



## 1.0mm Female Connector Clamp/Solder (Captive Contact) Attachment End Launch PCB, Removable End Launch, 0.35 Width

### RF Connectors Technical Data Sheet

PE45403

#### Configuration

- 1.0mm Female Connector
- Straight Body Geometry
- End Launch Interface Type
- Clamp/Solder (Captive Contact) Attachment

#### Features

- Max. Operating Frequency 110 GHz
- Good VSWR of 1.28:1
- Gold Plated Beryllium Copper Contact
- Contact plating according to ASTM B488
- Reusable end launch installation
- PCB Solder or Solderless Contact
- Narrow width of 0.35

#### Applications

- General Purpose Test
- PCB Applications
- Coplanar Waveguide Edge Launches
- Signal Integrity Measurements
- Chip Evaluations
- SERDES
- 25 GbE
- Substrate Characterization
- Test Fixtures

#### Description

Pasternack's PE45403 1.00mm removable end launch PCB connector is part of our full line of RF components available for same-day shipping. Our 1.00mm solderless edge launch connector operates to a maximum frequency of 110 GHz and offers an excellent VSWR of 1.28:1. The narrow 0.350 inch width connector body saves PCB real estate, supporting higher signal counts for chip evaluations, signal integrity or millimeter wave applications.

Our 1.00mm solderless end launch PCB connector PE45403 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 superior signal integrity, higher data rates or simply a test fixture, Pasternack has the right high speed PCB edge launch connections for you.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		110	GHz
VSWR			1.28:1	
Insertion Loss			0.1	dB
Operating Voltage (AC)			650	Vrms

#### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 18	18 to 40	40 to 50	50 to 67	67 to 110	GHz
VSWR, Max	1.15:1	1.15:1	1.18:1	1.25:1	1.28:1	

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1.0mm Female Connector Clamp/Solder \(Captive Contact\) Attachment End Launch PCB, Removable End Launch, 0.35 Width PE45403](#)



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Electrical Specification Notes:

Actual VSWR performance is largely dependent on circuit board design. For optimal results, the connector and circuit launch geometry should be modeled using Electromagnetic Simulation tools.

**Mechanical Specifications**

**Size**

Length	0.579 in [14.71 mm]
Width/Dia.	0.35 in [8.89 mm]
Height	0.321 in [8.15 mm]

**Material Specifications**

Description	Material	Plating
Contact	Beryllium Copper	Gold ASTM B488
Insulation	PCTFE	
Outer Conductor	Steel	
Body	Brass	Nickel AMS 2404B

Mechanical Specification Notes:

Launch Pin is Gold Plated Beryllium Copper

**Environmental Specifications**

**Temperature**

Operating Range -55 to +165 deg C

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

**Plotted and Other Data**

Notes:

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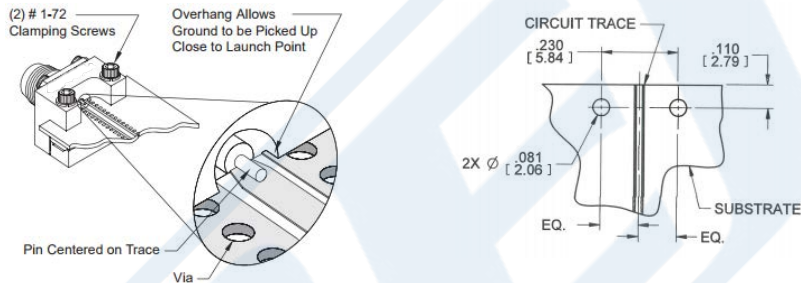
1.0mm Female Connector Clamp/Solder (Captive Contact)  
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**Assembly Instruction**

**End Launch Connectors - Installation Procedure**

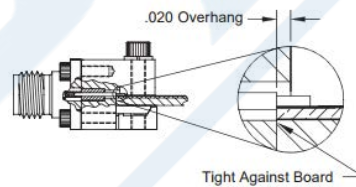
Step 1: Mount the end launch connector, PE45403, in the desired position on the board.

Step 2: Center the connector on the trace.



Step 3: Verify that the transition block is secured on the board.

Step 4: Tighten the 1-72 mounting screws to your boards suggested torque or until the connector is secure.

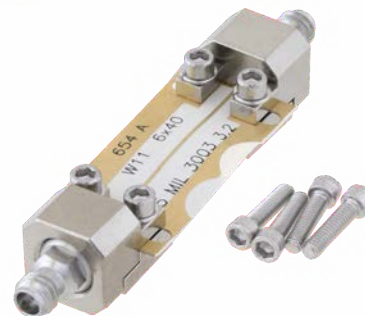


(Steps 5 – 7 optional, depending on application)

Step 5: If soldering the launch pin to the trace, flow solder the entire length of the contact area.

Step 6: To avoid performance mistakes, remove excess solder.

Step 7: Clean any residue from around the solder joint.



Example Assembly

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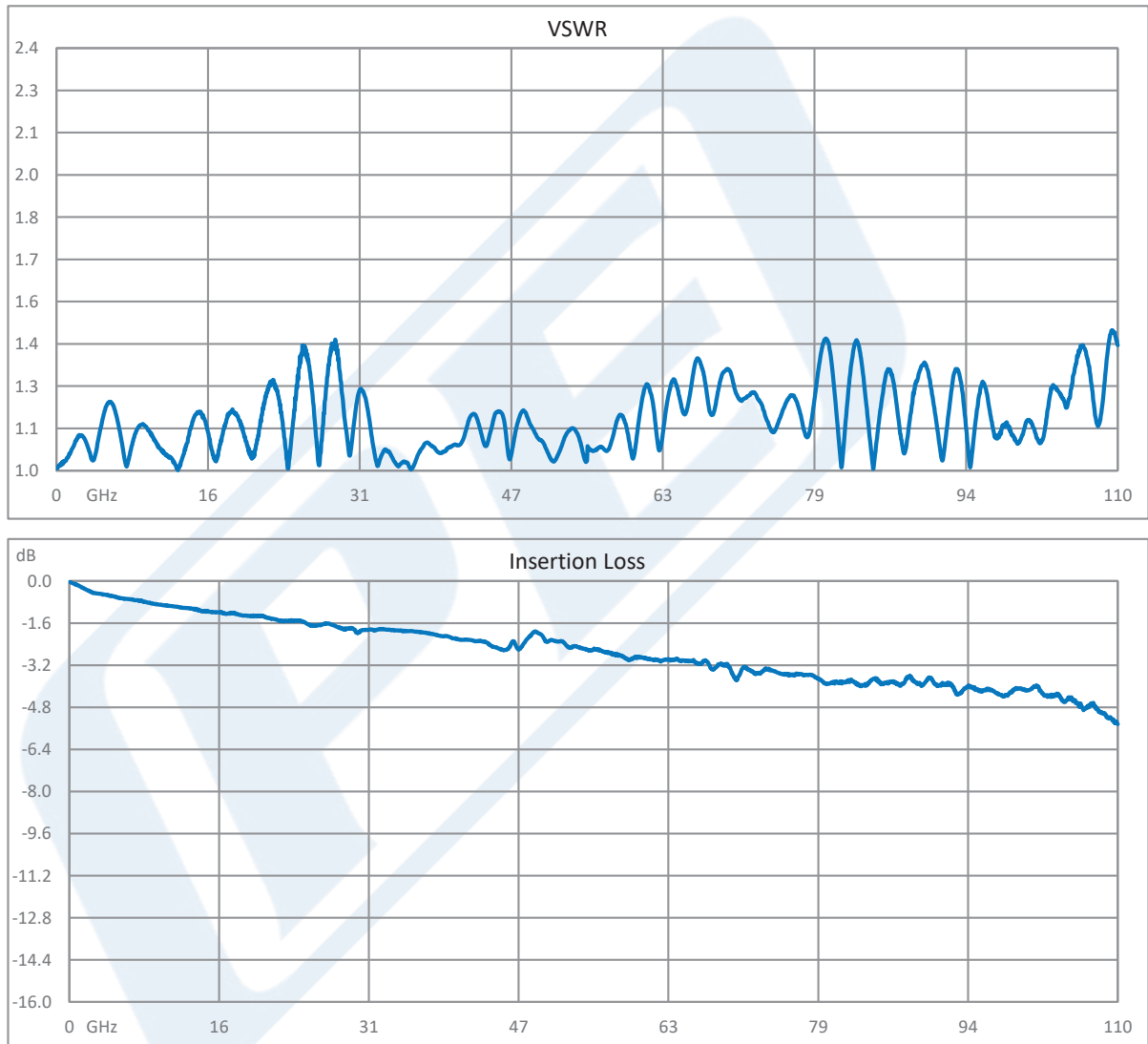


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Typical Performance Data



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1.0mm Female Connector Clamp/Solder (Captive Contact) Attachment End Launch PCB, Removable End Launch, 0.35 Width 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.

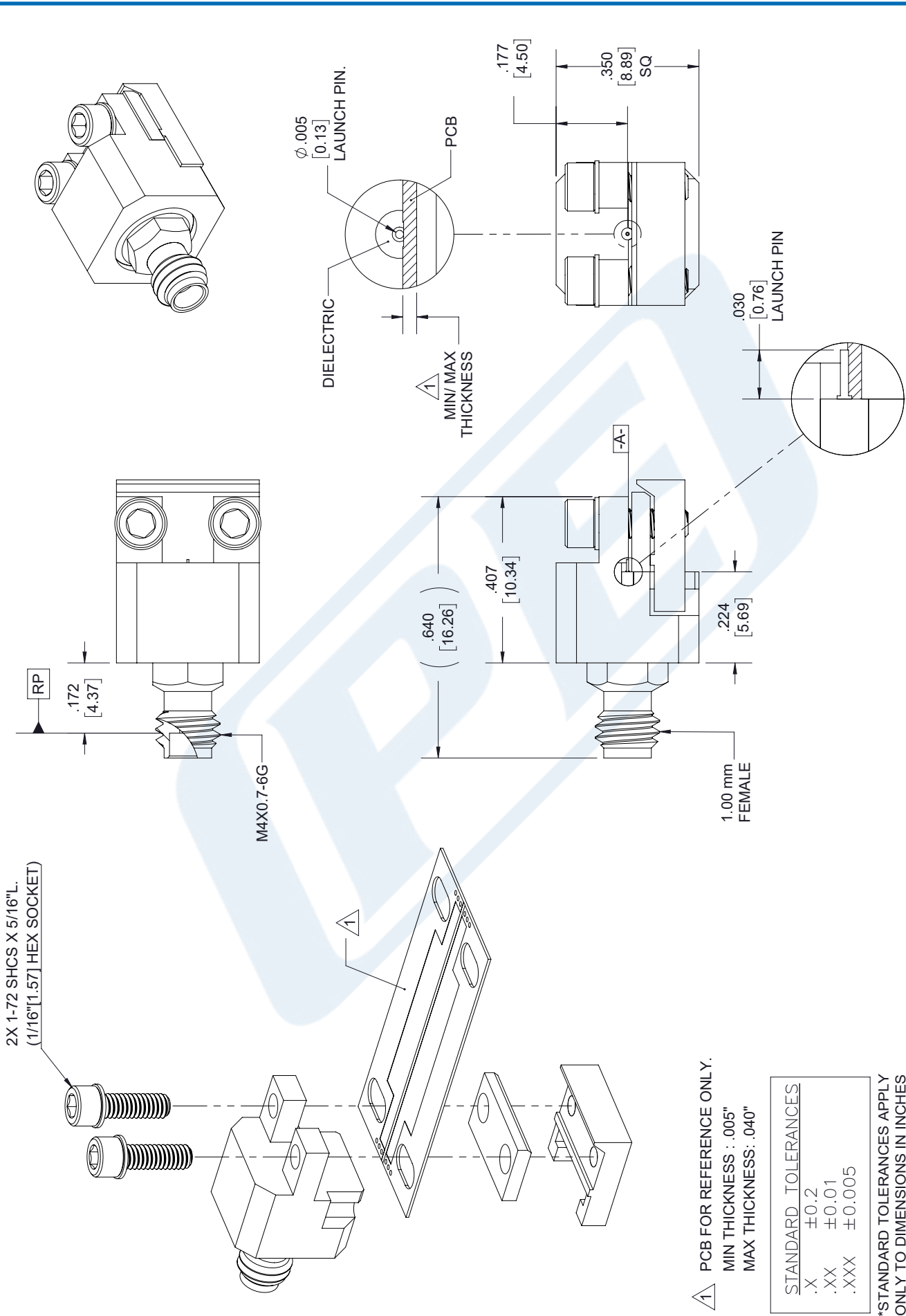
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1.0mm Female Connector Clamp/Solder \(Captive Contact\) Attachment End Launch PCB, Removable End Launch, 0.35 Width PE45403](https://www.pasternack.com/1.0mm-female-end-launch-pcb-connector-pe45403-p.aspx)

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The information contained in 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 reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

# PE45403 CAD Drawing

1.0mm Female Connector Clamp/Solder (Captive Contact) Attachment  
End Launch PCB, Removable End Launch, 0.35 Width



1 PCB FOR REFERENCE ONLY.  
MIN THICKNESS : .005"  
MAX THICKNESS : .040"

STANDARD TOLERANCES	
.X	±0.2
.XX	±0.01
.XXX	±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

<p><b>PE PASTERNAK®</b> THE ENGINEER'S RF SOURCE Pasternack Enterprises, Inc. P.O. Box 16759   Irvine   CA   92623 Phone: (949) 261-1920   Fax: (949) 261-7451 Website: www.pasternack.com   E-Mail: sales@pasternack.com</p>	DWG TITLE	PE45403
	CAGE CODE	53919
CAD FILE	102617	SCALE N/A
	SIZE A	7361

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].