



High Power Limiter, Field Replaceable 2.92mm, 100W Peak Power, 15 us Recovery, 13 dBm Flat Leakage, 18 GHz to 40 GHz

## Limiters Technical Data Sheet

PE80L2007

### Features

- 1 Watt Input Power(CW)
- 18 GHz to 40 GHz Frequency Range
- 4.5 dB Insertion Loss typ
- VSWR 3:1
- Leakage @ 1 Watt CW +13 dBm Max
- +50 Peak Input Power
- Limiting Threshold +6 dBm
- Field Replaceable 2.92mm Connectors
- Fast Response and Short Recovery Time 15  $\mu$ 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 PE80L2007 is a K/Ka Band Signal Limiter that operates in the 18 GHz to 40 GHz frequency range. The Limiter has up to 1 Watts CW input power handling capability with a +13 dBm max leakage output power level +50 dBm peak input power. Typical performance includes 4.5 dB typ insertion loss, 3:1 typical input VSWR, and a fast response and short recovery time of 15  $\mu$ sec. The excellent technical performance is achieved through the use of thin film stripline circuit construction. The low profile pin package supports field replaceable 2.92mm 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	18		40	GHz
Insertion Loss		4.5		dB
Input VSWR		3:1		
Leakage (CW) @ 1 Watt CW			+13	dBm
Recovery Time		15		us
Input Power (CW)			1	Watt
Input Power (Peak) @10 $\mu$ s Pulse Width 5% Duty Cycle			100	Watt
Limiting Threshold		+6		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 2.92mm, 100W Peak Power, 15 us Recovery, 13 dBm Flat Leakage, 18 GHz to 40 GHz PE80L2007](#)



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### Mechanical Specifications

#### Size

Length	0.63 in [16 mm]
Width	0.75 in [19.05 mm]
Height	0.35 in [8.89 mm]
Weight	0.04 lbs [18.14 g]

#### Configuration

Style	Limiter
Package Style	Connectorized
Connector 1	2.92mm Male
Connector 2	2.92mm Female
Connector Option	Field Replaceable

### Environmental Specifications

#### Temperature

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

Humidity	MIL-STD-202F, Method 103B, Condition B
Shock	MIL-STD-202F, Method 213B, Condition B
Vibration	MIL-STD-202F, Method 204D, Condition B
Altitude	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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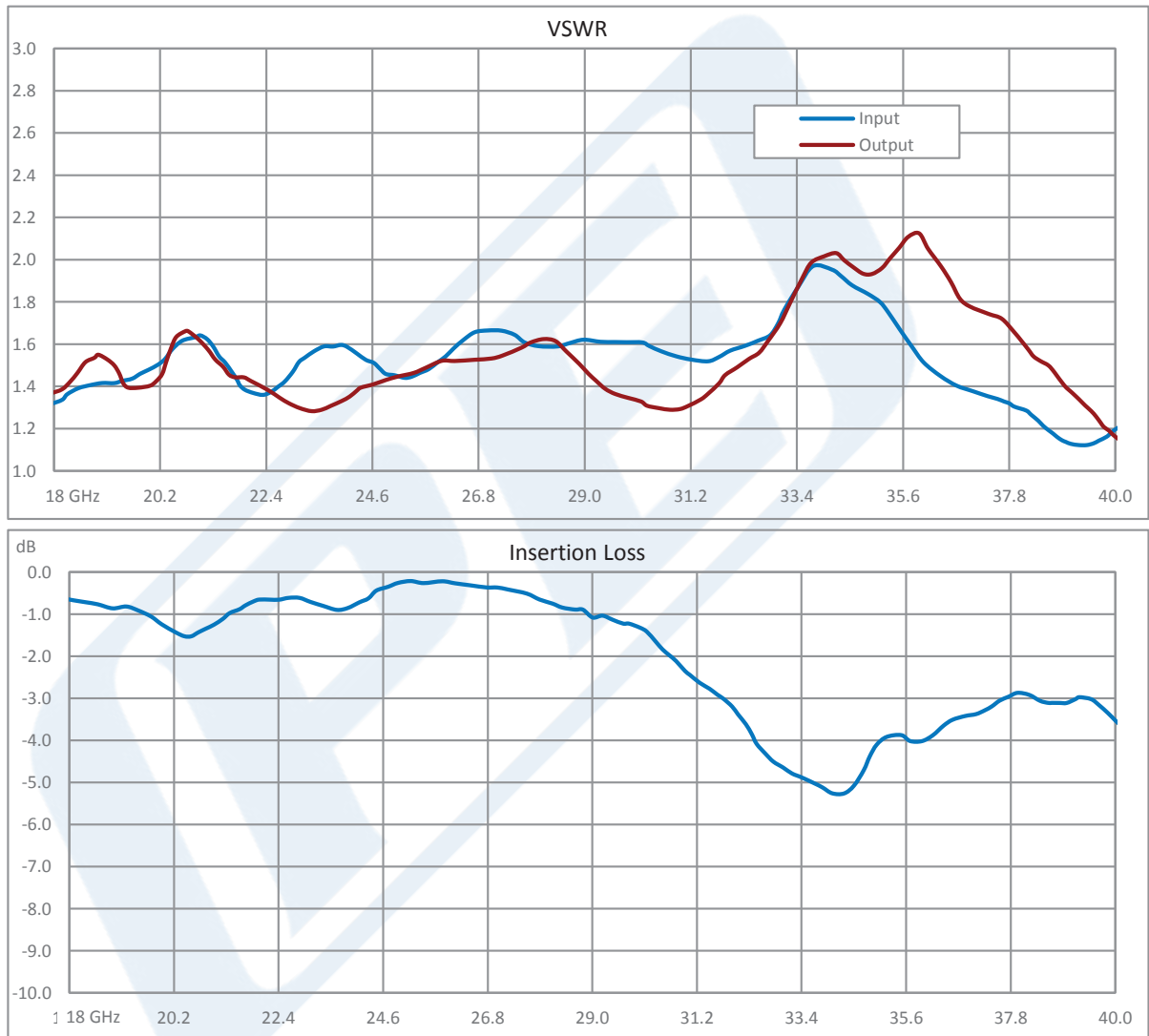


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Typical Performance Data



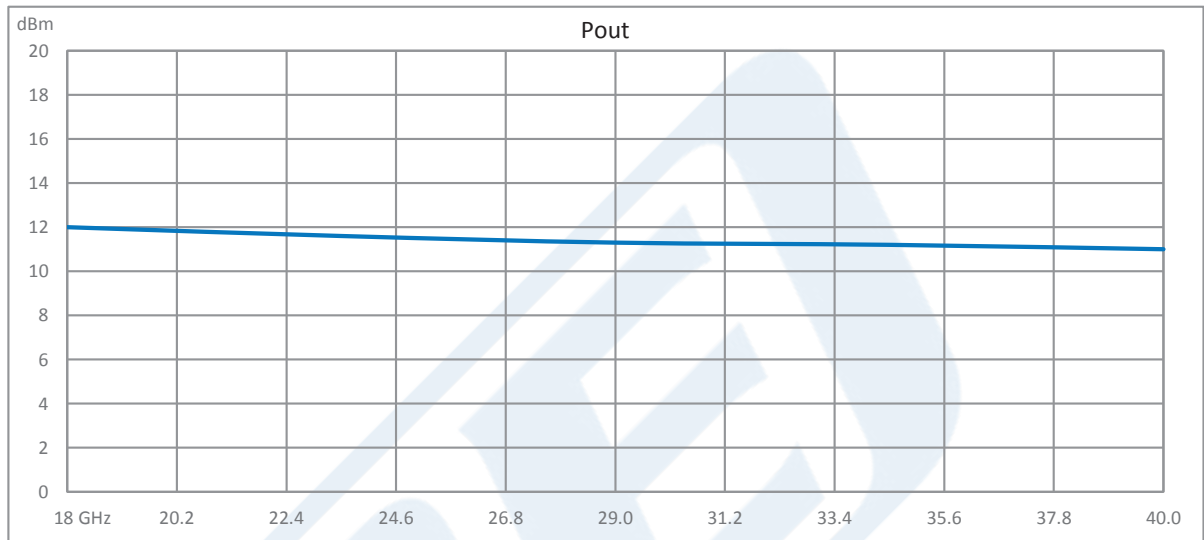
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High Power Limiter, Field Replaceable 2.92mm, 100W Peak Power, 15 us Recovery, 13 dBm Flat Leakage, 18 GHz to 40 GHz from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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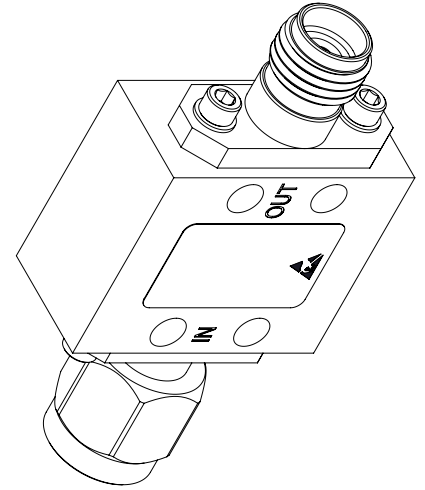
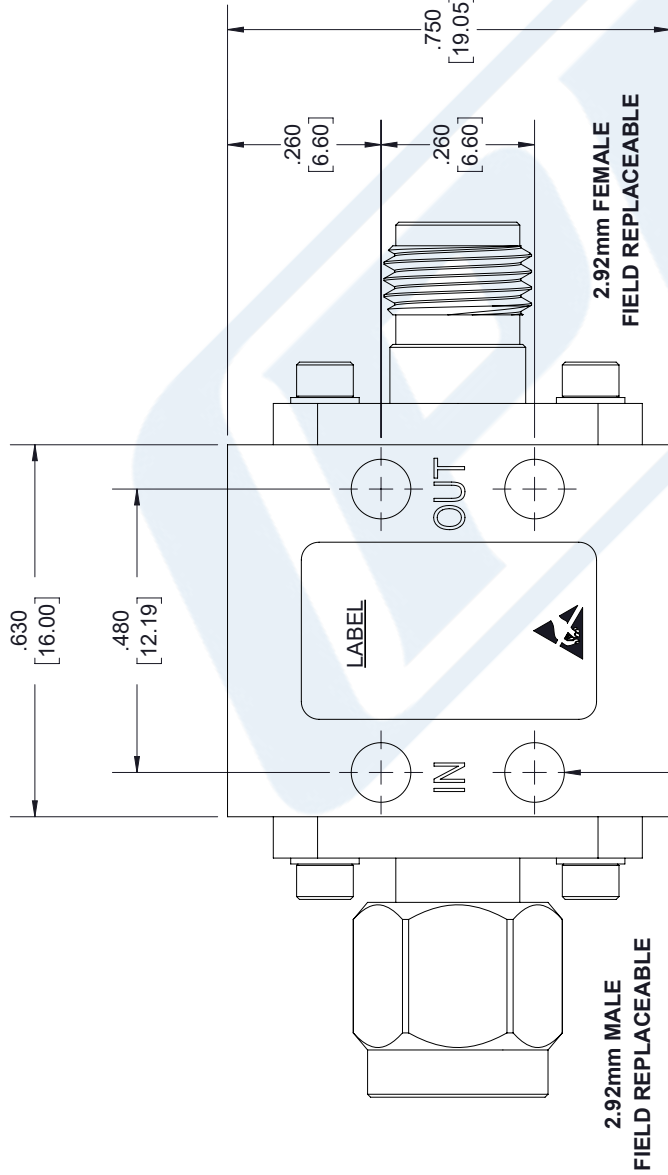
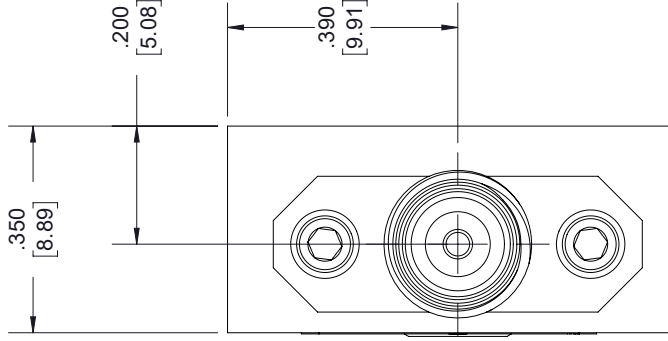
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# PE80L2007 CAD Drawing

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



LABEL:

**(PE) PASTERNAK**  
an INFINITI<sup>®</sup> brand  
**PE80L2007**  
S/N: XXXXXXXX  
D/C: XXXX

UNLESS OTHERWISE SPECIFIED  
LEADING DIMENSIONS ARE 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

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