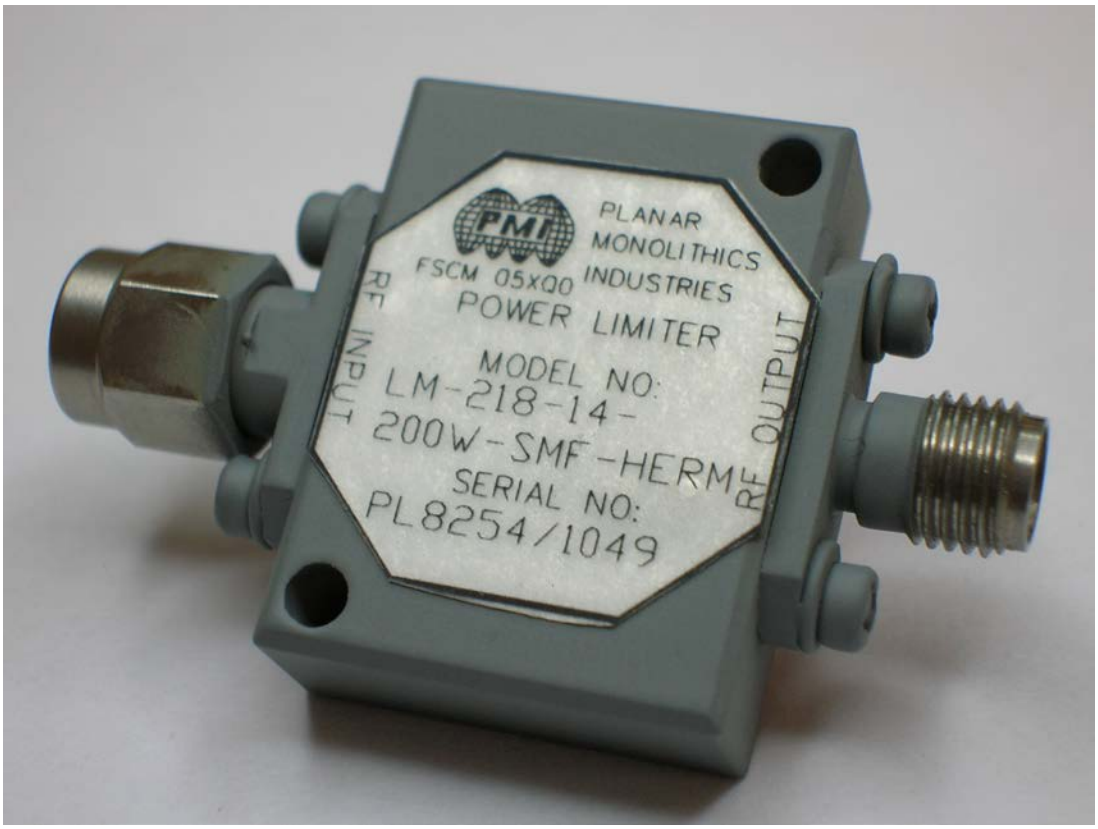
Typical Characteristics
on
LM-218-14-200W-SMF-HERM

PLANAR MONOLITHICS INDUSTRIES MODEL NUMBER LM-218-14-200W-SMF-HERM IS A HIGH POWER LIMITER THAT WORKS FROM 2 GHz TO 18 GHz THAT HANDLES 200 WATTS PEAK POWER WITH A PULSE WIDTH OF 1uSEC AND 0.1% DUTY CYCLE OR 1 WATT CW. THIS MODEL IS HERMETICALLY SEALED.



September 17, 2014

Designed By: PMI Engineering

Reported By: Sebastian Palacio

7311-F Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731
email: sales@pmi-rf.com

Typical Characteristics on LM-218-14-200W-SMF-HERM

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	10/14/10	
	A2	ECN #14-0094	06/26/14	

DESCRIPTION:

PLANAR MONOLITHICS INDUSTRIES MODEL NUMBER LM-218-14-200W-SMF-HERM IS A HIGH POWER LIMITER THAT WORKS FROM 2 GHz TO 18 GHz THAT HANDLES 200 WATTS PEAK POWER WITH A PULSE WIDTH OF 1uSEC AND 0.1% DUTY CYCLE OR 1 WATT CW. THIS MODEL IS HERMETICALLY SEALED.

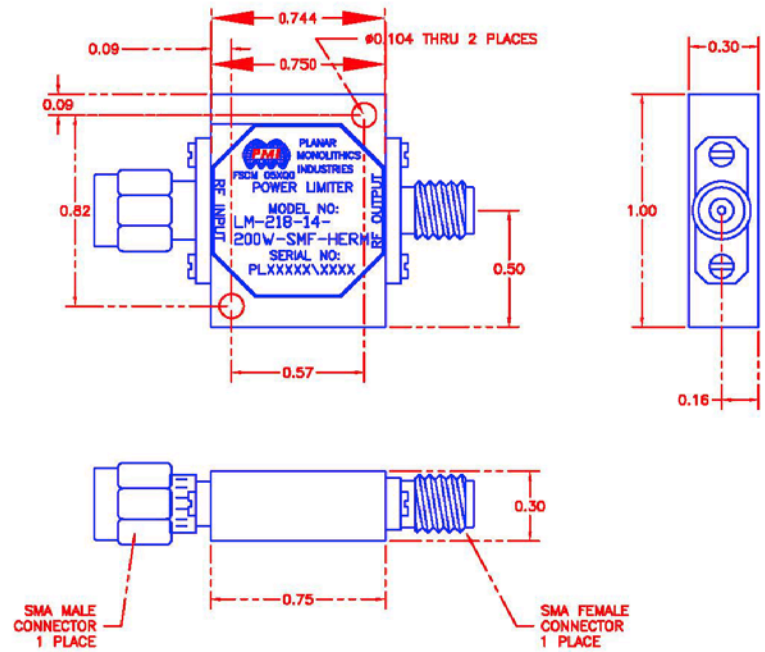
SPECIFICATIONS:

- FREQUENCY: 2 TO 18 GHz
- INSERTION LOSS: 2.0 dB MAXIMUM @ Pin=-10dBm
- PEAK POWER: 200 WATTS, 1usec and 0.1% Duty Cycle
- AVERAGE POWER: 1 Watt CW
- VSWR: 2.0:1 MAXIMUM
- LEAKAGE LEVEL: +14dBm MAXIMUM @ 1 Watt CW
- LOW LIMITING THRESHOLD: +6dBm TYPICAL
- RECOVERY TIME: 100nsec MAXIMUM @ Pin=27dBm
- CONNECTORS: SMA MALE / SMA FEMALE
- SIZE: 0.75 X 1.00 X .300 (H)
- WEIGHT: 1.5 OZ. TYPICAL
- SEALING: HERMETIC
- FINISH: GRAY EPOXY POLIMIDE COATING IAW MIL-C-22750, TYPE I OVER EPOXY POLIMIDE PRIMER IAW MIL-P-23377, TYPE I, CLASS 1 OR 3.

ENVIRONMENTAL RATINGS

- TEMPERATURE: -55°C TO +125°C (OPERATING) - NOTE 1
  -65°C TO +125°C (STORAGE)
- THERMAL SHOCK: MIL-STD-202F, METHOD 107D COND. A
- HUMIDITY: MIL-STD-202F, METHOD 103B COND. B
- SALT SPRAY: MIL-STD-202F, METHOD 101D+EST, COND. B
- VIBRATION: MIL-STD-202F, METHOD 204D COND. B
- SHOCK: MIL-STD-202F, METHOD 213B COND. C
- FUNGUS: MIL-STD-810F, METHOD 508.5

NOTE 1: Power Handling capability derated by 20% @ +125°C



M/N = MANUFACTURER PART NUMBER
O/N = OPTION NUMBER
S/N = SERIAL NUMBER

PMI CONFIDENTIAL AND PROPRIETARY

DESIGNED TO MEET ALL ENVIRONMENTAL CONDITIONS. ACTUAL TESTING AVAILABLE FOR AN ADDITIONAL CHARGE.

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
X.XX ±0.020
X.XXX ±0.010

PART NO.		
APPROVALS		DATE
DRAWN	KM	8/12/10
CHECKED		
ISSUED		

PLANAR MONOLITHICS INDUSTRIES
FREDERICK, MARYLAND

TITLE: PRODUCT FEATURE
LM-218-14-200W-SMF-HERM
HIGH POWER LIMITER

SIZE	FSCM NO.	DWG NO.	REV.
A	05XQ0	27013526	A2

SCALE N:S SHEET 1 of 1

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TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	Frequency Range:	2 to 18 GHz	2 to 18 GHz	
2	Insertion Loss @ -10dBm Input:	2.0 dB Max.	1.8 dB	
3	Peak Power:	200 Watts, 1 us. Pulse, 0.1% Duty Cycle	200 Watts, 1 us. Pulse, 0.1% Duty Cycle	
4	Average Power:	1 Watt CW (+30dBm)	1W	
5	Input & Output VSWR @ 0dBm:	2.0 : 1 Max.	1.7:1 See Plot	
6	RF Leakage @ 1 Watt CW (+30 dBm):	+14 dBm Max.	+10 dBm Typ.	
7	Low Limiting Threshold:	+6 dBm Typical	+6 dBm Typical	
8	Recovery Time @ +27 dBm Input:	100 ns Max.	85ns See Plot	

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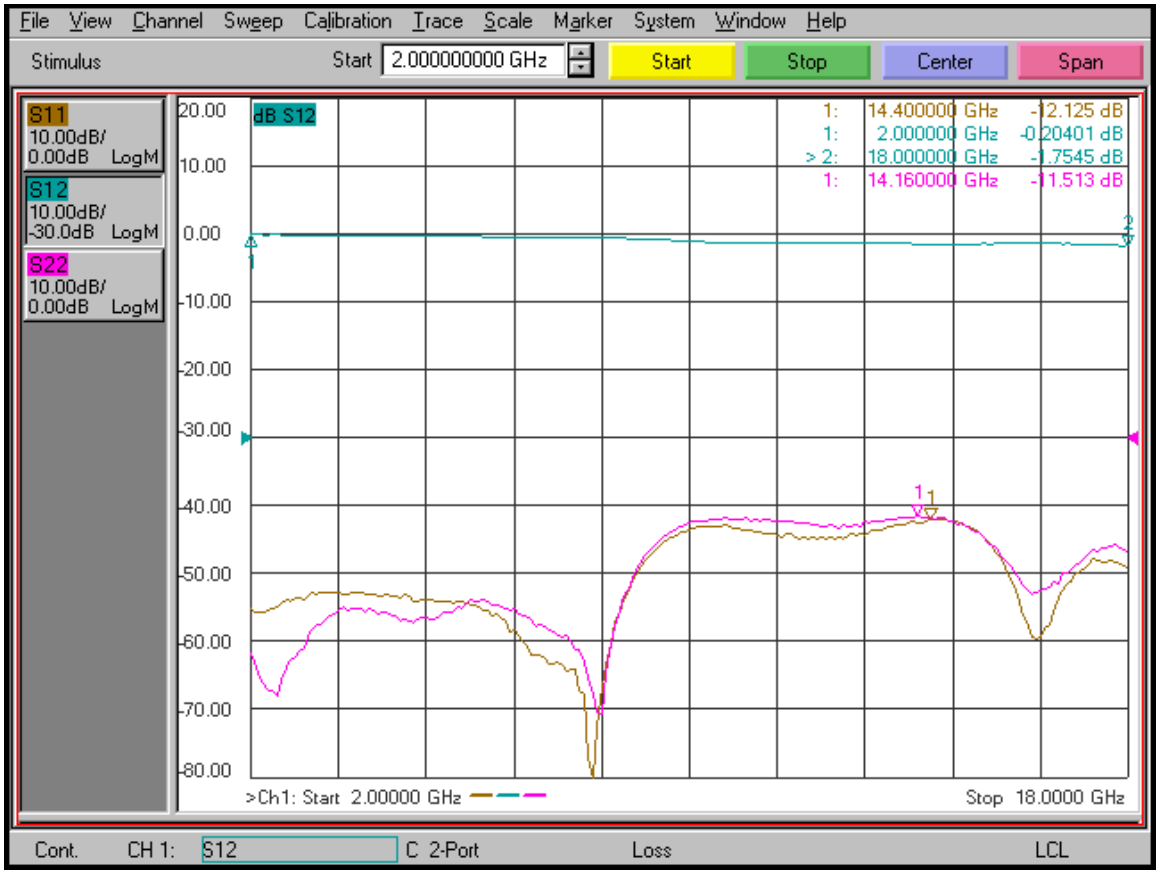
Insertion Loss and Return Loss



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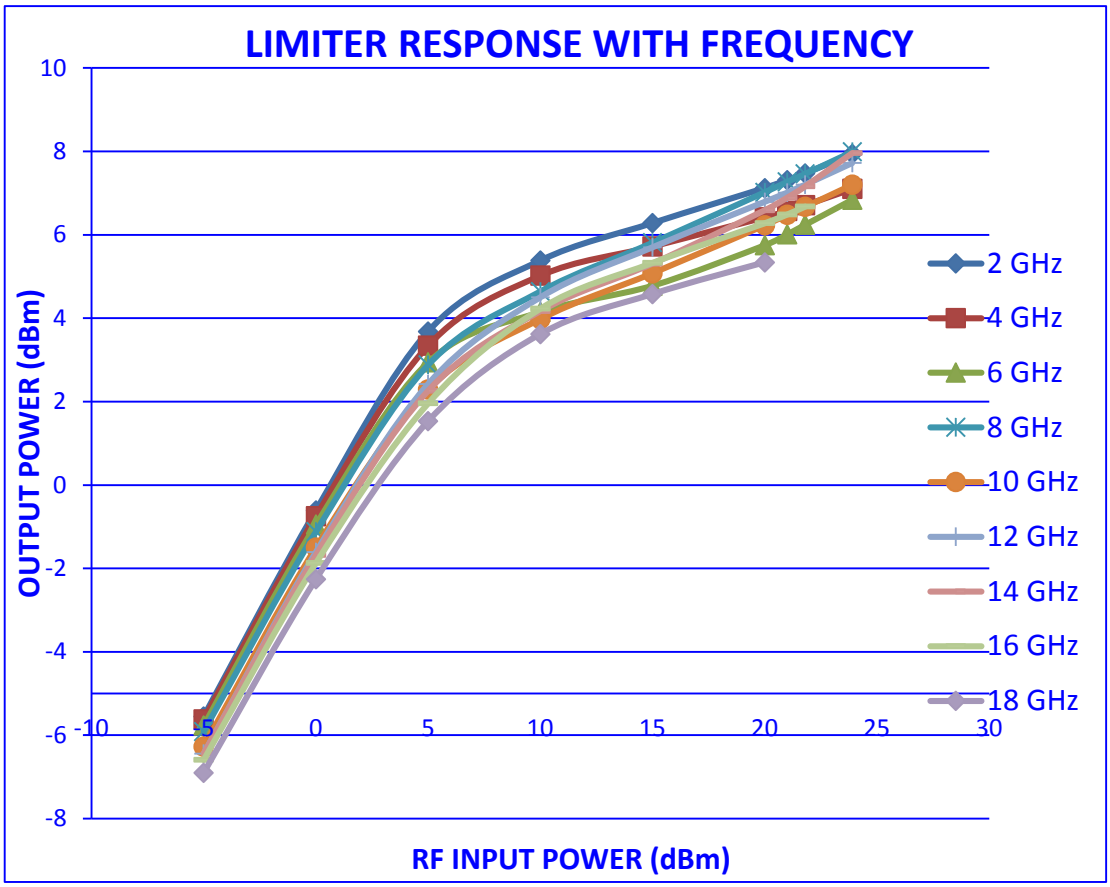

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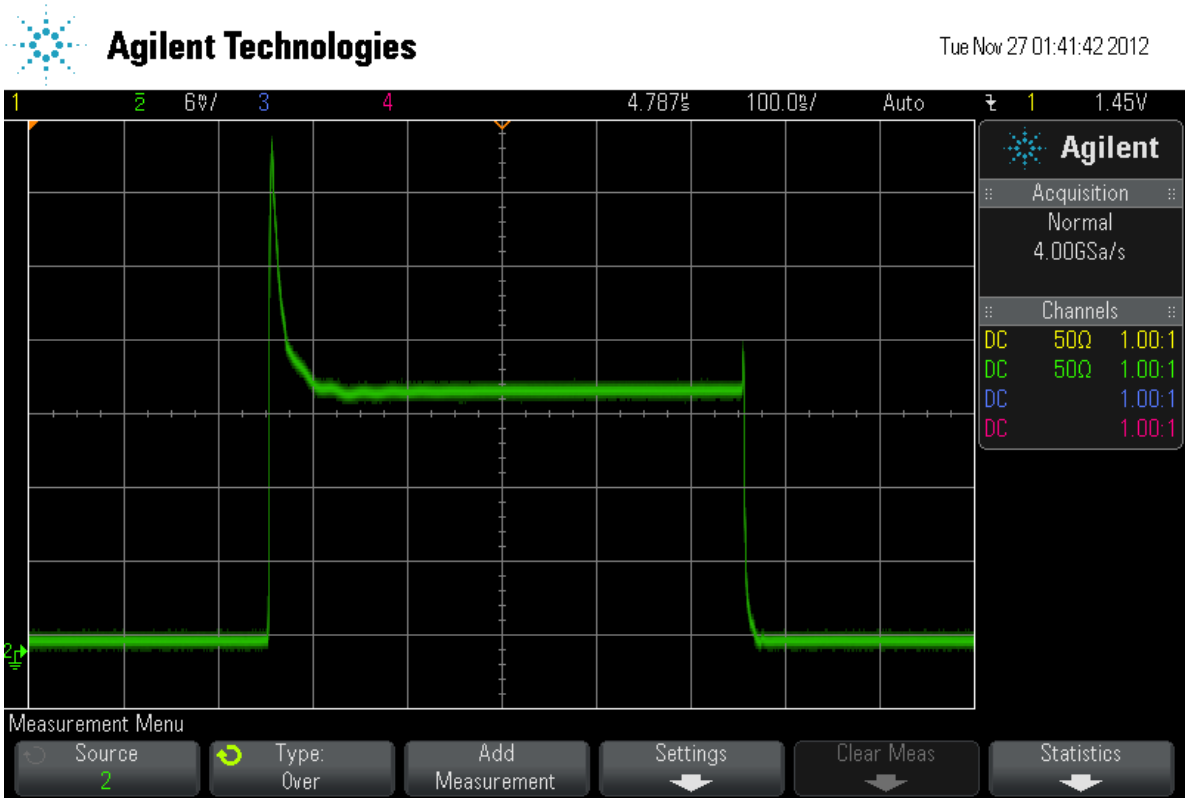
Recovery Time

100ns per Div.



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