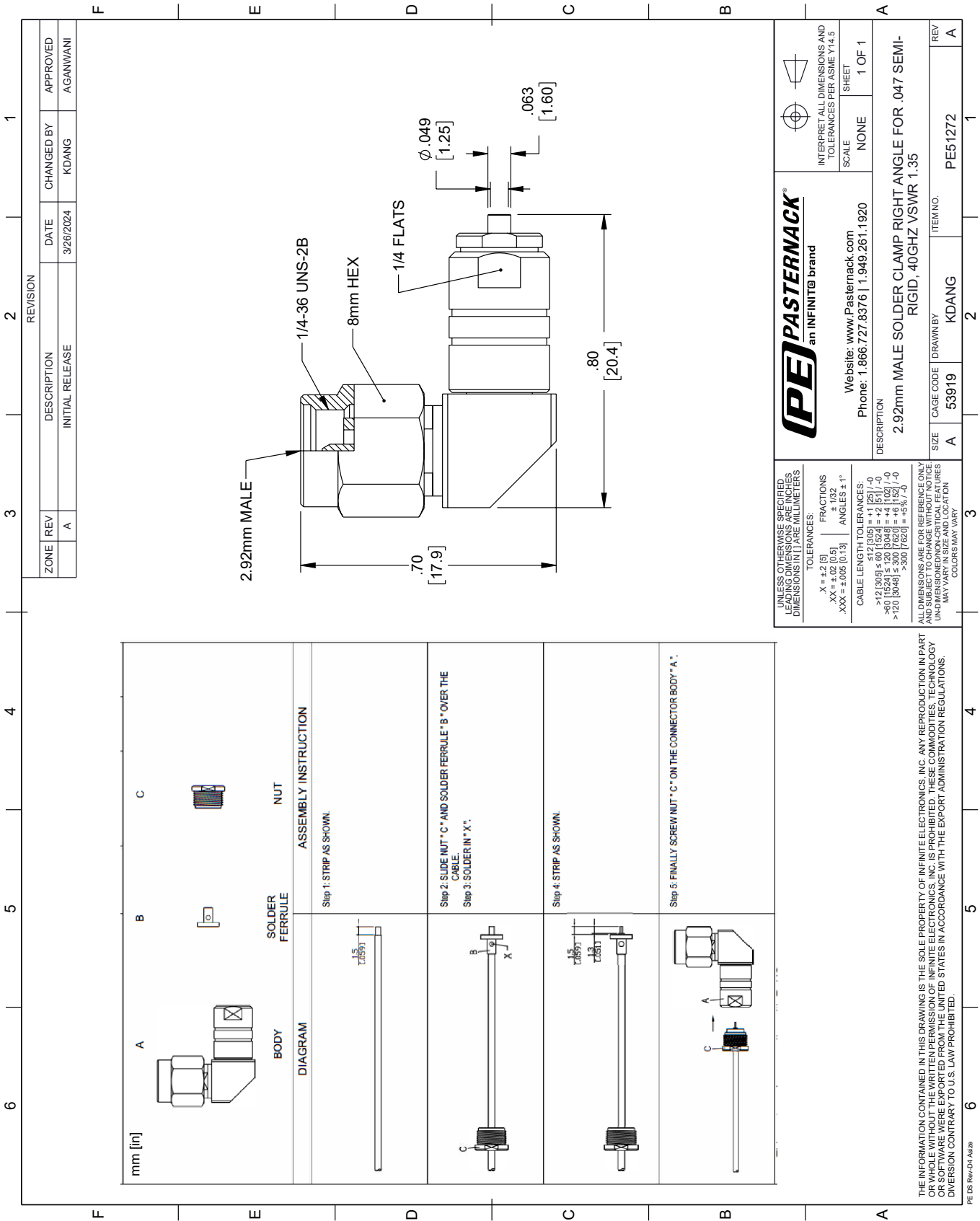
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2.92mm Male Right Angle Connector Clamp/Solder Attachment for PE-047SR, PE-P047, PE-P047LL, PE-SR047AL, PE-SR047FL, .047 Semi-Rigid PE51272](#)

URL: <https://www.pasternack.com/2.92mm-male-pe-047sr-pe-p047-pe-sr047al-connector-pe51272-p.aspx>

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PE51272 CAD Drawing

2.92mm Male Right Angle Connector Clamp/Solder Attachment for PE-047SR, PE-P047, PE-P047LL, PE-SR047AL, PE-SR047FL, .047 Semi-Rigid



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

Notes:

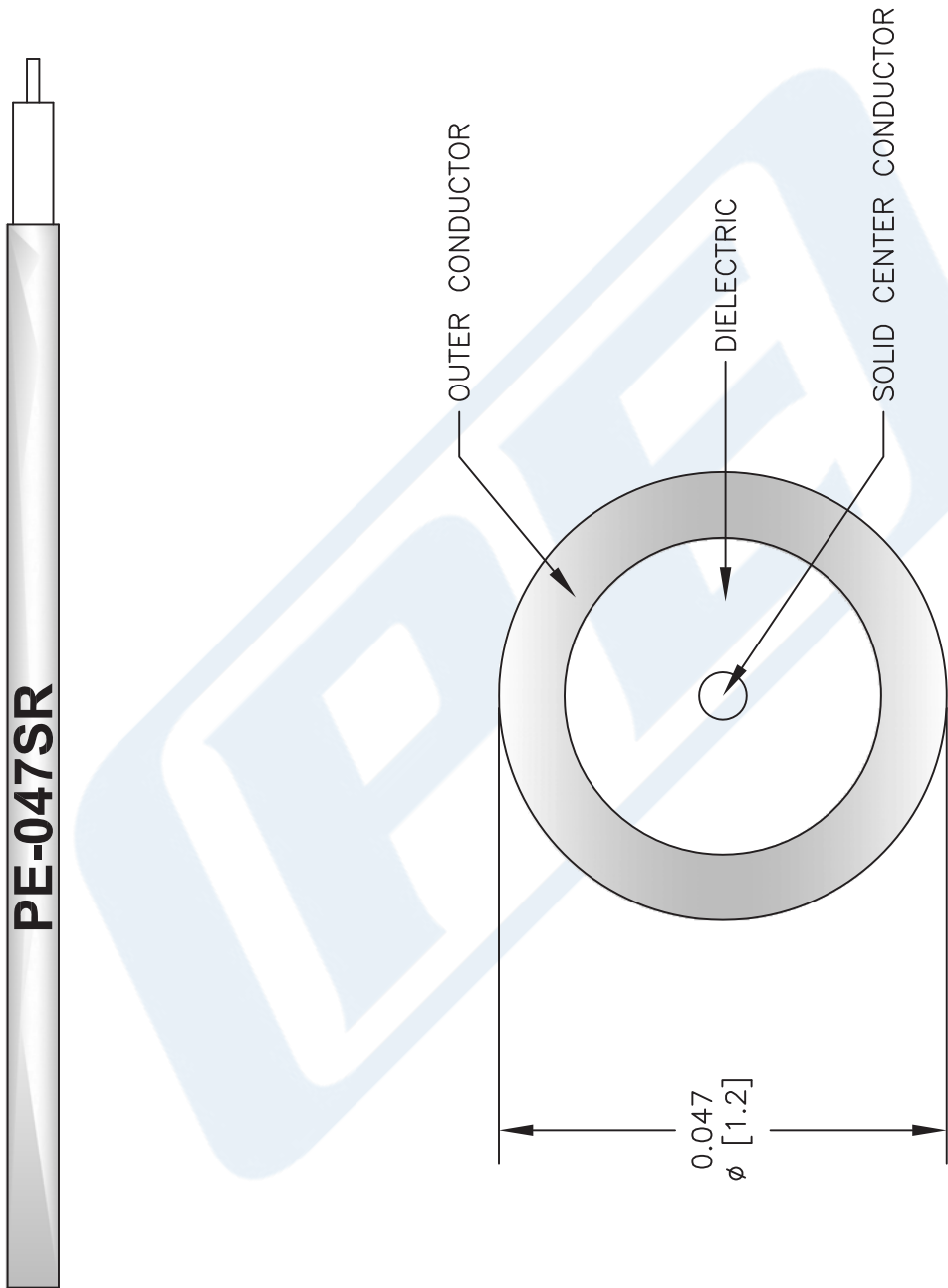
- Values at +25 °C, sea level

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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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-047SR			
	FSCM NO.	53919	CAD FILE	073113
			SCALE	N/A
			SIZE	A
				2233



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