



2.92mm High Power Limiter, 20 Watts Peak Power, 10 ns Recovery, 18 dBm Flat Leakage, 18 GHz to 40 GHz

Limiters - PE80L2002

Features

- High Speed 20 Watt Peak Limit
- 18 GHz to 40 GHz Frequency Range
- Insertion Loss @ -10 dBm 3.5 dB Typ
- VSWR @ -10 dBm 1.9:1 Typ
- Leakage @ 1 Watt CW +12 dBm Typ
- Recovery Time 10 ns
- Limiting Threshold +5 dBm Typ
- High Power Handling
- Field Replaceable Female 2.92mm Connectors

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 PE80L2002 is a High Power Limiter that operates from 18 GHz to 40 GHz. The Limiter handles 20 W Peak Power and operates from -54 Deg C to + 85 Deg C. Input/Output Connectors are Female 2.92mm field Replaceable.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	18		40	GHz
Insertion Loss @ Pin=-10 dBm			4	dB
Input VSWR			2.1:1	
Output VSWR			2.1:1	
Leakage (CW) @ 1 Watt CW		+12	+18	dBm
Recovery Time			10	ns
Input Power (CW)			1	Watt
Derated by 20% @ +125°C				
Input Power (Peak) @ 1us pulse, 0.1% Duty Cycle			20	Watt
Limiting Threshold		+5	+9	dBm

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

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2.92mm High Power Limiter, 20 Watts Peak Power, 10 ns Recovery, 18 dBm Flat Leakage, 18 GHz to 40 GHz PE80L2002](#)



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Mechanical Specifications

Size

Length	0.5 in [12.7 mm]
Width	0.5 in [12.7 mm]
Height	0.22 in [5.59 mm]
Weight	0.033 lbs [14.97 g]

Configuration

Style	High Power Limiter
Connector 1	2.92mm Female
Connector 2	2.92mm Female

Environmental Specifications

Temperature

Operating Range	-54 to +85 deg C
Storage Range	-55 to +125 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 (visit www.Pasternack.com for current document)

Not RoHS Compliant

Plotted and Other Data

Notes:

- Values at 25°C, sea level.

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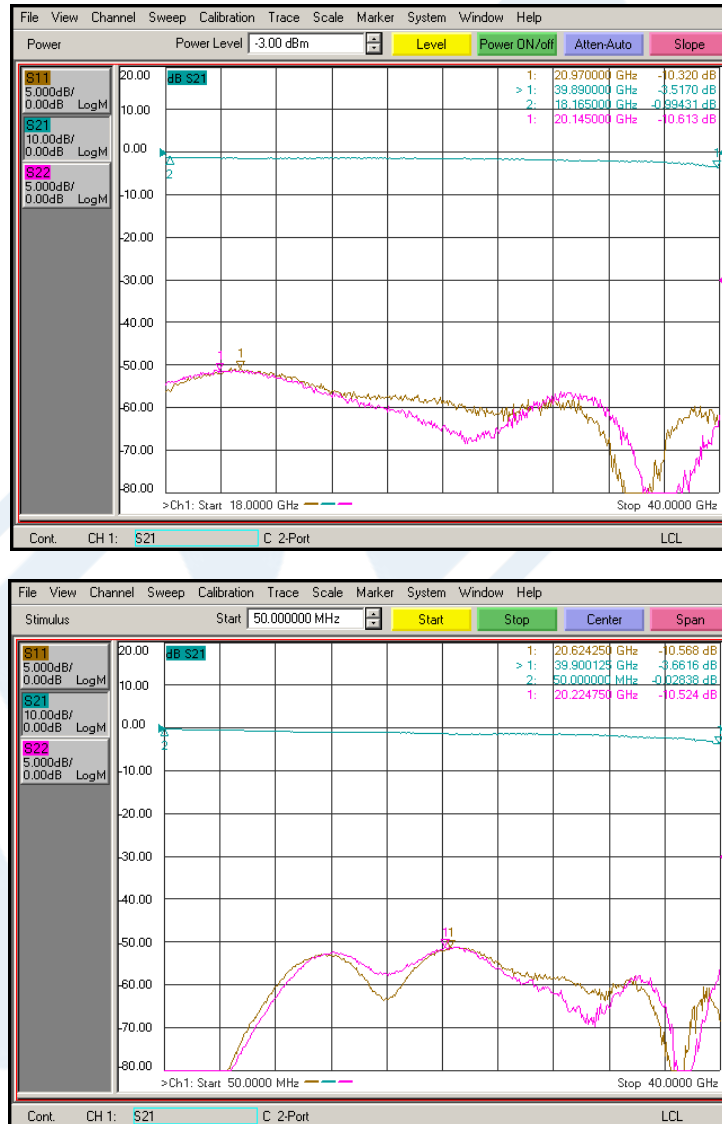


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Typical Performance Data

Insertion Loss & Return Loss (In/Out)

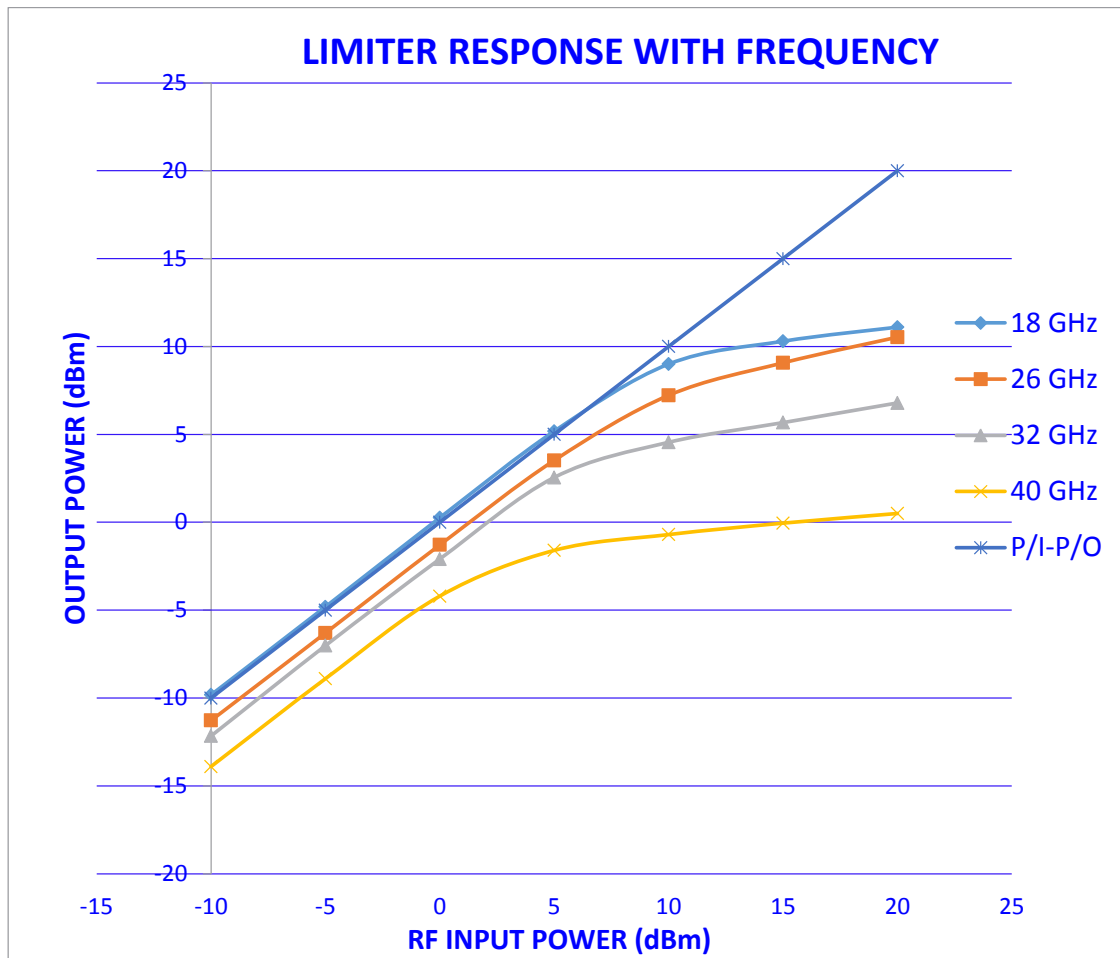


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Power Input vs. Power Output

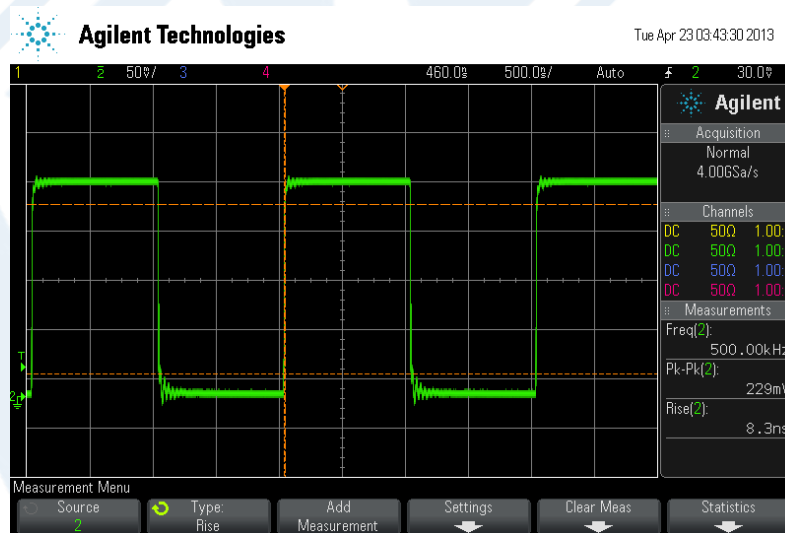
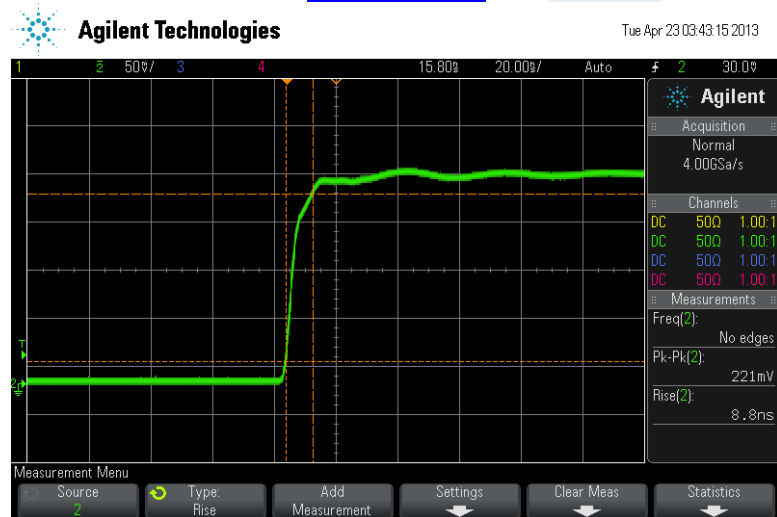
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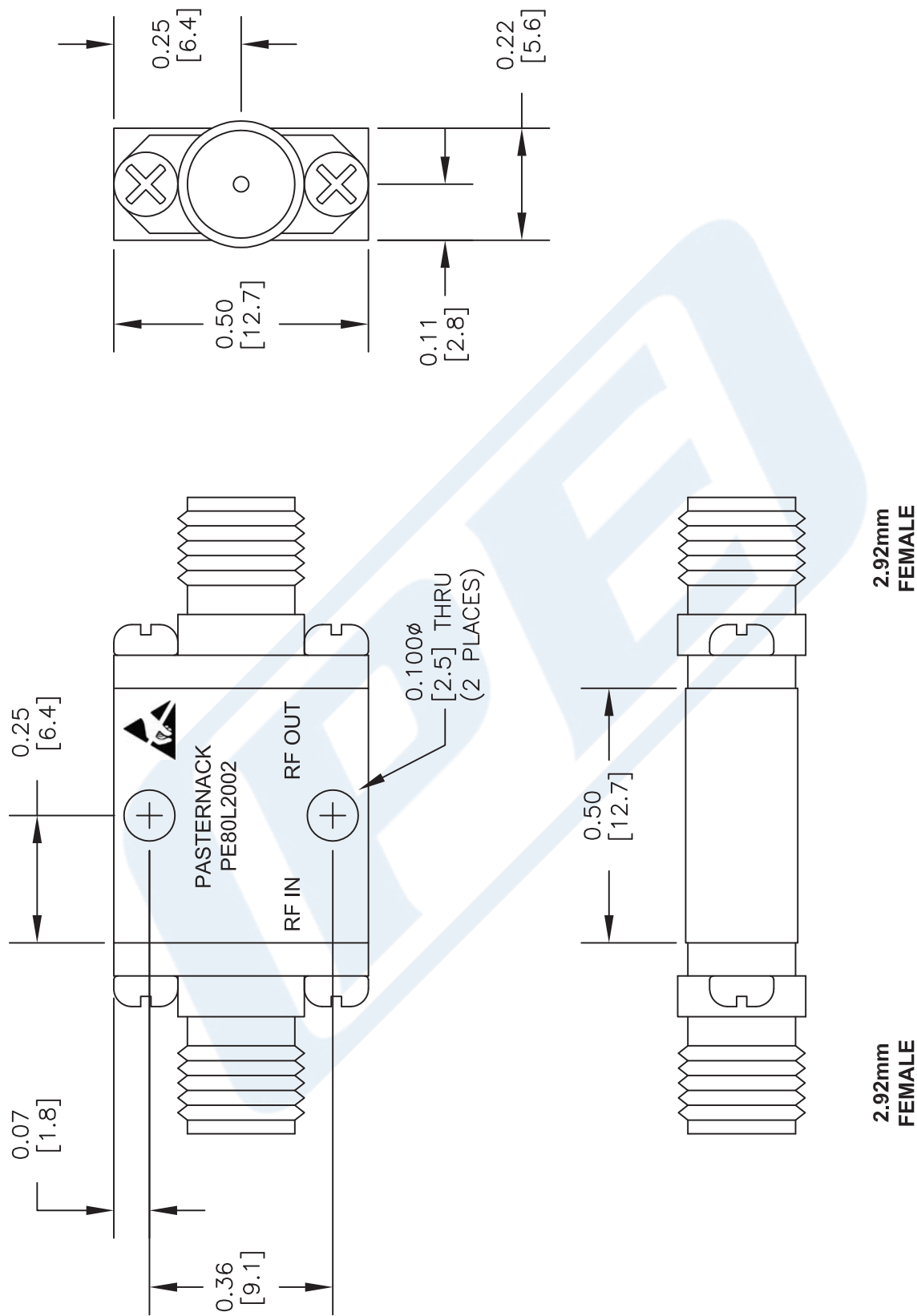
Recovery Time 1Watt - Pulse IN



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PE80L2002 CAD Drawing

2.92mm High Power Limiter, 20 Watts Peak Power, 10 ns
Recovery, 18 dBm Flat Leakage, 18 GHz to 40 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
PE80L2002

FSCM NO. 53919

2233

SIZE A

SCALE N/A

CAD FILE 031914

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