

**PMI MODEL NUMBER: MA-611G-20DB-SFFSFF IS A 6.0 GHz TO 11 GHz MECHANICAL VARIABLE ATTENUATOR. THIS UNIT HAS AN ATTENUATION OF 0 dB TO 20 dB. IT IS SUPPLIED IN A 1.75" x 1.00" x 0.50" HOUSING WITH SMA FEMALE CONNECTORS.**



**DATE**  
**7/17/2025**

**Designed By:**  
**Brian Wall**

**Tested and Reported By:**  
**Brian Wall**

# TYPICAL CHARACTERISTICS ON MA-6G11G-20DB-SFF

## OUTLINE DRAWING:

**DESCRIPTION:**

PMI MODEL NUMBER: MA-6G11G-20DB-SFF IS A 6 GHz TO 11 GHz MECHANICAL VARIABLE ATTENUATOR. THIS UNIT HAS AN ATTENUATION OF 0 dB TO 20 dB AND IS SUPPLIED IN A 1.75" x 1.00" x 0.50" HOUSING WITH SMA FEMALE CONNECTORS.

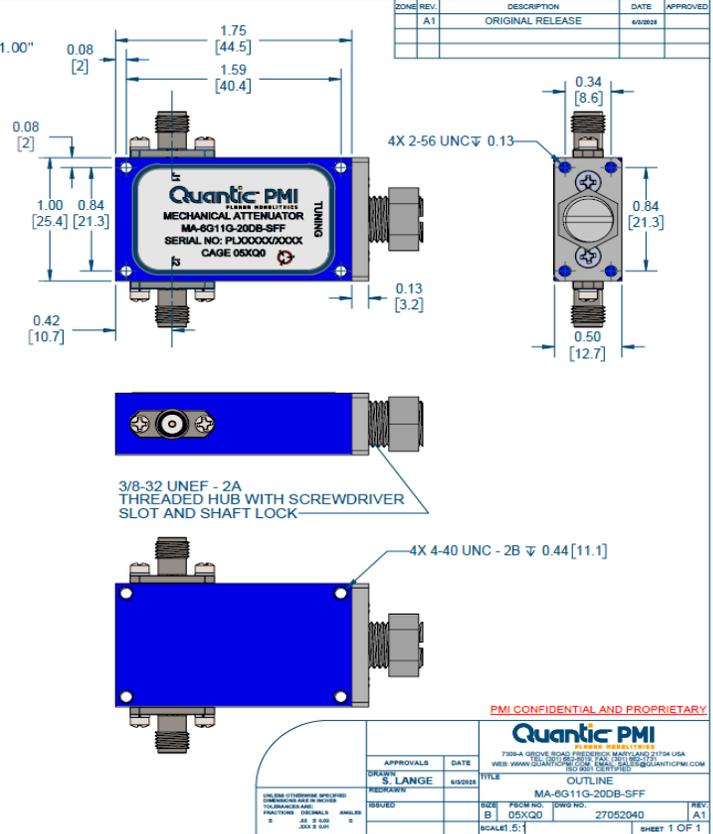
**SPECIFICATIONS:**

- FREQUENCY RANGE:..... 6.0 GHz TO 11.0 GHz
- ATTENUATION:..... 0 TO 20 dB
- VSWR:..... 1.5:1 MAX.
- INSERTION LOSS:..... 0.5 dB MAX
- CONNECTORS:..... SMA FEMALE
- FINISH:..... PAINTED BLUE

**ENVIRONMENTAL RATINGS:**

- TEMPERATURE:..... -54°C TO +55°C (OPERATING)  
-57°C TO +85°C (STORAGE)
- HUMIDITY:..... 5% TO 95%
- ALTITUDE:..... 30,000 ft MAX
- VIBRATION:..... MIL-E-5400T FIGURE 2 CURVE II (2G)
- SHOCK:..... 15G, 11ms (6-AXIS)

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

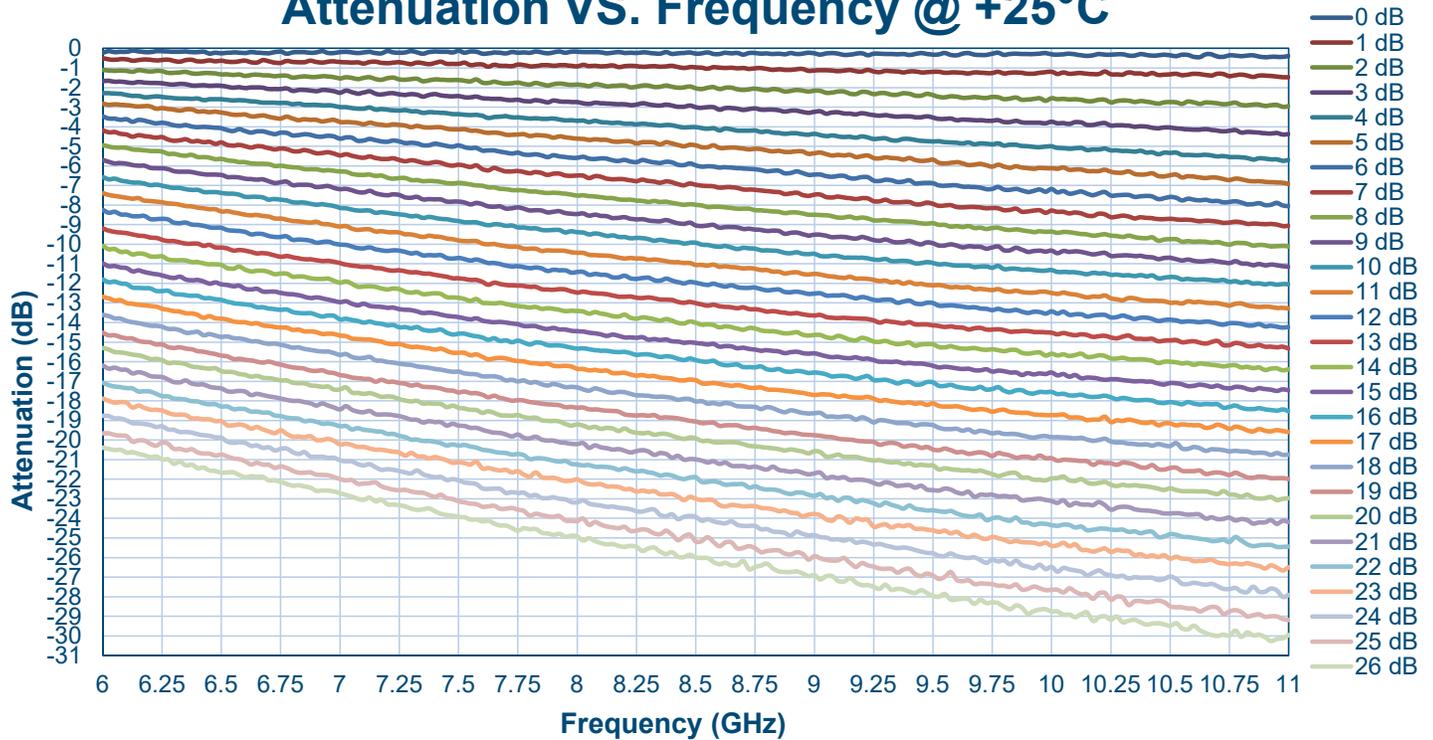


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ON  
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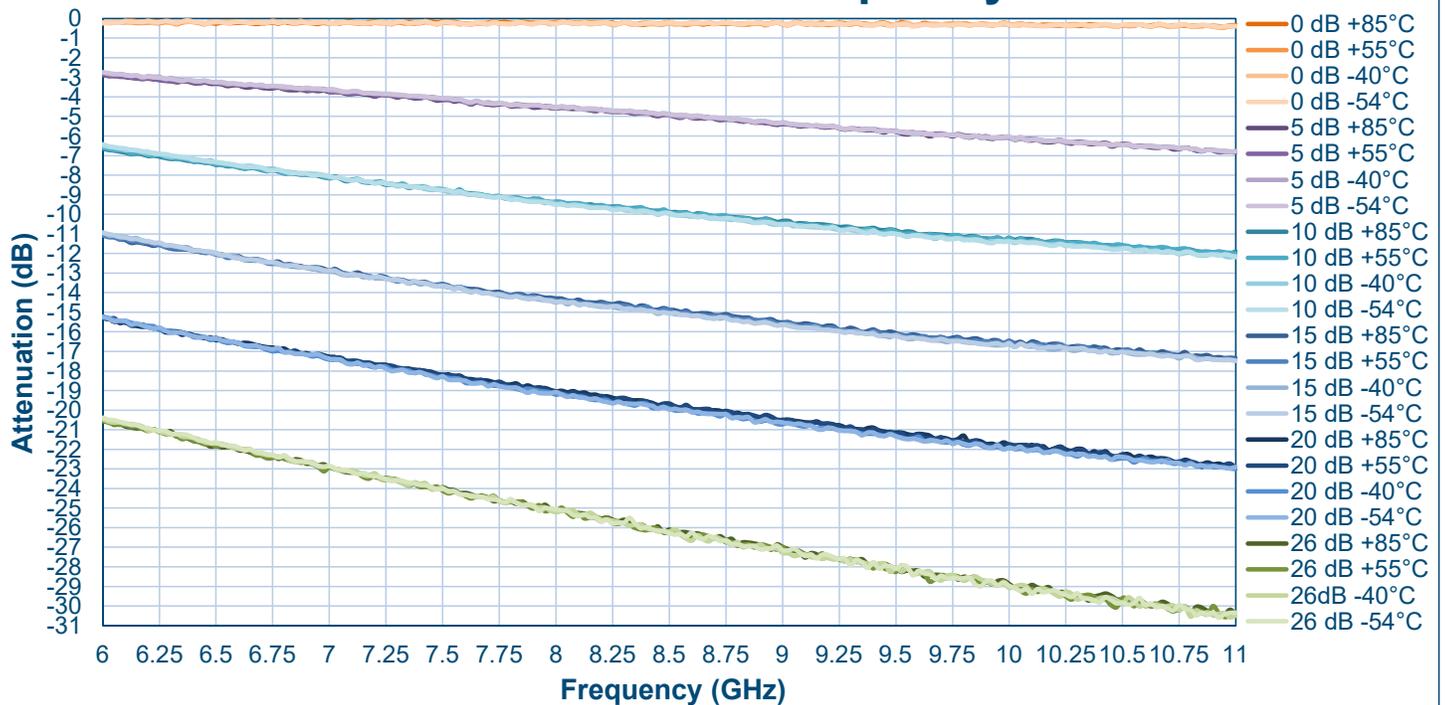
**TEST DATA:**

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	TEST RESULTS				
			-54°C	-40°C	+25°C	+55°C	+85°C
1	Frequency Range:	6 GHz to 11 GHz	6 GHz to 11 GHz				
2	Attenuation:	0 to 20 dB	0 to 20 dB See Graphs				
3	Insertion Loss:	0.5 dB Max.	0.42 dB See Graph	0.44 dB See Graph	0.46 dB See Graph	0.45 dB See Graph	0.41 dB See Graph
4	VSWR:	1.5:1 Max.	1.47:1 See Graph	1.47:1 See Graph	1.47:1 See Graph	1.49:1 See Graph	1.48:1 See Graph

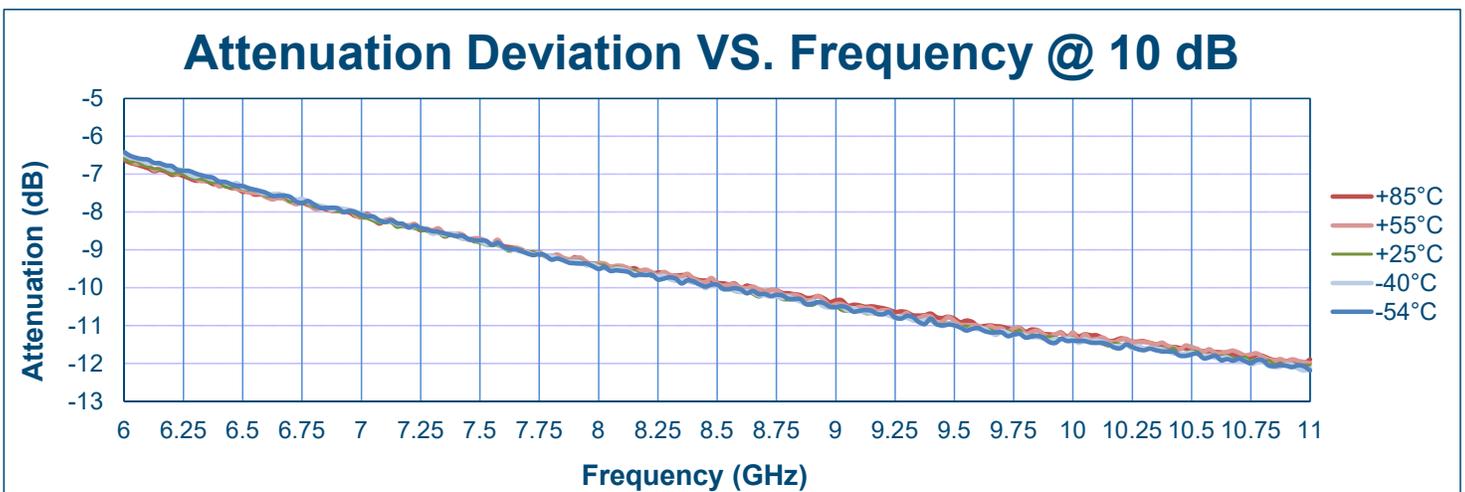
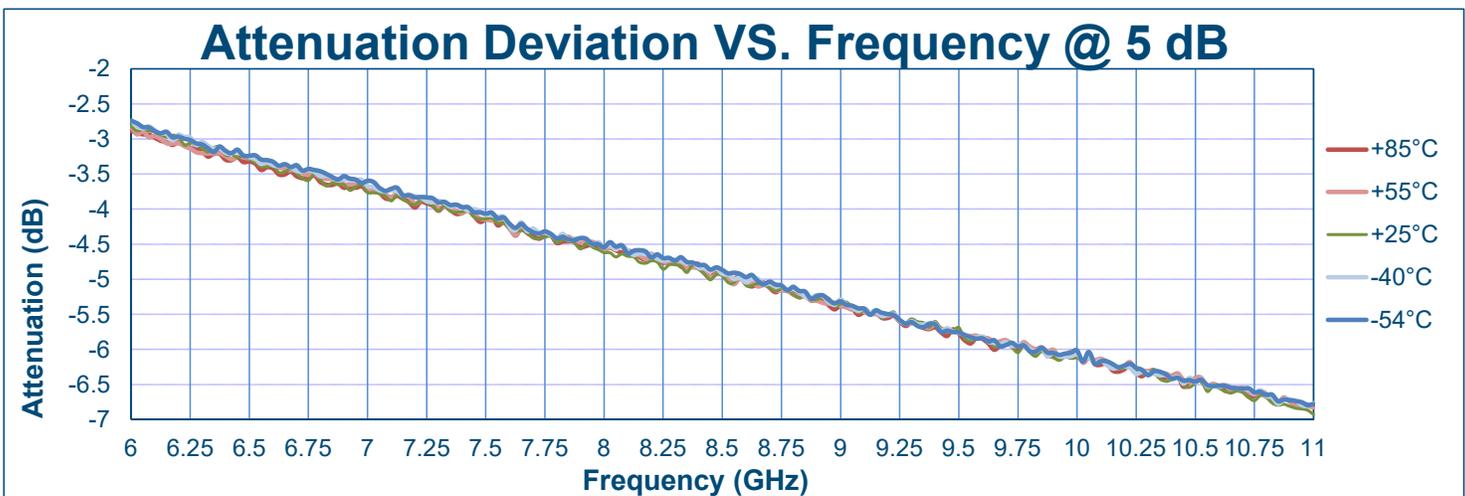
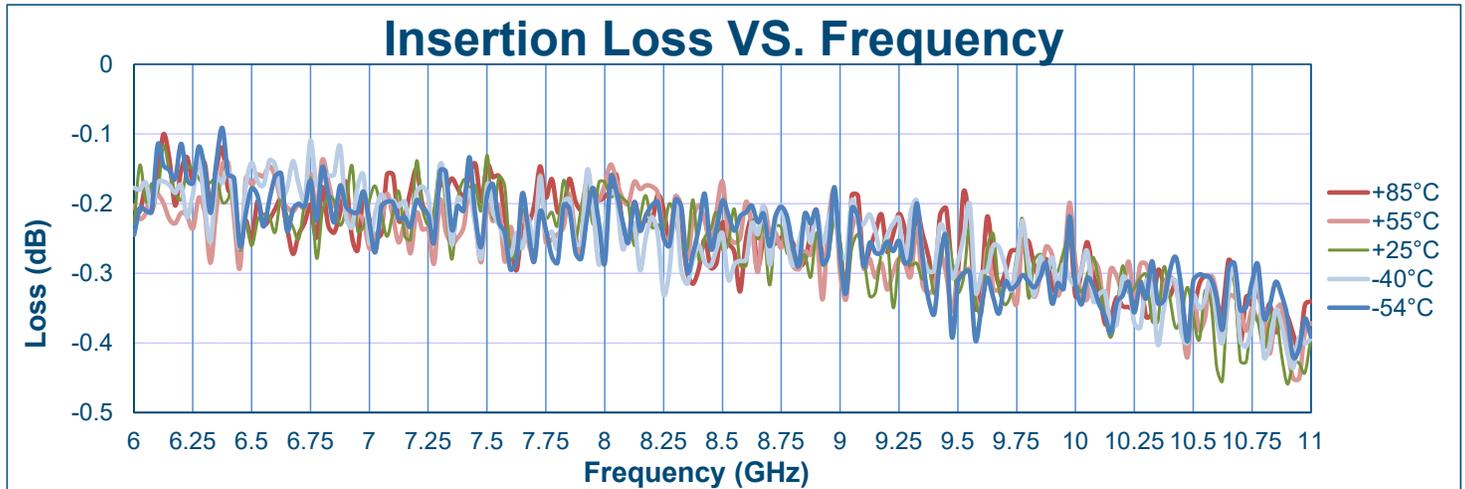
**Attenuation VS. Frequency @ +25°C**



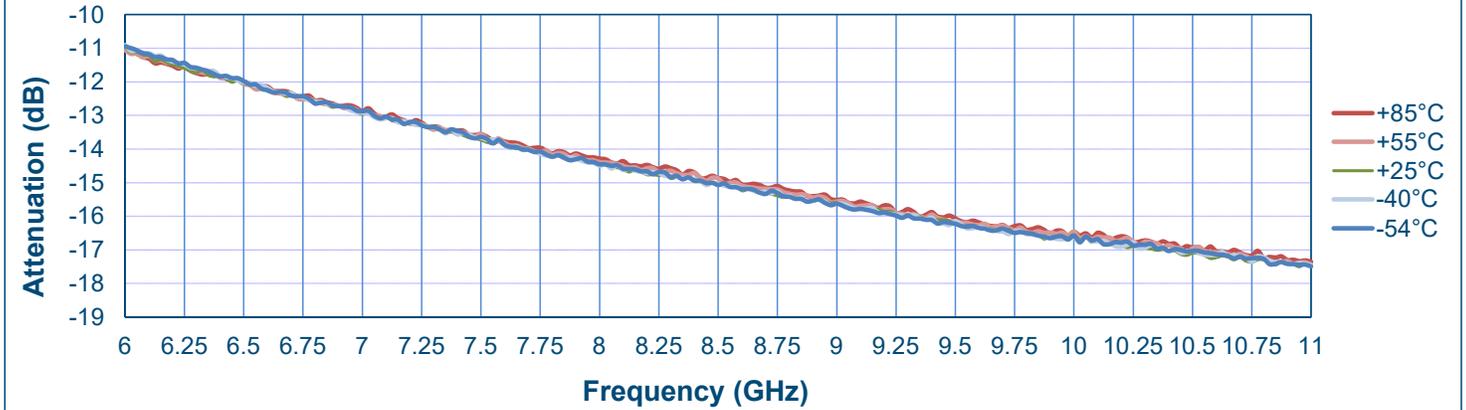
**Attenuation VS. Frequency**



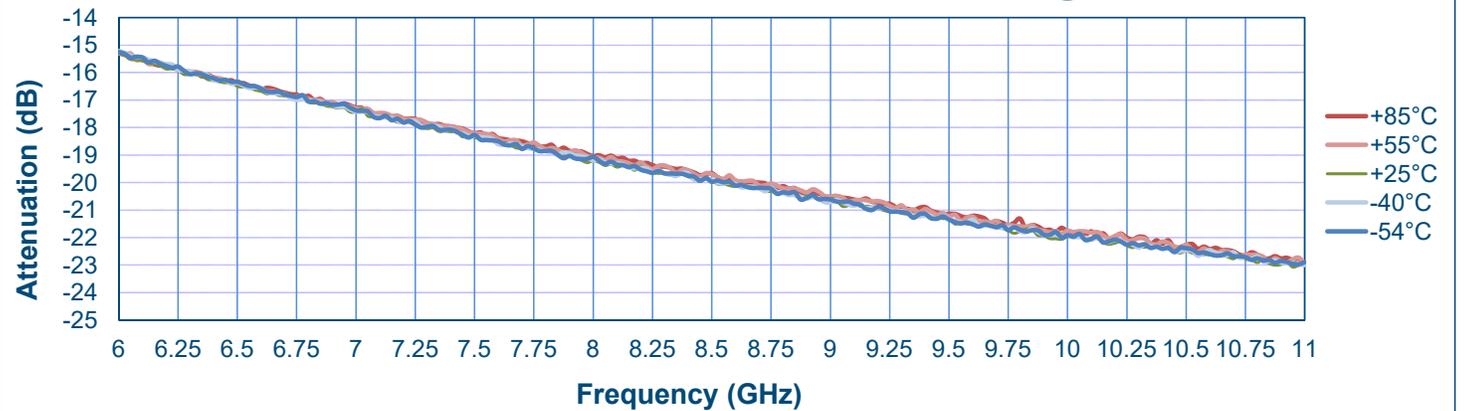
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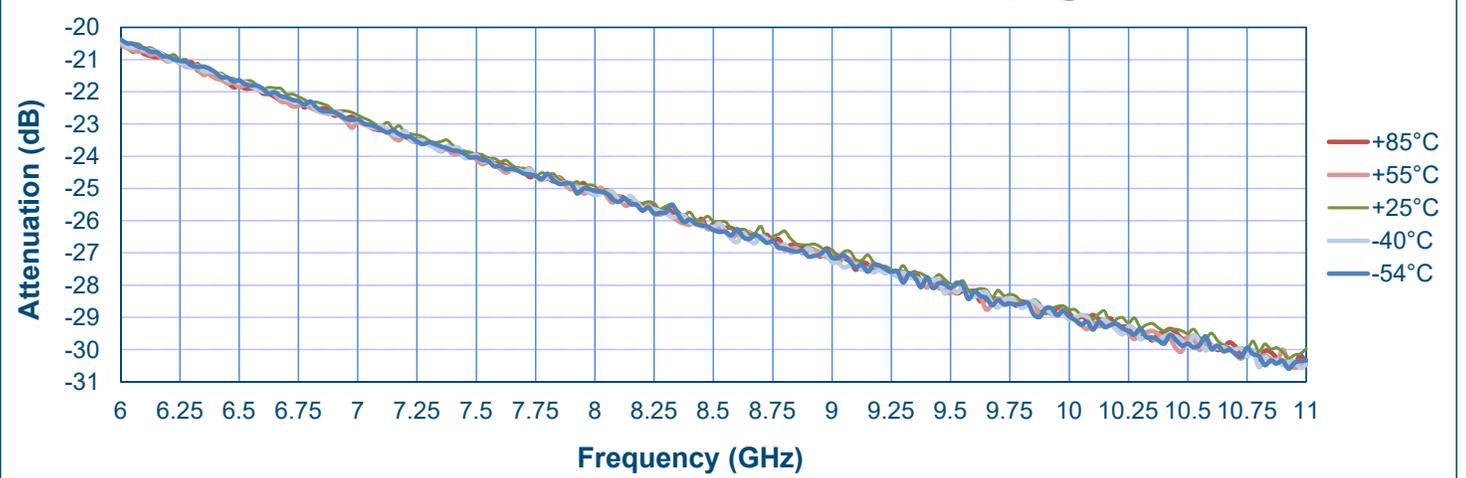
### Attenuation Deviation VS. Frequency @ 15 dB



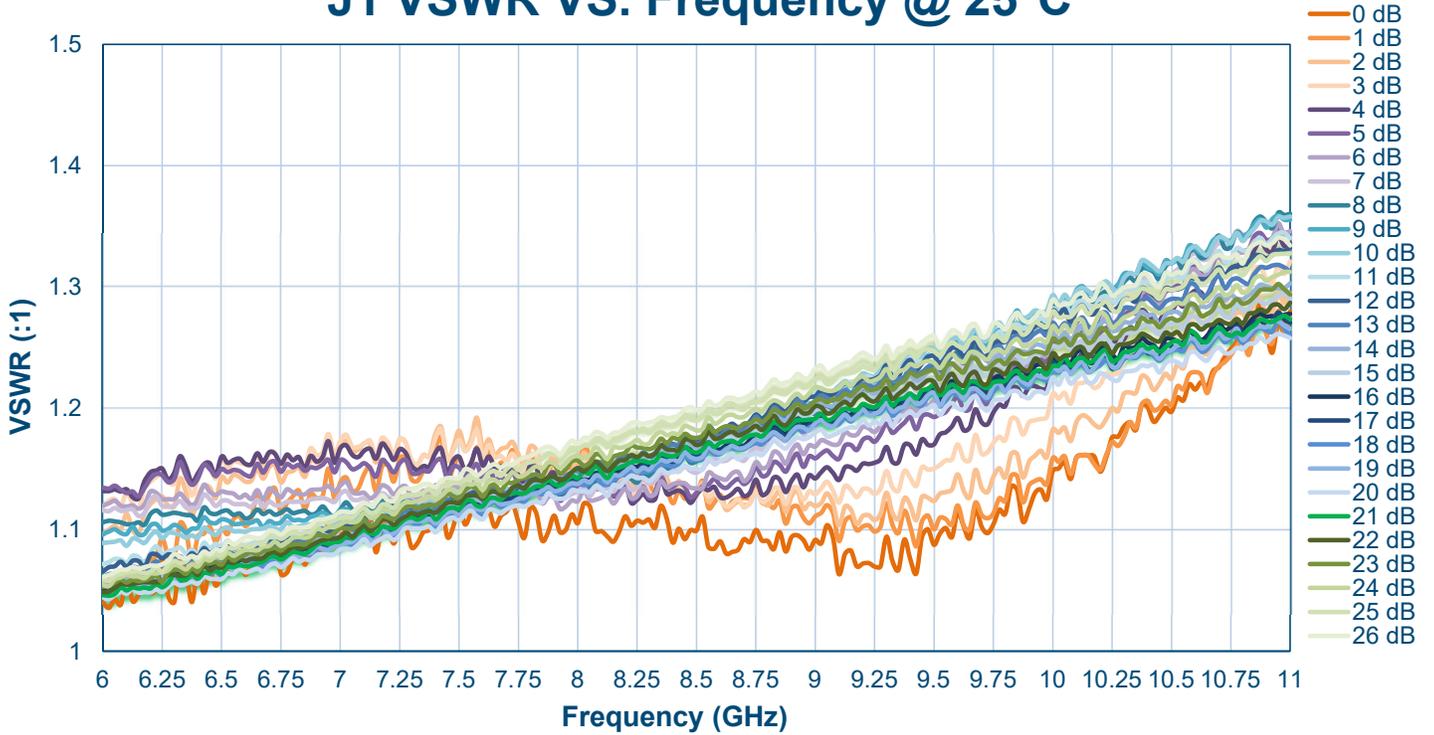
### Attenuation Deviation VS. Frequency @ 20 dB



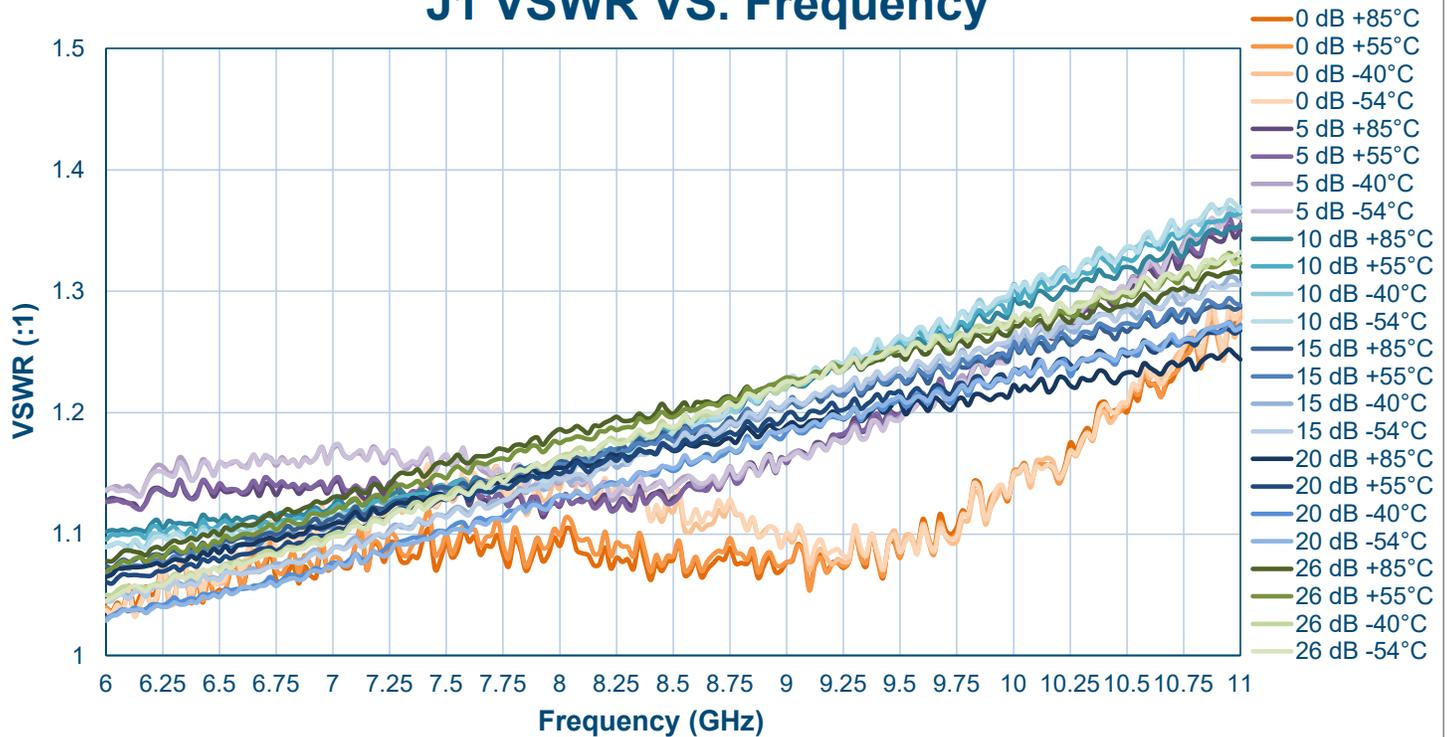
### Attenuation Deviation VS. Frequency @ 26 dB



**J1 VSWR VS. Frequency @ 25°C**

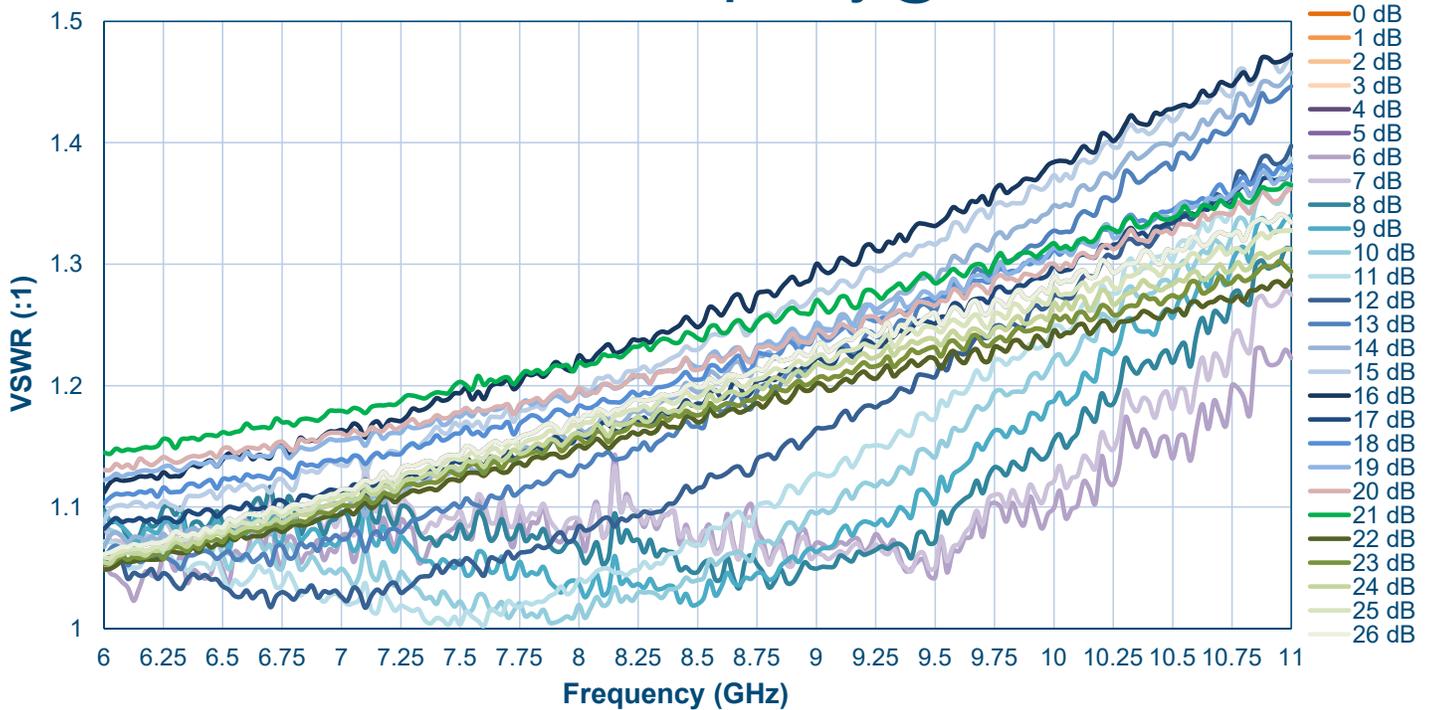


**J1 VSWR VS. Frequency**

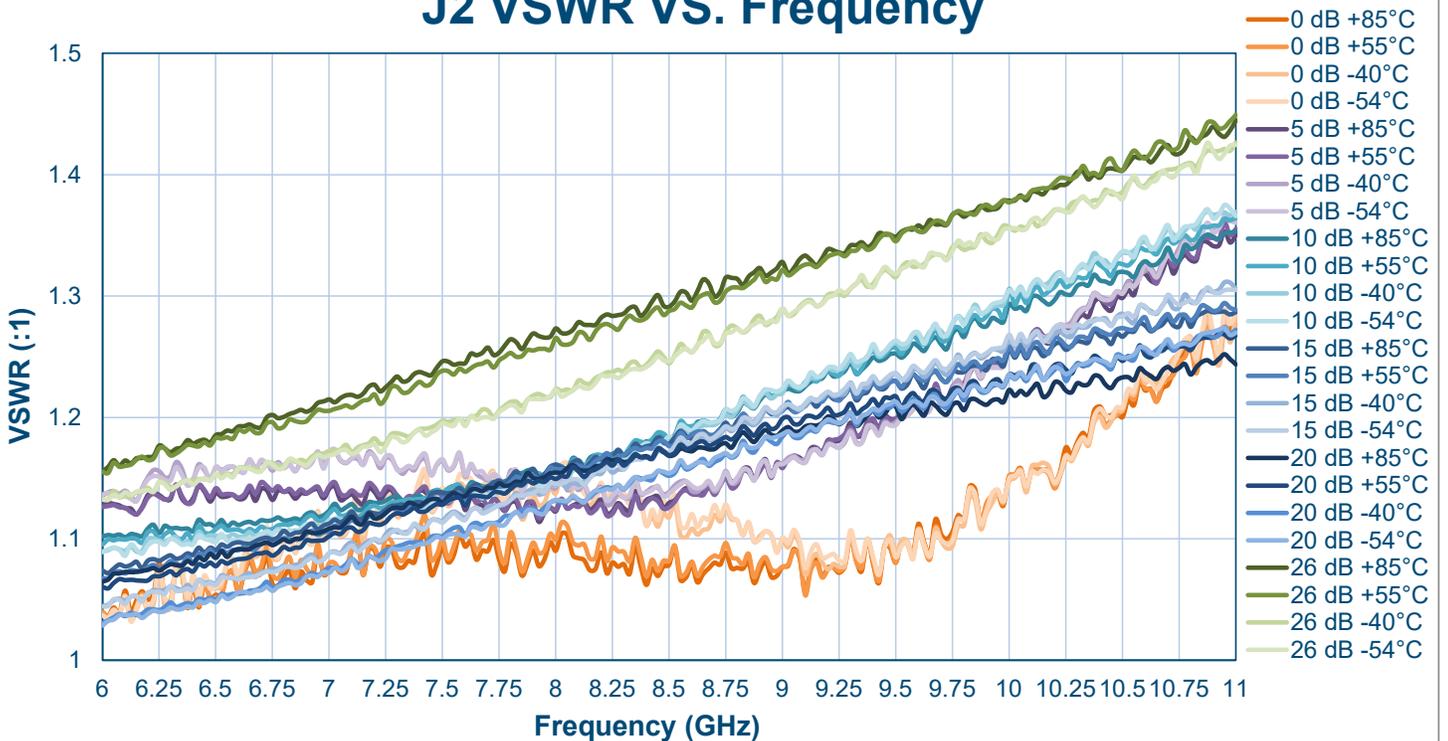


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**J2 VSWR VS. Frequency @ +25°C**



**J2 VSWR VS. Frequency**



### Flatness VS. Attenuation

