

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

The FMLM2004 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  $\mu$ sec. The excellent technical performance is achieved through the use of thin film stripline circuit construction. The low profile pin package supports field replaceable 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	Min	Typ	Max	Unit
Frequency Range	8		12	GHz
Insertion Loss			1.2	dB
Input VSWR		1.8:1		
Leakage (CW)			+18	dBm
Recovery Time		15		us
Input Power (CW)			3	Watt
Input Power (Peak) @10 $\mu$ s Pulse Width 5% Duty Cycle			100	Watt
Limiting Threshold	+15			dBm

### 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

### 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
- +50 dBm Peak Input Power
- Limiting Threshold +15 dBm
- Field Replaceable SMA 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

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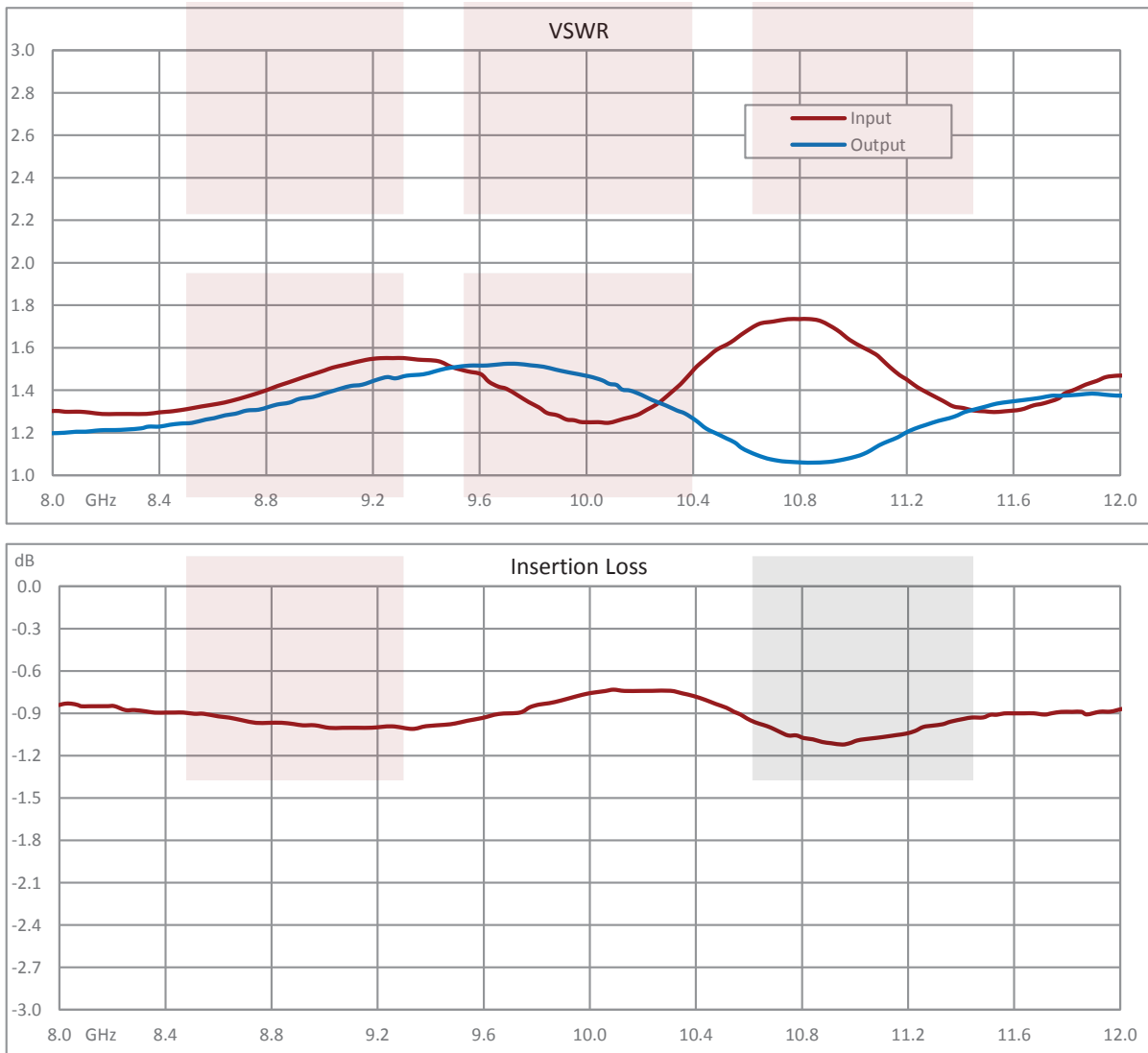
Humidity MIL-STD-202F, Method 103B, Condition B  
 Shock MIL-STD-202F, Method 213B, Condition B  
 Vibration MIL-STD-202F, Method 204D, Condition B  
 Altitude MIL-STD-202F, Method 105C, Condition B

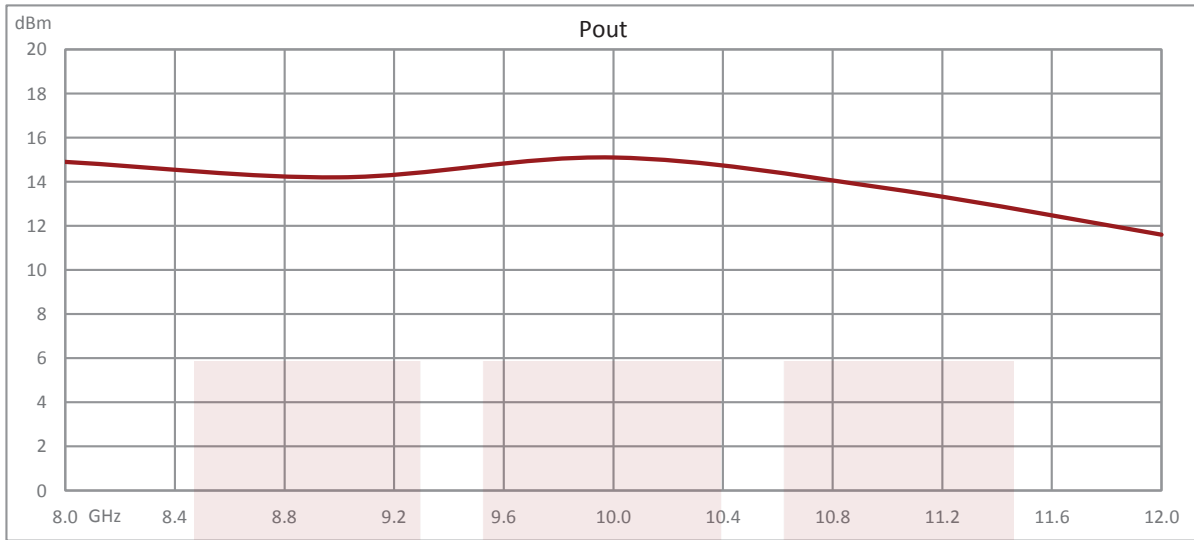
**Compliance Certifications** (see [product page](#) for current document)  
 DFARS Compliant 01/12/2017

**Plotted and Other Data**

Notes:

**Typical Performance Data**



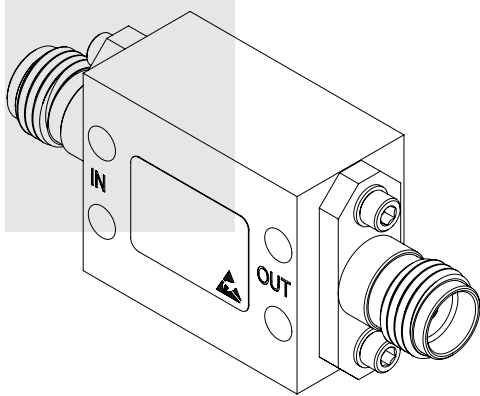
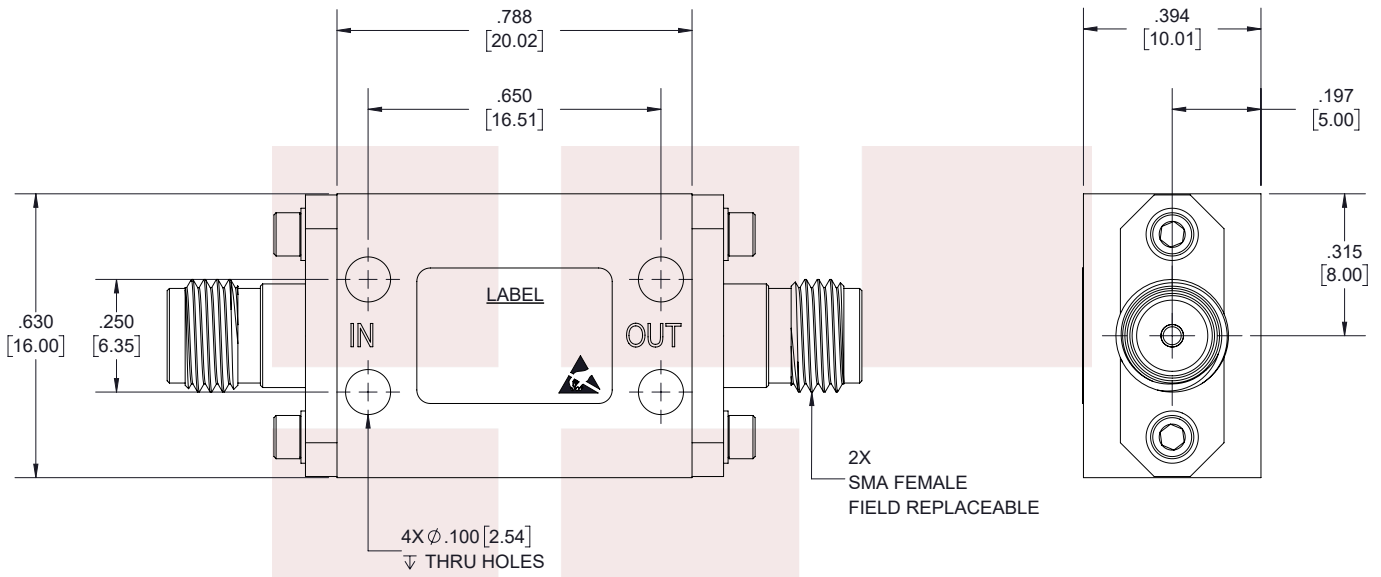


High Power Limiter, Field Replaceable SMA, 100W Peak Power, 15 us Recovery, 18 dBm Flat Leakage, 8 GHz to 12 GHz from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [High Power Limiter, Field Replaceable SMA, 100W Peak Power, 15 us Recovery, 18 dBm Flat Leakage, 8 GHz to 12 GHz FMLM2004](#)

URL: <https://www.fairviewmicrowave.com/sma-limiter-pin-15-us-18-dbm-12-ghz-fmlm2004-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



**LABEL**

**Fairview Microwave**  
an INFINIT<sup>®</sup> brand  
**FMLM2004**  
S/N: XXXXXXX  
D/C: YYYY

**STANDARD TOLERANCES**

.X	±0.2
.XX	±0.01
.XXX	±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

<p><b>Fairview Microwave</b> an INFINIT<sup>®</sup> brand</p>		<p>NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].</p>						
<p>TITLE</p> <p>High Power Limiter, Field Replaceable SMA, 100W Peak Power, 15 us Recovery, 18 dBm Flat Leakage, 8 GHz to 12 GHz</p>		<p>DWG NO</p> <p><b>FMLM2004</b></p>		<p>CAGE CODE</p> <p><b>3FKR5</b></p>				
CAD FILE	05/09/18	SHEET	1 OF 1	SCALE	N/A	SIZE	A	7361