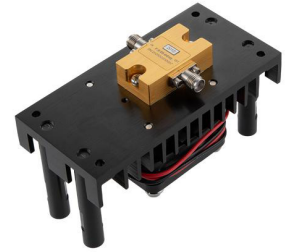


SMA High Power Limiter, 50 MHz to 6 GHz, 100W Peak Power, 16.5 dBm Flat Leakage

FMLM2010



Features

- 30 Watt Input Power(CW)
- 50 MHz to 6 GHz Frequency Range
- 2 dB Insertion Loss max.
- VSWR 2:1
- Leakage @ 1 Watt CW +17 dBm Max
- Peak Power Leakage +18 dBm
- +100 Watt Peak Input Power
- Field Replaceable SMA Connectors
- Heatsink Attached

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 FMLM2010 is a Signal Limiter that operates in the 50 MHz to 6 GHz frequency range. The Limiter has up to 30 Watts CW input power handling capability with a +17 dBm max leakage output power level and +100 Watt peak input power. Typical performance includes 2 dB max insertion loss, 2:1 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		6	GHz
Insertion Loss		1.5	2	dB
Input VSWR		1.5:1	2:1	
Output VSWR		1.5:1	2:1	
Leakage (CW) @ 1 Watt CW		+16.5		dBm
Leakage (Peak)			+18	dBm
Input Power (CW)			30	Watt
Input Power (Peak) @10μs pulse, 10% Duty Cycle			100	Watt

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	0.05 - 1	1 - 6				GHz
Insertion Loss, Typ	0.6	1.5				dB

Mechanical Specifications

Size

Length	1.26 in [32 mm]
Width	0.71 in [18.03 mm]

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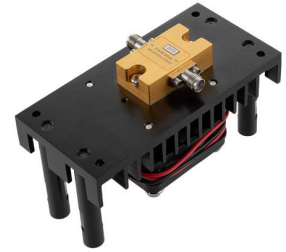


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Height	0.39 in [9.91 mm]
Weight	0.4 lbs [181.44 g]
Body Material and Plating	Copper
Configuration	
Style	High Power Limiter
Connector 1	SMA Female
Connector 2	SMA Female
Environmental Specifications	
Temperature	
Operating Range	-40 to +85 deg C
Storage 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.	

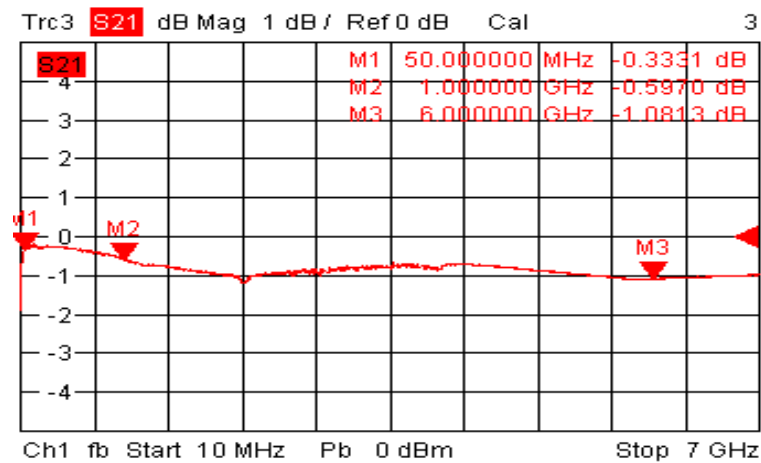
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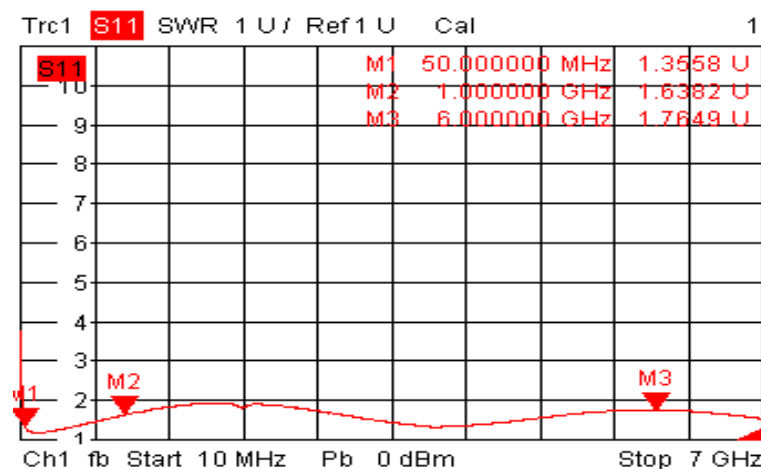


Typical Performance Data

Insertion Loss @+25°C

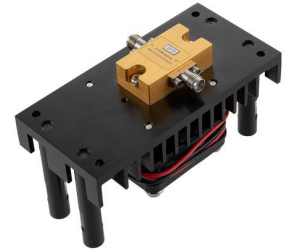


Input VSWR @+25°C

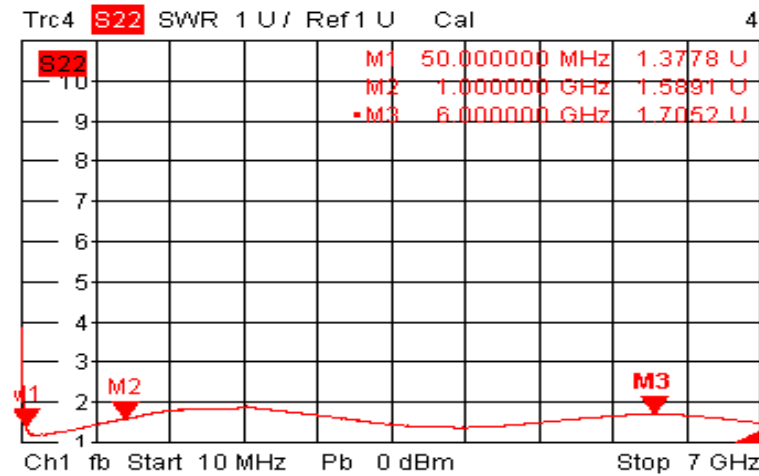


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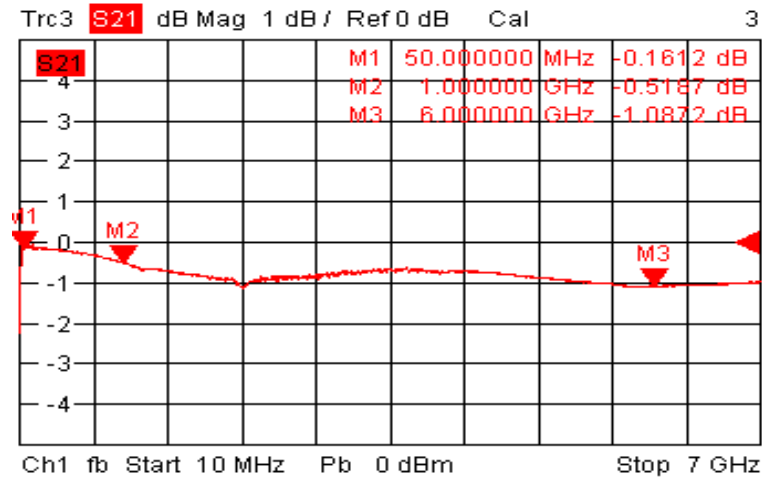
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Output VSWR @+25°C

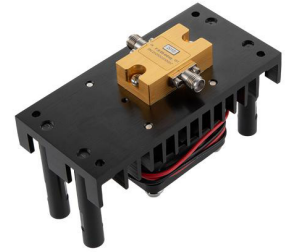


Insertion Loss @-40°C

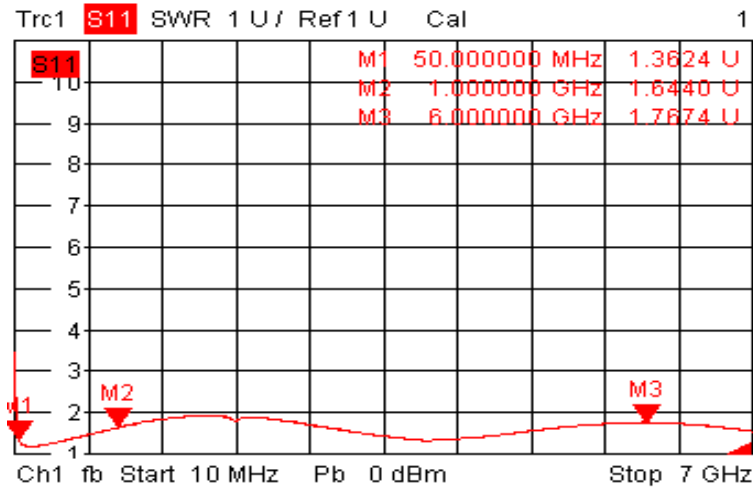


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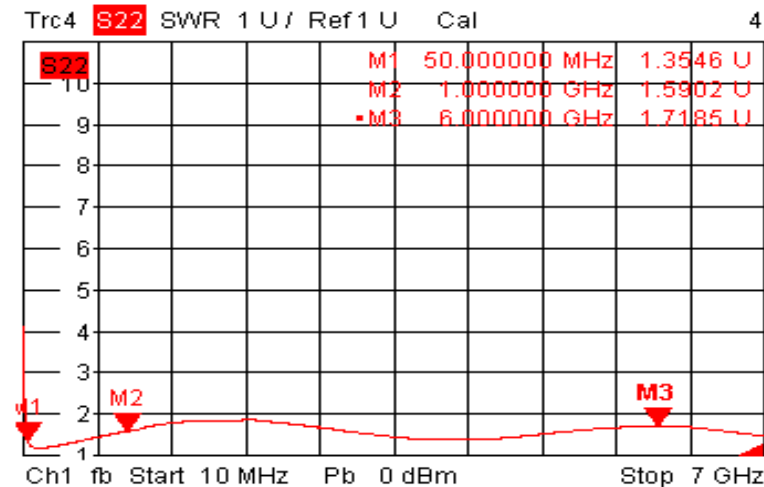
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Input VSWR @-40°C

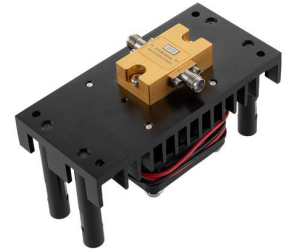


Output VSWR @-40°C

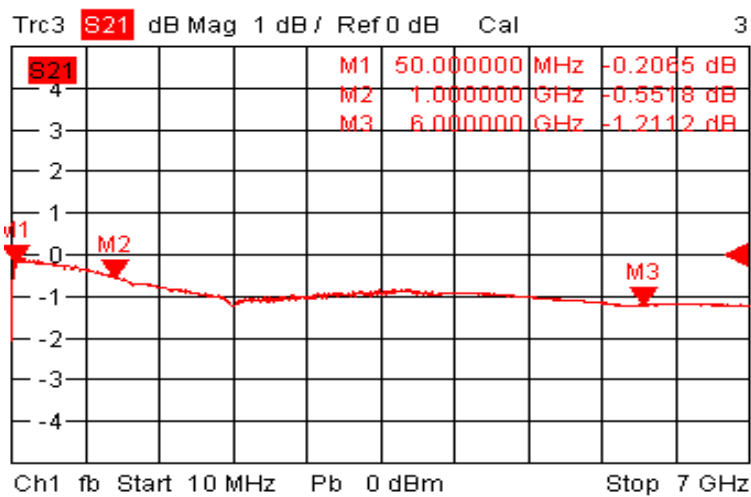


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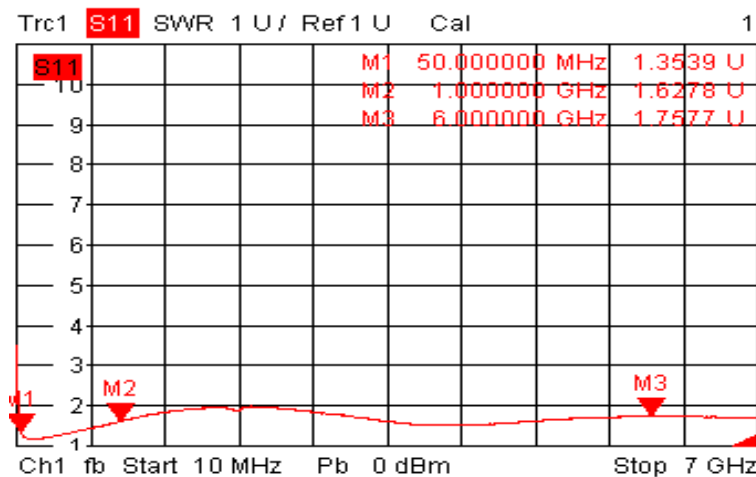
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Insertion Loss @+85°C

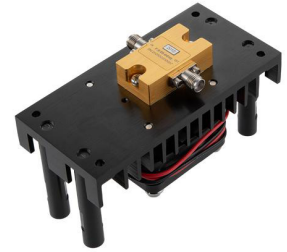


Input VSWR @+85°C

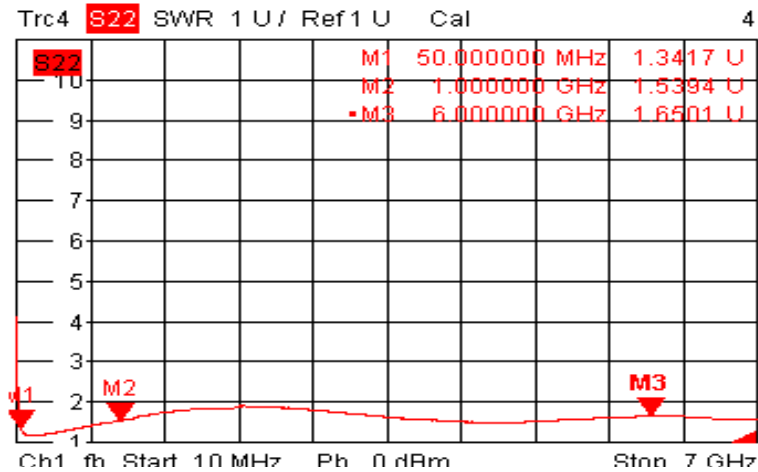


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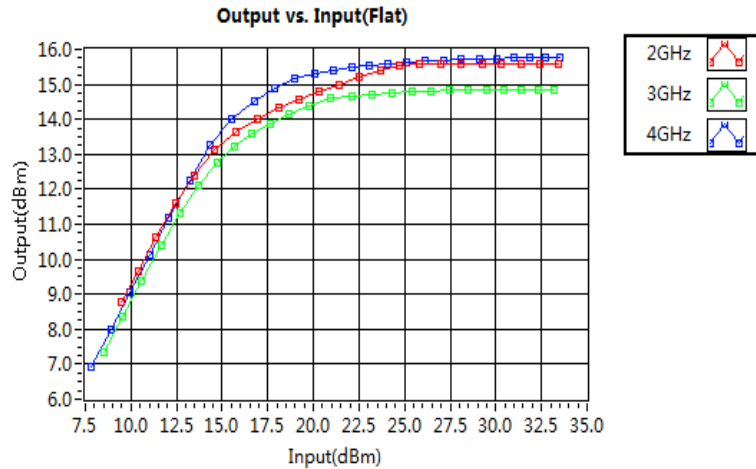
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Output VSWR @+85°C

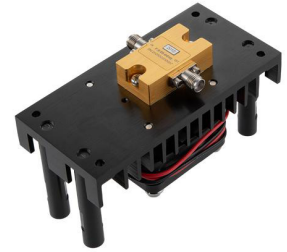


Flat Leakage Power



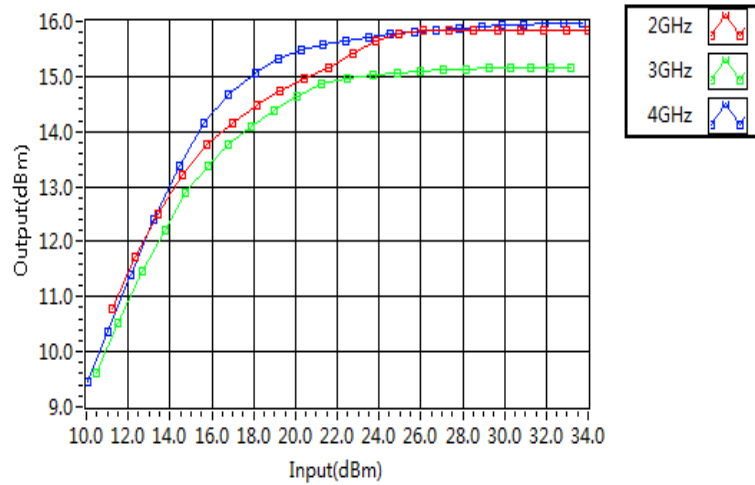
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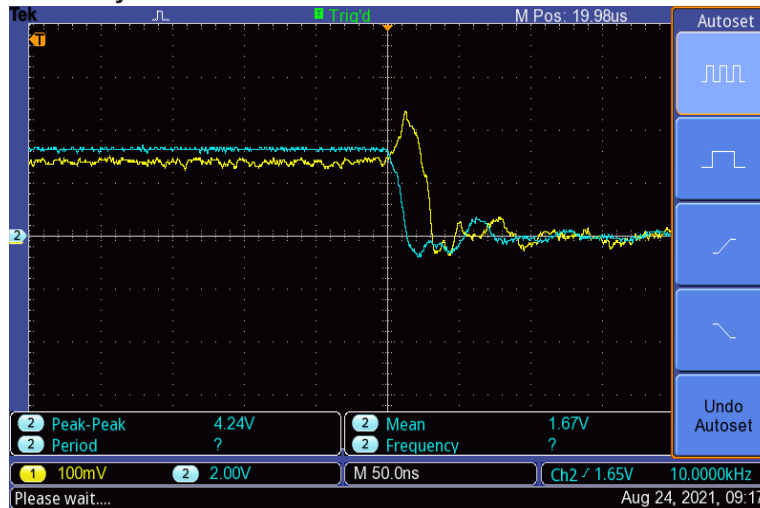


Peak Power Leakage

Output vs. Input(Peak)

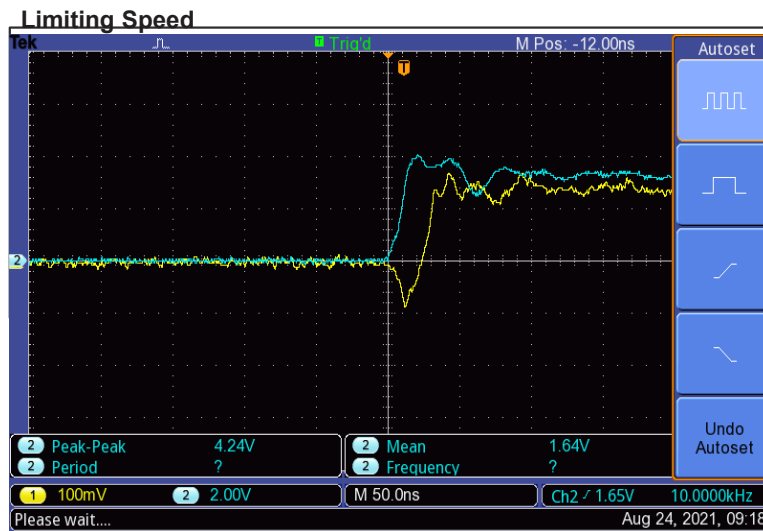
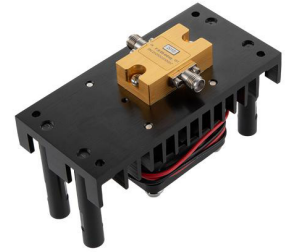


Recovery Time



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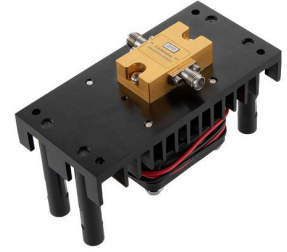


SMA High Power Limiter, 50 MHz to 6 GHz, 100W Peak Power, 16.5 dBm Flat Leakage from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SMA High Power Limiter, 50 MHz to 6 GHz, 100W Peak Power, 16.5 dBm Flat Leakage FMLM2010](#)

SMA High Power Limiter, 50 MHz to 6 GHz,
100W Peak Power, 16.5 dBm Flat Leakage

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URL: <https://www.fairviewmicrowave.com/high-power-limiter-sma-100w-peak-power-16.5-dbm-flat-leakage-500-to-6-ghz-fmlm2010-p.aspx>

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