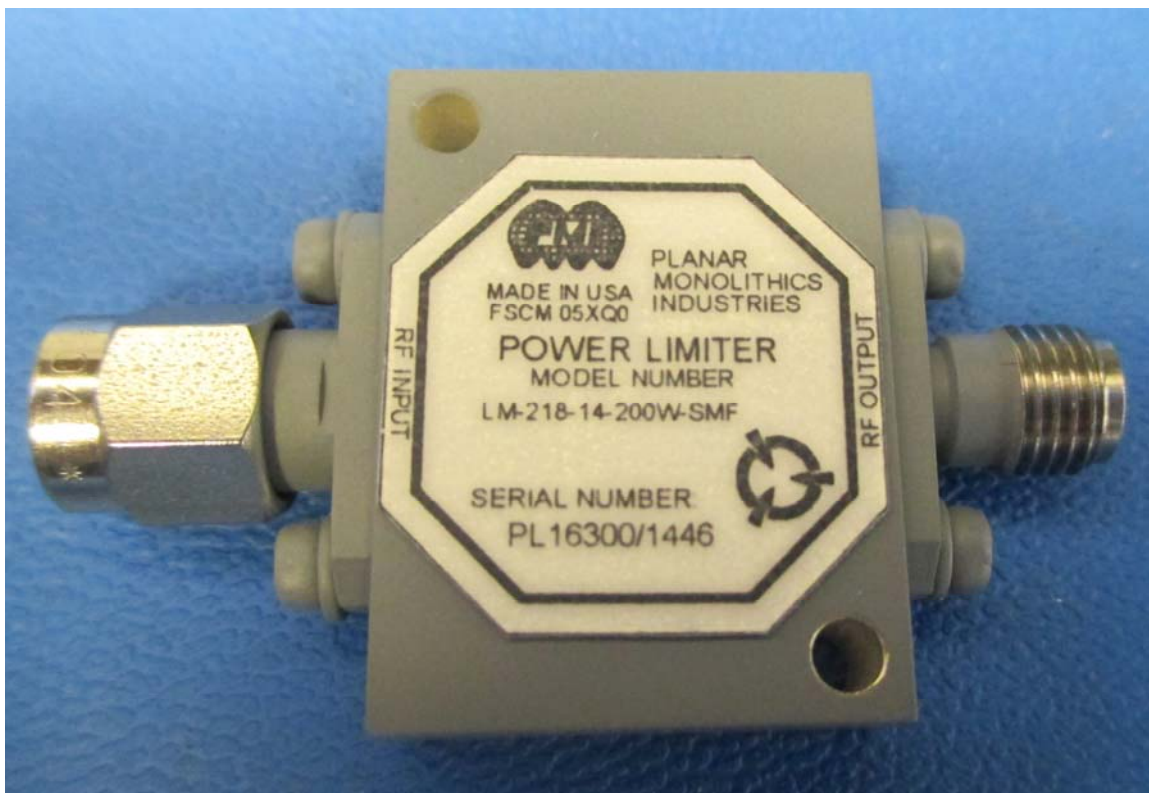




Typical Characteristics
on
LM-218-14-200W-SMF

PLANAR MONOLITHICS INDUSTRIES MODEL NUMBER LM-218-14-200W-SMF 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.



November 25, 2014

Designed By: PMI Engineering

Reported By: Harold Holvick



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

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

SPECIFICATIONS:

- FREQUENCY:..... 2 TO 18 GHz
- INSERTION LOSS:..... 2.0 dB MAXIMUM @ Pin=-10dbm
- PEAK POWER:..... 200 WATTS, 1μsec ond 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
- 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.

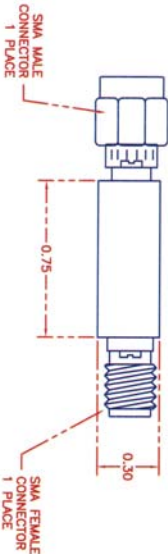
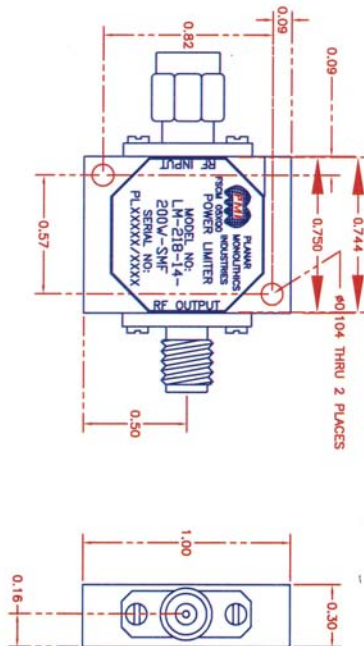
ENVIRONMENTAL RATINGS

- 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

DESIGNED TO MEET ALL ENVIRONMENTAL CONDITIONS. ACTUAL TESTING AVAILABLE FOR AN ADDITIONAL CHARGE.
 NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

REVISIONS		
ZONE	REV.	DATE
	1	02/19/14
ORIGINAL RELEASE		



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

PMI CONFIDENTIAL AND PROPRIETARY

PART NO.		APPROVAL		DATE	
		K.M.		6/12/10	
TITLE		SIZE		DRAWING NO.	
PLANAR MONOLITHICS INDUSTRIES FREDERICK, MARYLAND		A		05X00	
PRODUCT FEATURE LM-218-14-200W-SMF HIGH POWER LIMITER		DWG NO.		27022625	
SCALE N:5		SHEET		1 of 1	
				REV. 1	

ALL DIMENSIONS ARE IN INCHES
 TOLERANCES:
 XXX .0000
 XXXX .0010



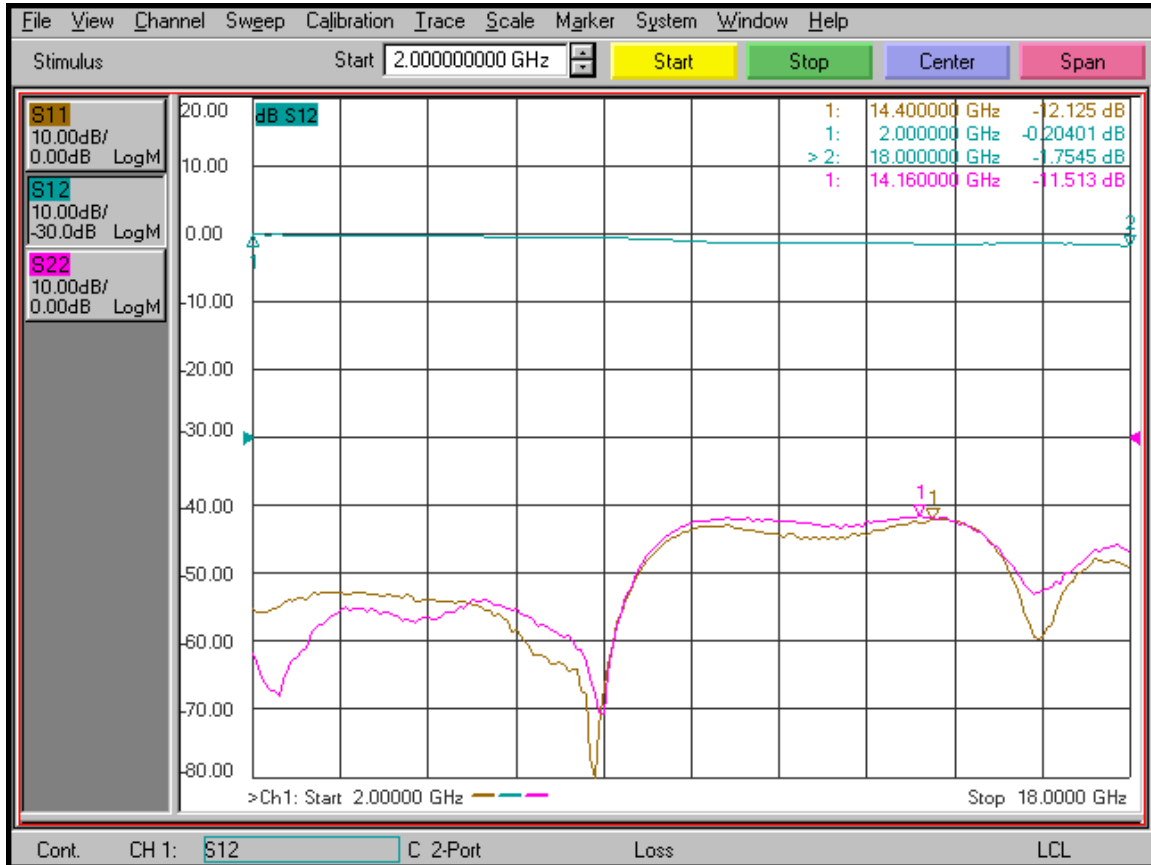
Typical Characteristics on LM-218-14-200W-SMF

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	



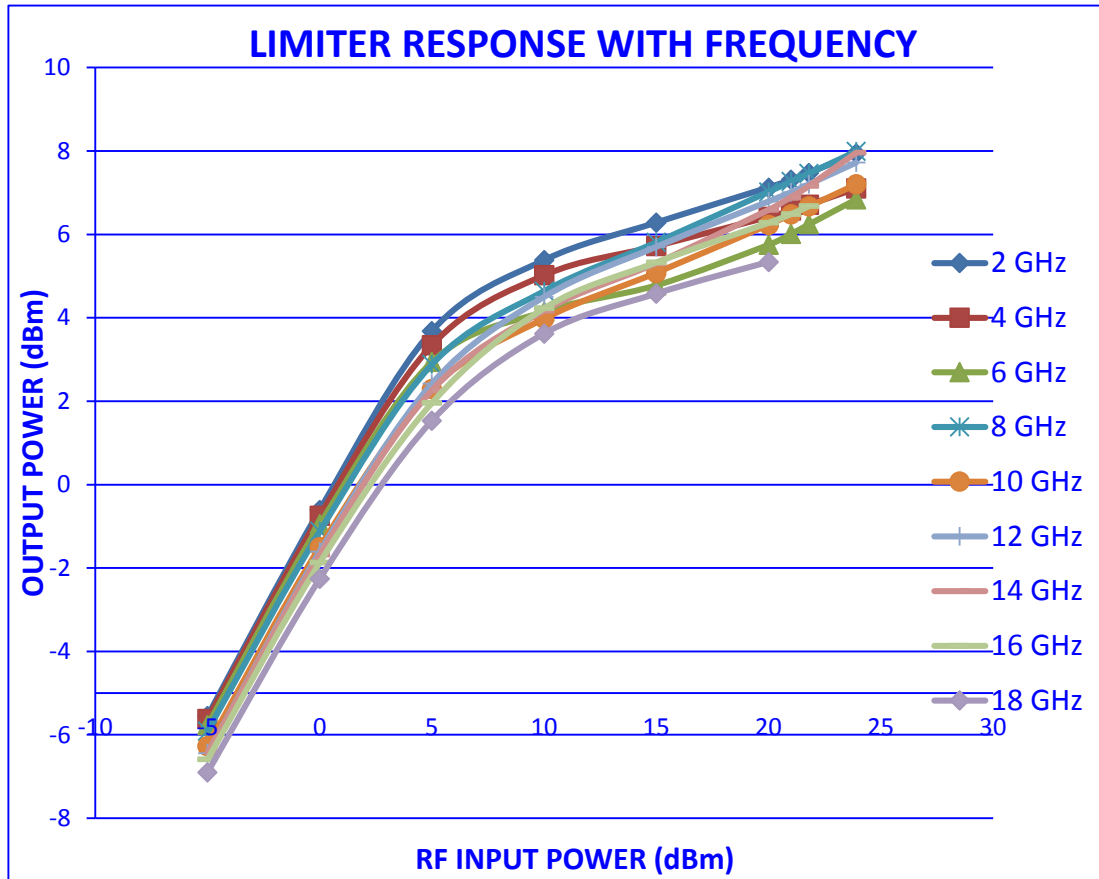
Typical Characteristics on LM-218-14-200W-SMF

Insertion Loss and Return Loss





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





Typical Characteristics on LM-218-14-200W-SMF Recovery Time

100ns per Div.



Agilent Technologies

Tue Nov 27 01:41:42 2012

