

**TYPICAL CHARACTERISTICS  
ON  
LM-10M18G-16-20W-RAD-OPT28**

**PMI MODEL NUMBER: LM-10M18G-16-20W-RAD-OPT28 IS A COXIAL LIMITER WITH AN OPERATING RANGE OF 2.0 TO 8.0 GHz. THIS LIMITER IS OUTFITTED WITH SMA CONNECTORS**



**Thursday, February 8, 2024**

**Designed and Reported By: M. Laulis**

**Tested By: Kevin C**

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ON  
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**Outline Drawing**

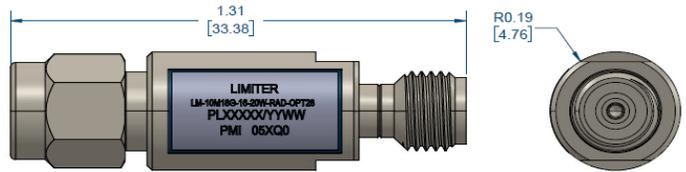
**DESCRIPTION:**

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ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	10/12/2010	

**SPECIFICATIONS:**

- FREQUENCY RANGE:..... 2.0 TO 8.0 GHz
- RF POWER HANDLING:..... 20W CW MAX  
500W PEAK MAX (10 µs PW / 1kHz PRF)
- INSERTION LOSS:..... 1.2 dB @ -10 dBm INPUT POWER
- RECOVERY TIME (3dB):..... 250 ns MAX
- LEAKAGE POWER:..... +15 dBm TYP
- IMPEDANCE:..... 50 Ω
- VSWR:..... 1.7:1 MAX @ -10 dBm INPUT POWER
- LIMITING THRESHOLD:..... +5 dBm NOM (1 dB COMPRESSION)
- CONNECTORS:..... INPUT: 2.92 MALE OUTPUT: 2.92 FEMALE
- FINISH:..... NICKEL PLATED
- SIZE:..... 1.314" (L) X 0.375" Ø
- WEIGHT:..... 20g [0.705 oz] MAX



**ENVIRONMENTAL RATINGS:**

- TEMPERATURE:..... -55°C TO +85°C (OPERATING)  
-62°C TO +95°C (STORAGE)
- HUMIDITY:..... 100%
- SHOCK:..... 20G 11±1ms
- ALTITUDE:..... 70,000 FT
- VIBRATION:..... 0.1 inchpp OR ± 10G, 5 ~ 500 Hz  
(FIGURE 2, SHEET 1 OF 3, CURVE IV)

NOTE: SPECIFICATIONS WILL VARY OVER TEMPERATURE  
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

PMI CONFIDENTIAL AND PROPRIETARY

APPROVALS		DATE	<b>Quantic PMI</b> <small>PLANNED FOR RELEASE</small> 7309-A GROVE ROAD FREDERICK, MD 21704 USA WWW.QUANTICPMI.COM TEL: 301-662-5019 FAX: 301-662-1731 ISO 9001 CERTIFIED	
DRAWN	M. LAULIS	10/12/2010	TITLE	
REDRAWN			OUTLINE	
ISSUED			SIZE	REV
	B	05XQ0	27047380	A1
			SCALE 2:1	SHEET 1 OF 1

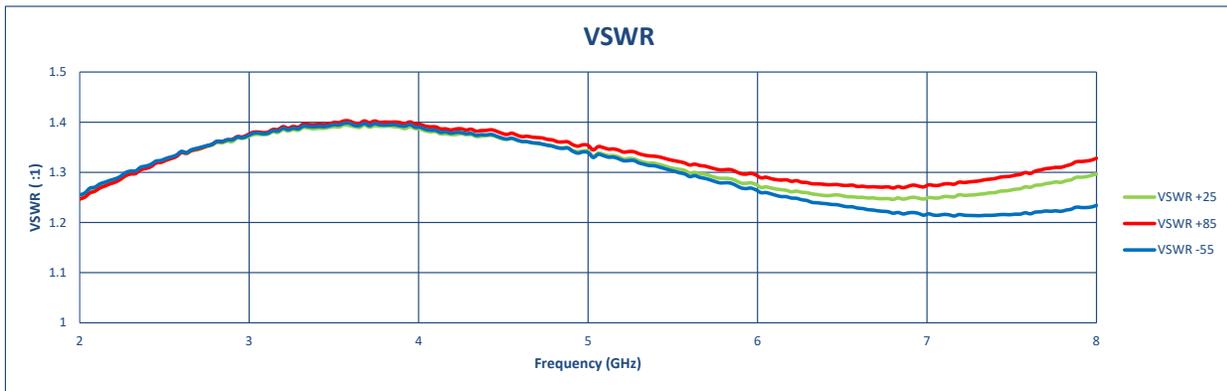
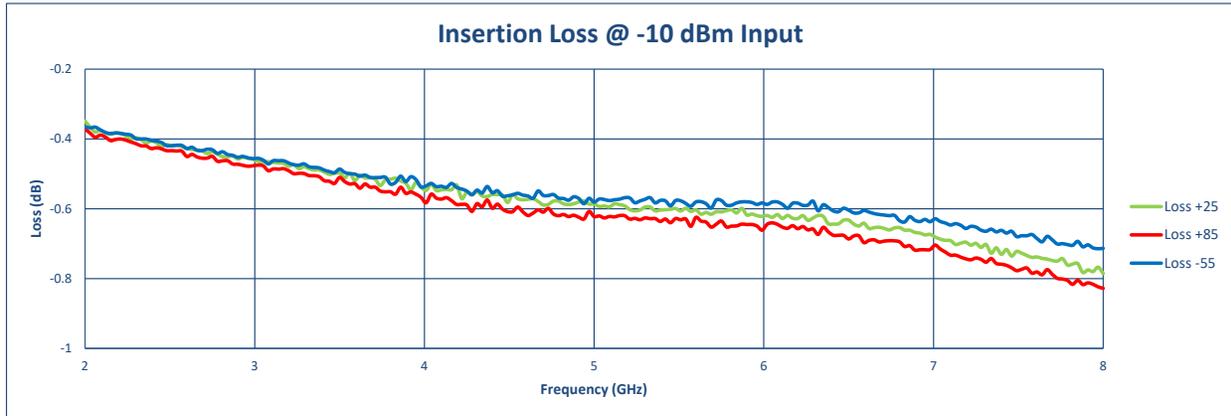


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TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	Test Results			QA QC
			+25°C	+85°C	-55°C	
1	Frequency Range:	2 GHz to 8 GHz	2 GHz to 8 GHz	2 GHz to 8 GHz	2 GHz to 8 GHz	
2	Insertion Loss:	1.2 dB Max. @ -10 dBm Input Power	0.79 dB See Graph	0.83 dB See Graph	0.71 dB See Graph	
3	VSWR:	1.7:1 Max. @ -10 dBm Input Power	1.39:1 See Graph	1.4:1 See Graph	1.4:1 See Graph	
4	RF Power Handling:	20 W CW MAX 500 W PEAK MAX (10 μs PW / 1kHz POWER)	20 W CW 500 W Peak MAX	20 W CW 500 W Peak MAX	20 W CW 500 W Peak MAX	
5	Impedance:	50Ω	50Ω			
6	Limiting Threshold:	+5dBm NOM (1 dB Compression)	+ 10 dBm See Graph	+ 9 dBm See Graph	+ 11 dBm See Graph	
7	Leakage Power:	+15 dBm TYP	14.9 dBm	15.10 dBm	14.69 dBm	
8	Recovery Time (3dB) :	250 ns MAX	114 ns			

7309-A Grove Road Frederick, MD 21704 USA Phone: (301) 662-5019 Fax: (301) 662-1731  
Email: sales@pmi-rf.com

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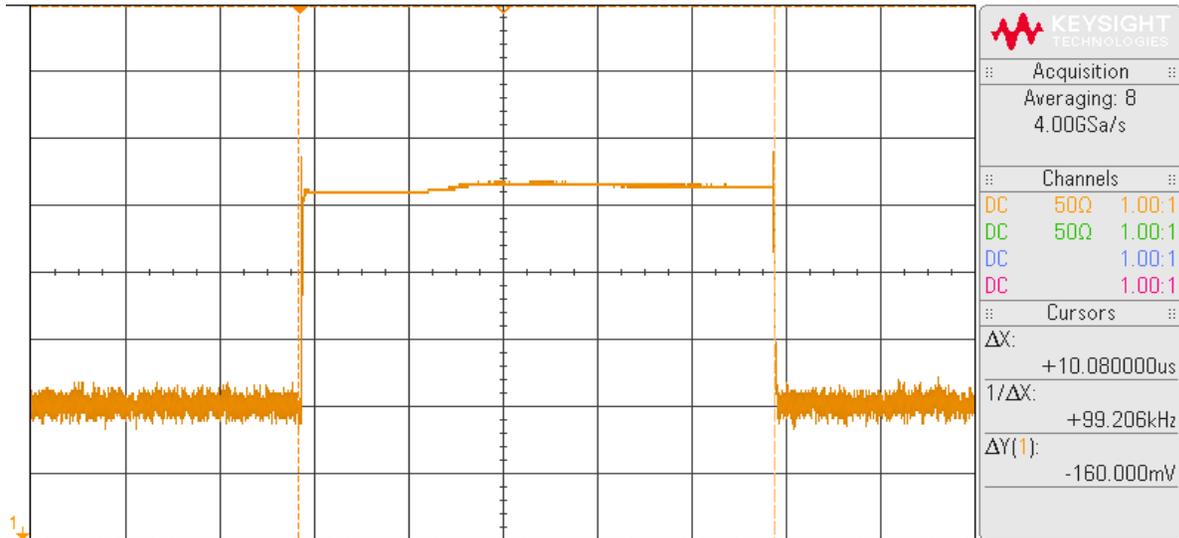


**Recovery Time**

**Full Pulse**  
500 W Peak 10µs 1kHz PRF

DSO-X 3034A, MY52103182: Tue Jan 30 14:19:34 2024

20V / 2 3 4 4.320% 2.000% / Auto f 2 1.39V



Save to file = scope\_5

Save

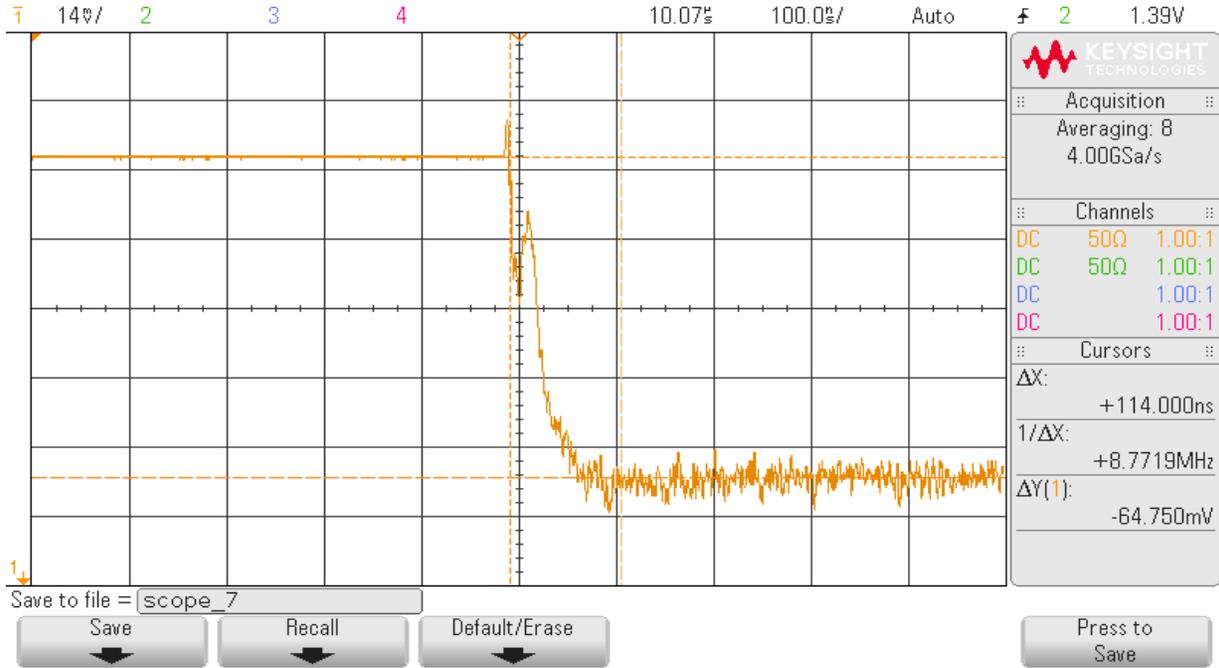
Recall

Default/Erse

Press to Save

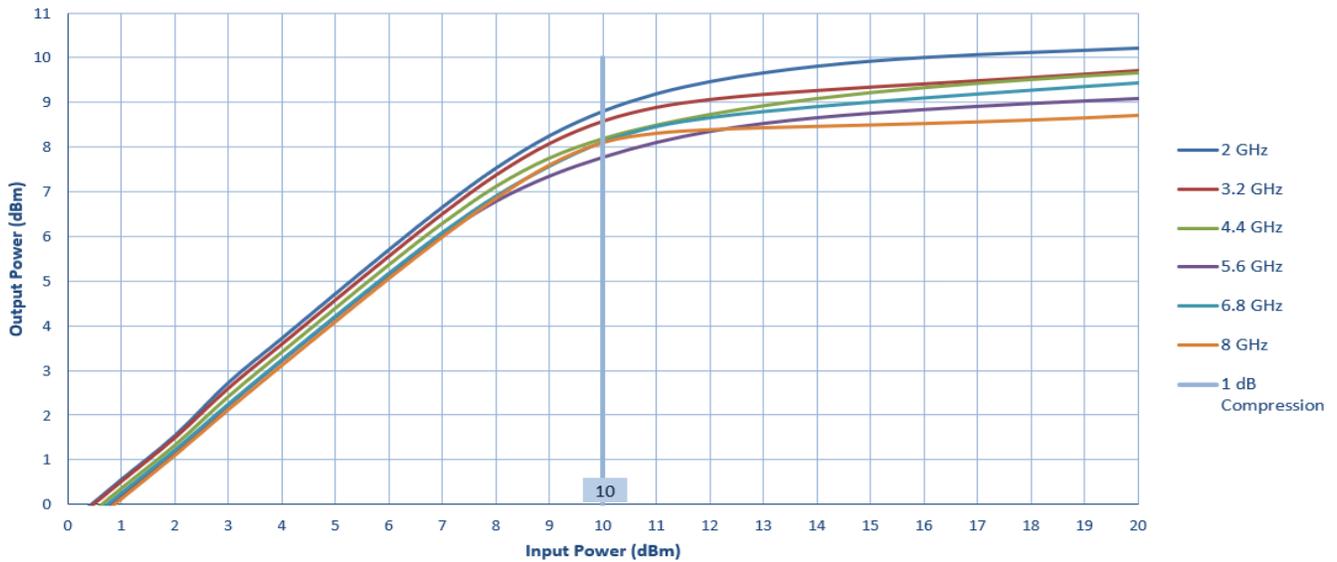
**Recovery Time**

DSO-X 3034A, MY52103182: Tue Jan 30 14:25:30 2024



**Limiter Response  
25°C**

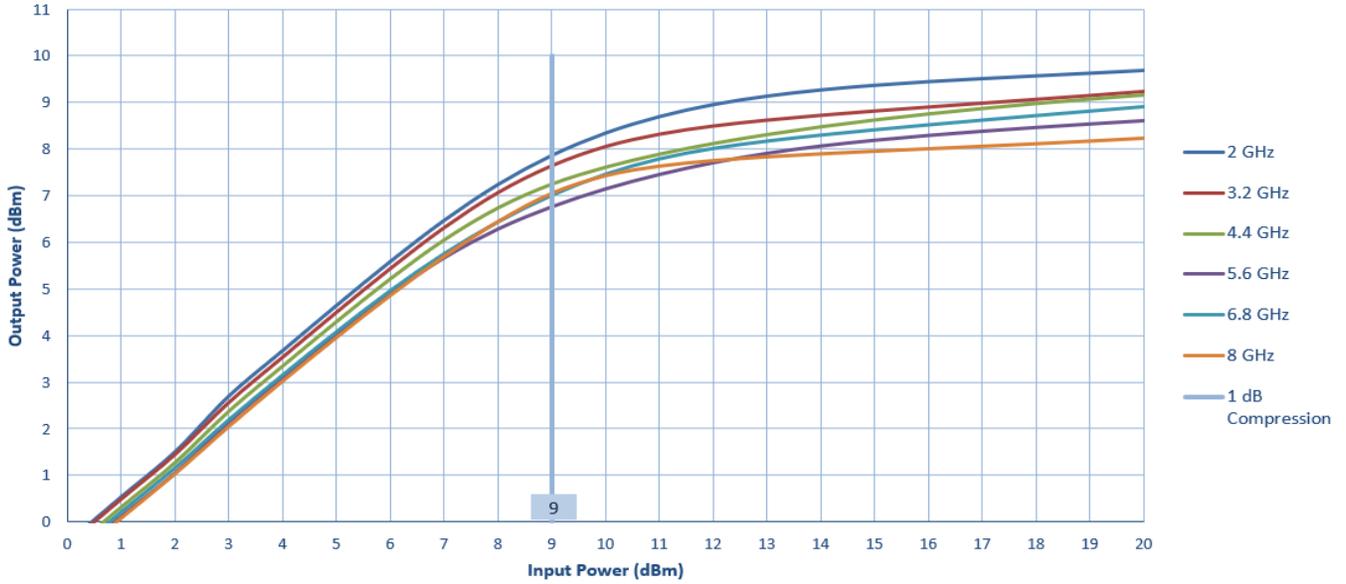
**Limiter Response with Frequency**



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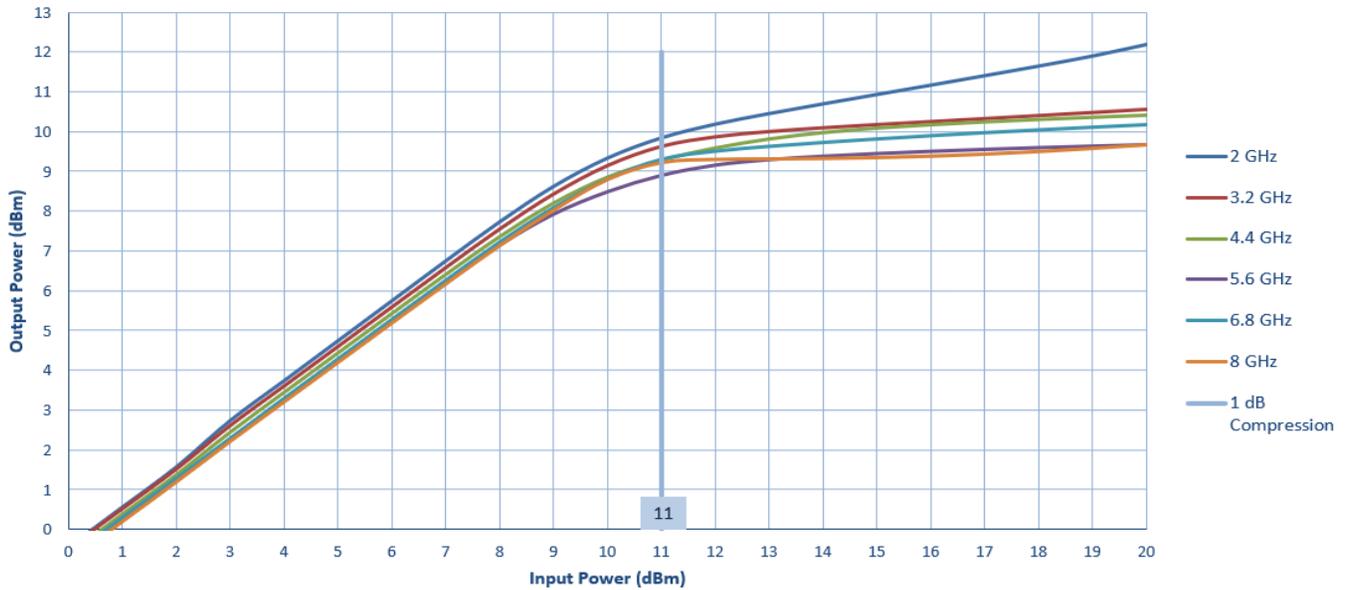
**85°C**

**Limiter Response with Frequency**



**-55°C**

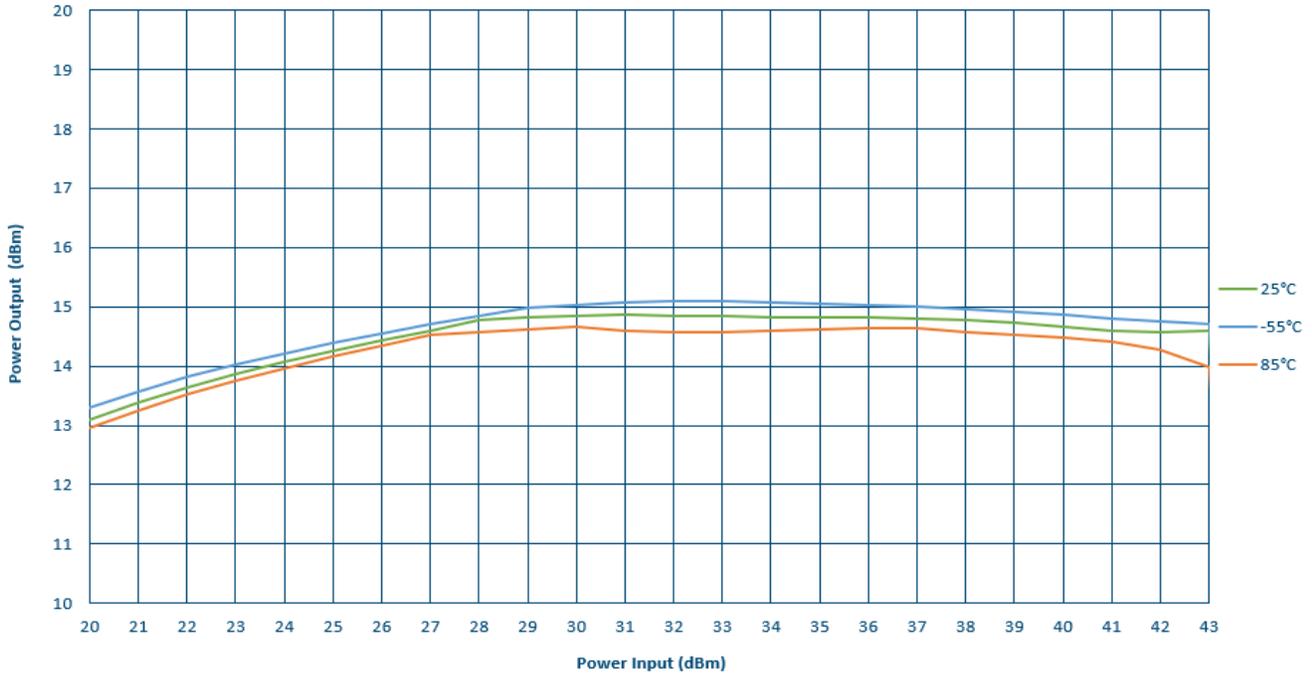
**Limiter Response with Frequency**



**TYPICAL CHARACTERISTICS  
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Leakage Power

**High Power Test Graph @ 2 GHz**



**High Power Test Graph @ 8 GHz**

