

# TYPICAL CHARACTERISTICS ON MA-1G2G-10DB-SFF

PMI MODEL NUMBER: MA-1G2G-10DB-SFF IS A 1.0 GHz TO 2.0 GHz MECHANICAL VARIABLE ATTENUATOR. THIS UNIT HAS AN ATTENUATION OF 0 dB TO 10 dB. IT IS SUPPLIED IN A 2.0" x 1.25" x 0.50" HOUSING WITH SMA FEMALE CONNECTORS.



REPORTED BY: V. PRATAP  
TESTED BY: V. PRATAP  
DATE: 7/15/2025

# TYPICAL CHARACTERISTICS ON MA-1G2G-10DB-SFF

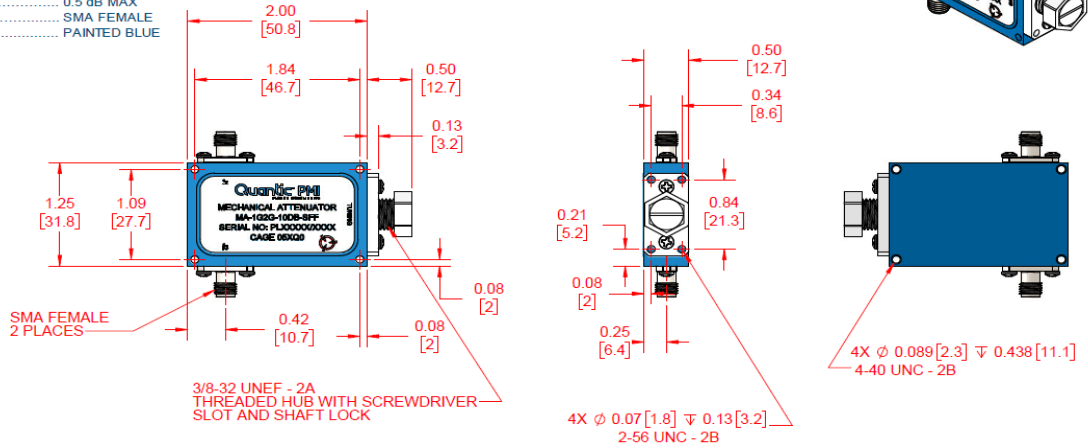
## OUTLINE DRAWING:

**DESCRIPTION:**

PMI MODEL NUMBER MA-1G2G-10DB-SFF IS A MECHANICAL VARIABLE ATTENUATOR THAT OPERATES OVER THE 1.0 TO 2.0 GHz FREQUENCY RANGE.

**SPECIFICATIONS:**

- FREQUENCY RANGE:..... 1.0 TO 2.0 GHz
- ATTENUATION:..... 0 TO 10 dB
- VSWR:..... 1.8:1 MAX @ 25°C
- INSERTION LOSS:..... 0.5 dB MAX
- CONNECTORS:..... SMA FEMALE
- FINISH:..... PAINTED BLUE
- TEMPERATURE RANGE:..... 1.9:1 MAX ACROSS OPERATING TEMPERATURE RANGE

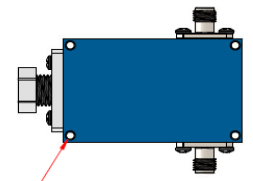
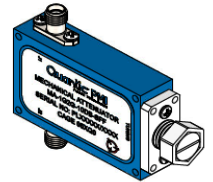


**ENVIRONMENTAL RATINGS:**

- TEMPERATURE:..... -54°C TO +55°C (OPERATING)
- HUMIDITY:..... -57°C TO +85°C (STORAGE)
- ALTITUDE:..... 5% TO 95%
- VIBRATION:..... 30,000 ft MAX
- SHOCK:..... 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

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	8/19/2018	



PMI CONFIDENTIAL AND PROPRIETARY

APPROVALS		DATE	TITLE	
DESIGN	V. Pratap	8/19/2018	OUTLINE	
REVISION			PART NUMBER	
			MA-1G2G-10DB-SFF	
SIZE	B	FORM NO.	27052000	REV. A1
SCALE 1:1		SHEET 1 OF 1		

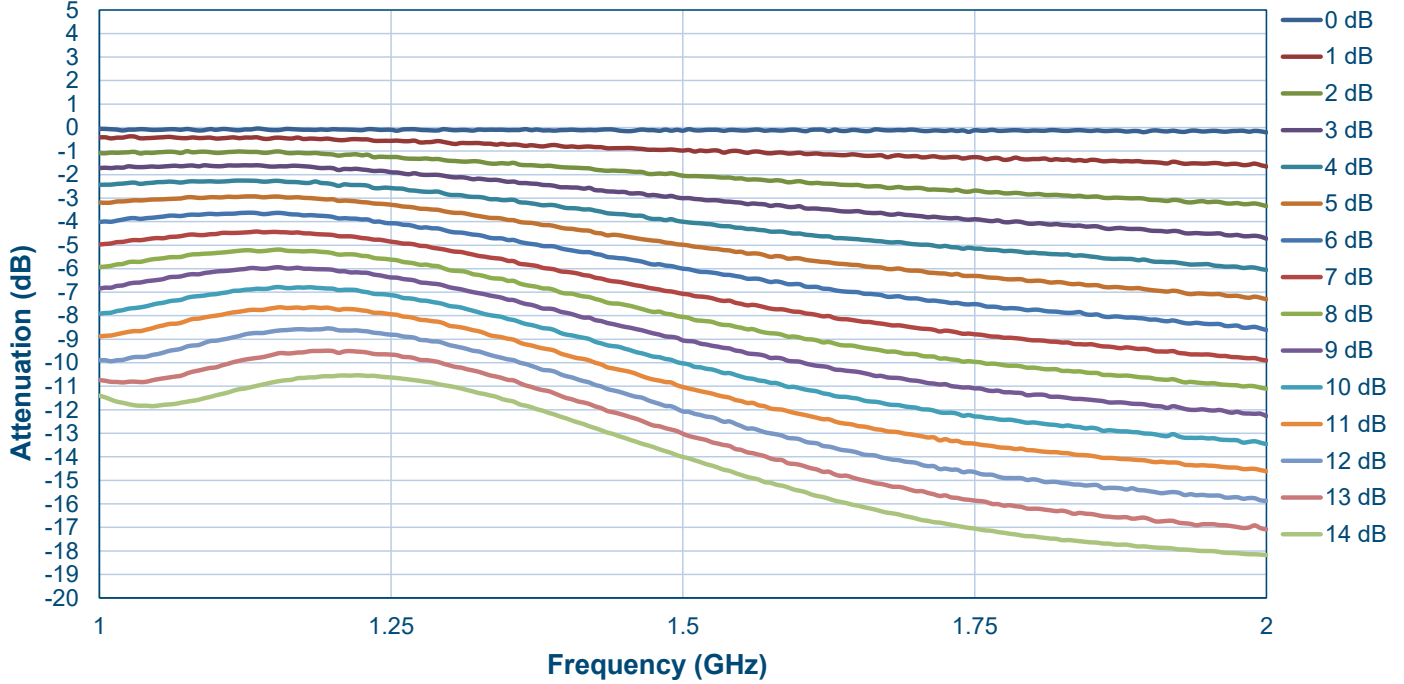
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**TEST DATA:**

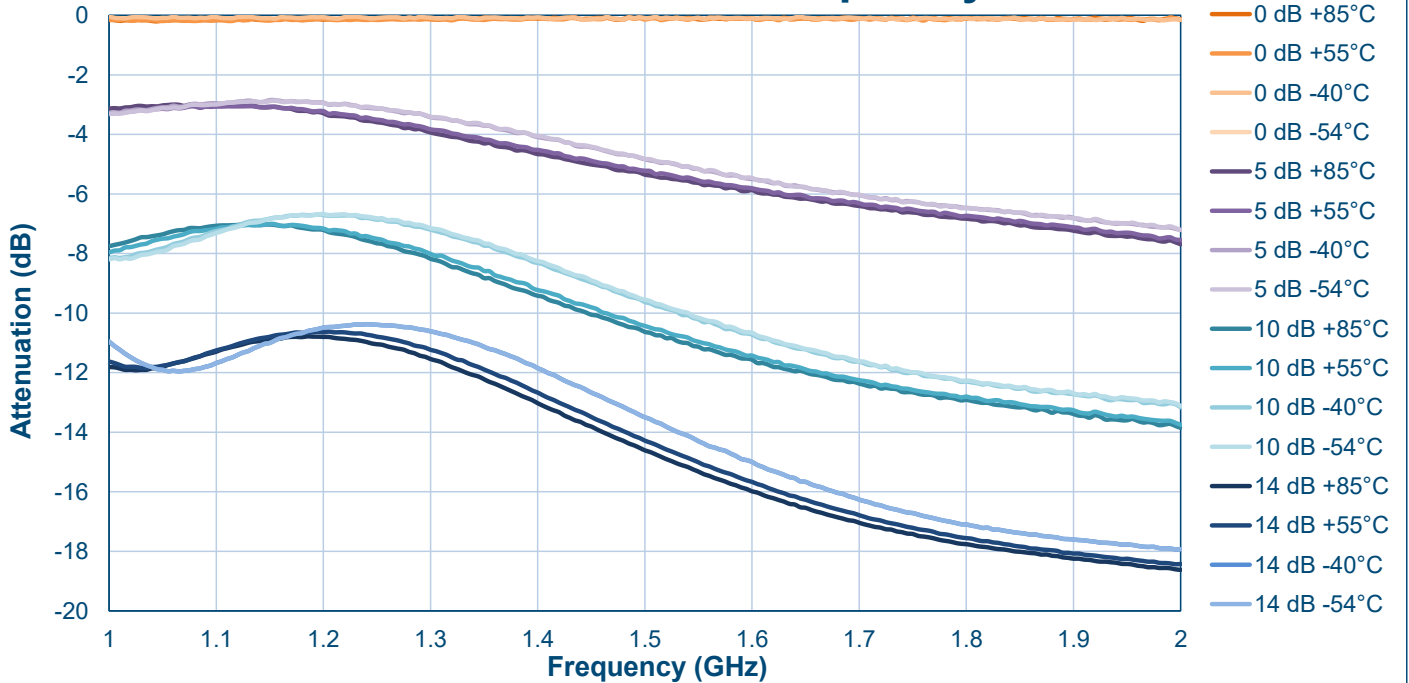
TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	TEST RESULTS				
			-54°C	-40°C	+25°C	+55°C	+85°C
1	Frequency Range:	1.0 GHz to 2.0 GHz	<b>1.0 GHz to 2.0 GHz</b>				
2	Attenuation:	0 to 10 dB	<b>0 to 10 dB See Graphs</b>				
3	VSWR:	1.8:1 Max. @ 25°C 1.9:1 Max Over Operating Temperature	<b>1.87:1 See Graph</b>	<b>1.84:1 See Graph</b>	<b>1.79:1 See Graph</b>	<b>1.77:1 See Graph</b>	<b>1.82:1 See Graph</b>
4	Insertion Loss:	0.5 dB Max.	<b>0.18 dB See Graph</b>	<b>0.17 dB See Graph</b>	<b>0.2 dB See Graph</b>	<b>0.19 dB See Graph</b>	<b>0.2 dB See Graph</b>

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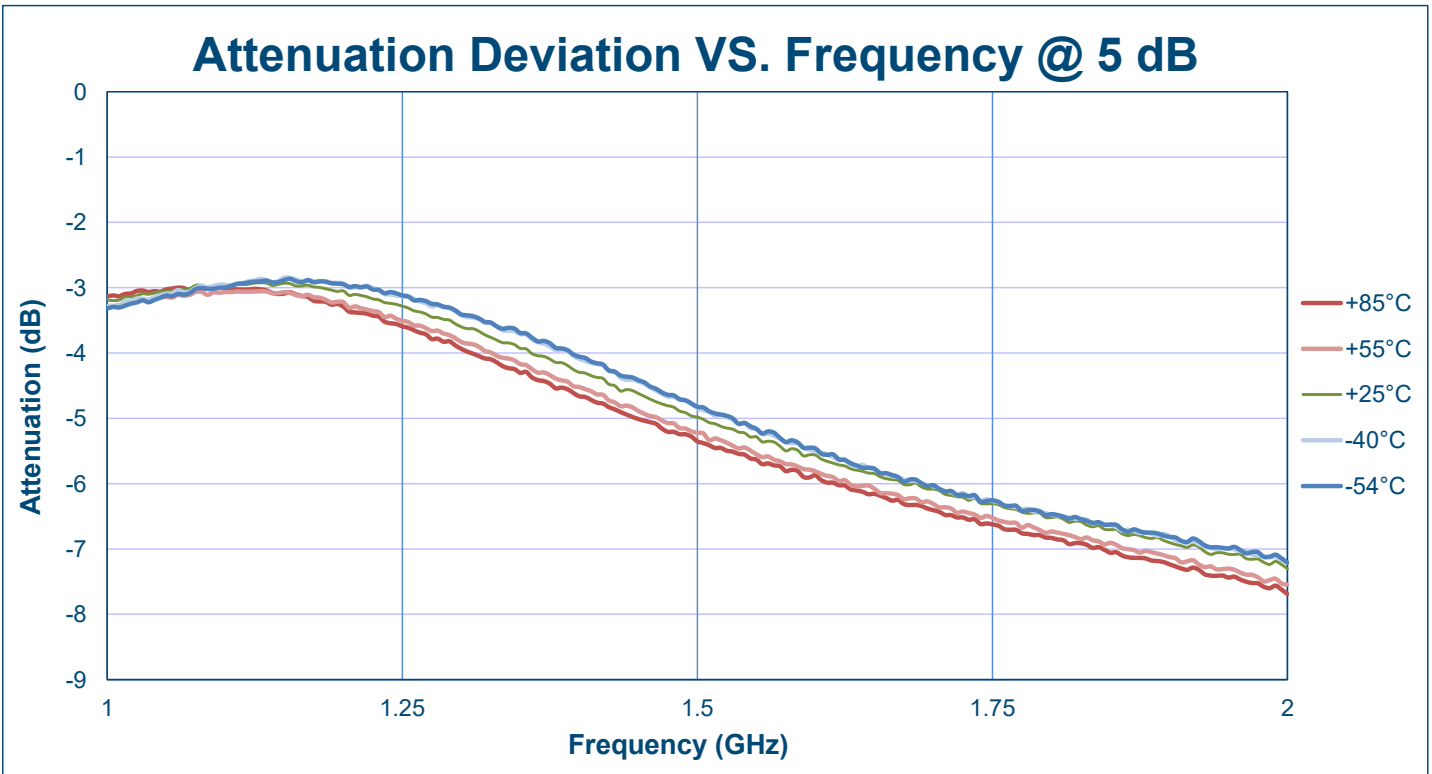
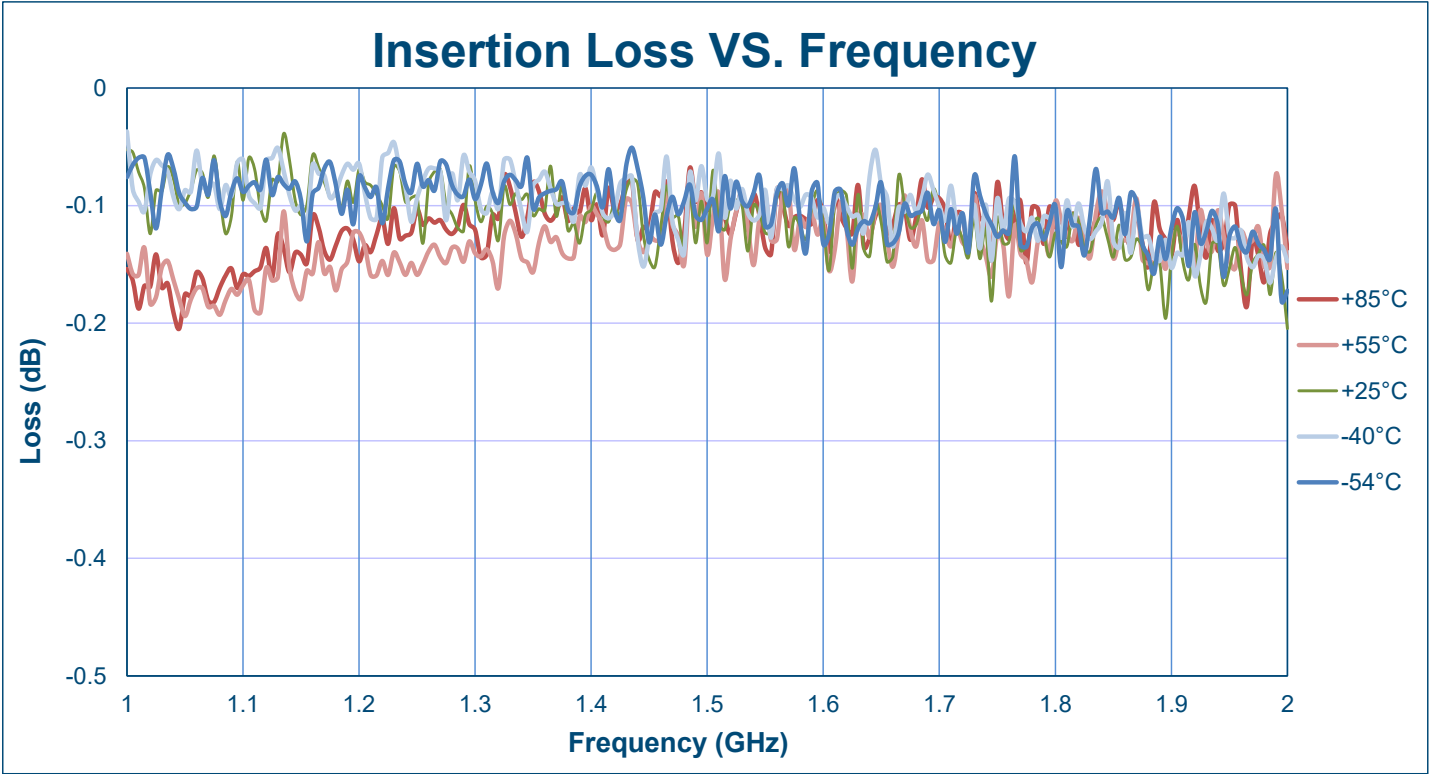
**Attenuation VS. Frequency @ +25°C**



**Attenuation VS. Frequency**

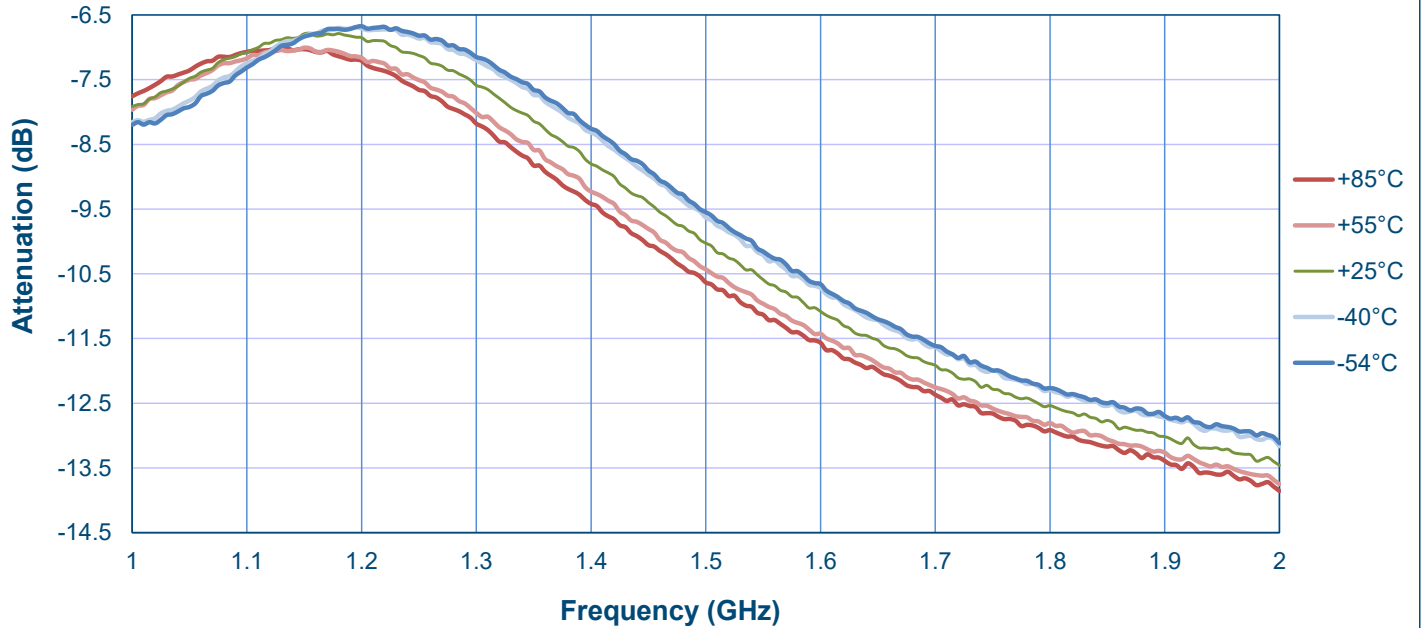


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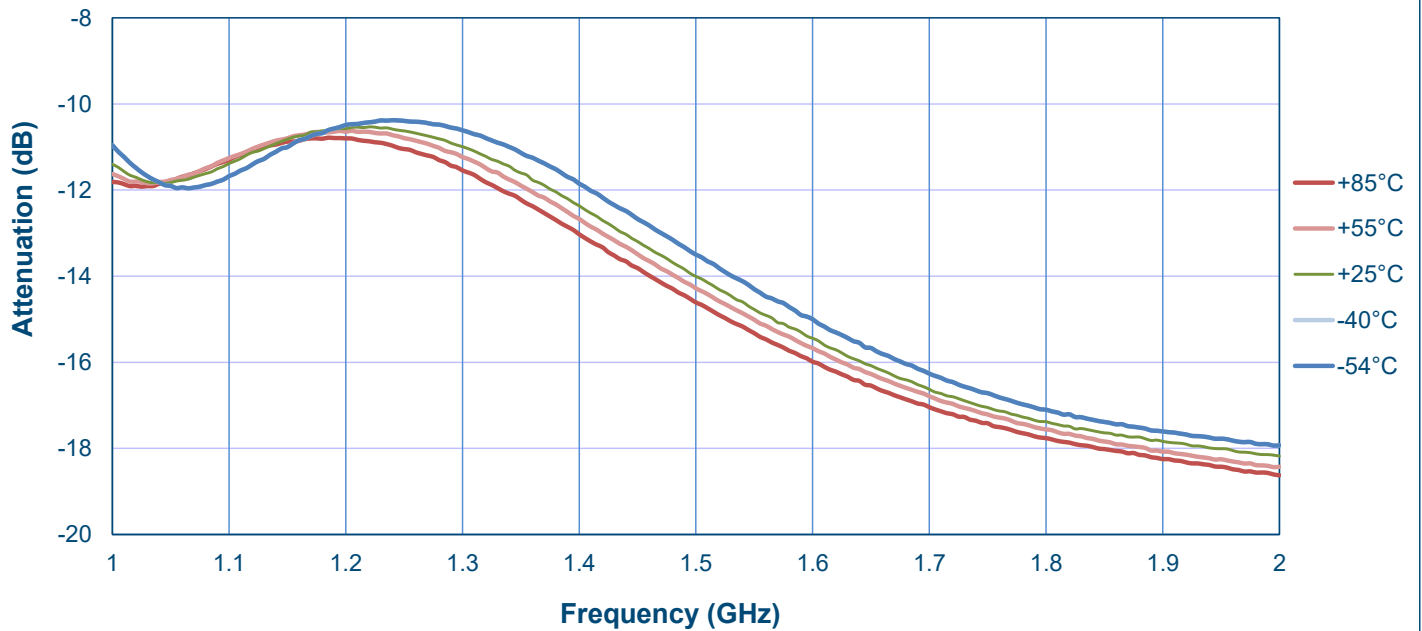


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**Attenuation Deviation VS. Frequency @ 10 dB**

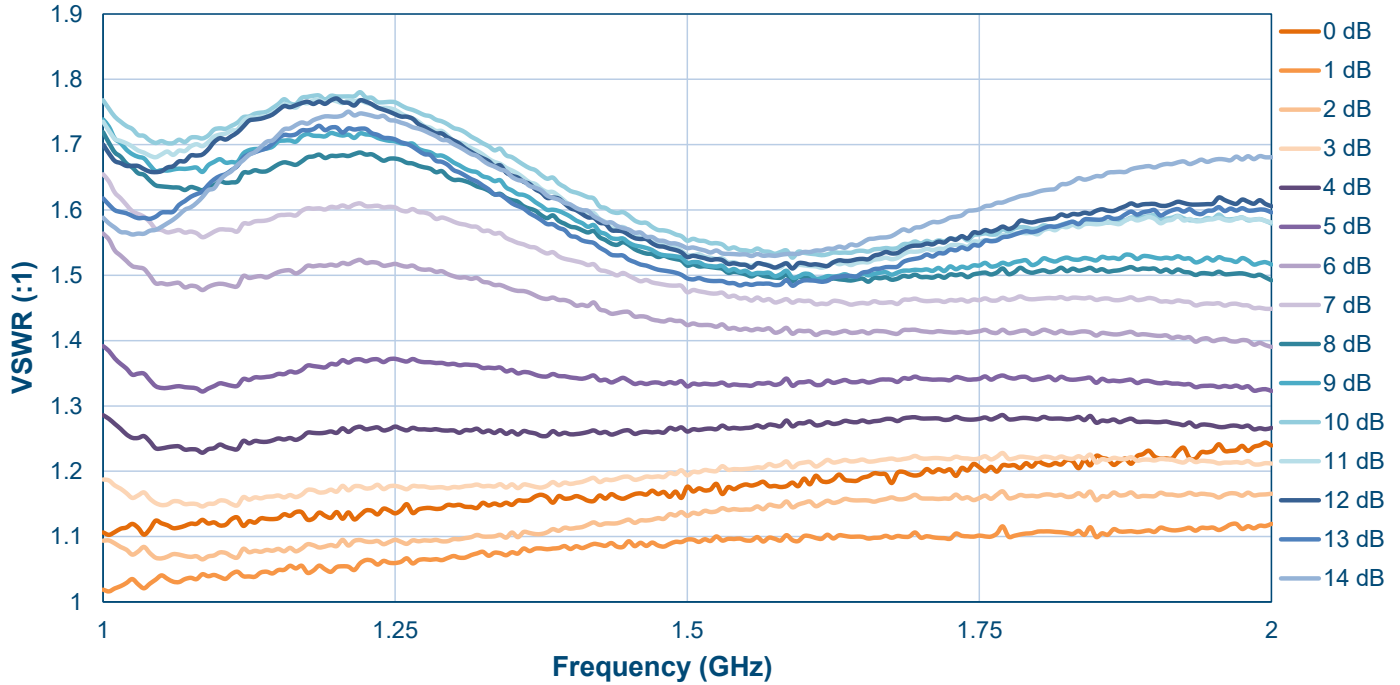


**Attenuation Deviation VS. Frequency @ 14 dB**

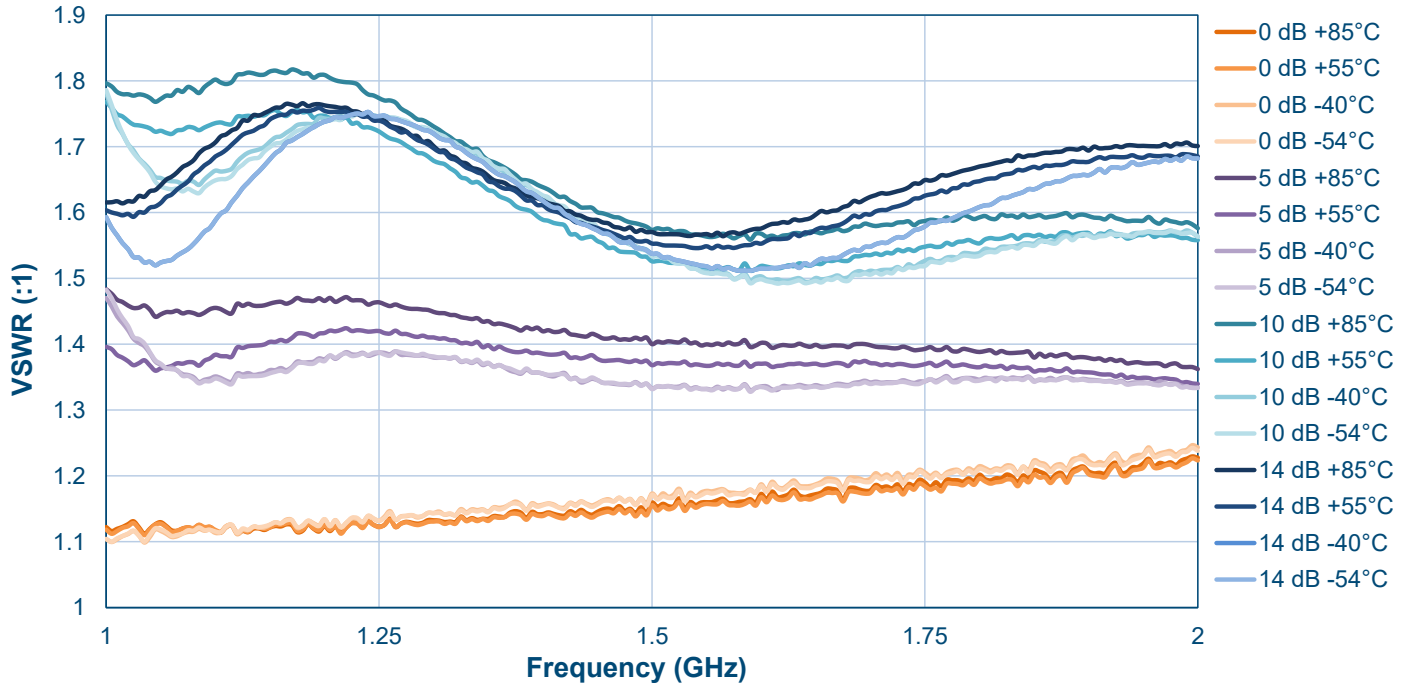


**TYPICAL CHARACTERISTICS  
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**J1 VSWR VS. Frequency @ 25°C**

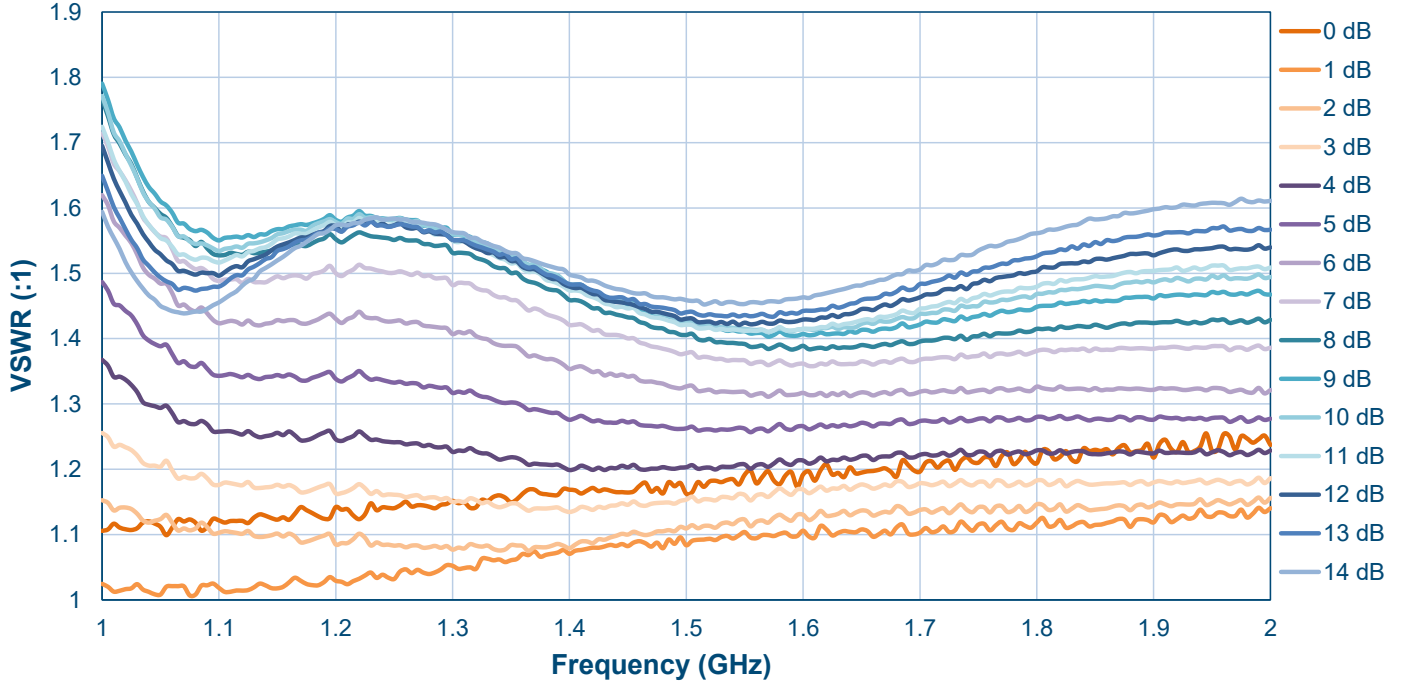


**J1 VSWR VS. Frequency**

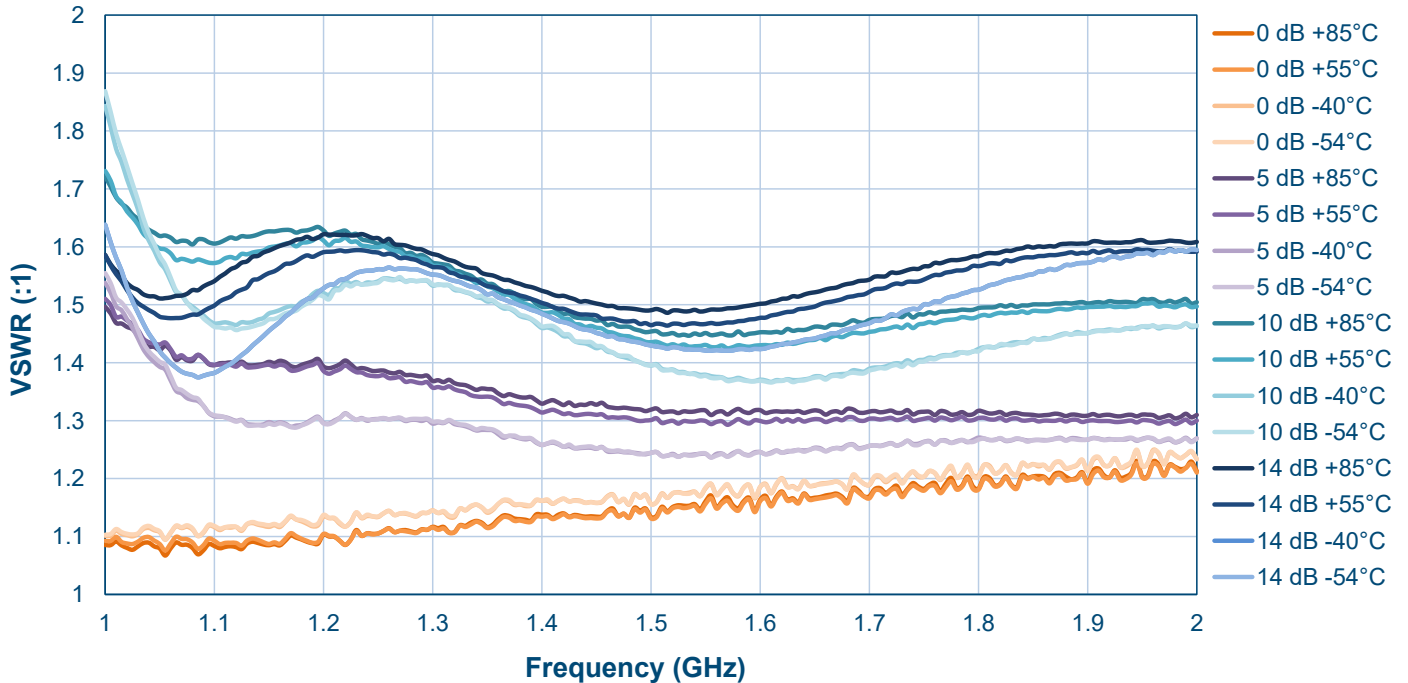


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**J2 VSWR VS. Frequency @ +25°C**



**J2 VSWR VS. Frequency**



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