

Mini SMP (SMPM) Male Smooth Bore VITA
67.3 Connector Solder Attachment for PE-P086,
PE-P086HF, PE-P086LL, PE-P086FLX



PE49820

Configuration

- Smooth Bore Mini SMP Male Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: PE-P086, PE-P086HF, PE-P086LL, PE-P086FLX, FM-F086, FM-F086HF
- VITA 67 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 PE49820 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 PE49820 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	0.0019 lbs [0.86 g]

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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

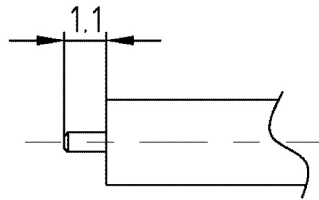
Mini SMP (SMPM) Male Smooth Bore VITA
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PE49820

Assembly Instruction

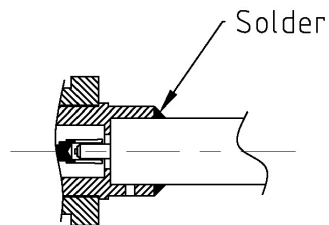
Cable Assembly Instructions



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 PE49816 and PE49820

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Mini SMP (SMPM) Male Smooth Bore VITA 67.3 Connector Solder Attachment for PE-P086, PE-P086HF, PE-P086LL, PE-P086FLX 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.

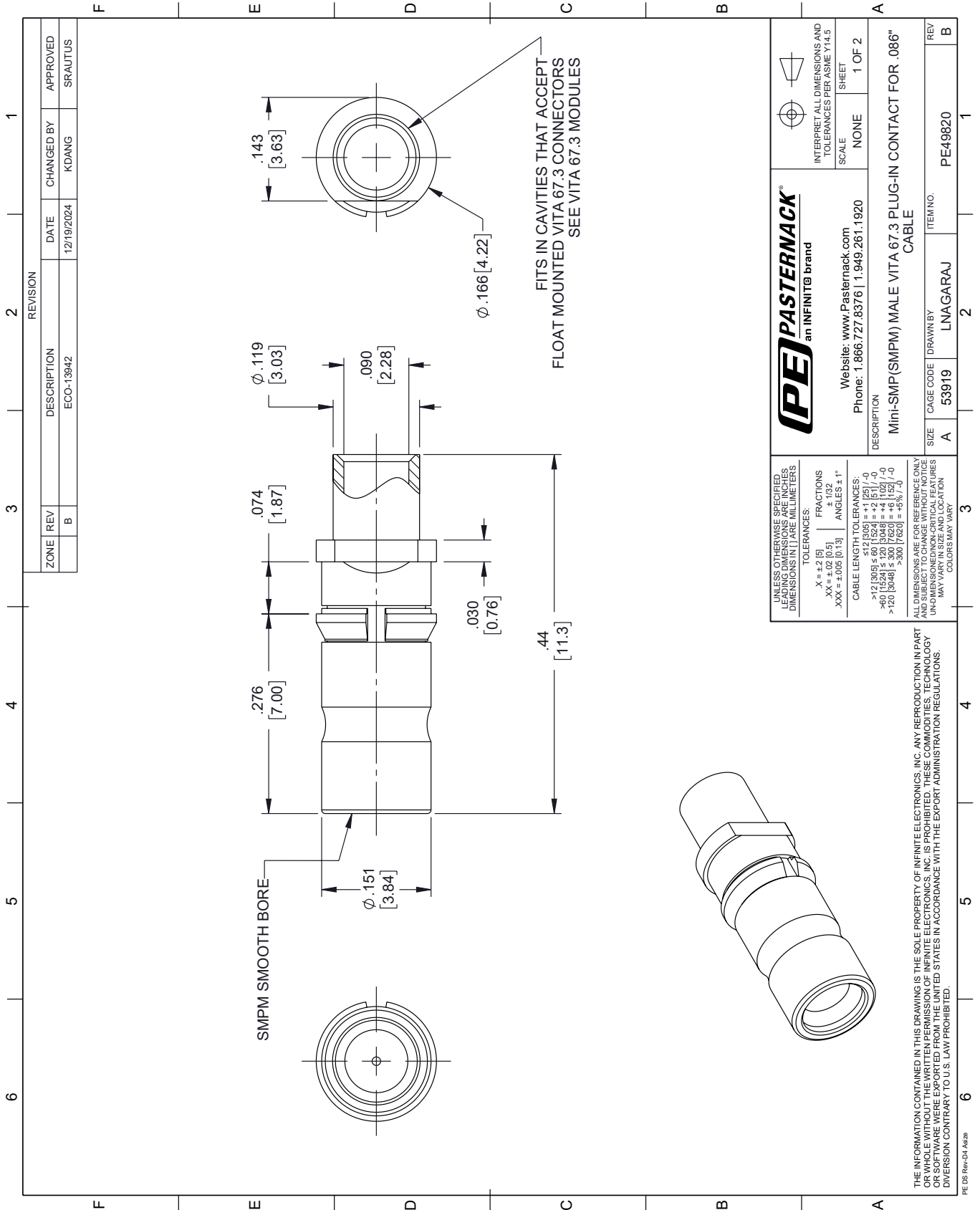
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Mini SMP \(SMPM\) Male Smooth Bore VITA 67.3 Connector Solder Attachment for PE-P086, PE-P086HF, PE-P086LL, PE-P086FLX PE49820](https://www.pasternack.com/mini-smp-male-smooth-bore-pe-p086-pe-p086hf-connector-pe49820.html)

URL: <https://www.pasternack.com/mini-smp-male-smooth-bore-pe-p086-pe-p086hf-connector-pe49820.html>

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.

PE49820 CAD Drawing

Mini SMP (SMPM) Male Smooth Bore VITA 67.3 Connector Solder Attachment
for PE-P086, PE-P086HF, PE-P086LL, PE-P086FLX



PE PASTERNAK
an INFINITE brand

Website: 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 2

DESCRIPTION: Mini-SMP(SMPM) MALE VITA 67.3 PLUG-IN CONTACT FOR .086" CABLE
CAGE CODE: LNA GARAJ
ITEM NO: PE49820

SIZE A 53919
DRAWN BY LNAGARAJ

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

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

CABLE LENGTH TOLERANCES:
 ≤ 12 [305] ± .60 [15.24] = ±.2 [5.1] / -0
 > 12 [305] ≤ 60 [1524] = ±.4 [10.2] / -0
 > 60 [1524] ≤ 120 [3048] = ±.4 [10.2] / -0
 > 120 [3048] ≤ 300 [7620] = ±.6 [15.2] / -0
 > 300 [7620] = ±.8 [20.3] / -0

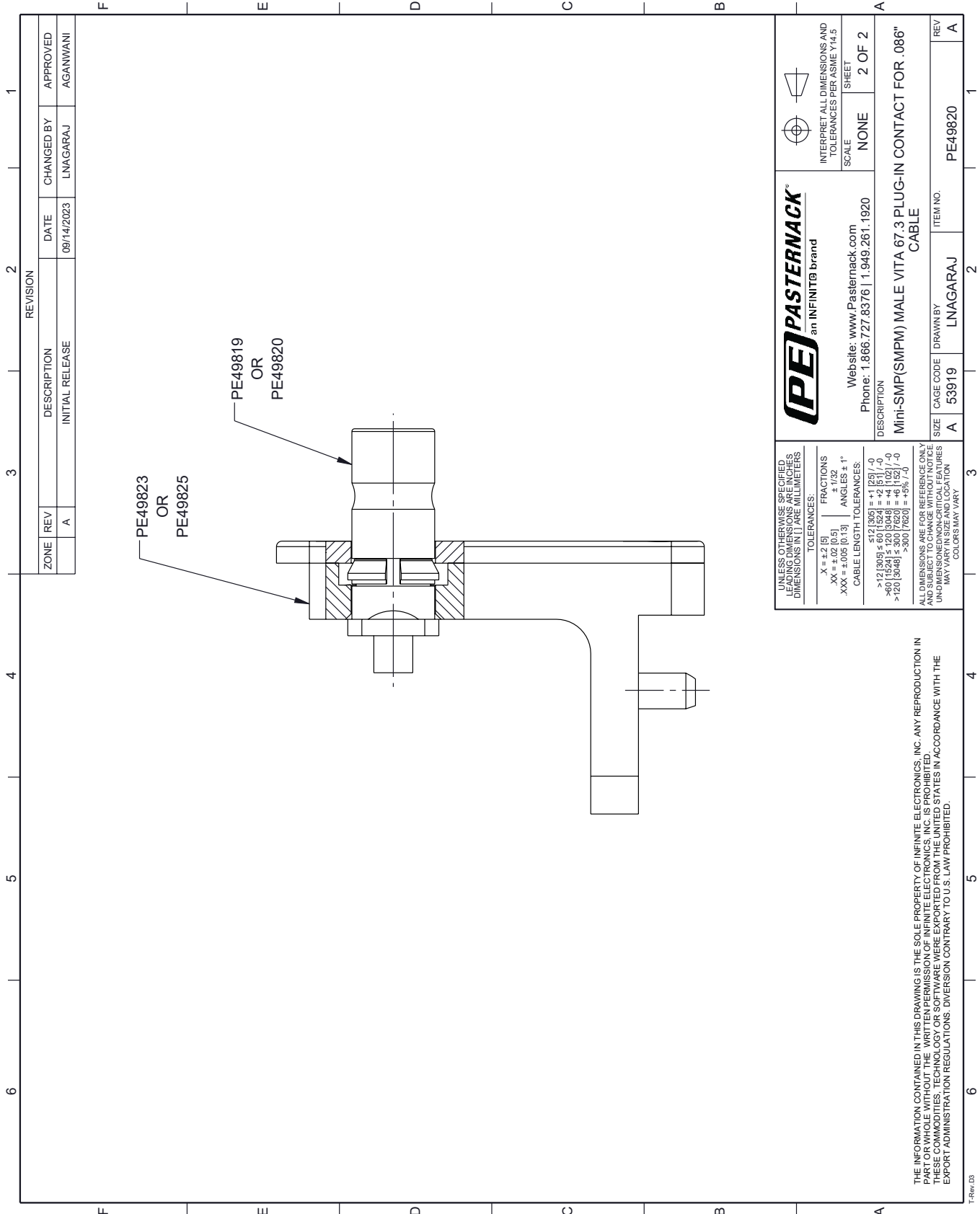
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PE DS Rev-04 Add2

PE49820 CAD Drawing

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for PE-P086, PE-P086HF, PE-P086LL, PE-P086FLX



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV			
	A	08/14/2023	LNAGARAJ	AGANWANI
DESCRIPTION				
INITIAL RELEASE				

 an INFINITE® brand		 INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5
Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920		SCALE: NONE SHEET: 2 OF 2
DESCRIPTION: Mini-SMP(SMPM) MALE VITA 67.3 PLUG-IN CONTACT FOR .086" CABLE		
SIZE: A	CAGE CODE: 53919	ITEM NO.: PE49820
DRAWN BY: LNAGARAJ		REV: A

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TOLERANCES:

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

CABLE LENGTH TOLERANCES:

<12 [305]	±.60 [15.24]
>12 [305]	±.12 [3.05]
>60 [1524]	±.12 [3.05]
>120 [3048]	±.30 [7.62]

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