



# 1 Watt RF Load Up to 50 GHz With 2.4mm Male Input Passivated Stainless Steel

## RF Terminations Technical Data Sheet

PE6178

### Features

- DC to 50 GHz Frequency Range
- VSWR 1.45:1 Max
- Max Power 1 Watt (CW)
- 2.4mm Male Coaxial Interface

### Applications

- Wireless
- SatCom
- Radar Systems
- Test and Measurement
- Commercial and Military Communication

### Description

Pasternack's PE6178 is an RF termination (also called RF load or dummy load) that operates from DC to 50 GHz and handles up to 1 Watt (CW). Our 2.4mm termination / load has a male gender. PE6178 2.4mm load termination offers 1.45:1 max VSWR.

RF load / terminations are indispensable components in many RF, microwave and millimeter wave systems where signal reflection from unused ports can potentially damage the device or reduce the signal integrity. By using a terminator on an unused port with a matched load (dummy load), the incident energy will be absorbed with minimal reflection. These termination components are commonly used to terminate devices such as couplers, circulators, and switches. They are also widely used in measurement systems to ensure accurate results. Pasternack offers a huge selection of RF, microwave and millimeter wave terminations up to 65 GHz with excellent performance over the entire operating range and power handling capabilities up to 800 Watt (CW).

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		50	GHz
Impedance		50		Ohms
VSWR			1.45:1	
Input Power (CW) derated linearly to 0.1W at +125°C			1	Watts

### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 18	18 to 35	35 to 50			GHz
VSWR, Max	1.15:1	1.3:1	1.45:1			

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1 Watt RF Load Up to 50 GHz With 2.4mm Male Input Passivated Stainless Steel PE6178](#)



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### Mechanical Specifications

#### Size

Length	0.59 in [14.99 mm]
Width	0.315 in [8 mm]
Weight	0.013 lbs [5.9 g]

#### Configuration

Connector	2.4mm Male
Hex Size	5/16 inch
Mating Torque	8 in-lbs [0.90 Nm]
Durability	500 Cycles

### Material Specifications

Description	Material	Plating
Connector 1 Contact	Beryllium Copper	Gold MIL-PRF-39012
Body	Passivated Stainless Steel	
Coupling Nut	Passivated Stainless Steel	
Housing	Passivated Stainless Steel	

Mechanical Specification Notes:  
Dielectric material: high temperature plastic bead.

### Environmental Specifications

#### Temperature

Operating Range	-55 to +100 deg C
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### Compliance Certifications (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)

RoHS Compliant	
REACH Compliant	12/17/2015

### 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 Watt RF Load Up to 50 GHz With 2.4mm Male Input Passivated Stainless Steel PE6178](#)

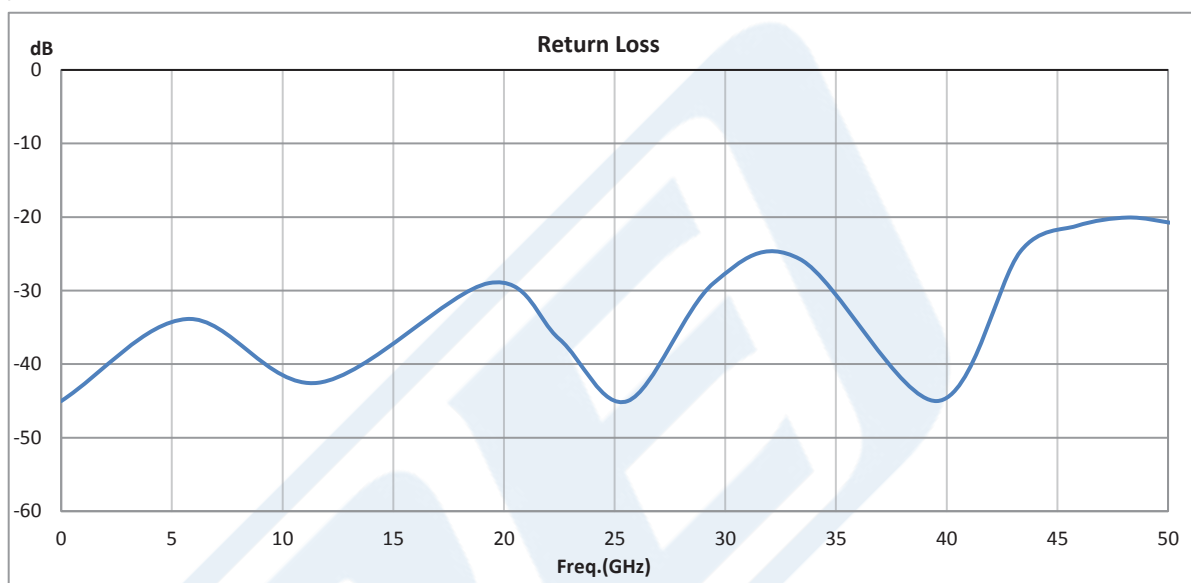


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### Typical Performance Data



1 Watt RF Load Up to 50 GHz With 2.4mm Male Input Passivated Stainless Steel from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

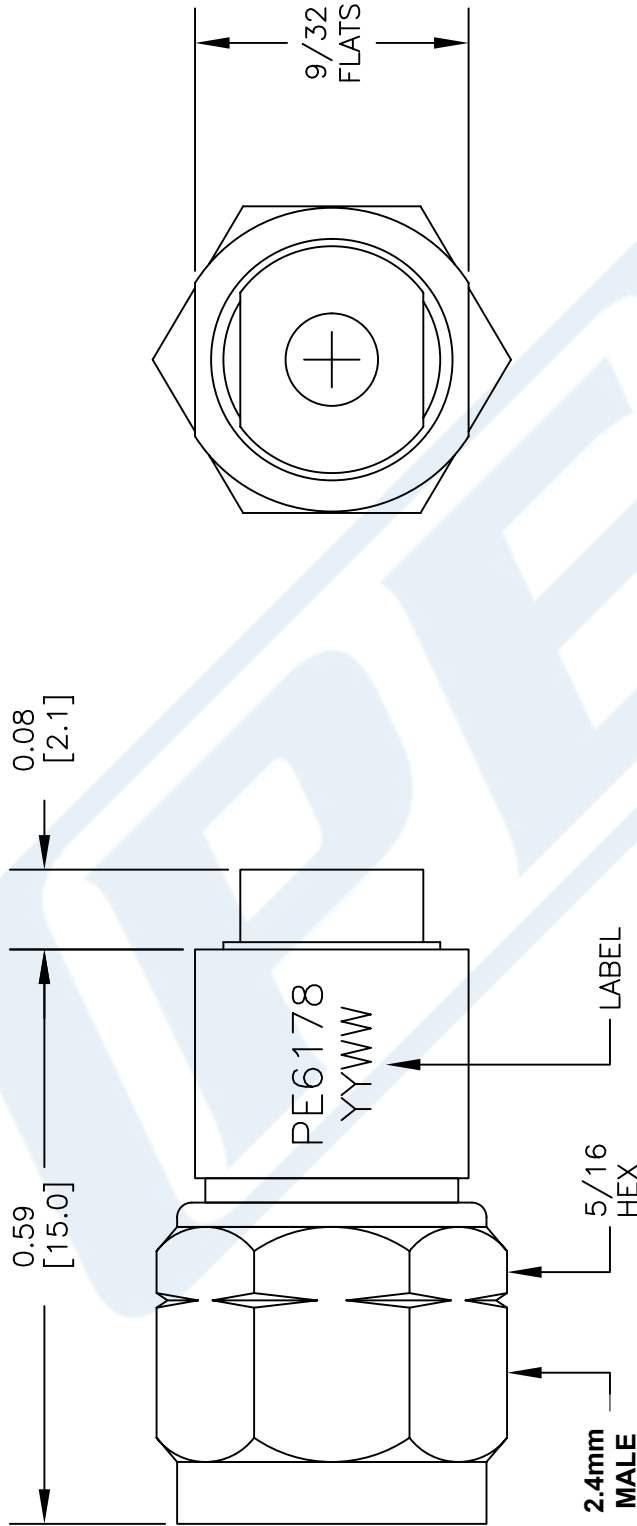
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URL: <http://www.pasternack.com/1-watts-2.4mm-male-rf-load-up-to-50-ghz-precision-pe6178-p.aspx>

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.

# PE6178 CAD Drawing

1 Watt RF Load Up to 50 GHz With 2.4mm Male Input Passivated Stainless Steel



**STANDARD TOLERANCES**

- .X ±0.05
- .XX ±0.03
- .XXX ±0.010

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

**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].

DWG TITLE  
**PE6178**

FSCM NO. 53919

3045

SIZE A

SCALE N/A

CAD FILE 061016



**THE ENGINEER'S RF SOURCE**  
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