



1.85mm Female Connector Clamp/Solder  
 (Captive Contact) Attachment End Launch PCB,  
 Microstrip/Coplanar Launch, 0.005 inch

RF Connectors  
 Technical Data Sheet

PE45477

### Configuration

- 1.85mm Female Connector
- 50 Ohms
- Straight Body Geometry
- End Launch Interface Type
- Clamp/Solder (Captive Contact) Attachment

### Features

- Max. Operating Frequency 67 GHz
- Good VSWR of 1.35:1
- Gold Plated Beryllium Copper Contact
- Optimized for 5 mil Du5880

### Applications

- General Purpose Test
- PCB Applications
- Signal Integrity Measurement
- Chip Evaluations
- SERDES
- End Launch Test Fixtures
- Microstrip Launches
- CPW Launches

### Description

Pasternack's PE45477 1.85mm female connector with clamp/solder (captive contact) attachment for end launch PCB is part of our full line of RF components available for same-day shipping. Our 1.85mm female connector operates up to a maximum frequency of 67 GHz and offers good VSWR of 1.35:1.

Our 1.85mm female connector PE45477 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		67	GHz
VSWR			1.35:1	

#### 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 0.615 in [15.62 mm]  
 Width/Dia. 0.469 in [11.91 mm]

Mating Cycles 500 Cycles

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1.85mm Female Connector Clamp/Solder \(Captive Contact\) Attachment End Launch PCB, Microstrip/Coplanar Launch, 0.005 inch PE45477](#)



1.85mm Female Connector Clamp/Solder  
(Captive Contact) Attachment End Launch PCB,  
Microstrip/Coplanar Launch, 0.005 inch

RF Connectors  
Technical Data Sheet

PE45477

**Material Specifications**

Description	Material	Plating
Contact	Beryllium Copper	Gold
Insulation	PTFE	
Outer Conductor	Passivated Stainless Steel	
Body	Passivated Stainless Steel	

Mechanical Specification Notes:  
Launch Pin is Gold Plated Beryllium Copper

**Environmental Specifications**

**Temperature**  
Operating Range -40 to +125 deg C

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

**Plotted and Other Data**

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1.85mm Female Connector Clamp/Solder \(Captive Contact\) Attachment End Launch PCB, Microstrip/Coplanar Launch, 0.005 inch PE45477](#)



1.85mm Female Connector Clamp/Solder  
(Captive Contact) Attachment End Launch PCB,  
Microstrip/Coplanar Launch, 0.005 inch

RF Connectors  
Technical Data Sheet

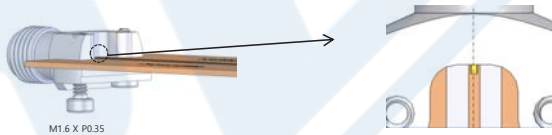
PE45477

**Assembly Instruction**

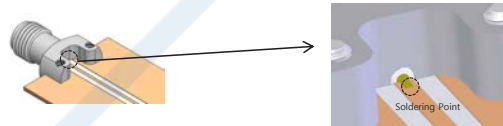
**STEP 1 :**  
Insert end launch connector (including ground block & screws) in the edge position of substrate.



**STEP 2:**  
Tighten ground block against the substrate using two screws while ensuring flat pin is centered on the trace.



**STEP 3:**  
Solder the flat pin to center trace on substrate while the connector is held in the correct position.  
(Note: solder should flow along the length of the exposed flat pin for good electrical performance)



**STEP 4:**  
Remove any excess solder and clean all flux and other residues from the trace.



(Substrate shown for assembly instruction purposes only)

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1.85mm Female Connector Clamp/Solder \(Captive Contact\) Attachment End Launch PCB, Microstrip/Coplanar Launch, 0.005 inch PE45477](#)

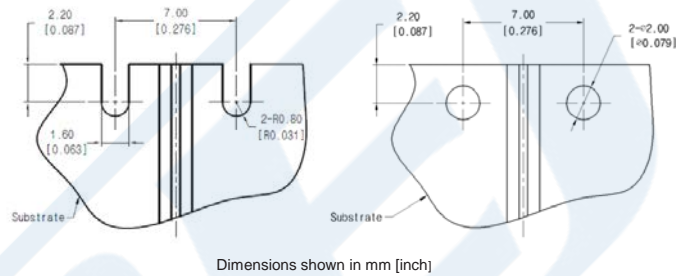


1.85mm Female Connector Clamp/Solder  
(Captive Contact) Attachment End Launch PCB,  
Microstrip/Coplanar Launch, 0.005 inch

RF Connectors  
Technical Data Sheet

PE45477

TYPICAL PCB GEOMETRY  
SUBSTRATE THICKNESS: 0.005"  
MICROSTRIP WIDTH: 0.014"  
SUBSTRATE MATERIAL: Du5880



Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1.85mm Female Connector Clamp/Solder \(Captive Contact\) Attachment End Launch PCB, Microstrip/Coplanar Launch, 0.005 inch PE45477](#)

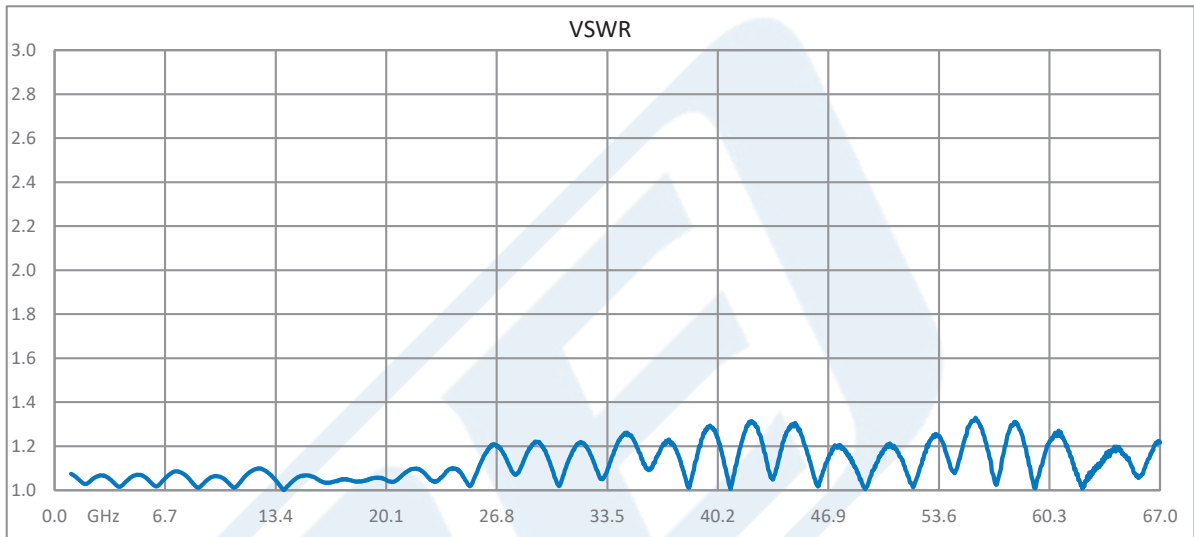


1.85mm Female Connector Clamp/Solder  
(Captive Contact) Attachment End Launch PCB,  
Microstrip/Coplanar Launch, 0.005 inch

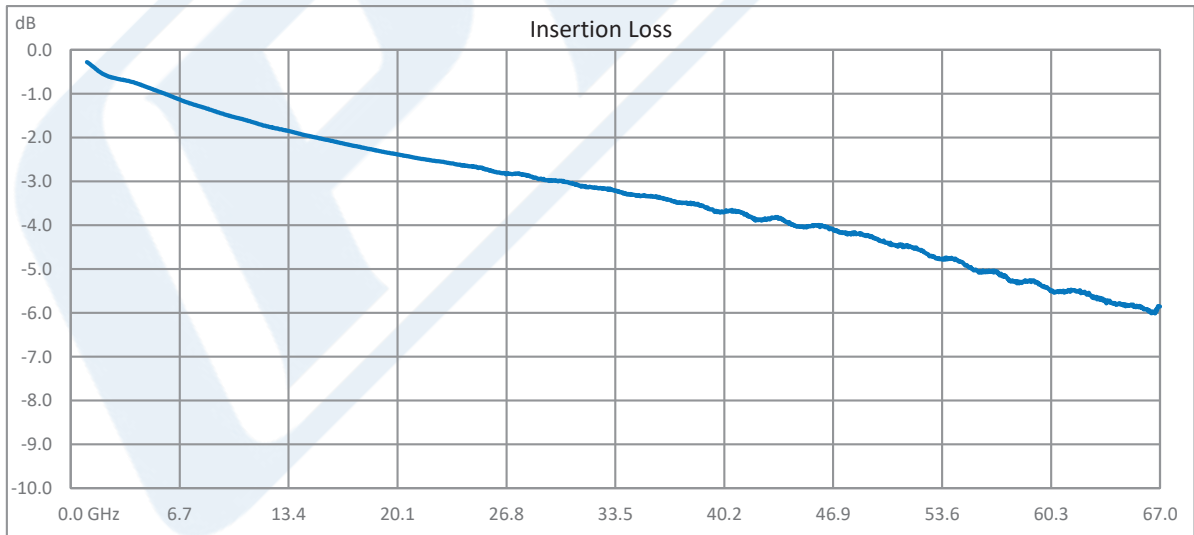
RF Connectors  
Technical Data Sheet

PE45477

Typical Performance Data



Test data taken with 2 connectors on both ends of test fixture



Test data taken with 2 connectors on both ends of test fixture

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1.85mm Female Connector Clamp/Solder \(Captive Contact\) Attachment End Launch PCB, Microstrip/Coplanar Launch, 0.005 inch PE45477](#)



1.85mm Female Connector Clamp/Solder  
(Captive Contact) Attachment End Launch PCB,  
Microstrip/Coplanar Launch, 0.005 inch

RF Connectors  
Technical Data Sheet

PE45477

1.85mm Female Connector Clamp/Solder (Captive Contact) Attachment End Launch PCB, Microstrip/Coplanar Launch, 0.005 inch 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.

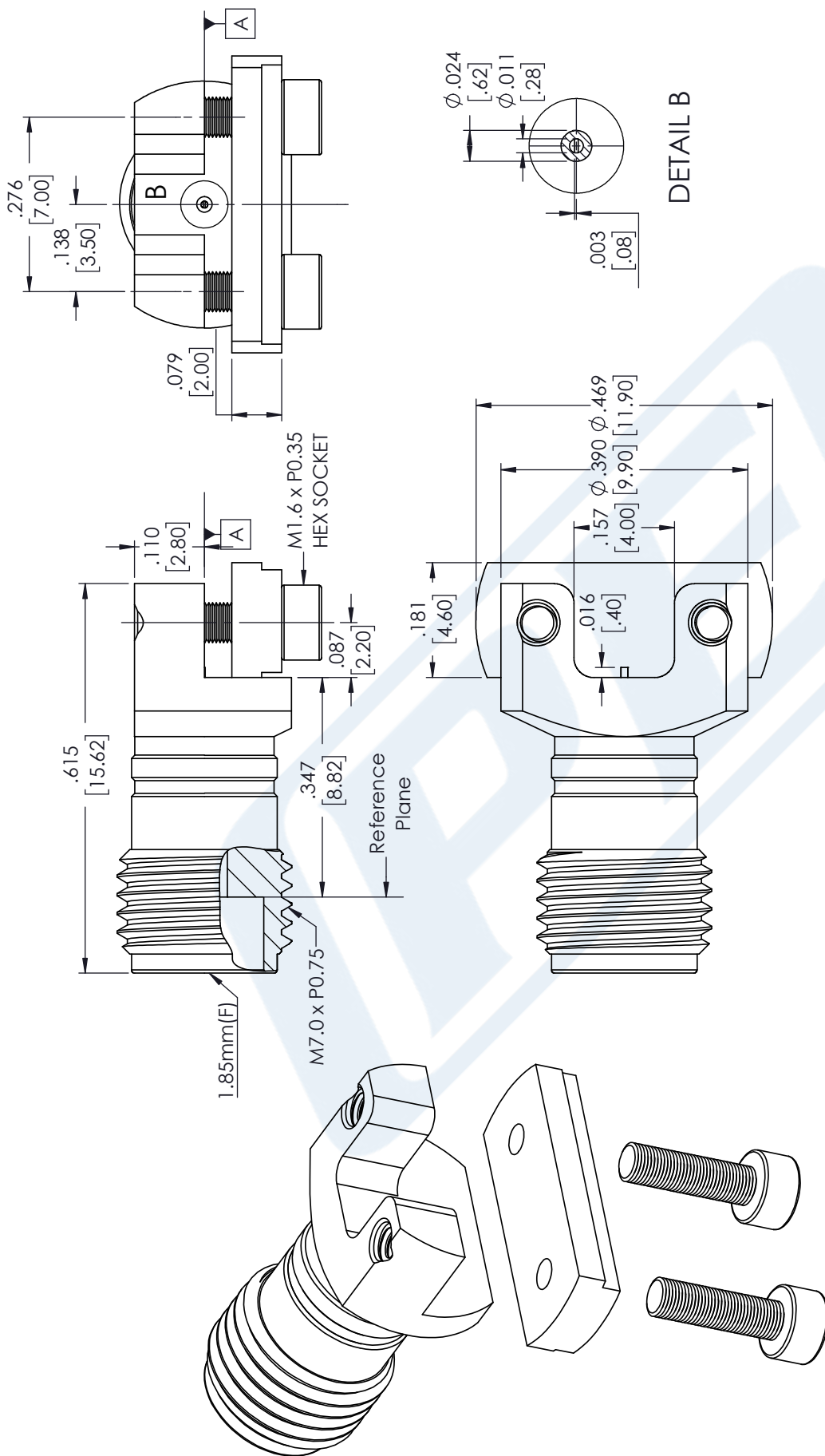
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1.85mm Female Connector Clamp/Solder \(Captive Contact\) Attachment End Launch PCB, Microstrip/Coplanar Launch, 0.005 inch PE45477](https://www.pasternack.com/1.85mm-female-end-launch-pcb-connector-pe45477-p.aspx)

URL: <https://www.pasternack.com/1.85mm-female-end-launch-pcb-connector-pe45477-p.aspx>

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.

# PE45477 CAD Drawing

1.85mm Female Connector Clamp/Solder (Captive Contact) Attachment  
End Launch PCB, Microstrip/Coplanar Launch, 0.005 inch



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

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES



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

DWG TITLE  
PE45477

CAGE CODE 53919

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].

CAD FILE 06/04/18

SCALE N/A

SIZE A

CN2379