

## Right Angle, Mini SMP, VITA 67, 4-Position Connector (Stainless Steel)



### PE45531

#### Configuration

- Mini SMP Connector
- Right Angle Body Geometry
- VITA 67 Design

#### Features

- Max. Operating Frequency 40 GHz
- Good VSWR of 1.45:1
- 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
- Robust and Rugged high speed cabled solution
- VITA 67 Backplane
- High Density Applications

#### Description

Pasternack's PE45531 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 PE45531 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

#### Mechanical Specifications

##### Size

Length	0.85 in [21.59 mm]
Width	0.548 in [13.92 mm]
Height	0.644 in [16.36 mm]
Weight	0.031 lbs [14.06 g]
Mating Cycles	500 Cycles

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Engagement Force	4.25lbs [1.93kg]
Disengagement Force	3.5lbs [1.59kg]

#### Material Specifications

Description	Material	Plating
Body	Passivated Stainless Steel	SAE-AMS2700

#### Environmental Specifications

<b>Temperature</b>	
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:

Right Angle, Mini SMP, VITA 67, 4-Position Connector (Stainless Steel) 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: [Right Angle, Mini SMP, VITA 67, 4-Position Connector \(Stainless Steel\) PE45531](#)

URL: <https://www.pasternack.com/mini-smp-connector-pe45531-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 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.

# PE45531 CAD Drawing

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