



Mini SMP Male VITA 67 Connector Solder Attachment for PE-P047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL

RF Connectors Technical Data Sheet

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

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Mini SMP Male VITA 67 Connector Solder Attachment for PE-P047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL PE45539](#)



Mini SMP Male VITA 67 Connector Solder Attachment for PE-P047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL

RF Connectors Technical Data Sheet

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Mechanical Specifications

Size

Length	0.42 in [10.67 mm]
Width/Dia.	0.19 in [4.83 mm]
Height	0.19 in [4.83 mm]
Weight	0.0016 lbs [0.73 g]
Mating Cycles	500 Cycles

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:

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RF Connectors Technical Data Sheet

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Mini SMP Male VITA 67 Connector Solder Attachment for PE-P047, 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.

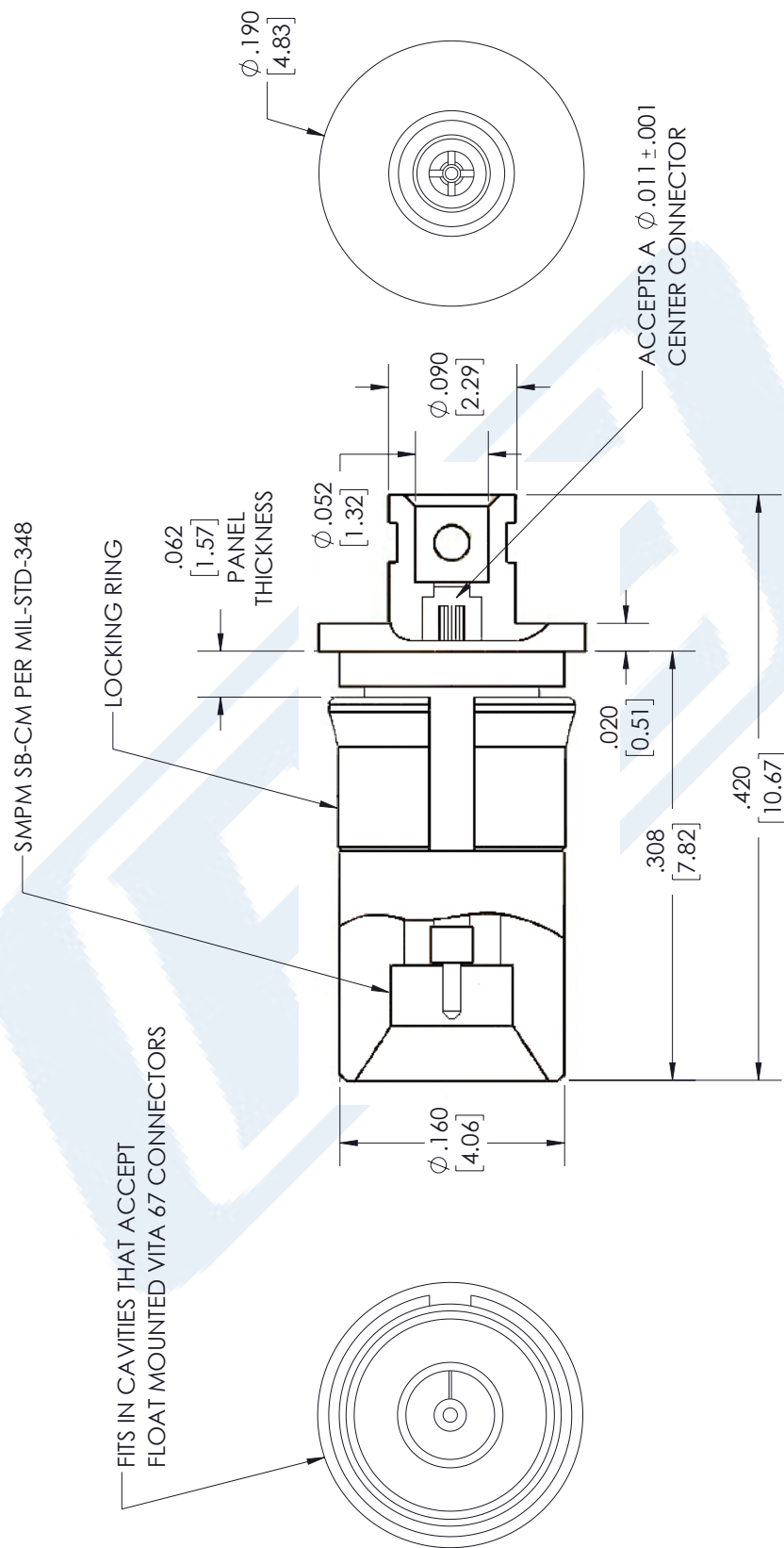
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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	09/16/2022	AGANWANI



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

TOLERANCES:		
$X \pm \pm 2$	[5.08]	FRACTIONS
$XX \pm \pm 02$	[.51]	$\pm 1/32$
$XXX \pm \pm .005$	[.13]	ANGLES $\pm 1^\circ$
CABLE LENGTH (L) TOLERANCES:		
$L \leq 12$ [305] = +1 [25] / -0		
12 [305] < $L \leq 60$ [1524] = +2 [51] / -0		
0 [1524] < $L \leq 120$ [3048] = +4 [102] / -0		
0 [3048] < $L \leq 300$ [7620] = +6 [152] / -0		
300 [7620] < $L = +5\%L$ / -0		

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE	N/A
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Phone: 1.949.261.1920 | 1.866.727.8376
Fax: 1.949.261.7451
Website: www.pasternack.com

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
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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:

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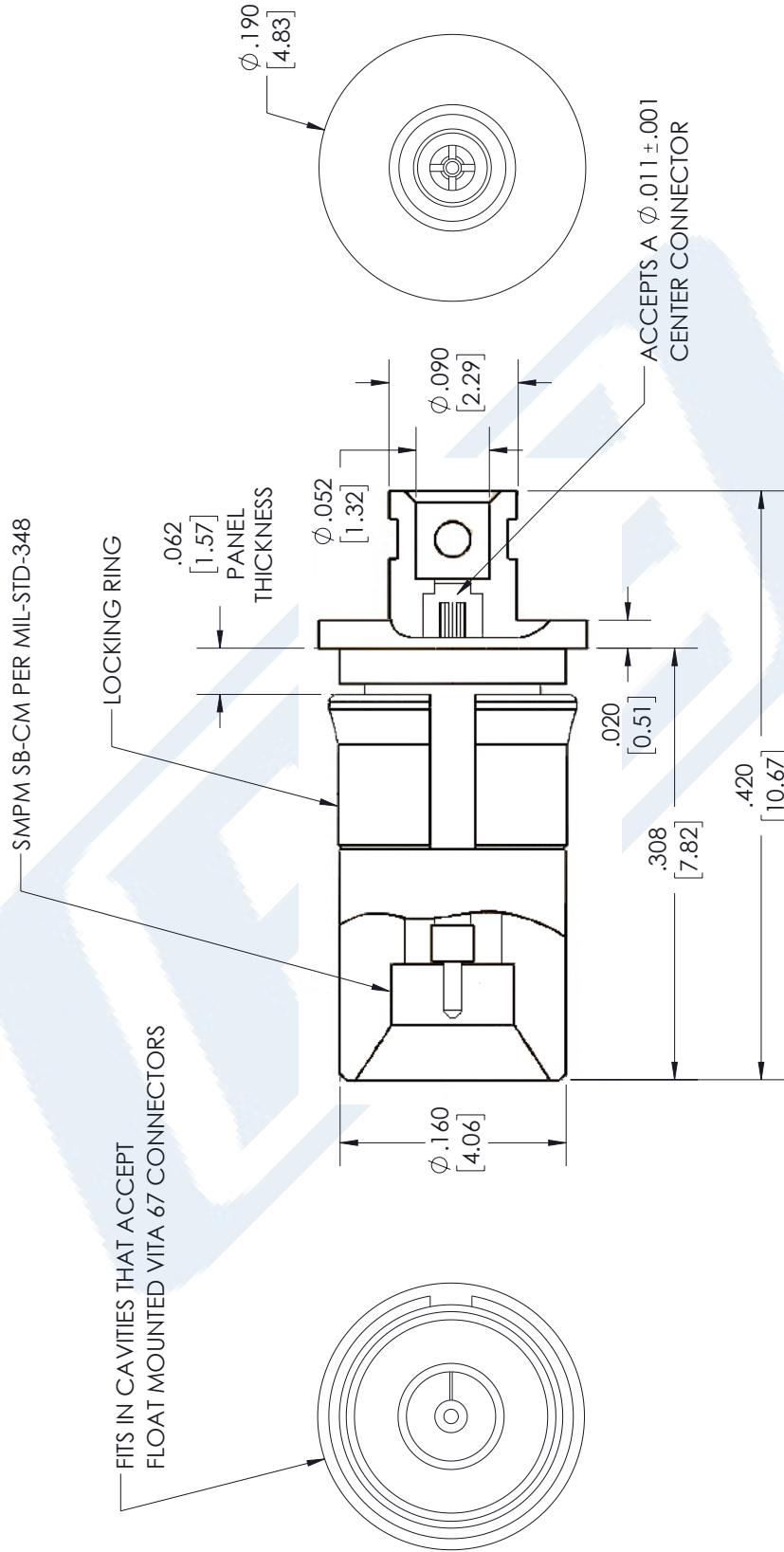
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PE45539 CAD Drawing

Mini SMP Male VITA 67 Connector Solder Attachment for PE-P047, PE-P047LL, PE-047SR, PE-SR047FL, PE-SR047AL

REVISIONS			
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A	INITIAL RELEASE	09/16/2022	AGANWANI



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

TOLERANCES:

.X = ±.2	[.08]	FRACTIONS
.XX = ±.02	[.51]	± 1/32
.XXX = ±.005	[.13]	ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305]	±.1 [25]	/-0
12 [305] < L ≤ 60 [1524]	±.2 [51]	/-0
60 [1524] < L ≤ 120 [3048]	±.4 [102]	/-0
120 [3048] < L ≤ 300 [7620]	±.6 [152]	/-0
300 [7620] < L	±.5% L	/-0

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

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Website: www.pasternack.com
E-mail: sales@pasternack.com

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

SIZE A

CAGE CODE 53919

DRAWN BY BPUCHASKI

ITEM NO. PE45539

REV A

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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:

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.

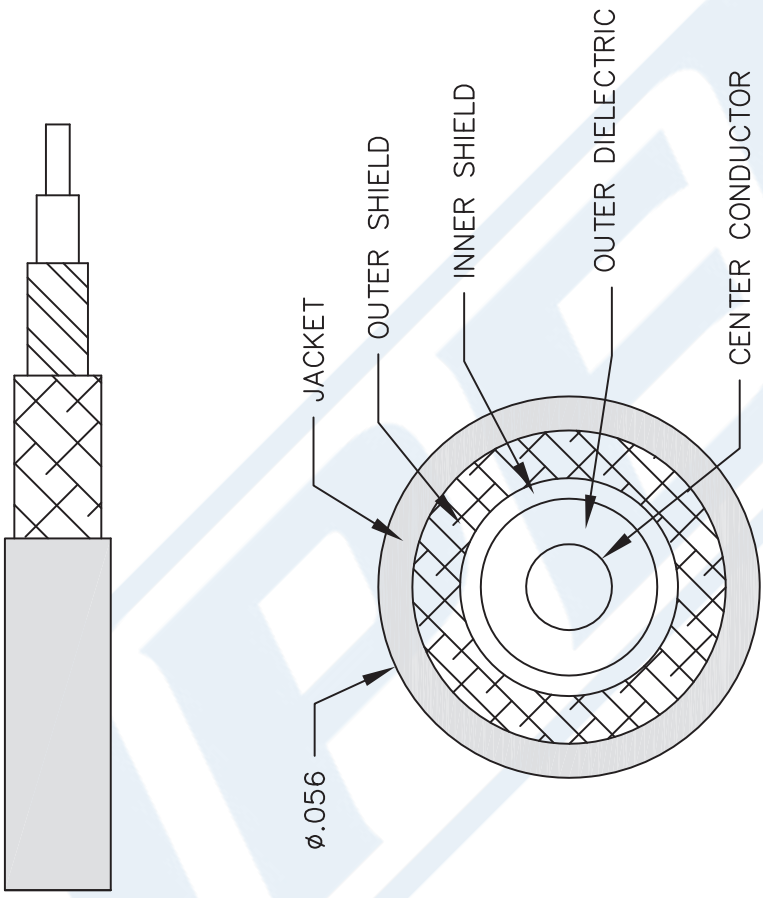
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URL: <https://www.pasternack.com/precision-0.056-semirigid-replacement-50-ohm-coax-cable-fep-jacket-pe-p047-p.aspx>

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PE-P047 CAD Drawing

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



NOTES:
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

41742

SIZE A

SCALE N/A

CAD FILE 111716

PE PASTERNAK
THE ENGINEER'S RF SOURCE

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