



High Power Broadband Limiter, 0.5 GHz to
18 GHz, Field Replaceable SMA, 20W Peak Power, 2W Input
Power, +18 dBm Leakage Power

Limiters Technical Data Sheet

PE80L2009

Features

- Frequency Range: 500 MHz to 18 GHz
- 2 Watt Input Power (CW)
- 1.6 dB typ Insertion Loss
- VSWR 1.8:1 typ
- Leakage @ 2 Watt CW +14 dBm typ
- +20 dBm Peak Input Power
- Limiting Threshold +14 dBm min
- Field Replaceable SMA Connectors
- Compact and Rugged Thin Film Construction
- 0°C to +50°C Operating Temperature
- 50 Ohm Design
- Designed to meet MIL-STD-202 Environmental Test Conditions

Applications

- Receiver Protection
- Test & Measurement
- Reducing Amplitude Variations
- Protects Low Noise Amplifiers and other Devices from ESD or input power damage
- Electronic Warfare
- Military & Space
- Military & Commercial Wireless Communications Systems
- Research & Development

Description

The PE80L2009 is a broadband Signal Limiter that operates from 500 MHz to 18 GHz. This limiter has up to 2 watts CW input power handling capability and peak power handling up to 20 watts max. Impressive typical performance includes 1.6 dB Insertion loss, +14 dBm leakage power, and 1.8:1 VSWR. The excellent technical performance is achieved through the use of thin film stripline construction. The low profile pin package assembly supports a field replaceable SMA male input and SMA female output connector, and can be drop mounted onto a PWB. The limiter is designed for high reliability and meets MIL-STD-202F environmental conditions for Humidity, Shock, Vibration, and Altitude.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.5		18	GHz
Insertion Loss		1.6	2	dB
Input VSWR		1.8:1		
Leakage (CW)		+14	+18	dBm
Input Power (CW)			2	Watt
Input Power (Peak)*			20	Watt
Limiting Threshold	+14			dBm

*Conditions: 1 usec Pulse Width and 1% Duty Cycle

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [High Power Broadband Limiter, 0.5 GHz to 18 GHz, Field Replaceable SMA, 20W Peak Power, 2W Input Power, +18 dBm Leakage Power PE80L2009](#)



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Mechanical Specifications

Size

Length	0.53 in [13.46 mm]
Width	0.63 in [16 mm]
Height	0.25 in [6.35 mm]
Weight	0.03 lbs [13.61 g]

Configuration

Style	Limiter
Connector 1	SMA Male
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	MIL-STD-202, 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)

Plotted and Other Data

Notes:

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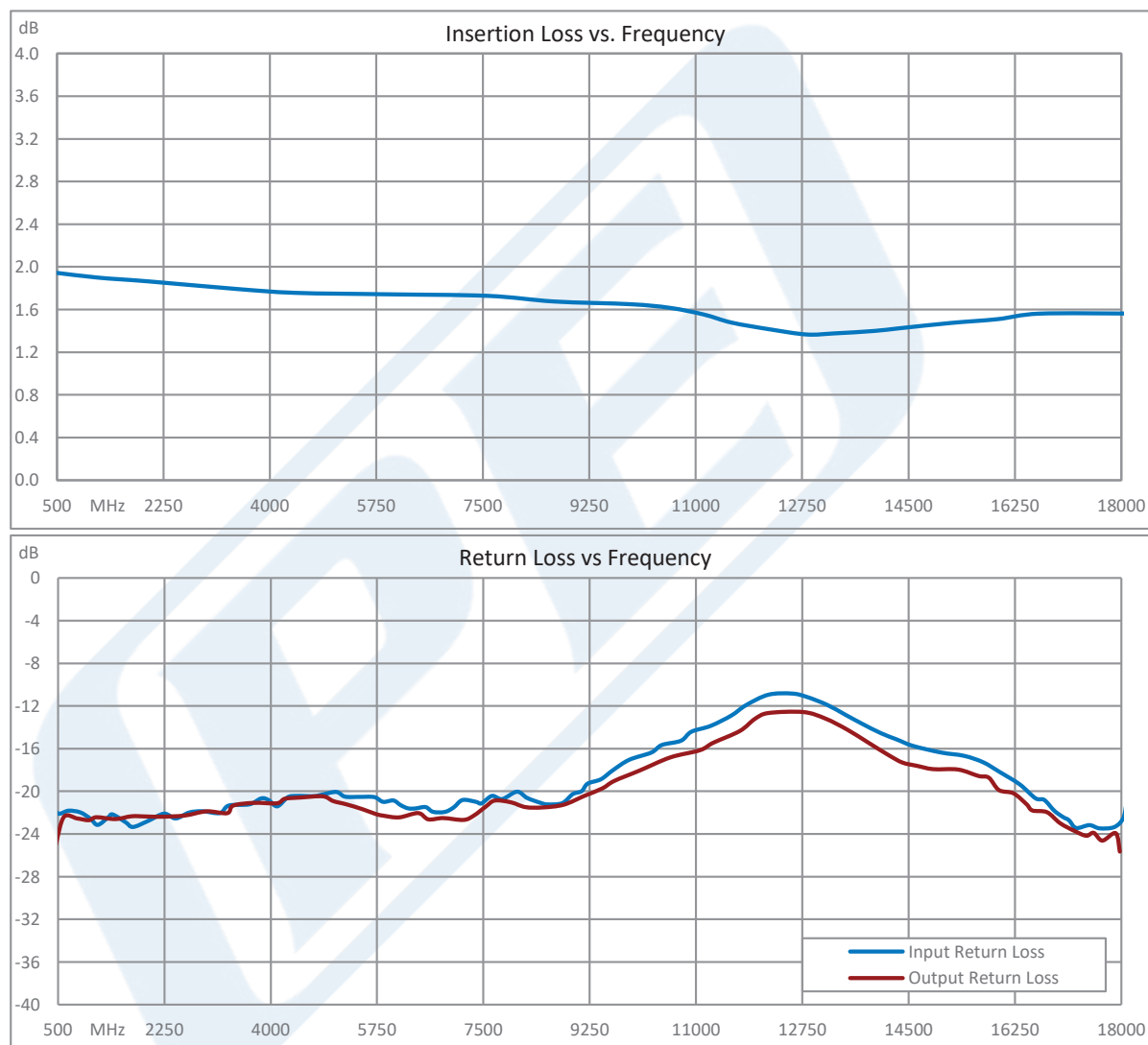


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Typical Performance Data



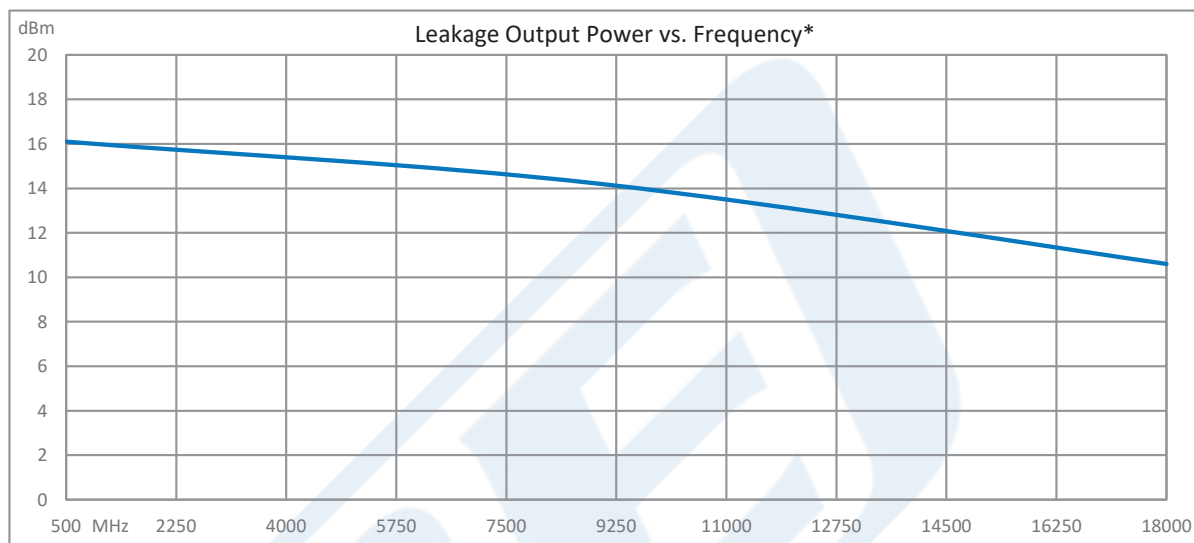
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*Input Power +33 dBm

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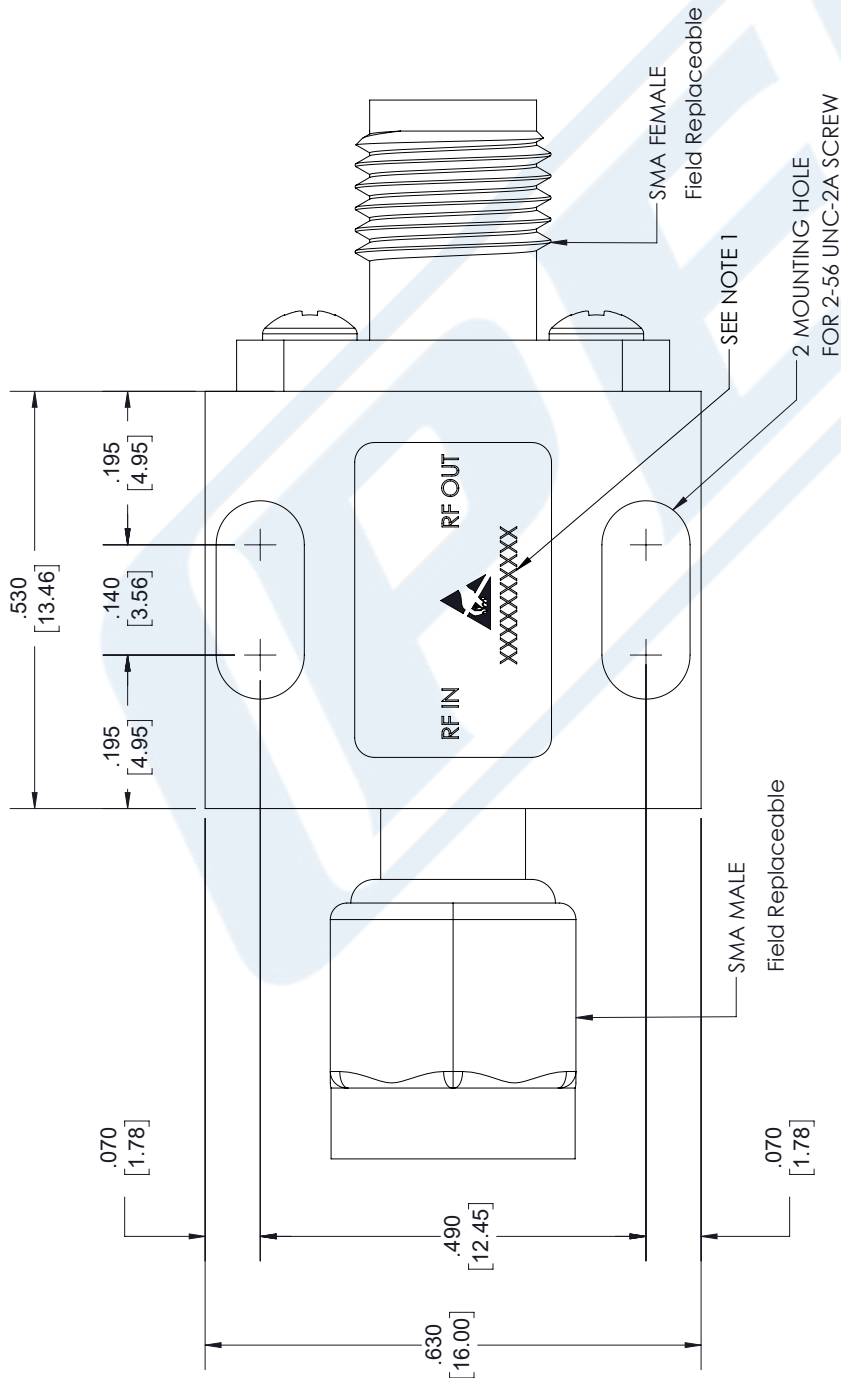
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Technical drawing of a mechanical part, showing a top view and a side view. The top view is a hexagonal shape with a central circular feature and two circular features on the sides. The side view shows the profile of the part, including a central circular feature and two circular features on the sides. Dimensions are provided in inches and millimeters.

Dimensions (inches and millimeters):

- Top view (hexagonal shape):
 - Central circular feature: .315 [8.00]
 - Side circular features: .315 [8.00]
- Side view (profile):
 - Overall width: .250 [6.35]
 - Central circular feature: .150 [3.81]



1. SERIAL NUMBER AND DATE CODE ARE COMBINED. EX: 202008280001.

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THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

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