



SMA High Power Limiter, 100 Watts Peak Power, 10 ns Recovery, 14 dBm Flat Leakage, 12 GHz to 18 GHz

Limiters Technical Data Sheet

PE80L4000

Features

- High Speed 100 Watt Peak Limit
- 12 GHz to 18 GHz Frequency Range
- Insertion Loss @ -20 dBm 1.5 dB
- VSWR @ -20 dBm 1.5:1
- Leakage @ 1 Watt CW 10 dBm
- High Power Handling
- Recovery Time 10 nsec Max

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 PE80L4000 is a High Power Limiter that operates from 12 GHz to 18 GHz. The Limiter handles 100 Watts Peak Incident Power with a pulse of 1 us. Input Connector is Male SMA and Output Connector is Female SMA.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	12		18	GHz
Insertion Loss @ Pin=-20 dBm		1.5	2	dB
Input VSWR		1.5:1	2:1	
Output VSWR		1.5:1	2:1	
Leakage (CW)		+10	+14	dBm
Recovery Time			10	ns
Input Power (CW)			1	Watt
Derated by 20% @ +125°C				
Input Power (Peak) @1us pulse, 0.1% Duty Cycle			100	Watt
Limiting Threshold	+1			dBm

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]
Weight	0.058 lbs [26.31 g]

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, 10 ns Recovery, 14 dBm Flat Leakage, 12 GHz to 18 GHz PE80L4000](#)



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Configuration

Style

Connector 1

Connector 2

Limiter

SMA Male

SMA Female

Environmental Specifications

Temperature

Operating Range

Storage Range

-54 to +85 deg C

-65 to +100 deg C

Humidity

Shock

Vibration

Altitude

Temperature Cycle

Fungus

Salt Fog

ESD Sensitivity

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

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

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

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

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

MIL-STD-810F, METHOD 508.5

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

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

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

Plotted and Other Data

Notes:

- Values at 25°C, sea level.

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Typical Performance Data

Insertion Loss & Return Loss



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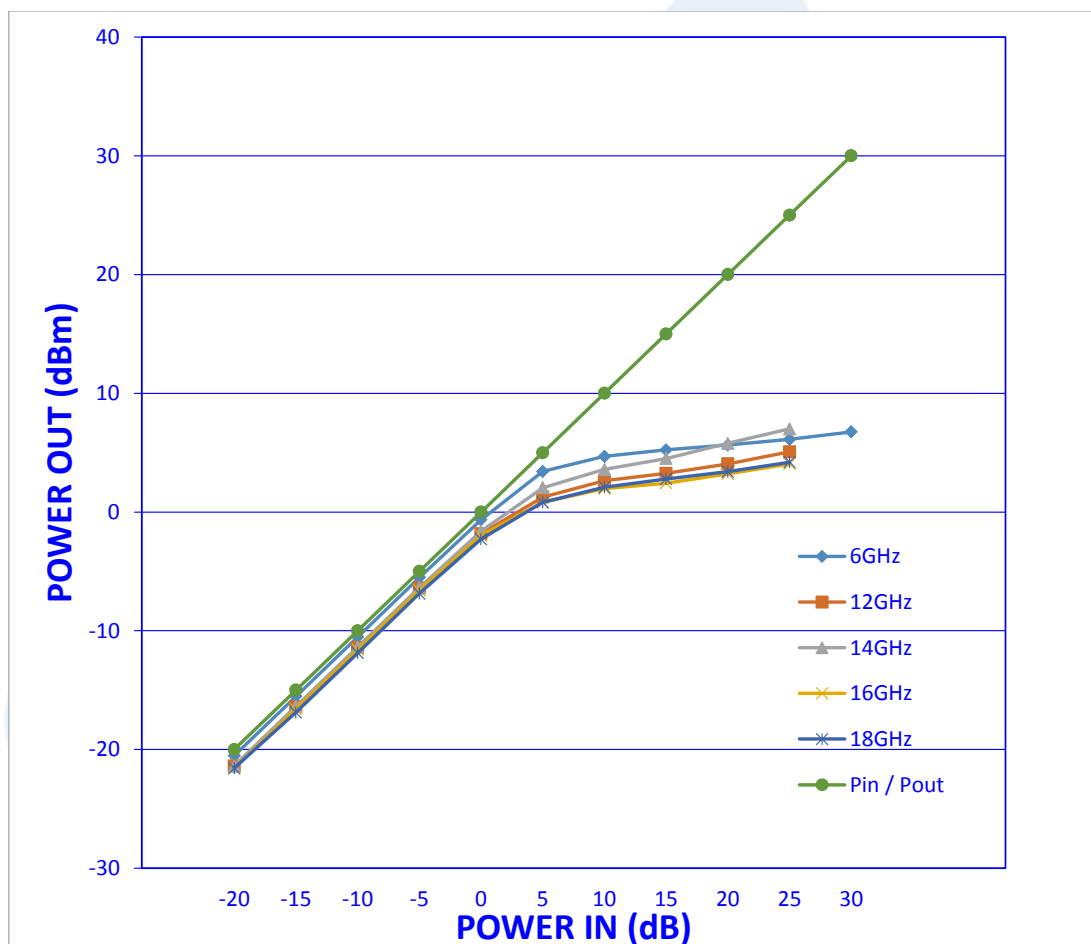


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Limiting Response



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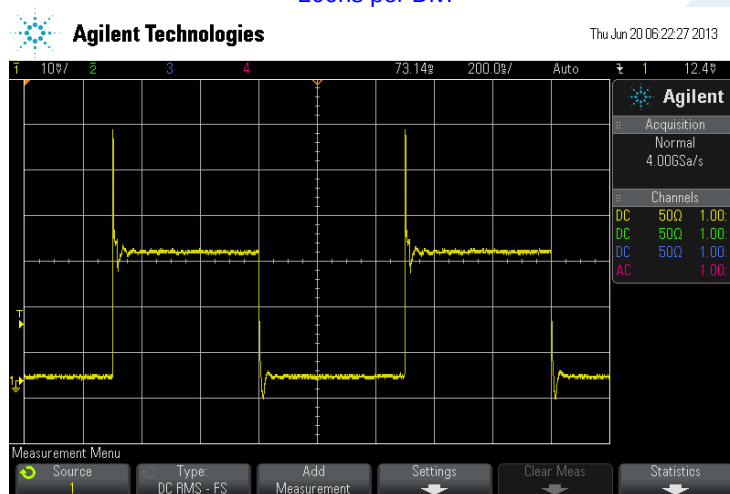
Limiters Technical Data Sheet

PE80L4000

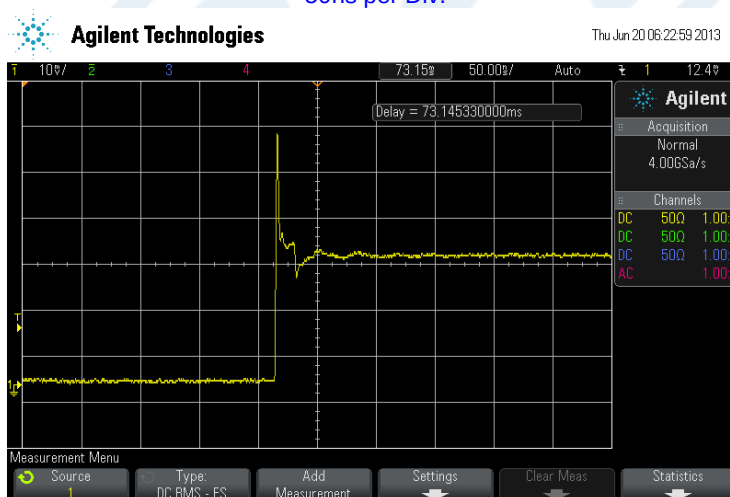
Recovery Time

(1W @ 6GHz – Pulsed @ 1MHz, 50% Duty Cycle)

200ns per Div.



50ns per Div.



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SMA High Power Limiter, 100 Watts Peak Power, 10 ns Recovery, 14 dBm Flat Leakage, 12 GHz to 18 GHz 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.

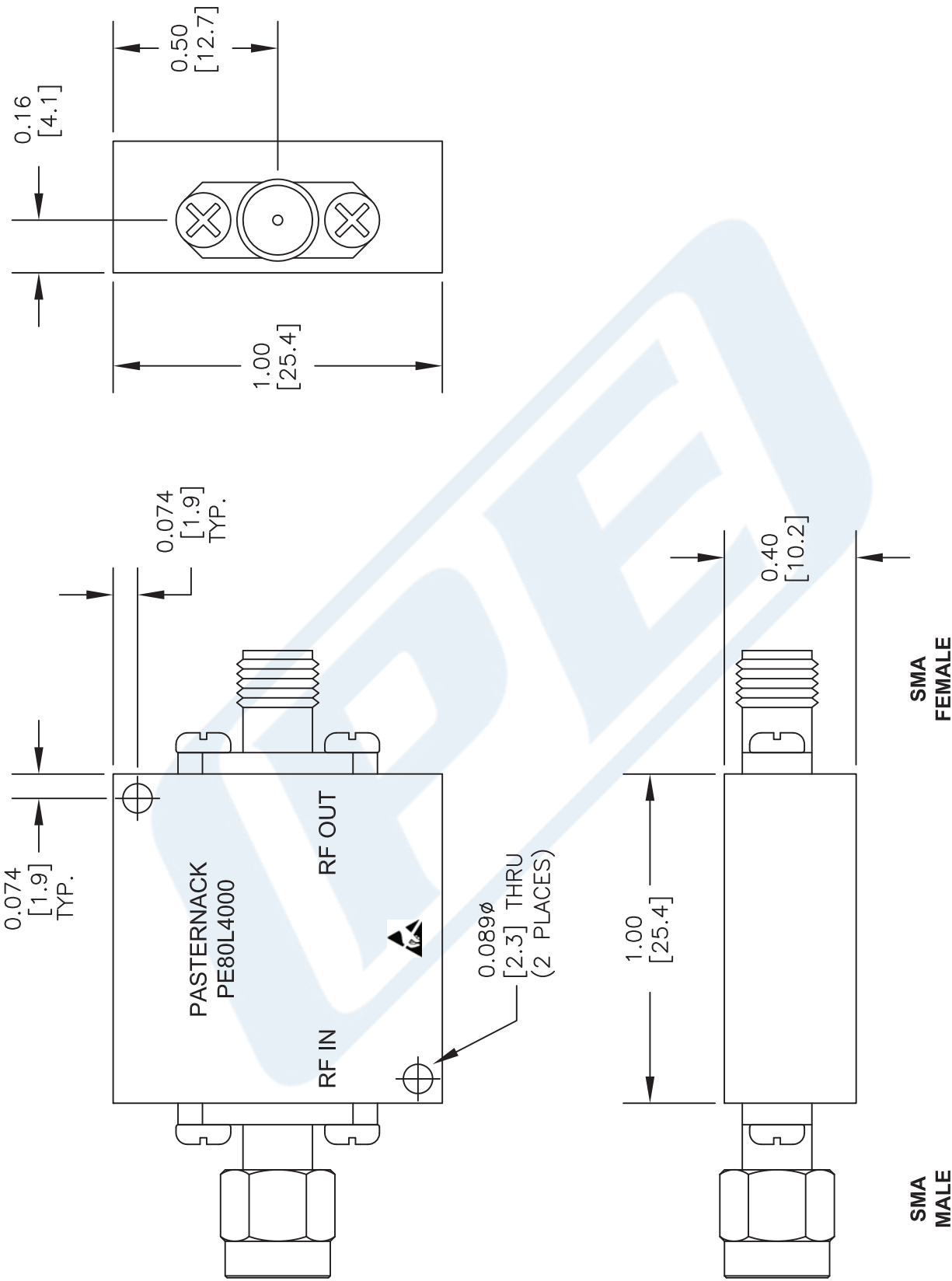
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. 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.

PE80L4000 CAD Drawing

SMA High Power Limiter, 100 Watts Peak Power, 10 ns
Recovery, 14 dBm Flat Leakage, 12 GHz to 18 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
PE80L4000

FSCM NO. 53919

2233

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