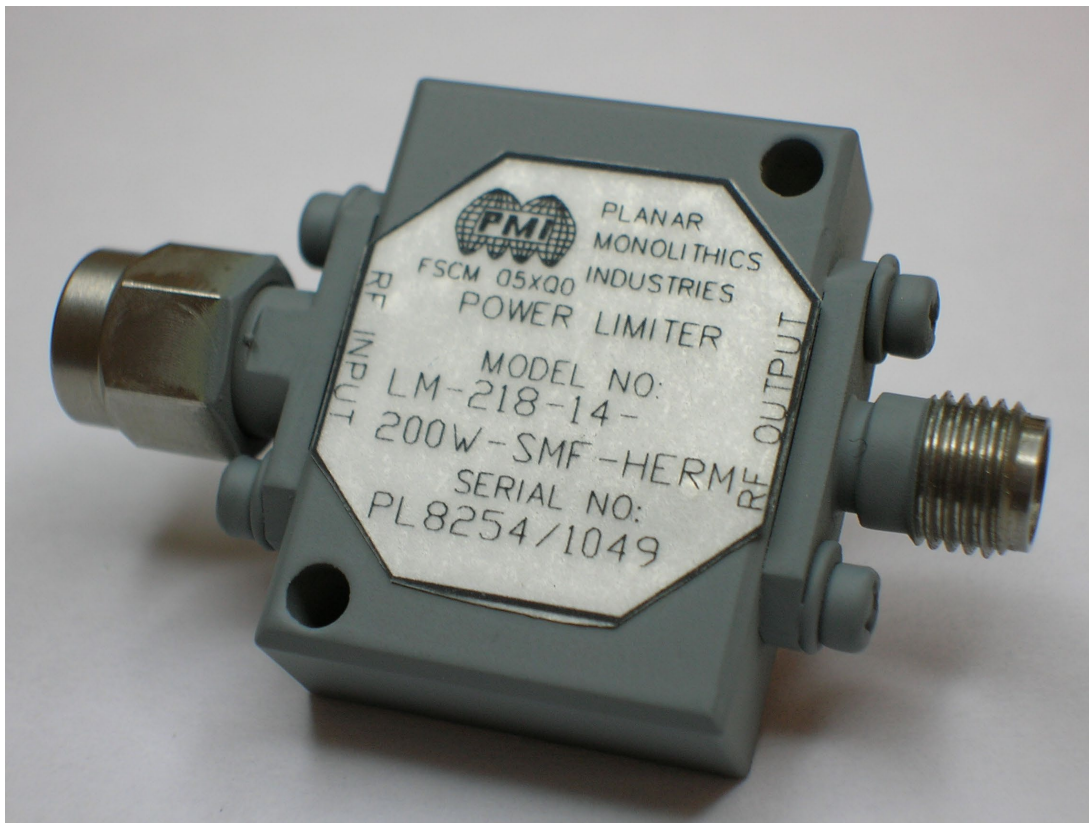




Typical Characteristics on LM-218-14-200W-SMF-HERM

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 2 WATTS CW. THIS MODEL IS HERMETICALLY SEALED.



September 6, 2024

Designed By: PMI Engineering

Reported By: Sebastian Palacio



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

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
2 WATTS CW. THIS MODEL IS HERMETICALLY SEALED.

SPECIFICATIONS:

- FREQUENCY: 2 TO 18 GHz
- INSERTION LOSS: 2.0 dB MAXIMUM @ Pin=-10dBm
- PEAK POWER: 200 WATTS MAXIMUM, 1usec and 0.1% Duty Cycle
- AVERAGE POWER: 2 Watt CW MAXIMUM
- VSWR: 2.0:1 MAXIMUM
- LEAKAGE LEVEL: +15dBm MAXIMUM @ 2 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

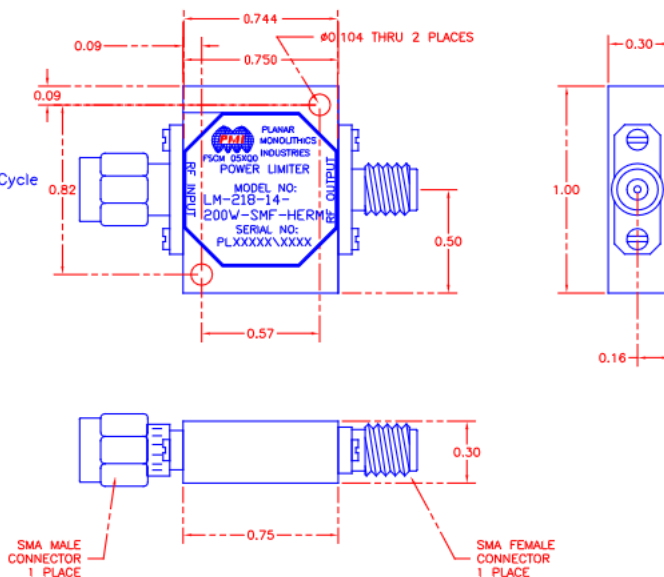
- TEMPERATURE: -55°C TO +125°C (OPERATING) - NOTE 1
-65°C TO +125°C (STORAGE)
- THERMAL SHOCK: MIL-STD-202F, METHOD 107D COND. A
- HUMIDITY: MIL-STD-202F, METHOD 103B COND. B
- SALT SPRAY: MIL-STD-202F, METHOD 101D+EST, COND. B
- VIBRATION: MIL-STD-202F, METHOD 204D COND. B
- SHOCK: MIL-STD-202F, METHOD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

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

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

REVISIONS			
ZONE	REV.	DESCRIPTION	DATE
	A1	ORIGINAL RELEASE	10/14/10
	A2	ECN #14-0094	06/26/14
	A3	ECN #24-0254	08/29/24



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

PMI CONFIDENTIAL AND PROPRIETARY

PART NO.		PMI PLANAR MONOLITHICS INDUSTRIES FREDERICK, MARYLAND	
APPROVALS	DATE	TITLE	
DRAWN KM	8/12/10	PRODUCT FEATURE	
CHECKED		LM-218-14-200W-SMF-HERM	
ISSUED		HIGH POWER LIMITER	
SIZE A	FSOM NO. 05XQ0	DWG NO. 27013526	REV. A3
SCALE N:S		SHEET 1 of 1	



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

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 Max, 1 us. Pulse, 0.1% Duty Cycle	200 Watts, 1 us. Pulse, 0.1% Duty Cycle	
4	Average Power:	2 Watts CW max	1W Measured at 1 W CW	
5	Input & Output VSWR @ 0dBm:	2.0 : 1 Max.	1.7:1 See Plot	
6	RF Leakage @ 2 Watt CW (+30 dBm):	+15 dBm Max.	+10 dBm Typ. Measured at 1 W CW	
7	Low Limiting Threshold:	+6 dBm Typical	+6 dBm Typical	
8	Recovery Time @ +27 dBm Input:	100 ns Max.	85ns See Plot	



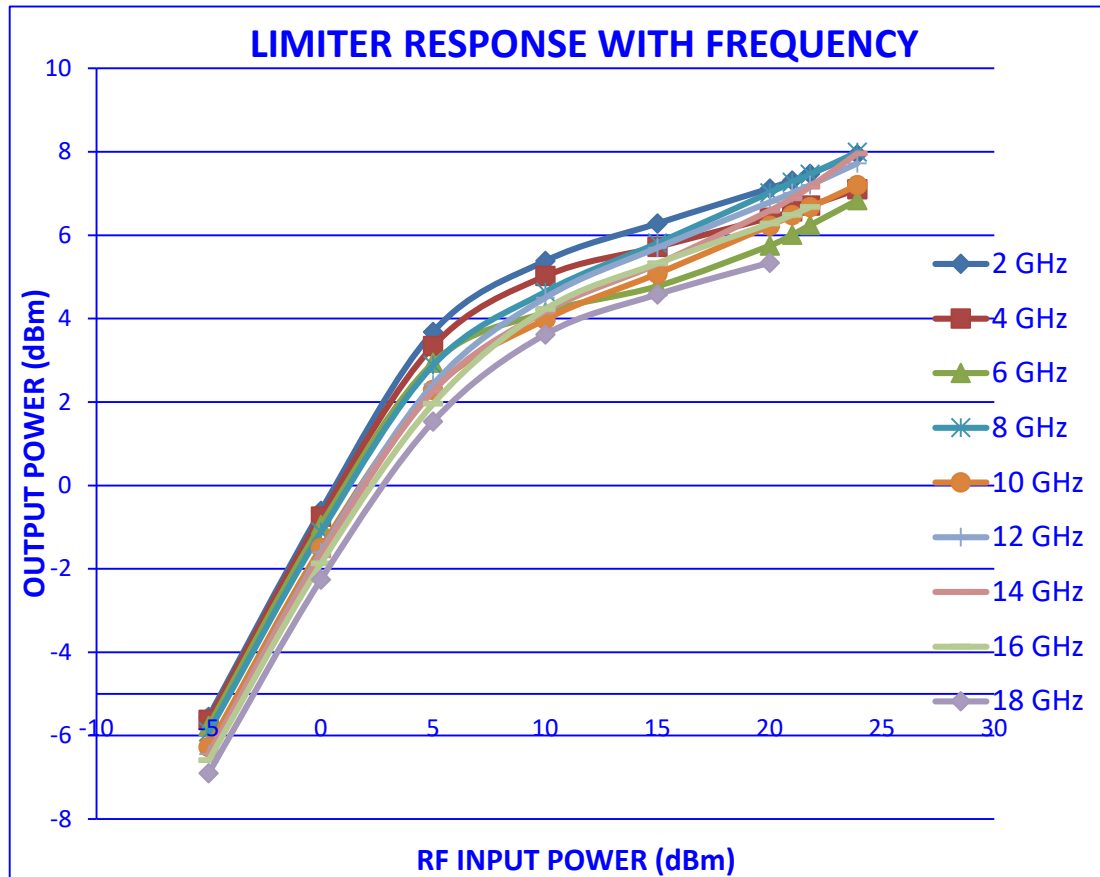
Typical Characteristics on LM-218-14-200W-SMF-HERM

Insertion Loss and Return Loss





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





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

Recovery Time

100ns per Div.



Agilent Technologies

Tue Nov 27 01:41:42 2012

