



SMA High Power Limiter, 100 Watts Peak Power, 40 ns Recovery, 13 dBm Flat Leakage, 2 GHz to 8 GHz

## Limiters - PE80L1001

### Features

- High Speed 5 Watt CW Limit
- 2 GHz to 8 GHz Frequency Range
- Peak Power 5 Watts CW
- Insertion Loss 1.0 dB Typ
- Leakage Power +13 dBm Max
- High Power Handling

### Applications

- Electronic Warfare
- Test & Measurement
- Military & Space
- Military Communication Systems
- Stabilizing generator outputs
- Reducing amplitude variations
- Protects low noise amplifiers and other devices from ESD or input power damage
- Receiver Protection
- Weapon systems

### Description

The PE80L1001 is a High Power Limiter that operates from 2 GHz to 8 GHz. The Limiter handles 5 W CW Power and operates from -55 Deg C to + 85 Deg C.

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	2		8	GHz
Insertion Loss @Pin=-20 dBm		1		dB
Input VSWR			2:1	
Leakage (CW) @ 5 Watt CW			+13	dBm
Recovery Time			40	ns
Input Power (CW)			5	Watt
Derated by 20% @ +125°C				
Input Power (Peak) @1us pulse, 0.1% Duty Cycle			100	Watt

Electrical Specification Notes:  
Values at 25°C, sea level.

### Mechanical Specifications

#### Size

Length	1 in [25.4 mm]
Width	1 in [25.4 mm]
Height	0.4 in [10.16 mm]

#### Configuration

Style	High Power Limiter
Connector 1	SMA Female
Connector 2	SMA Female

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA High Power Limiter, 100 Watts Peak Power, 40 ns Recovery, 13 dBm Flat Leakage, 2 GHz to 8 GHz PE80L1001](#)



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### Environmental Specifications

#### Temperature

Operating Range

-55 to +85 deg C

Storage Range

-65 to +125 deg C

Humidity

MIL-STD-202F, METHOD 103B COND. B

Shock

MIL-STD-202F, METHOD 213B COND. B

Vibration

MIL-STD-202F, METHOD 204D COND. B

Altitude

MIL-STD-202F, METHOD 105C COND. B

Temperature Cycle

MIL-STD-202F, METHOD 107D COND. A

Fungus

MIL-STD-810F, METHOD 508.5

Salt Fog

MIL-STD-202F, METHOD 101D+EST Cond.B

ESD Sensitivity

Transport material in Approved ESD bags. Handle only in approved ESD Workstation.



### Compliance Certifications (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)

Not RoHS Compliant

### Plotted and Other Data

Notes:

- Values at 25°C, sea level.

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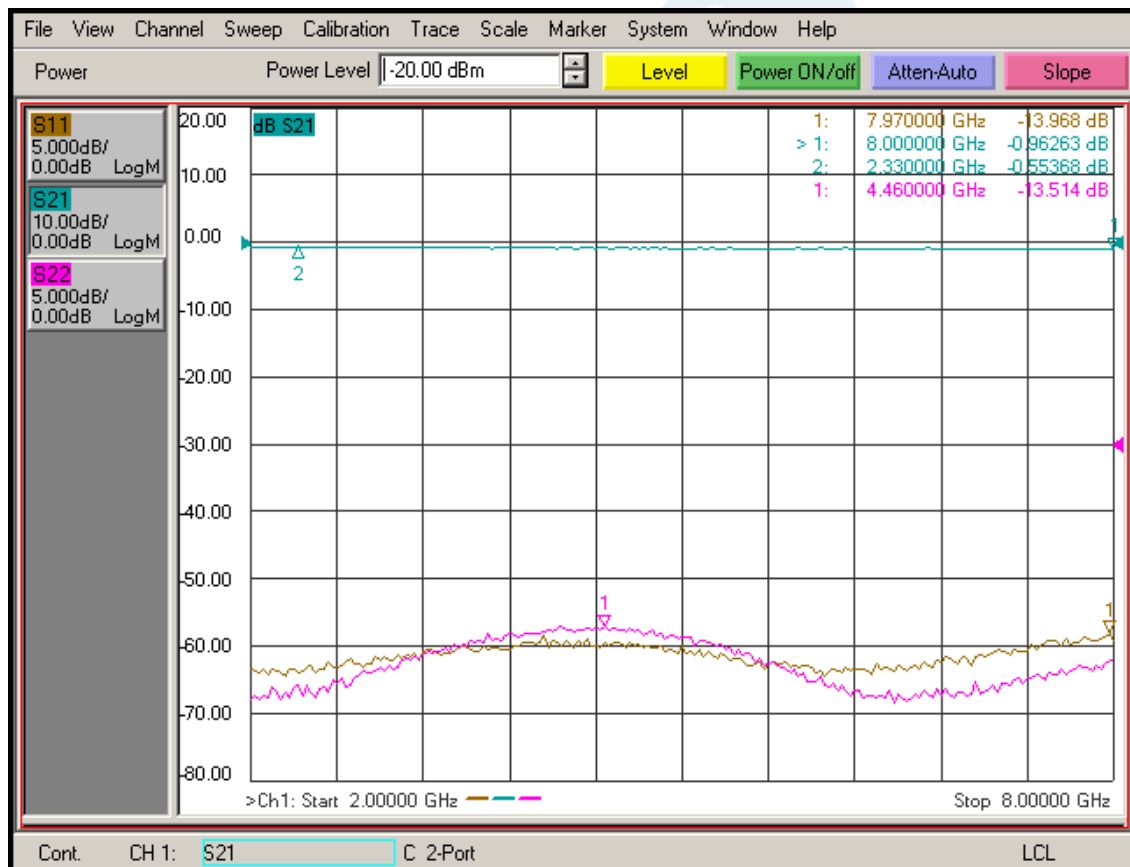


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### Typical Performance Data

#### INSERTION LOSS & RETURN LOSS @ -20dBm IN

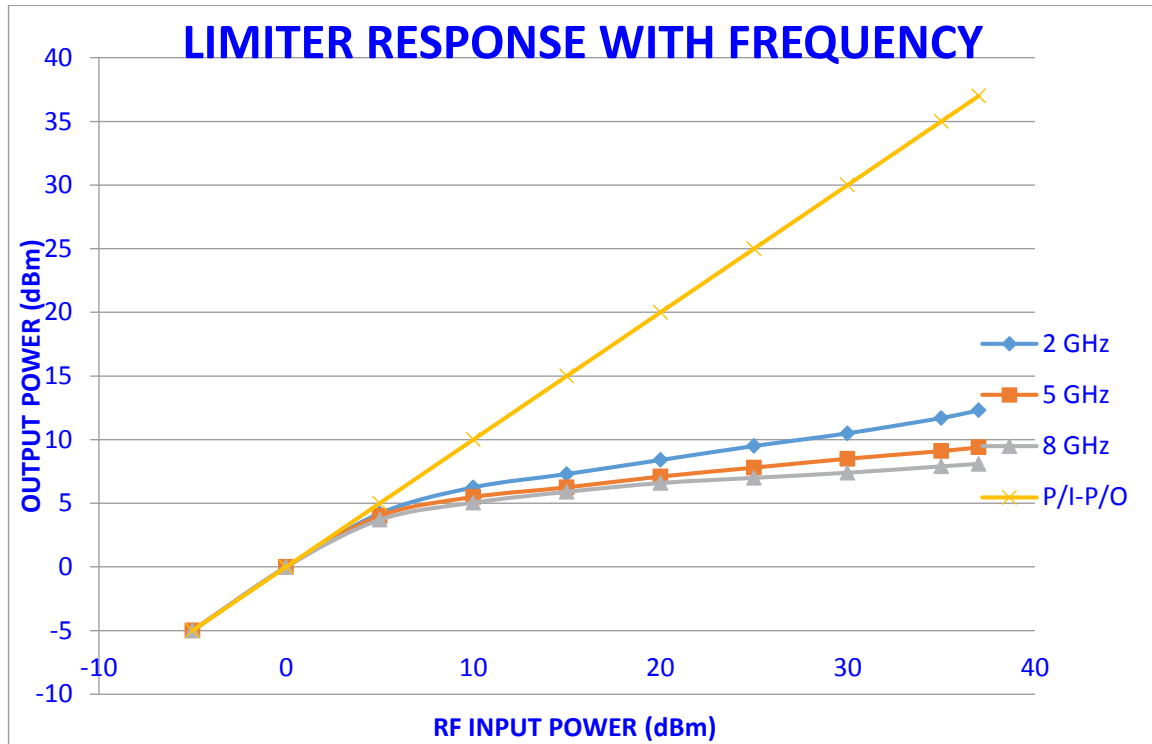


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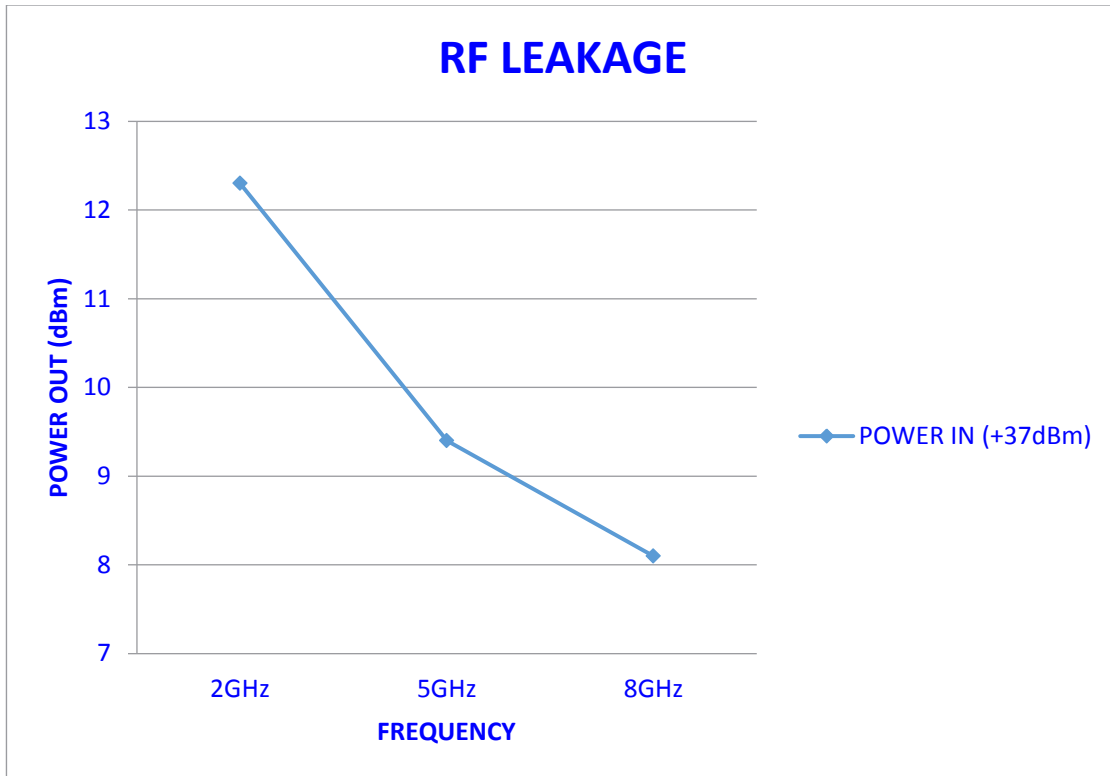


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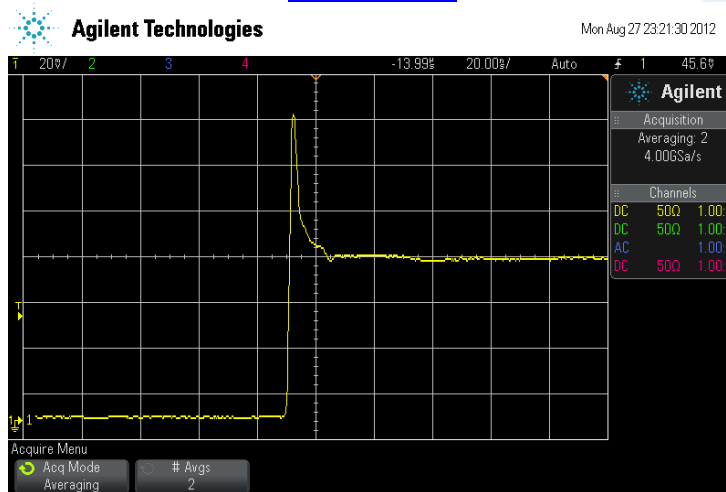


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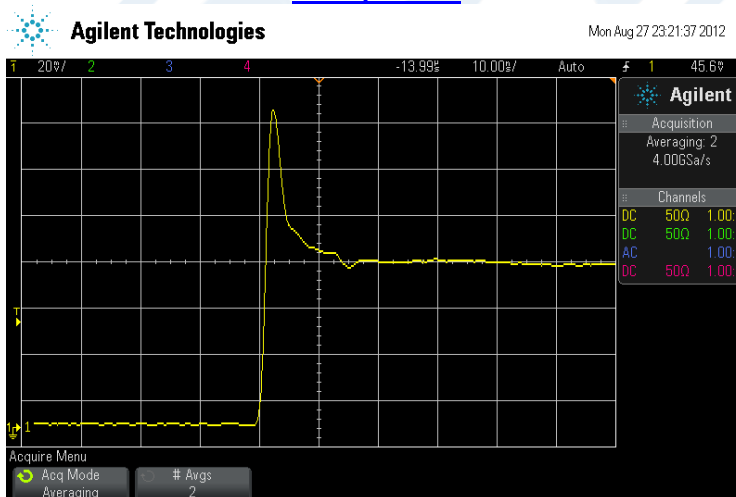
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### RECOVERY TIME

20ns per Div.



10ns per Div.



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SMA High Power Limiter, 100 Watts Peak Power, 40 ns Recovery, 13 dBm Flat Leakage, 2 GHz to 8 GHz 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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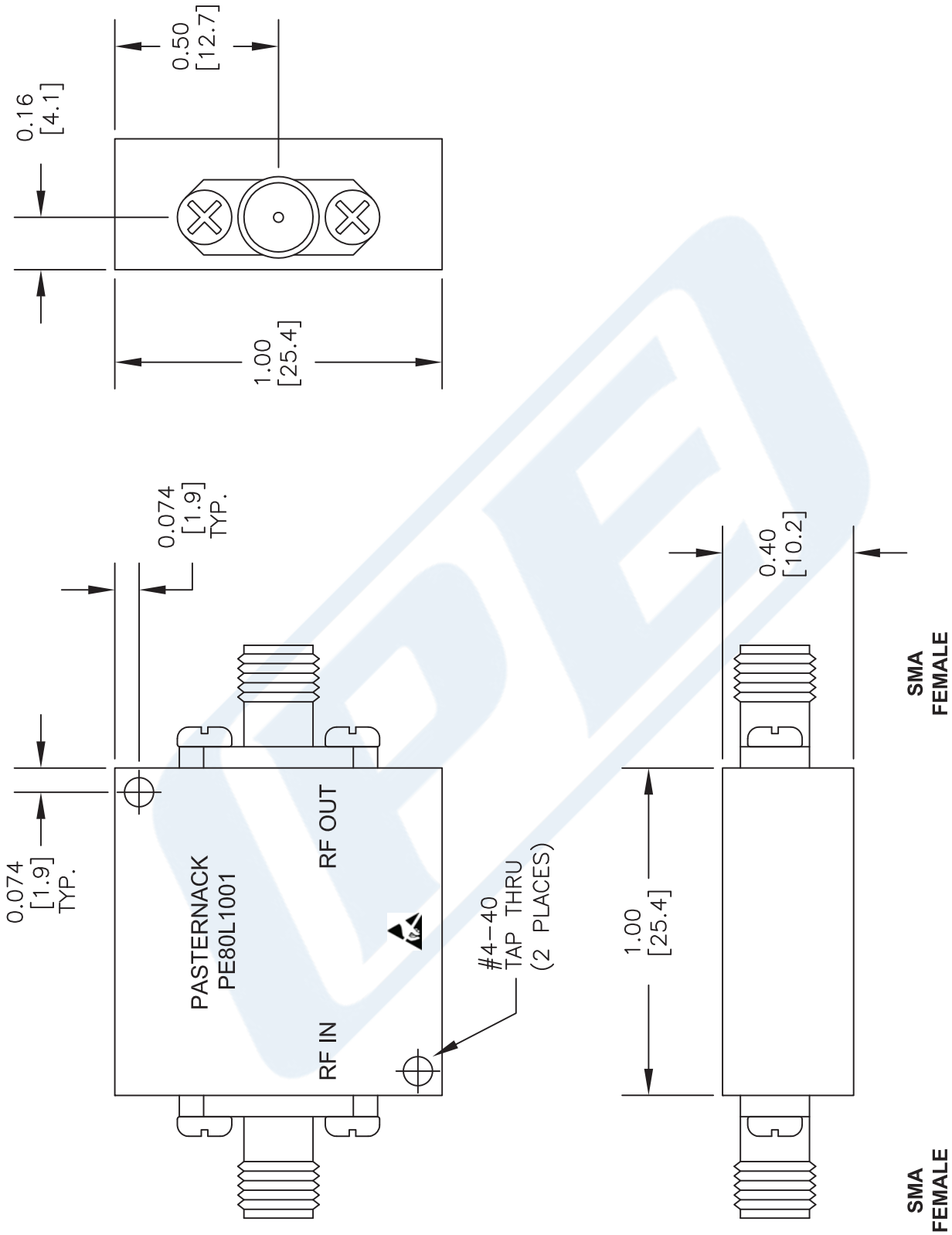
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. 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.



# PE80L1001 CAD Drawing

SMA High Power Limiter, 100 Watts Peak Power, 40 ns  
Recovery, 13 dBm Flat Leakage, 2 GHz to 8 GHz



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  
**PE80L1001**

**PE PASTERNAK**  
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FSCM NO. 53919

CAD FILE 010515

SCALE N/A

SIZE A

2233