



Mini SMP Female VITA 67 Connector Solder Attachment for PE-P086, PE-P086HF, PE-P086LL, PE-P086FLX

RF Connectors Technical Data Sheet

PE45536

Configuration

- Mini SMP Female Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: PE-P086, PE-P086HF, PE-P086LL, PE-P086FLX
- 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 PE45536 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 PE45536 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 Female VITA 67 Connector Solder Attachment for PE-P086, PE-P086HF, PE-P086LL, PE-P086FLX PE45536](#)



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RF Connectors
Technical Data Sheet

PE45536

Mechanical Specifications

Size

Length	0.48 in [12.19 mm]
Width/Dia.	0.196 in [4.98 mm]
Height	0.196 in [4.98 mm]
Weight	1.31 lbs [594.21 g]
Mating Cycles	500 Cycles

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold ASTM B488
Contact Spring	Passivated Stainless Steel	
Insulation	Teflon	
Outer Conductor	Beryllium Copper	Gold ASTM B488
Body	Beryllium Copper	Gold ASTM B488
Retaining Ring	Beryllium Copper	Nickel SAE-AMS-QQ-N-290

Environmental Specifications

Temperature

Operating Range	-65 to +150 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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PE45536

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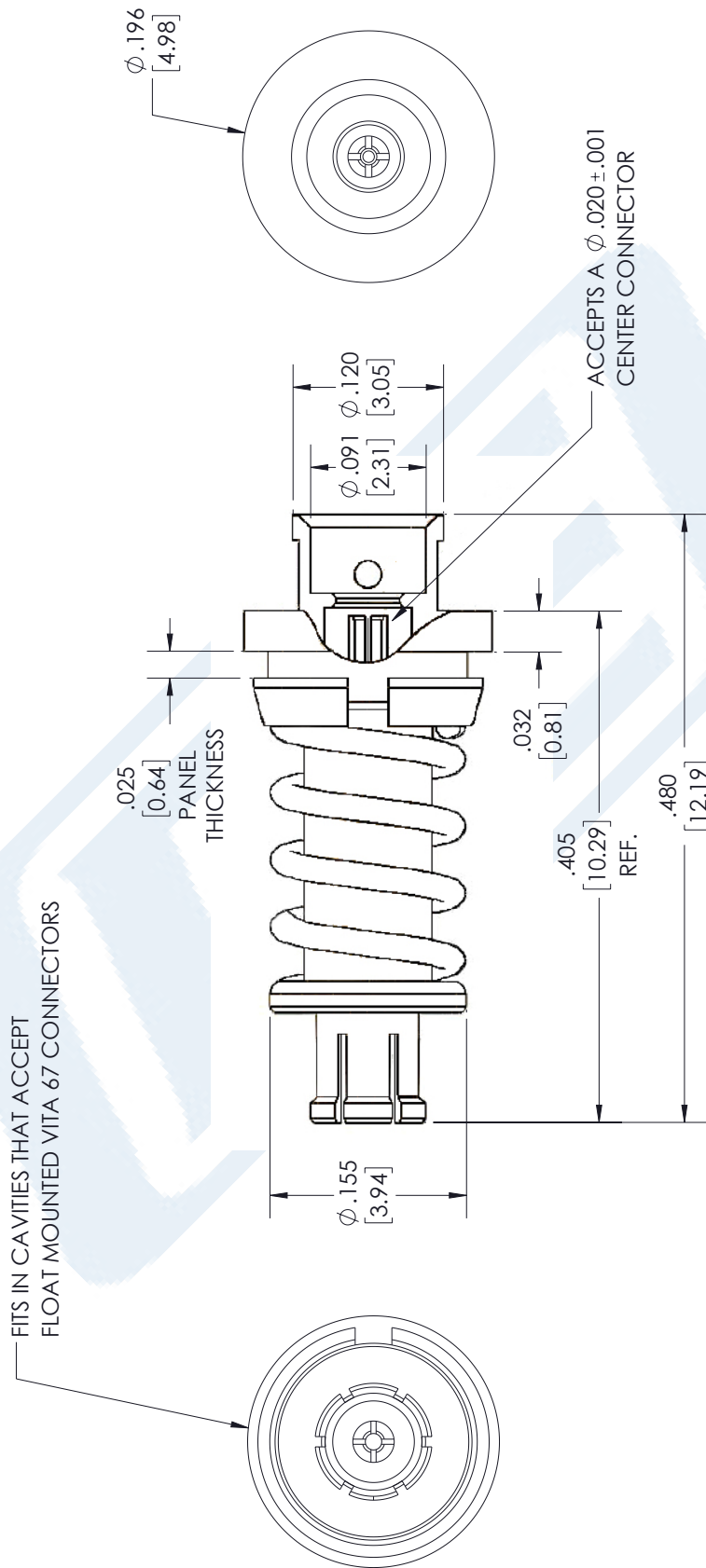
URL: <https://www.pasternack.com/mini-smp-female-pe-p086-pe-p086hf-pe-p086flx-connector-pe45536-p.aspx>

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PE45536 CAD Drawing

Mini SMP Female VITA 67 Connector Solder Attachment for PE-P086, PE-P086HF, PE-P086LL, PE-P086FLX

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 = ± .2 [5.08]
.XX = ± .02 [.51]
.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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an INFINITE brand

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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV A

SIZE A CAGE CODE 53919 DRAWN BY BPUCHASKI ITEM NO. PE45536

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Size

Length	0.48 in [12.19 mm]
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Weight	1.31 lbs [594.21 g]
Mating Cycles	500 Cycles

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold ASTM B488
Contact Spring	Passivated Stainless Steel	
Insulation	Teflon	
Outer Conductor	Beryllium Copper	Gold ASTM B488
Body	Beryllium Copper	Gold ASTM B488
Retaining Ring	Beryllium Copper	Nickel SAE-AMS-QQ-N-290

Environmental Specifications

Temperature

Operating Range	-65 to +150 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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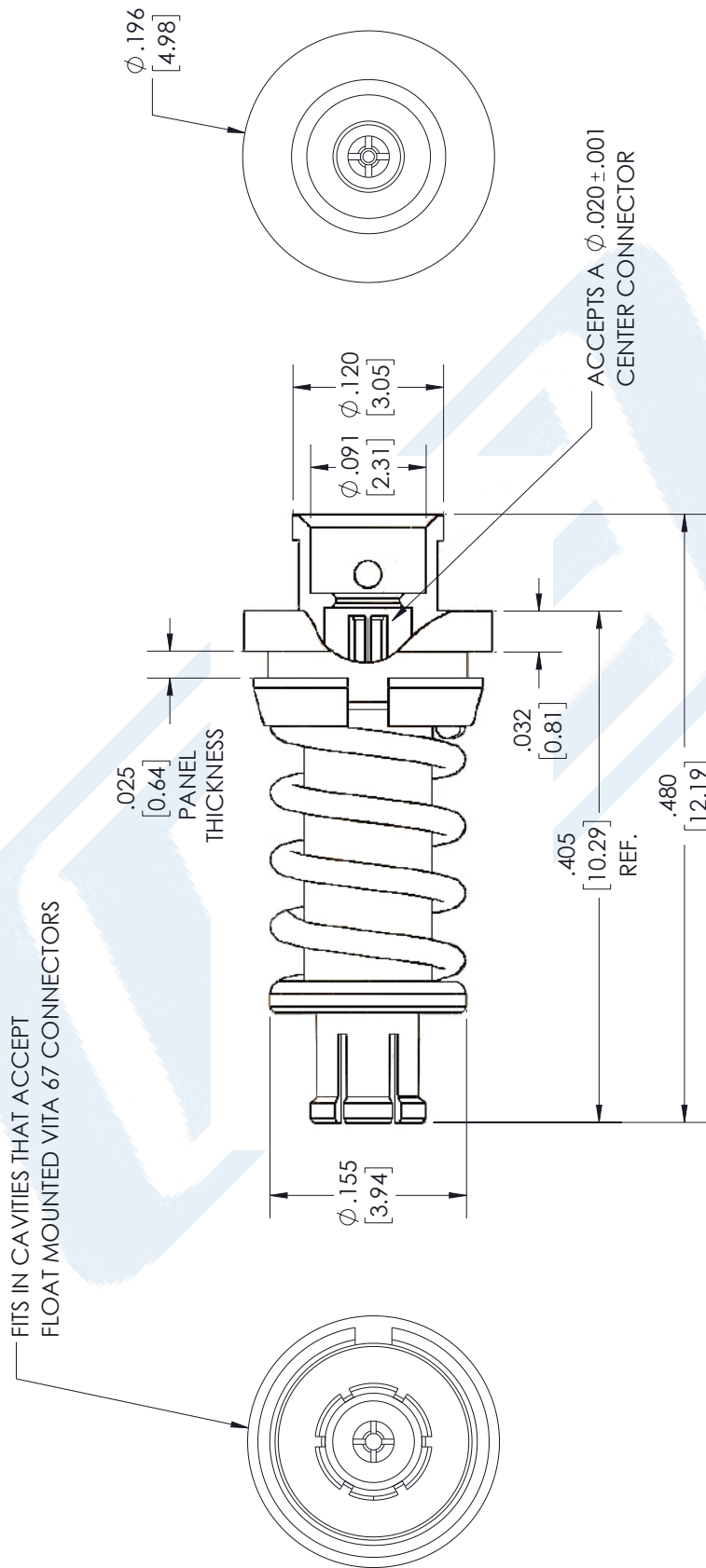
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PE45536 CAD Drawing

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REVISIONS			
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A	INITIAL RELEASE	09/16/2022	AGANWANI



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS				THIRD-ANGLE PROJECTION					
TOLERANCES:									
X = ± .2 [5.08]				THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION ALL RIGHTS RESERVED.					
.XX = ± .02 [.51]				SHEET 1 OF 1					
XXX = ± .005 [.13]				SCALE N/A					
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				REV A					
SIZE				CAGE CODE		DRAWN BY		ITEM NO.	
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Flexible PE-P086HF Coax Cable Double Shielded with Blue FEP Jacket

RF Cables Technical Data Sheet

PE-P086HF

Configuration

- Flexible Cable
- 2 Shield(s)

Description

Pasternack's PE-P086HF is a flexible, high frequency coaxial cable that provides similar loss characteristics to semi-rigid cable and low VSWR of 1.3:1 maximum up to 40 GHz. The low loss coax cable features silver-plated conductors and dual shields to maintain a shielding effectiveness of 110 dB. The size of the conductors for this low VSWR coax was specifically chosen to allow termination with standard connectors designed for M17/133-RG405 and other M17/133 cables. The outer shield is coated with a tough, chemical and heat resistant jacket. This PE-P086HF flexible low loss coaxial cable is a great choice for short length, high frequency system hook-up or jumper cable applications. The Pasternack coax cable can also be used as a replacement option for bent semi-rigid cable assemblies when length and routing are considered.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		40	GHz
Impedance		50 ±2		Ohms
Velocity of Propagation		70		%
Nominal Capacitance		29.4 [96.46]		pF/ft [pF/m]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible PE-P086HF Coax Cable Double Shielded with Blue FEP Jacket PE-P086HF](#)

Flexible PE-P086HF Coax Cable Double Shielded with Blue FEP Jacket

RF Cables Technical Data Sheet

PE-P086HF

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.4	1	2	2.4	3	GHz
Attenuation, Max	13.1	21.1	30.5	33.7	38	dB/100ft
	42.98	69.23	100.07	110.56	124.67	dB/100m
Attenuation, Typ	11.9	19.2	27.7	30.6	34.5	dB/100ft
	39.04	62.99	90.88	100.39	113.19	dB/100m

Description	F6	F7	F8	F9	F10	Units
Frequency	5	10	18	40		GHz
Attenuation, Max	50.3	74.3	104.6	170.3		dB/100ft
	165.03	243.77	343.18	558.73		dB/100m
Attenuation, Typ	45.7	67.5	95.1	154.8		dB/100ft
	149.93	221.46	312.01	507.87		dB/100m

Mechanical Specifications

Diameter	0.104 in [2.64 mm]
Weight	0.013 lbs/ft [0.02 Kg/m]
Min. Bend Radius (Installation)	0.52 in [13.21 mm]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Steel, Silver, 1 Strands	0.02 in [0.51 mm]
Conductor Type	Solid	
Dielectric	PTFE	0.064 in [1.63 mm]
First Shield	Silver Plated Copper Tape	
Second Shield	Silver Plated Copper Braid	

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible PE-P086HF Coax Cable Double Shielded with Blue FEP Jacket PE-P086HF](#)

Flexible PE-P086HF Coax Cable Double
Shielded with Blue FEP Jacket

RF Cables Technical Data Sheet

PE-P086HF

Jacket	FEP, Blue	0.104 in [2.64 mm]
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Environmental Specifications

Temperature

Operating Range -55 to +200 deg C

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

Plotted and Other Data

Notes:

Flexible PE-P086HF 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.

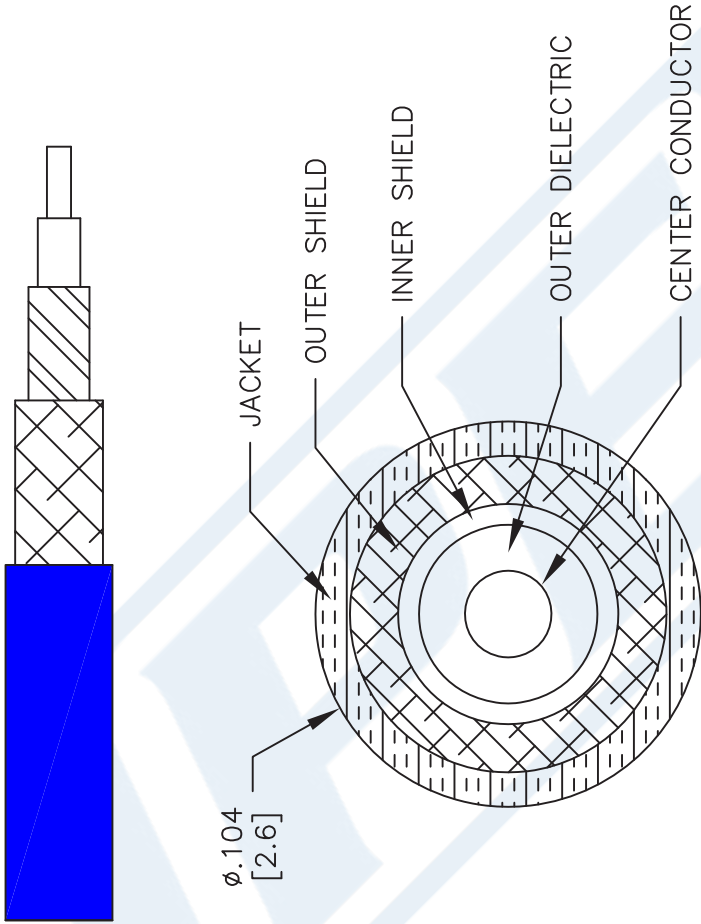
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible PE-P086HF Coax Cable Double Shielded with Blue FEP Jacket PE-P086HF](#)

URL: <https://www.pasternack.com/50-ohm-flexible-invalid-alias-fep-jacket-silver-plated-copper-tape-over-silver-plated-copper-braid-outer-conductor-double-shielded-blue-pe-p086hf-p.aspx>

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PE-P086HF CAD Drawing

Flexible PE-P086HF 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-P086HF

CAGE CODE 53919

CAD FILE 041317

SCALE N/A

SIZE A

2233

PE PASTERNAK®
THE ENGINEER'S RF SOURCE

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