



**RF Connectors Technical Data Sheet** 

PE45476

# Configuration

- 2.4mm Female Connector
- 50 Ohms
- Straight Body Geometry

#### **Features**

- Max. Operating Frequency 50 GHz
- Excellent VSWR of 1.2:1
- Optimized for 10 mil Du5880

End Launch Interface Type

Clamp/Solder (Captive Contact) Attachment

Gold Plated Beryllium Copper Contact

# **Applications**

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

### **Description**

Pasternack's PE45476 2.4mm 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 2.4mm female connector operates up to a maximum frequency of 50 GHz and offers excellent VSWR of 1.2:1.

Our 2.4mm female connector PE45476 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		50	GHz
VSWR			1.2:1	

**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: 2.4mm Female Connector Clamp/Solder (Captive Contact) Attachment End Launch PCB, Microstrip/Coplanar Launch, 0.010 inch PE45476

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 Phone: (866) 727-8376 or (949) 261-1920 • Fax: (949) 261-7451





# RF Connectors Technical Data Sheet

PE45476

#### **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: 2.4mm Female Connector Clamp/Solder (Captive Contact) Attachment End Launch PCB, Microstrip/Coplanar Launch, 0.010 inch PE45476

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 **Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451





RF Connectors
Technical Data Sheet

PE45476

#### **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: 2.4mm Female Connector Clamp/Solder (Captive Contact) Attachment End Launch PCB, Microstrip/Coplanar Launch, 0.010 inch PE45476

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 **Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451

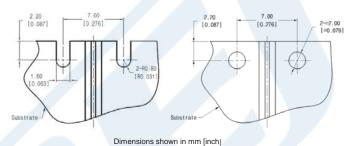




RF Connectors
Technical Data Sheet

PE45476

# TYPICAL PCB GEOMETRY SUBSTRATE THICKNESS: 0.010" MICROSTRIP WIDTH: 0.030" 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: 2.4mm Female Connector Clamp/Solder (Captive Contact) Attachment End Launch PCB, Microstrip/Coplanar Launch, 0.010 inch PE45476

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 **Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451

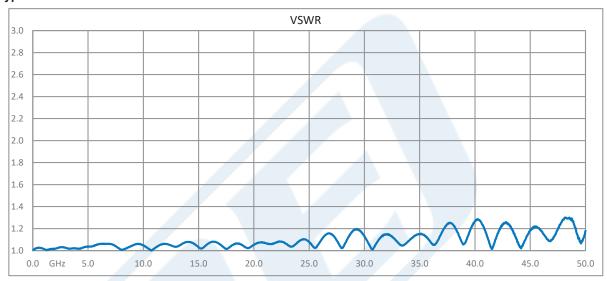




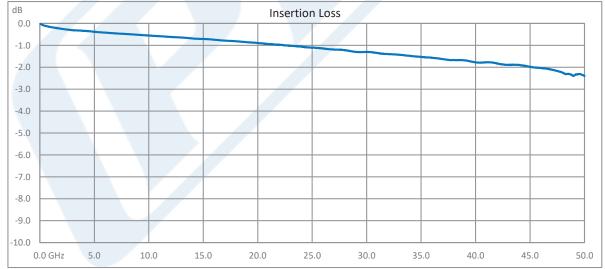
RF Connectors
Technical Data Sheet

PE45476

#### **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: 2.4mm Female Connector Clamp/Solder (Captive Contact) Attachment End Launch PCB, Microstrip/Coplanar Launch, 0.010 inch PE45476

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 **Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451





# RF Connectors Technical Data Sheet

PE45476

2.4mm Female Connector Clamp/Solder (Captive Contact) Attachment End Launch PCB, Microstrip/Coplanar Launch, 0.010 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: 2.4mm Female Connector Clamp/Solder (Captive Contact) Attachment End Launch PCB, Microstrip/Coplanar Launch, 0.010 inch PE45476

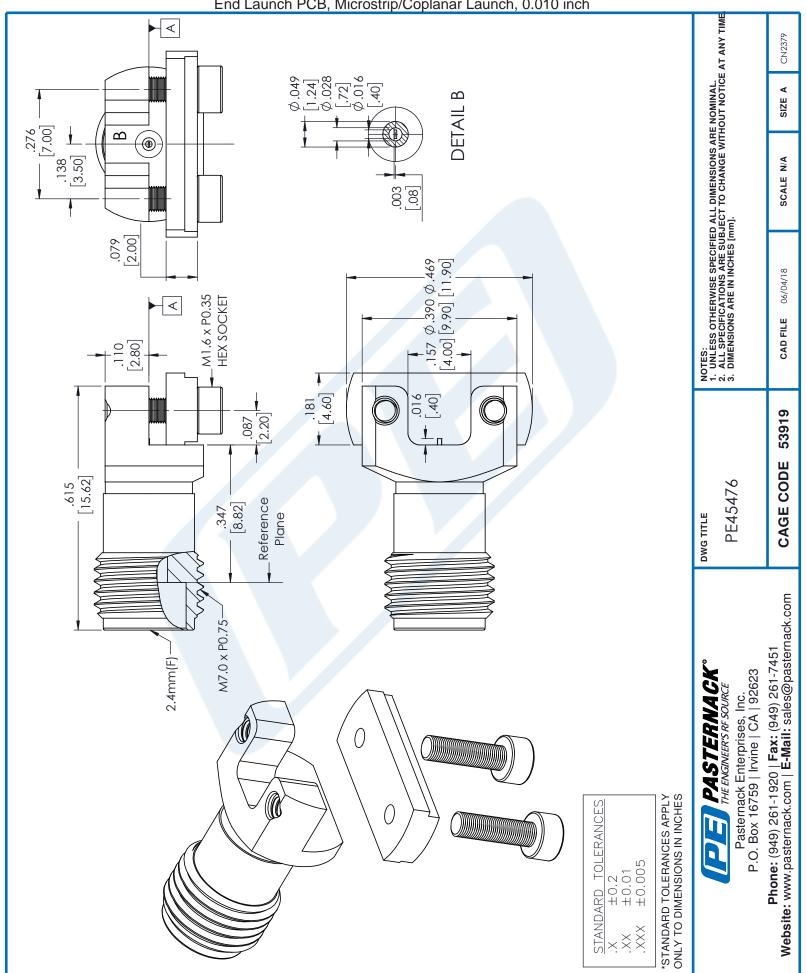
URL: https://www.pasternack.com/2.4mm-female-end-launch-pcb-connector-pe45476-p.aspx

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.

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 **Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451

# PE45476 CAD Drawing

2.4mm Female Connector Clamp/Solder (Captive Contact) Attachment End Launch PCB, Microstrip/Coplanar Launch, 0.010 inch



PE45476 REV 1.1

© 2018 Pasternack Enterprises All Rights Reserved