

SMA High Power Limiter, 5 MHz to 21 GHz, 10W Peak Power, 18 dBm Flat Leakage



FMLM2012

Features

- 10 Watt Input Power(CW)
- 50 MHz to 21 GHz Frequency Range
- 1.3 dB Insertion Loss max.
- VSWR 1.8:1
- Leakage @ 1 Watt CW +20.5 dBm Max
- Peak Power Leakage +22 dBm
- +10 Watt Peak Input Power
- Field Replaceable SMA 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 FMLM2012 is a Signal Limiter that operates in the 50 MHz to 21 GHz frequency range. The Limiter has up to 4 Watts CW input power handling capability with a 20.5 dBm max leakage output power level and +10 Watt peak input power. Typical performance includes 1.3 dB max insertion loss, 1.8:1 typical input VSWR. The low profile pin package supports field replaceable SMA connectors. The module has an operational temperature range from -40°C to 85°C and is guaranteed to meet a series of environmental test conditions for Altitude, Vibration, Humidity and Shock.

Electrical Specifications

Description	Min	Typ	Max	Unit
Frequency Range	0.05		21	GHz
Input VSWR		1.6:1	1.8:1	
Output VSWR		1.6:1	1.8:1	
Leakage (CW) @ 1 Watt CW		+18	+20.5	dBm
Leakage (Peak)			+22	dBm
Input Power (CW)			4	Watt
Input Power (Peak)			10	Watt
@100us pulse, 10% Duty Cycle				

Mechanical Specifications

Size

Length	0.79 in [20.07 mm]
Width	0.71 in [18.03 mm]
Height	0.39 in [9.91 mm]
Weight	0.08 lbs [36.29 g]
Body Material and Plating	Aluminum

Configuration

Style	High Power Limiter
Connector 1	SMA Female
Connector 2	SMA Female

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Environmental Specifications

Temperature

Operating Range

-40 to +85 deg C

Storage Range

-50 to +105 deg C

Humidity

100% RH at 35°, 95%RH at 40°

Shock

20G for 11msec half sine wave, 3 axis both directions

Vibration

25g RMS (15 degrees 2KHz) endurance, 1 hour per axis

Altitude

35,000 ft. (Epoxy Sealed Controlled environment)

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

Plotted and Other Data

Notes:

Values at 25°C, sea level.

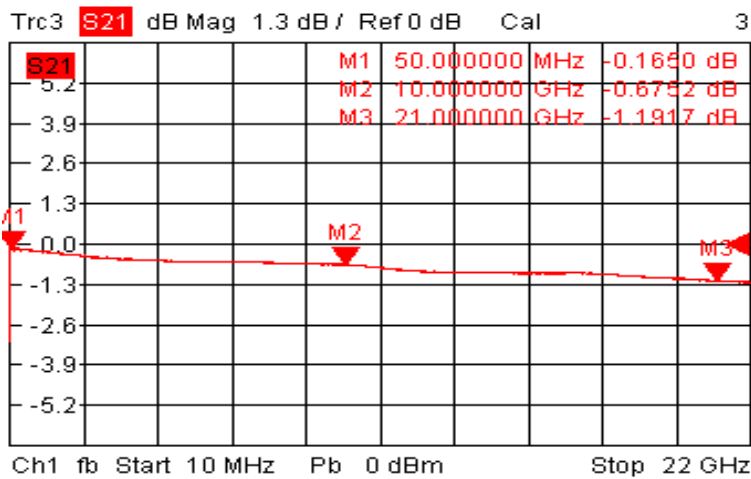
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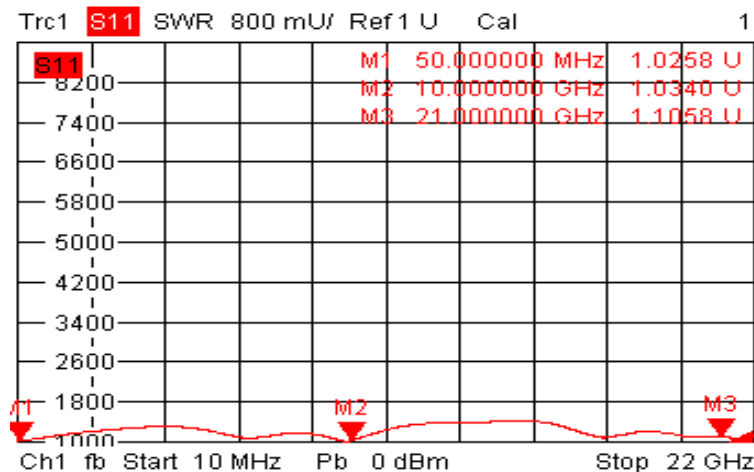
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Typical Performance Data

Insertion Loss @+25°C



Input VSWR @+25°C

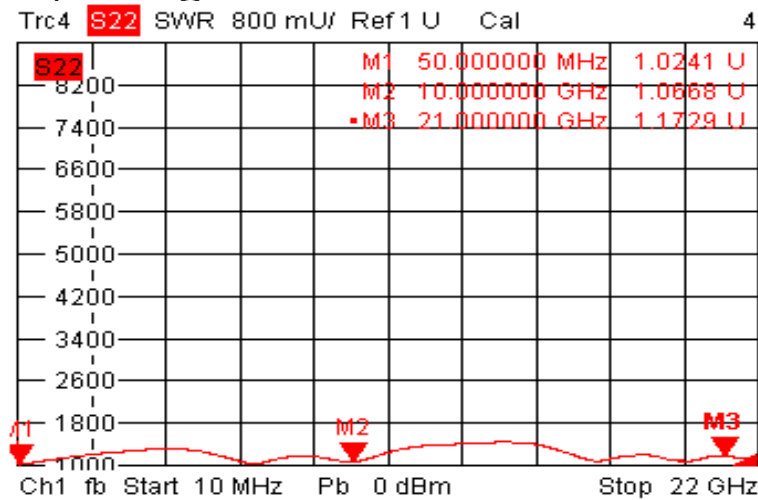


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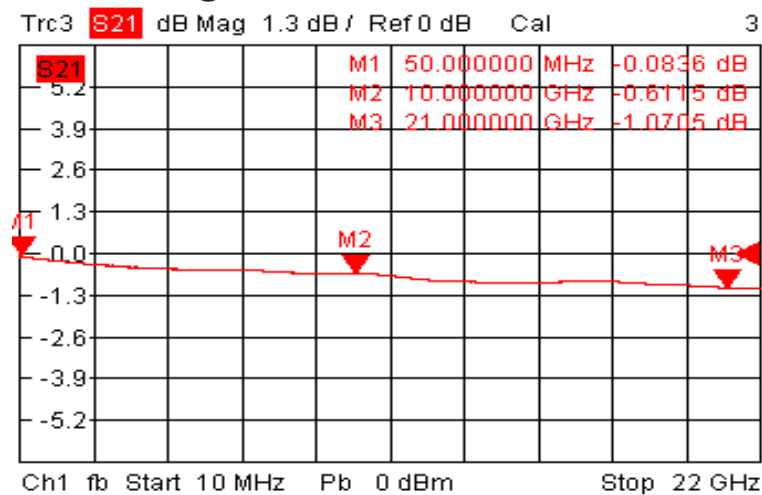
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Output VSWR @+25°C



Insertion Loss @-40°C

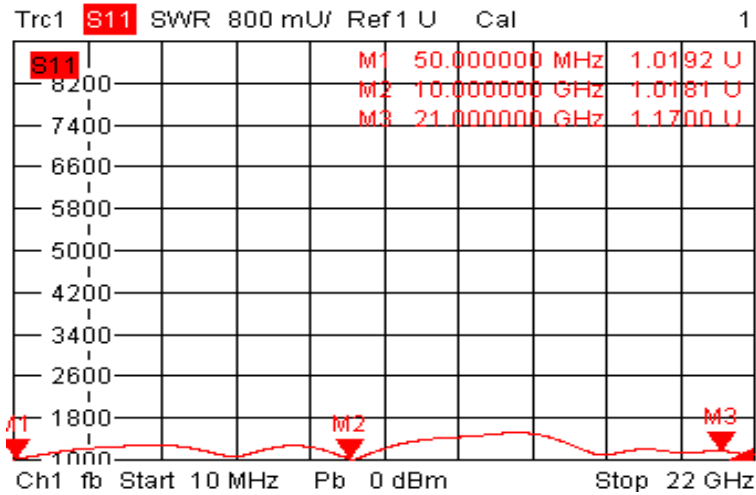


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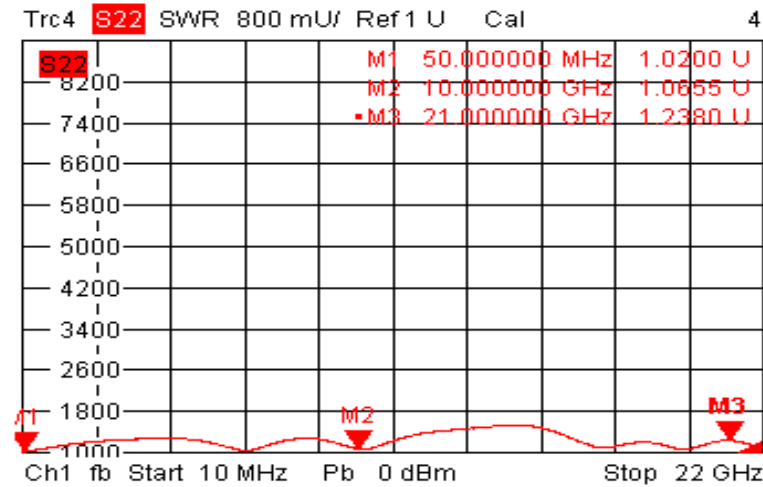
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Input VSWR @-40°C



Output VSWR @-40°C

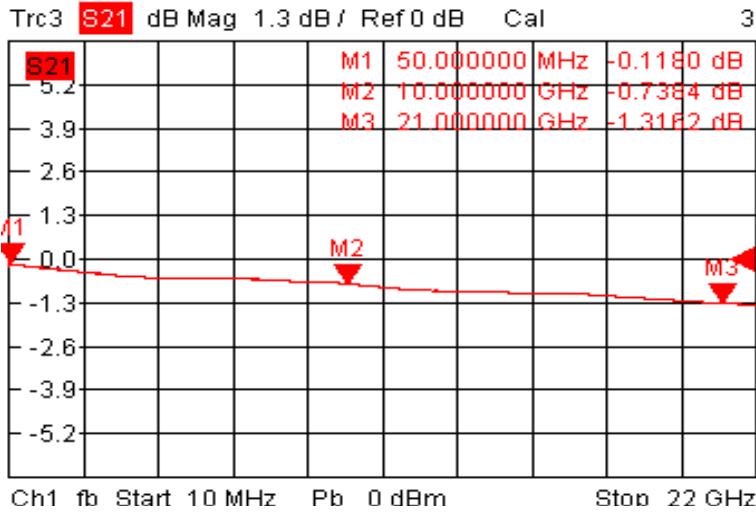


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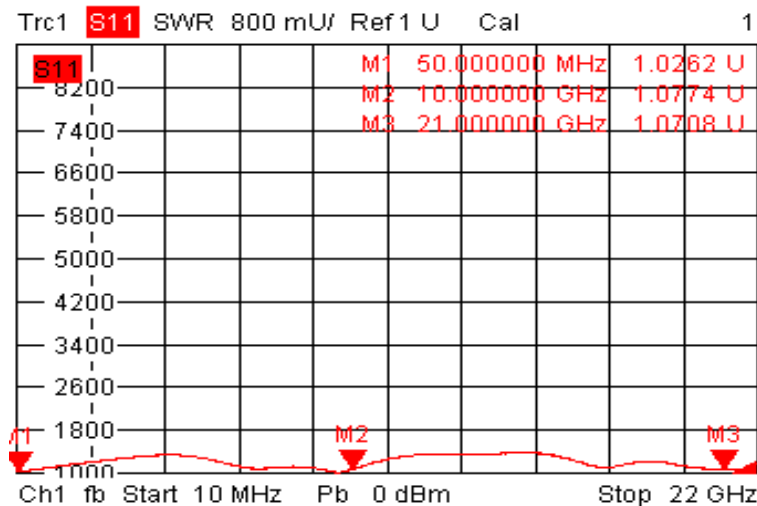
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Insertion Loss @+85°C



Input VSWR @+85°C

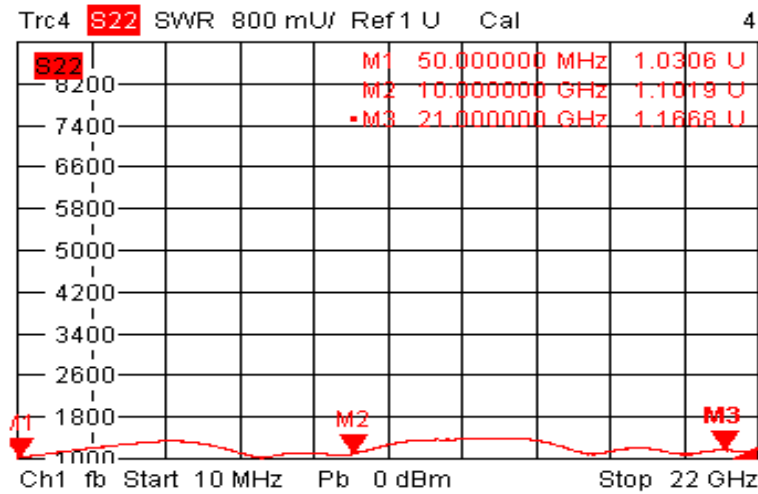


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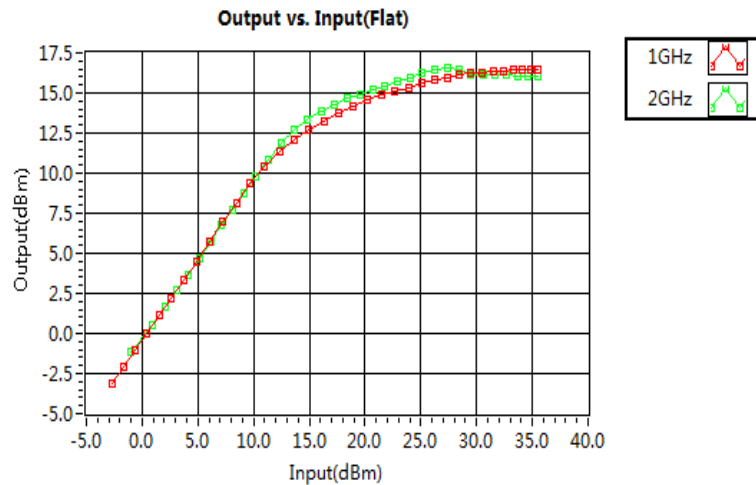
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Output VSWR @+85°C



Flat Leakage Power(1-2GHz)

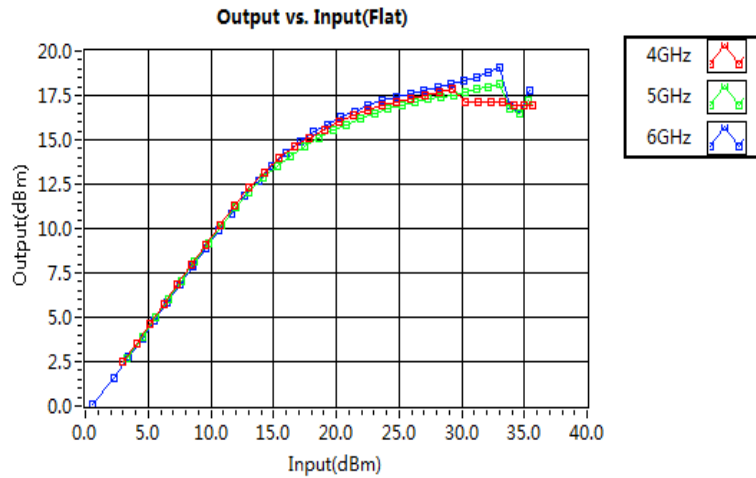


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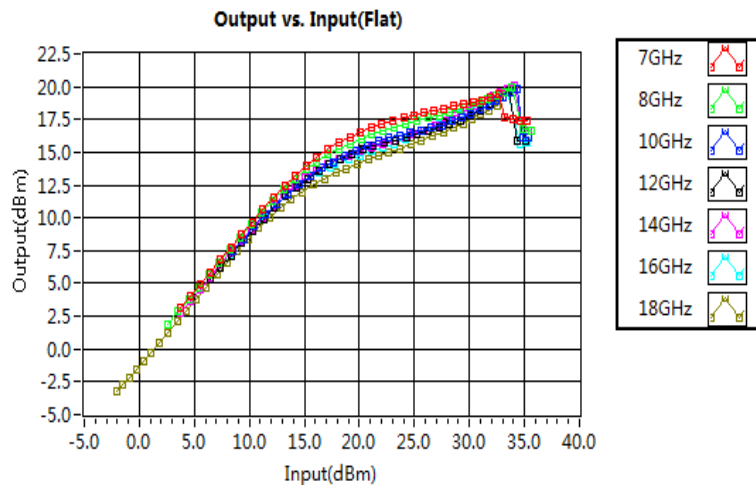
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Flat Leakage Power(4-6GHz)

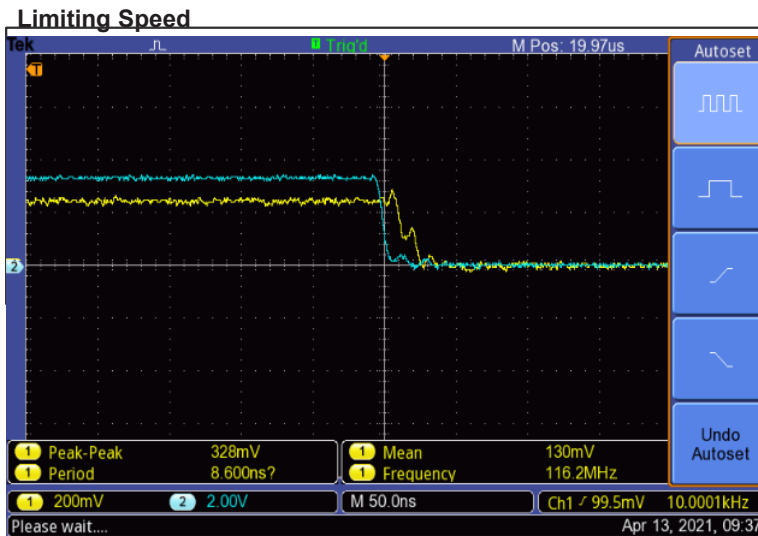
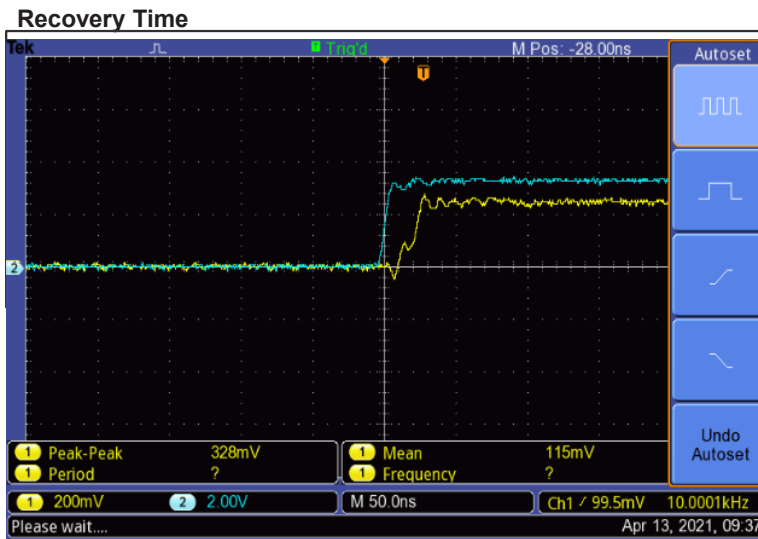


Flat Leakage Power(7-18GHz)



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For additional information on this product, please click the following link: [SMA High Power Limiter, 5 MHz to 21 GHz, 10W Peak Power, 18 dBm Flat Leakage FMLM2012](#)

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URL: <https://www.fairviewmicrowave.com/high-power-limiter-sma-10w-peak-power-18-dbm-flat-leakage-50-to-21-ghz-fmlm2012-p.aspx>

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FMLM2012 CAD Drawing
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