

**TYPICAL CHARACTERISTICS  
ON  
LM-100M18G-40DBM-10DBM-SFF**

**PMI MODEL NUMBER: LM-100M18G-40DBM-10DBM-SFF IS A RF LIMITER THAT OPERATES IN THE 0.1 GHz TO 18 GHz FREQUENCY RANGE. THIS LIMITER HAS A MAXIMUM INPUT POWER OF 10 W (+40 dBm) CW AND 1 kW (+60 dBm) PEAK @ 1 us PULSE WIDTH AND 1% DUTY CYCLE. MAXIMUM FLAT LEAKAGE IS 10.5 dBm AND VSWR IS 2.0:1 MAX.**



**July 23, 2025**

**Designed By:**

**Engineering PMI**

**Drawings By:**

**Matthew Laulis**

**Tested and Reported By:**

**Alfredo Lopez**

# TYPICAL CHARACTERISTICS ON LM-100M18G-40DBM-10DBM-SFF

## Outline Drawing

**DESCRIPTION:**

PMI MODEL NUMBER: LM-100M18G-40DBM-10DBM-SFF IS A RF LIMITER THAT OPERATES IN THE 0.1 GHz TO 18 GHz FREQUENCY RANGE. THIS LIMITER HAS A MAXIMUM INPUT POWER OF 10 W (+40 dBm) CW AND 1 kW (+60 dBm) PEAK @ 1 us PULSE WIDTH AND 1% DUTY CYCLE. MAXIMUM FLAT LEAKAGE IS 10 dBm AND VSWR IS 2.0:1 MAX.

**SPECIFICATIONS:**

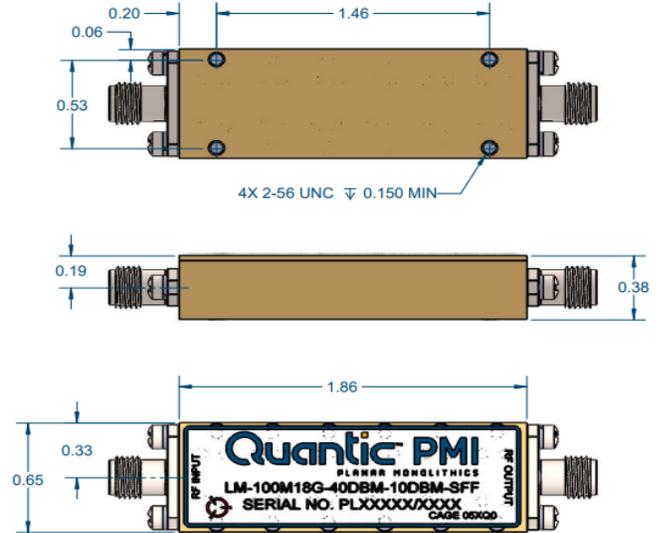
- FREQUENCY RANGE:..... 0.1 TO 18.0 GHz
- INPUT/OUTPUT VSWR:..... 2.0:1 MAX
- INSERTION LOSS:..... 4.0 dB MAX, 3.0 dB GOAL
- INPUT POWER:..... 10 W (+40 dBm) CW MAX
- RECOVERY TIME:..... 1 kW (+60 dBm) PEAK MAX @ 1us PW, 1% DC  
250 ns MAX @ 1kW PEAK POWER  
100 ns MAX @ 10 W
- FLAT LEAKAGE:..... 10.5 dBm MAX
- CONNECTORS:..... SMA (F) - FIELD REPLACABLE
- FINISH:..... GOLD PLATED
- \*INPUT AND OUTPUT DC BLOCKED

**ENVIRONMENTAL RATINGS:**

- TEMPERATURE:..... -54°C TO +85°C (OPERATING)  
-65°C TO +125°C (STORAGE)
- HUMIDITY:..... MIL-STD-202, METHOD 103B COND. B
- SHOCK:..... MIL-STD-202, METHOD 213B COND. B
- ALTITUDE:..... MIL-STD-202, METHOD 105C COND. B
- VIBRATION:..... MIL-STD-202, METHOD 107B COND. B
- TEMPERATURE CYCLE:..... MIL-STD-202, METHOD 107D COND. A

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

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	1/19/25	
	B1	ECN # 25-0220	7/23/2024	



PMI CONFIDENTIAL AND PROPRIETARY

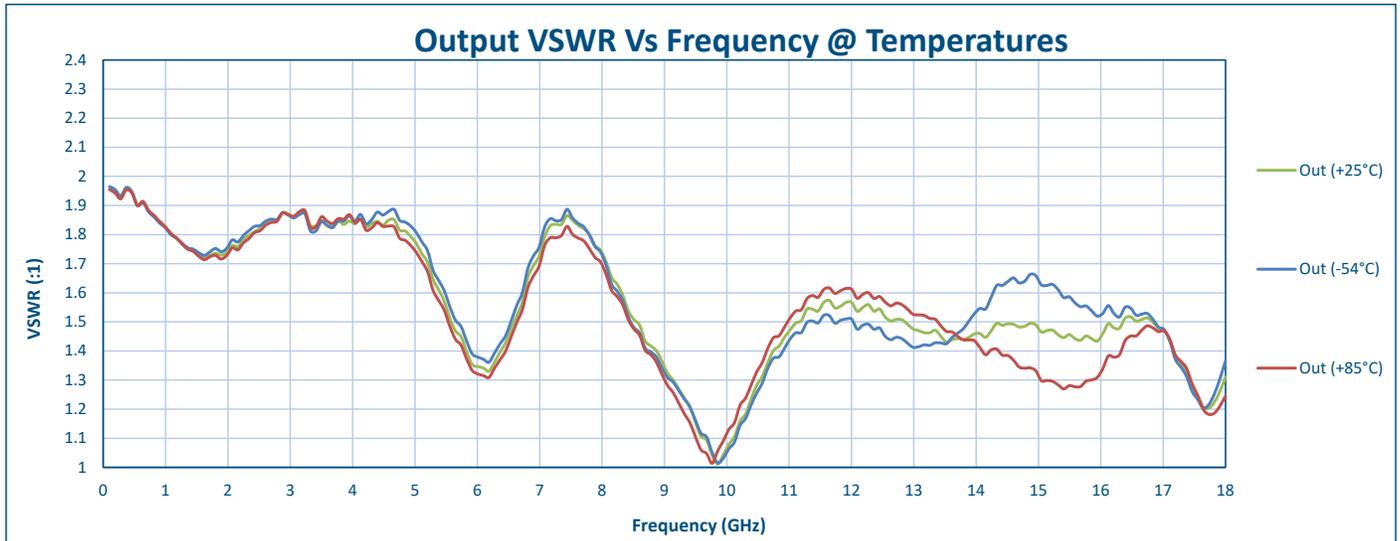
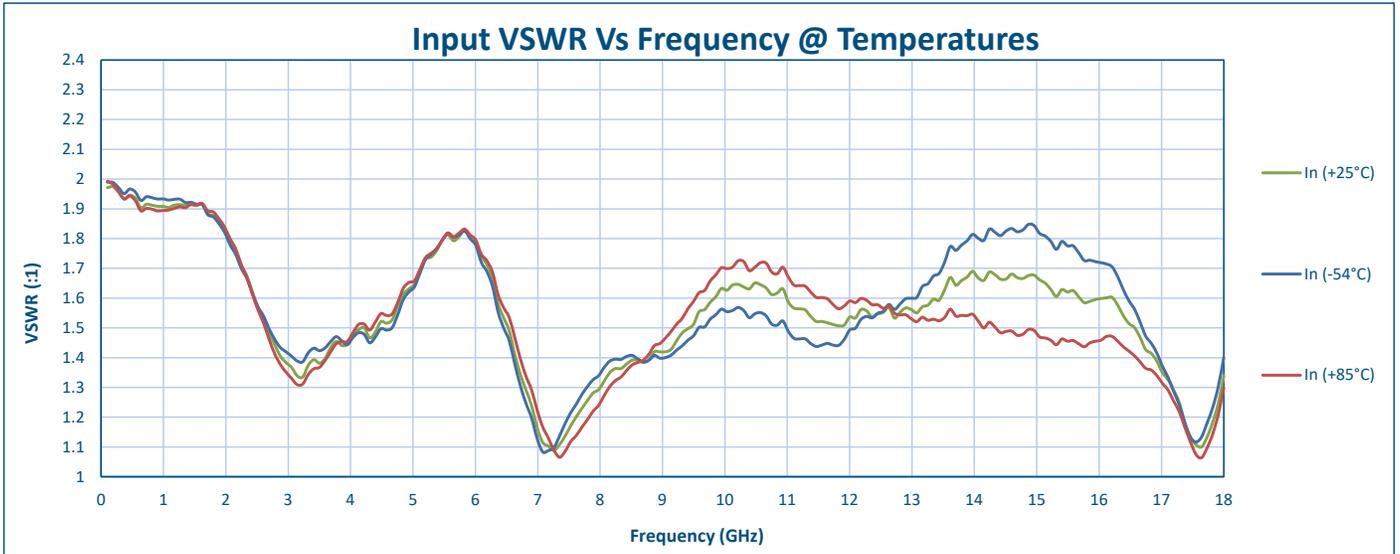
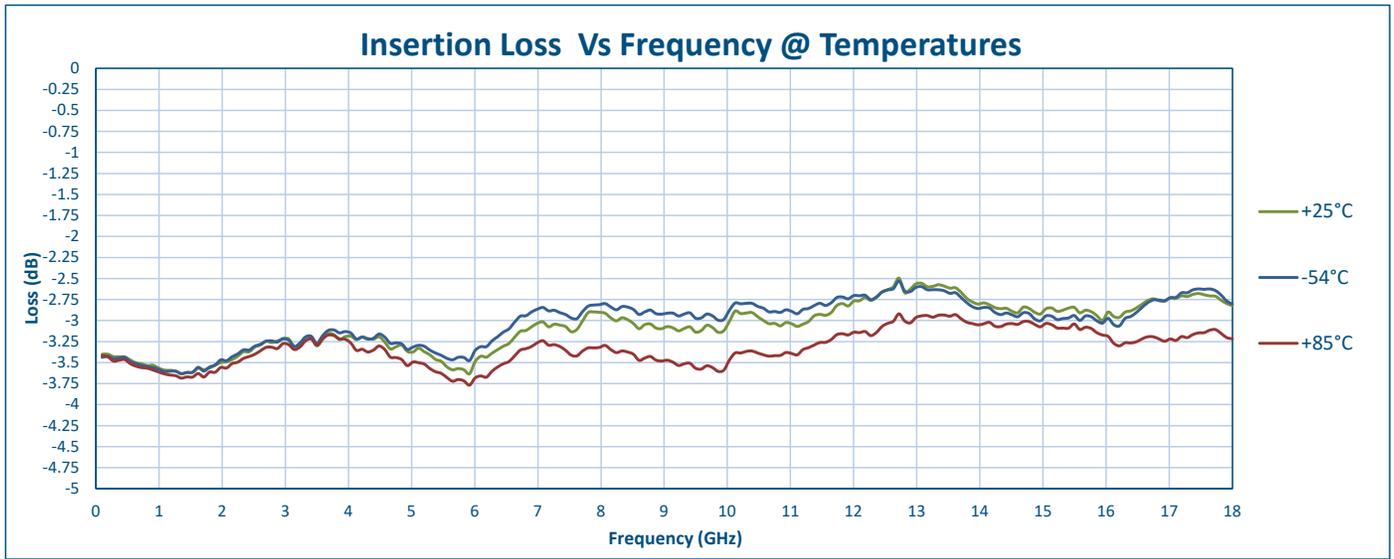
APPROVALS		DATE	TITLE	
DESIGNED	M. LAULIS	1/19/25	OUTLINE	
ISSUED			SIZE	REV.
			B1	05X00
			DWG NO.	27050240
			SCALE	2:1
				SHEET 1 OF 1

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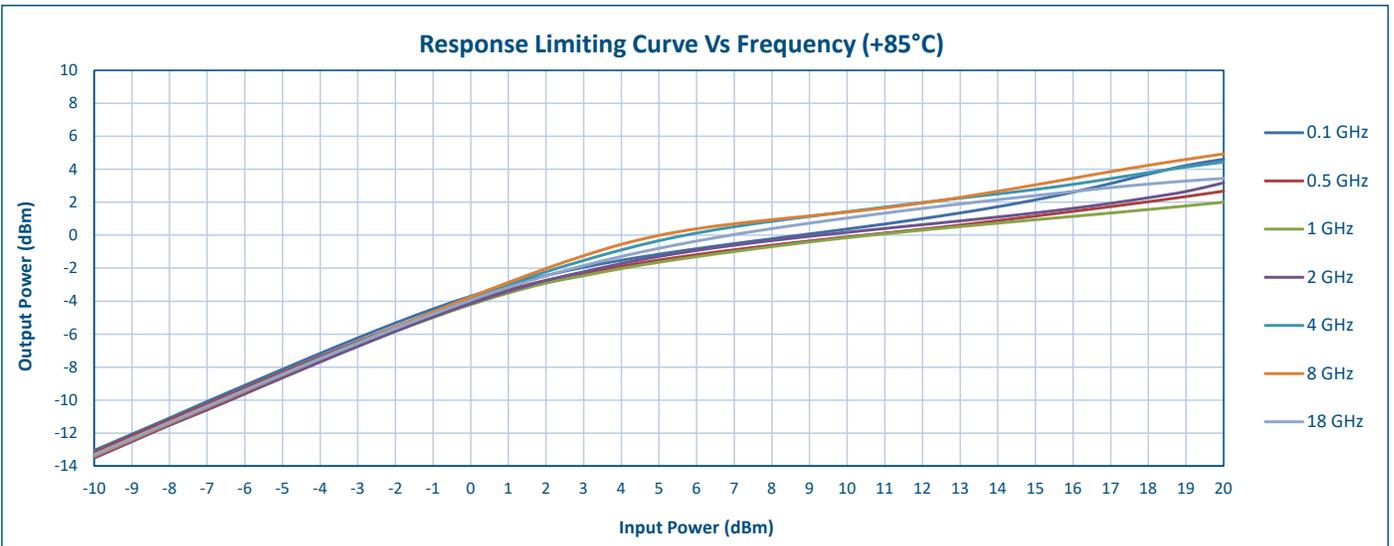
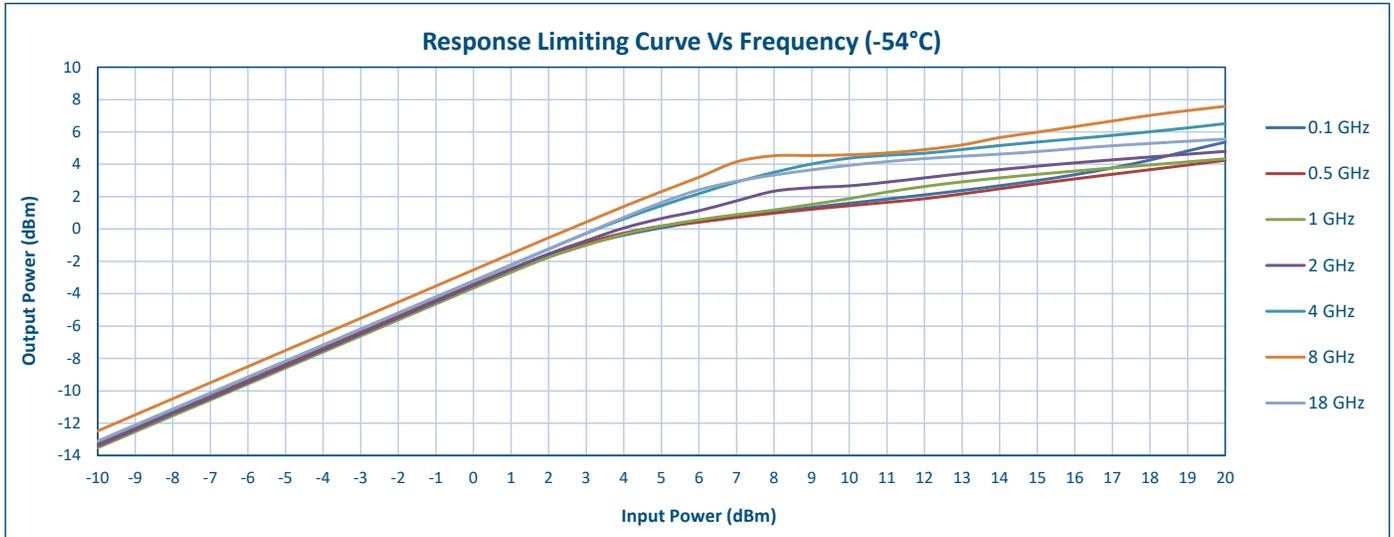
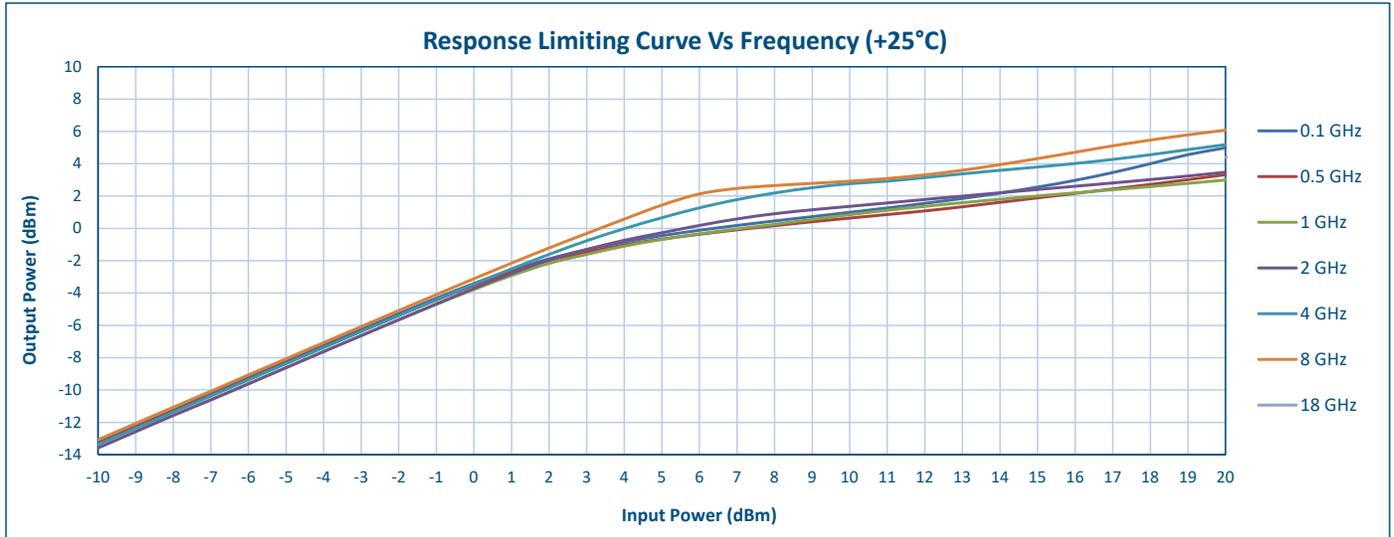
**Technical Specifications**

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	Test Results		
			+25°C	+54°C	+85°C
1	Frequency Range:	0.1 to 18 GHz	0.1 to 18 GHz	0.1 to 18 GHz	0.1 to 18 GHz
2	Insertion Loss:	4.0 dB Max. 3.0 dB Goal.	3.63 dB See Graph	3.63 dB See Graph	3.77 dB See Graph
3	VSWR	2.0:1 Max.	1.97 :1 See Graph	1.99 :1 See Graph	1.99 :1 See Graph
4	Input Power:	10 Watts Max. (CW)	Pass 10 Watts CW See Plot	Pass 10 Watts CW See Plot	Pass 10 Watts CW See Plot
		1 kW Peak Max. (1 $\mu$ s PW, 1% Duty Cycle)	Pass 1 kW Peak See Plot	Pass 1 kW Peak See Plot	Pass 1 kW Peak See Plot
5	Flat Leakage:	+10.5 dBm Max.	+10.1 dBm @10 Watts CW	+10.42 dBm @10 Watts CW	+9.69 dBm @ 10 Watts CW
			+10.08 dBm @ 1 kW Peak See Plot		
6	Recovery Time	250 ns Max. @ 1 kW Peak 100 ns Max. @ 10 W	28.30 ns @ 1 kW Peak Input Power See Plot		
			75 ns @ 10 Watts Peak Input Power See Plot		

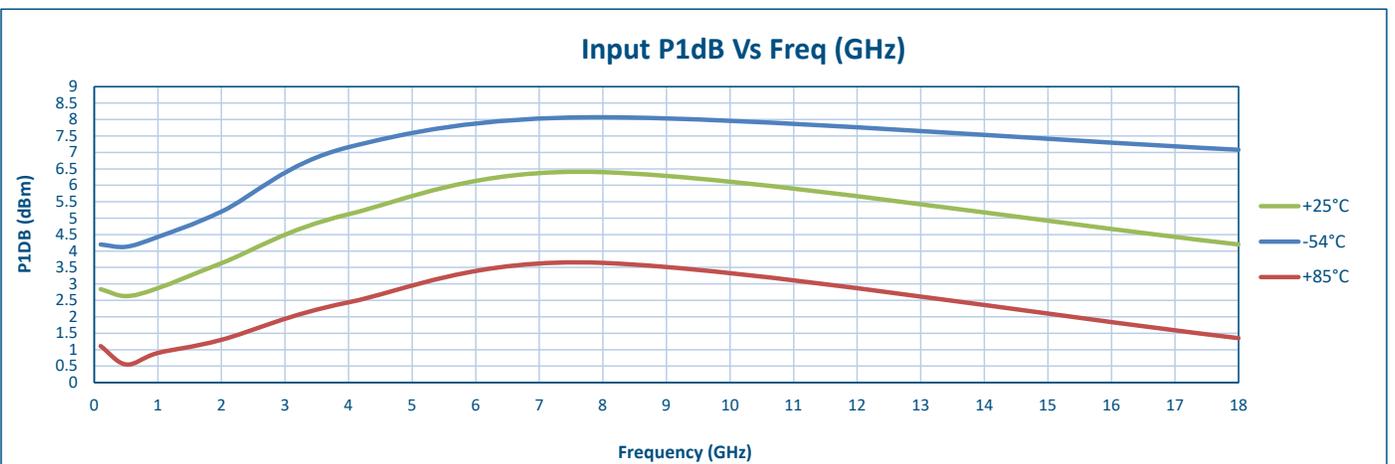
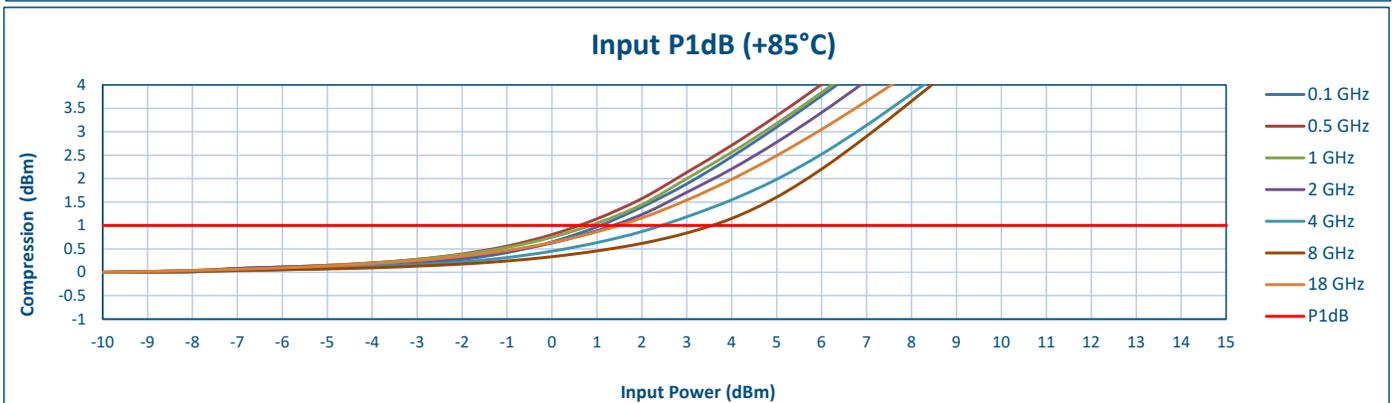
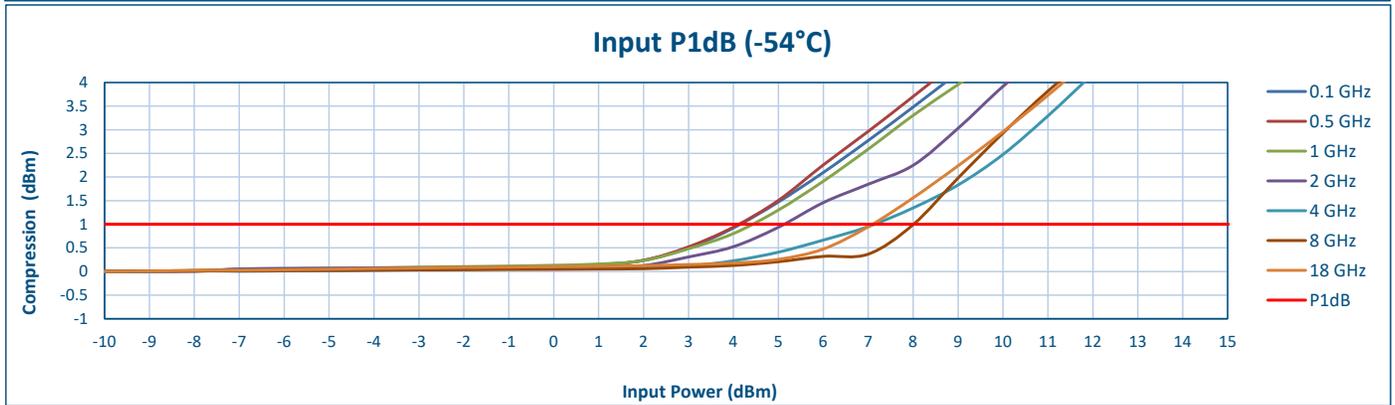
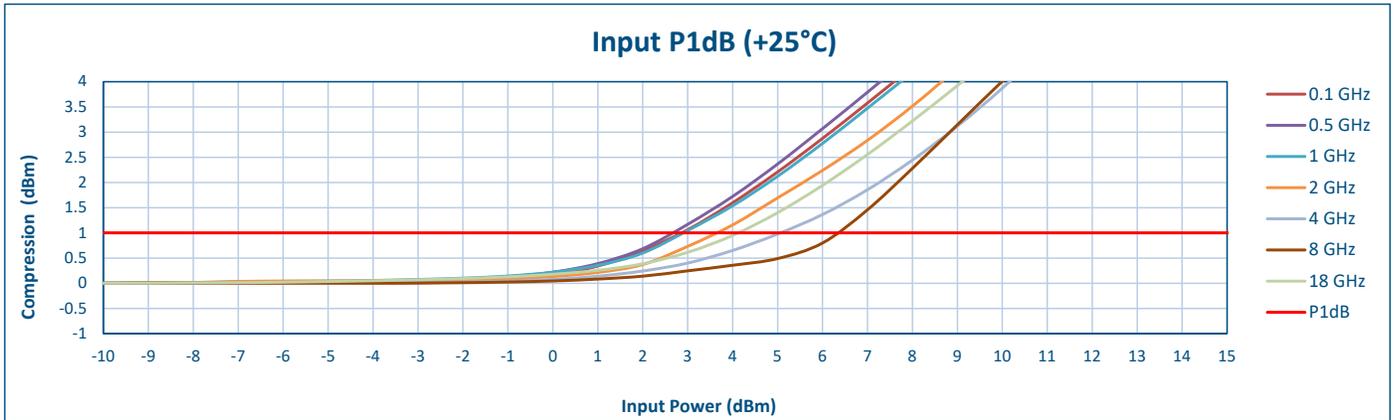
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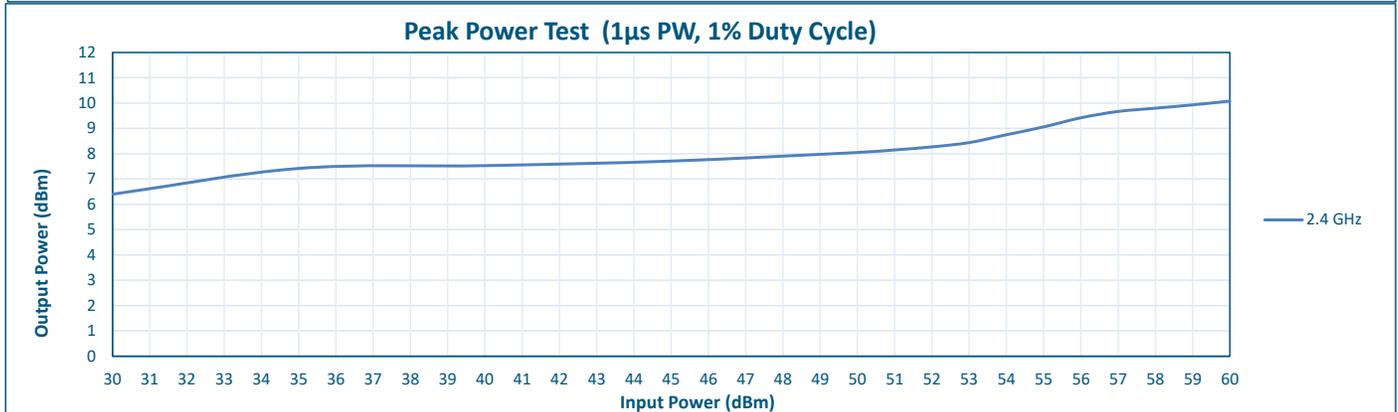
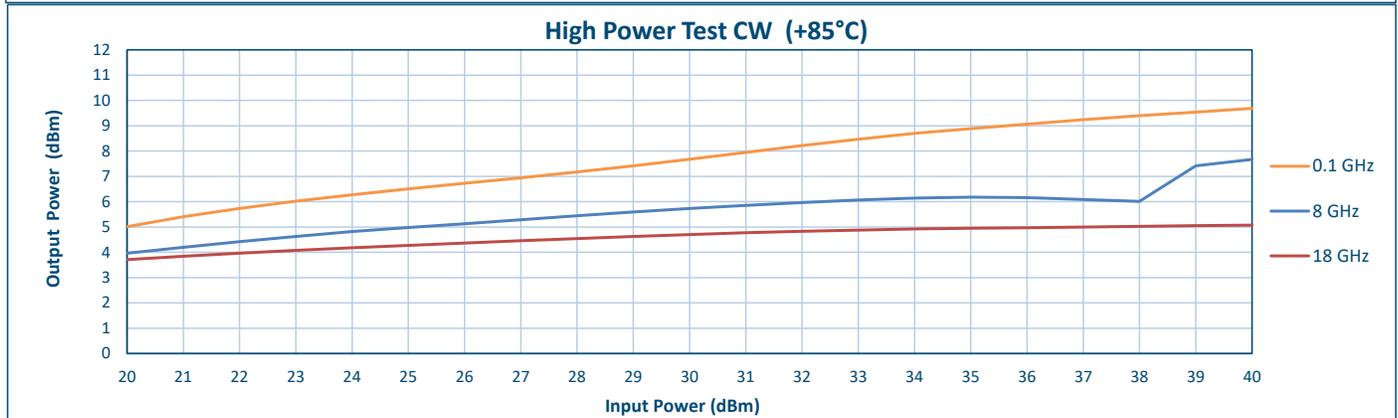
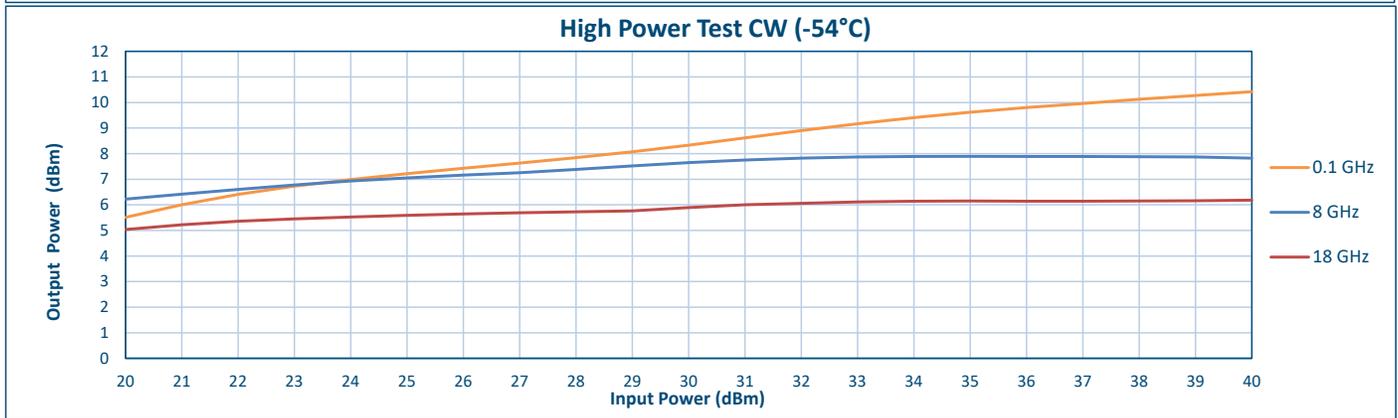
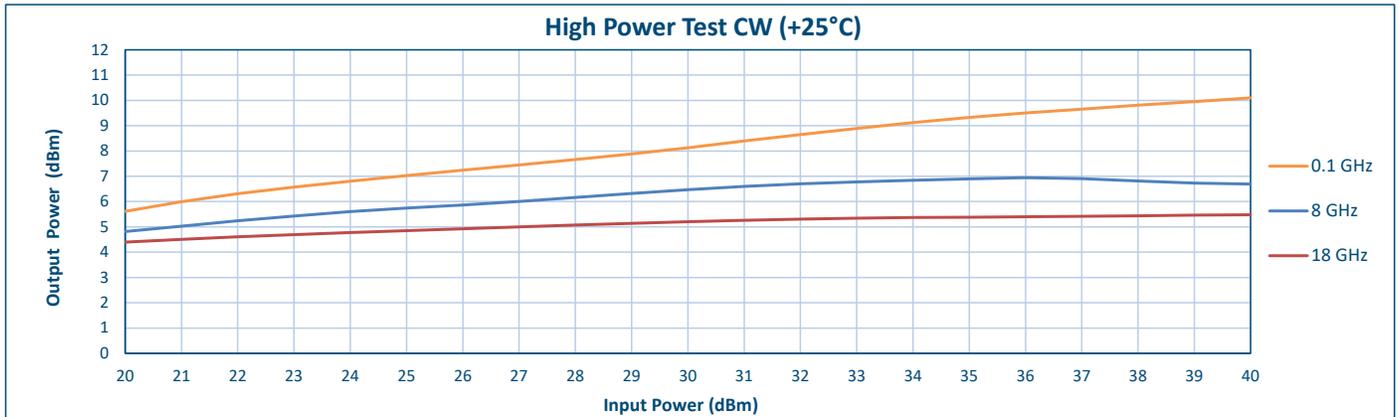
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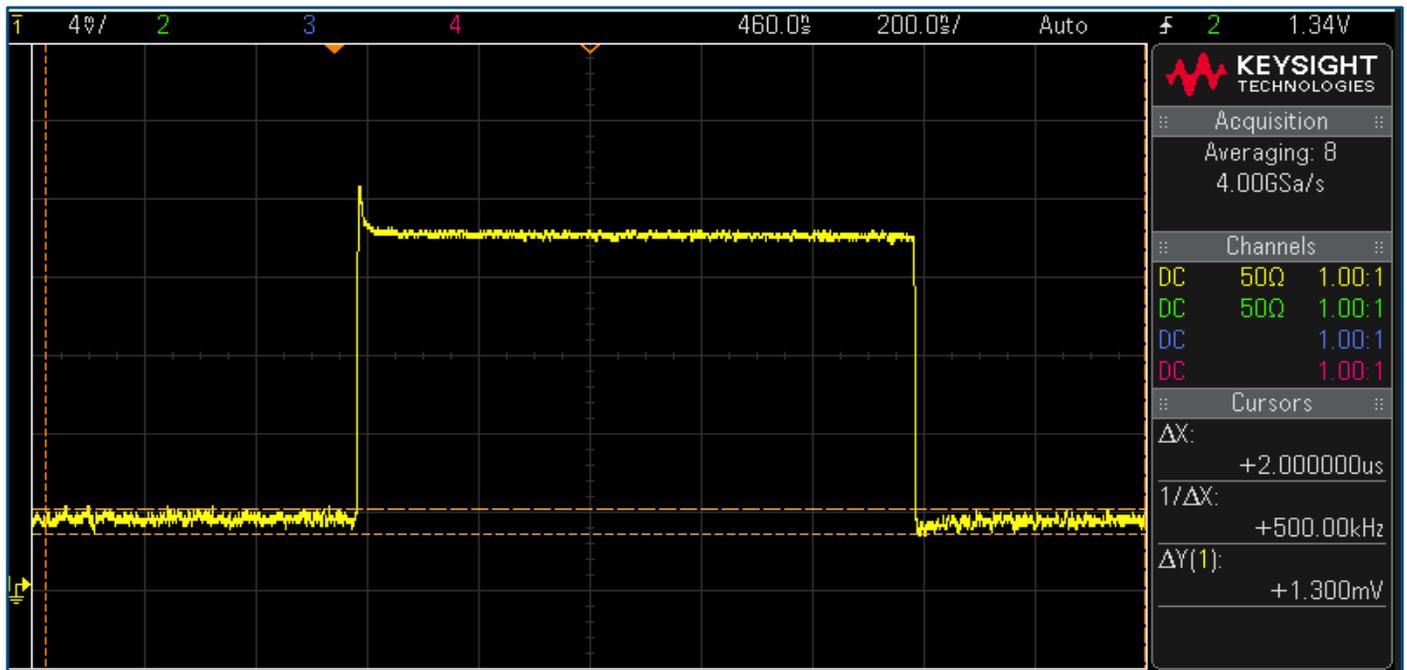


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**Recovery time**  
**@18 GHz, 10 Watts Peak Input Power**  
**1  $\mu$ s PW, 1% Duty Cycle**

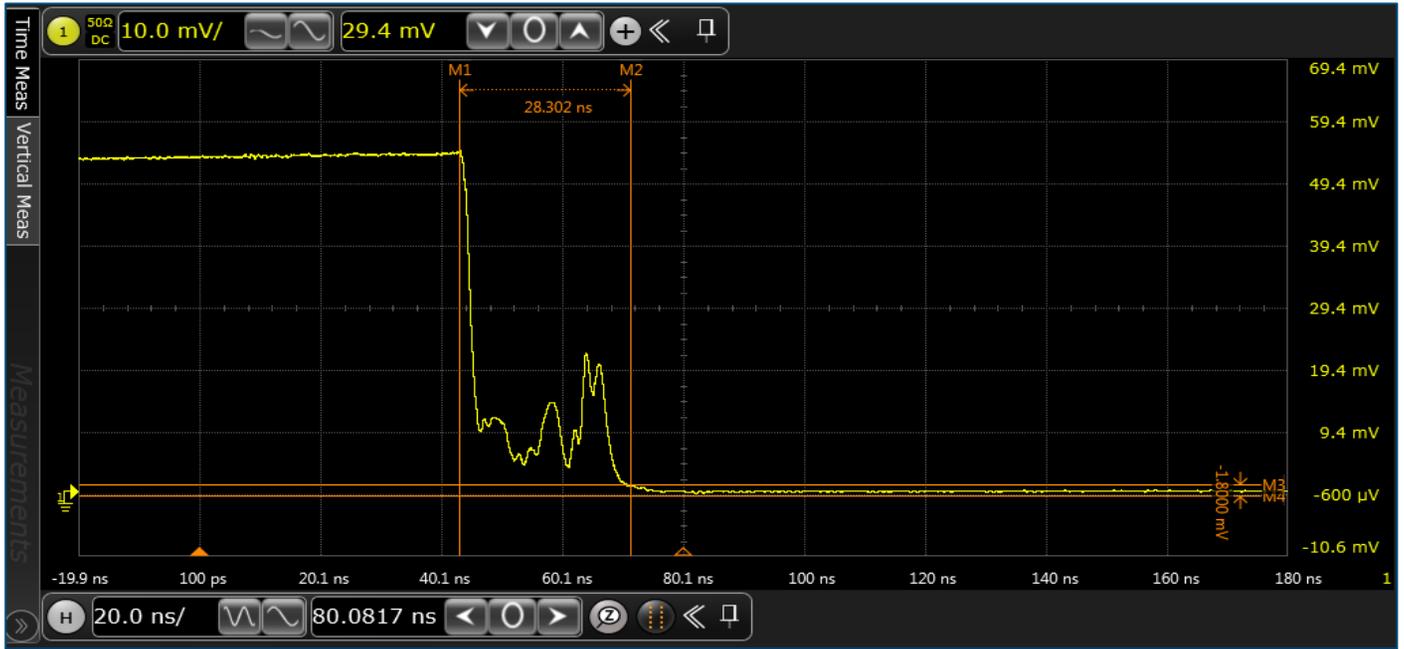


**Full Pulse**  
**@18 GHz, 10 Watts Peak Input Power**  
**1  $\mu$ s PW, 1% Duty Cycle**



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**Recovery time**  
**@2.4 GHz, 1 kW Peak Input Power**  
**1  $\mu$ s PW, 1% Duty Cycle**



**Full Pulse**  
**@2.4 GHz, 1 kW Peak Input Power**  
**1  $\mu$ s PW, 1% Duty Cycle**

