



High Power Limiter, Field Replaceable SMA, 100W Peak Power,
15 us Recovery, 18 dBm Flat Leakage, 8 GHz to 12 GHz

Limiters Technical Data Sheet

PE80L2004

Features

- 3 Watt Input Power(CW)
- 8 GHz to 12 GHz Frequency Range
- 1.2 dB Insertion Loss max.
- VSWR 1.8:1
- Leakage @ 1 Watt CW +18 dBm Max
- Limiting Threshold +15 dBm
- +50 dBm Peak Input Power
- Field Replaceable SMA Connectors
- Fast Response and Short Recovery Time 15 μ s typical
- Compact and Rugged Thin Film Construction

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 PE80L2004 is an X Band Signal Limiter that operates in the 8 GHz to 12 GHz frequency range. The Limiter has up to 3 Watts CW input power handling capability with a +18 dBm max leakage output power level and +50 dBm peak input power. Typical performance includes 1.2 dB max insertion loss, 1.8:1 typical input VSWR, and a fast response and short recovery time of 15 μ sec. The excellent technical performance is achieved through the use of thin film stripline circuit construction. The low profile pin package supports field replaceable SMA connectors and can be drop mounted onto a PWB. The Limiter is designed for high reliability and meets MIL-STD-202F environmental test conditions for Humidity, Shock, Vibration, and Altitude.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	8		12	GHz
Insertion Loss			1.2	dB
Input VSWR		1.8:1		
Leakage (CW) @ 1 Watt CW			+18	dBm
Recovery Time		15		us
Input Power (CW)			3	Watt
Input Power (Peak) @10 μ s Pulse Width 5% Duty Cycle			100	Watt
Limiting Threshold	+15			dBm

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [High Power Limiter, Field Replaceable SMA, 100W Peak Power, 15 us Recovery, 18 dBm Flat Leakage, 8 GHz to 12 GHz PE80L2004](#)



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Mechanical Specifications

Size

Length	0.788 in [20.02 mm]
Width	0.63 in [16 mm]
Height	0.394 in [10.01 mm]
Weight	0.04 lbs [18.14 g]

Configuration

Style	Limiter
Package Style	Connectorized
Connector 1	SMA Female
Connector 2	SMA Female
Connector Option	Field Replaceable

Environmental Specifications

Temperature

Operating Range	0 to +50 deg C
Storage Range	-45 to +100 deg C

Humidity

Shock

Vibration

Altitude

MIL-STD-202F, Method 103B, Condition B
MIL-STD-202F, Method 213B, Condition B
MIL-STD-202F, Method 204D, Condition B
MIL-STD-202F, Method 105C, Condition B

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

DFARS Compliant	01/12/2017
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Plotted and Other Data

Notes:

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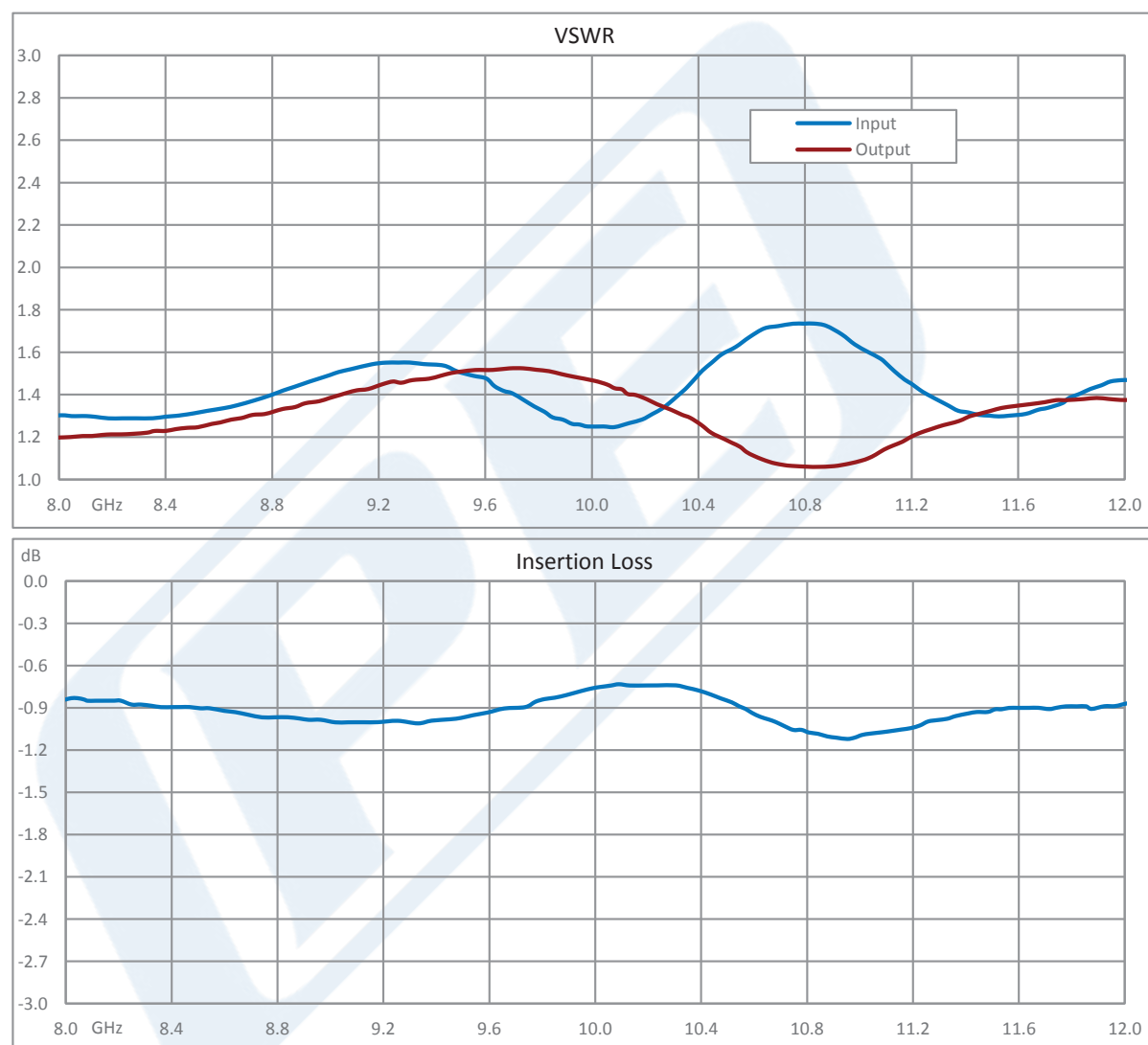


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Typical Performance Data



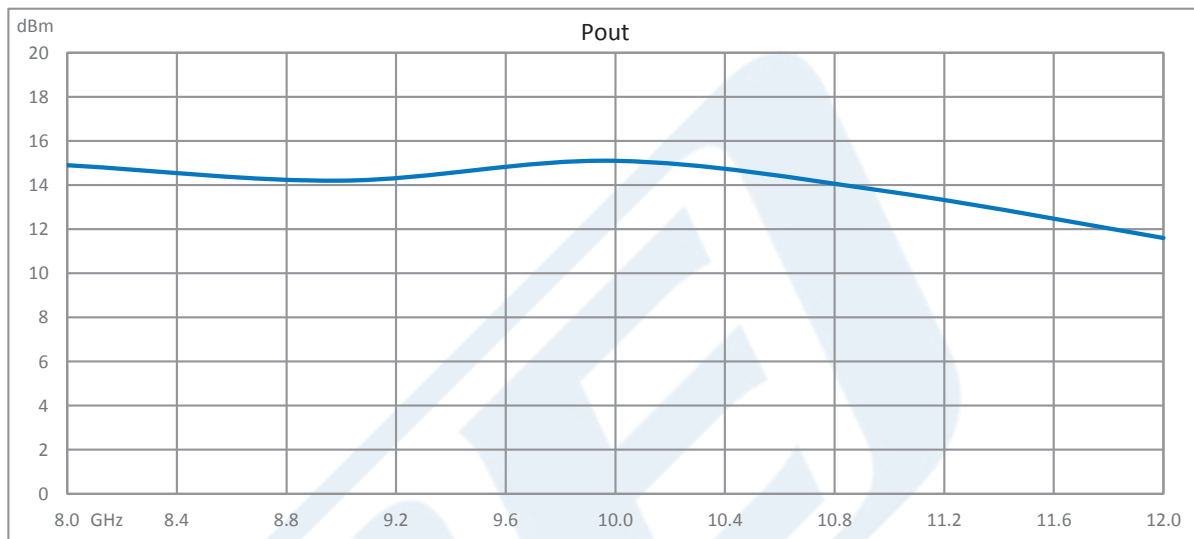
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High Power Limiter, Field Replaceable SMA, 100W Peak Power, 15 us Recovery, 18 dBm Flat Leakage, 8 GHz to 12 GHz from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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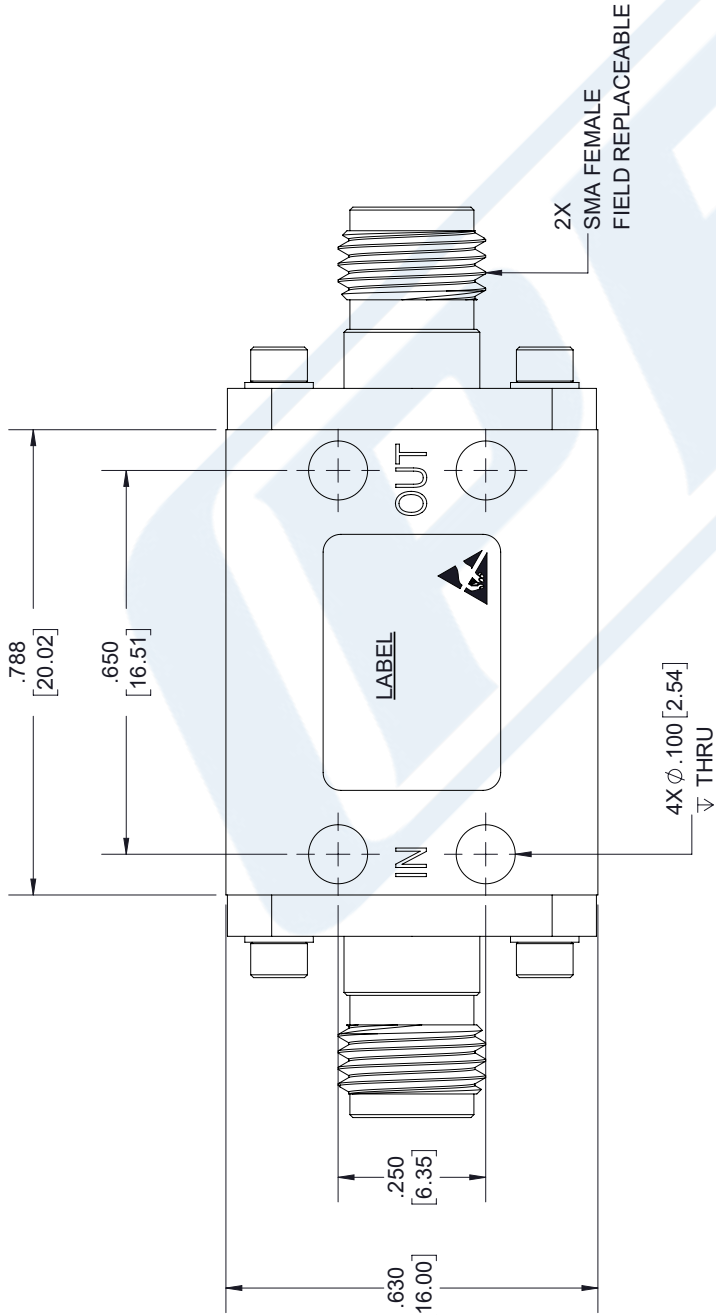
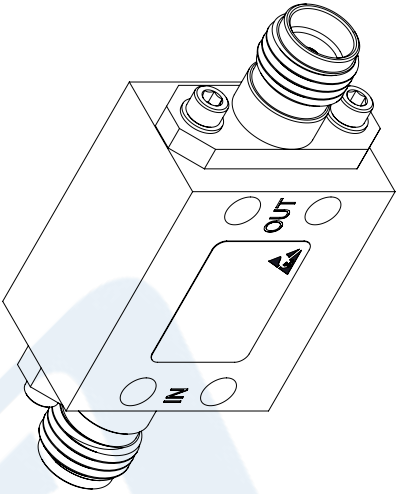
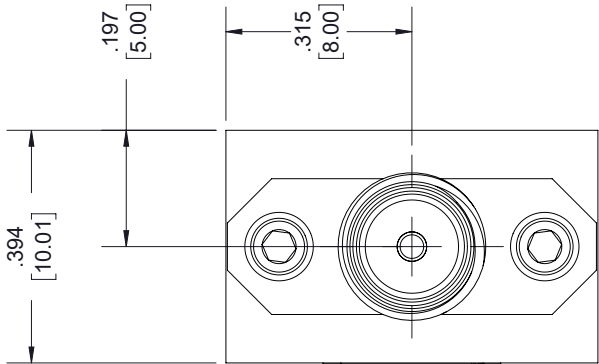
URL: <https://www.pasternack.com/sma-limiter-15-us-18-dbm-12-ghz-pe80l2004-p.aspx>

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PE80L2004 CAD Drawing

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	04/23/19	T. GALLA



2X SMA FEMALE
FIELD REPLACEABLE

UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE IN INCHES
DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:
X±.2 [5.08] FRACTIONS
XX±.01 [.25] ±.132
XXX±.005 [.13] ANGLES ± 1°

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

PE PASTERNAK
an INFINITI[®] brand

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SHEET 1 OF 1
SCALE N/A

SIZE A CAGE 53919 DRAWN BY K.DANG PART NUMBER PE80L2004 REV A

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PE80L2004
S/N: XXXXXXXX
D/C: XXXX

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