TYPICAL CHARACTERISTICS
ON
PCH-180-1G1R5G-SFF

PMI MODEL NO. PCH-180-1G1R5G-SFF IS A 180 DEGREE HYBRID COUPLER THAT OPERATES OVER THE FREQUENCY RANGE OF 1.0 TO 1.5 GHz. IT HAS A MAXIMUM INSERTION LOSS OF 0.6 dB AND A MINIMUM ISOLATION OF 20 dB. THIS MODEL IS OUTFITTED WITH SMA FEMALE CONNECTORS.

Reported By	Noor Azhar
Tested By	Noor Azhar
Date	November 10, 2023

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

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PRODUCT FEATURE

DESCRIPTION:

PMI MODEL NO. PCH-180-1G1R5G-SFF IS A 180 DEGREE HYBRID COUPLER THAT OPERATES OVER THE FREQUENCY RANGE OF 1.0 TO 1.5 GHz. IT HAS A MAXIMUM INSERTION LOSS OF 0.35 dB AND A MINIMUM ISOLATION OF 20 dB. THIS MODEL IS OUTFITTED WITH SMA FEMALE CONNECTORS.

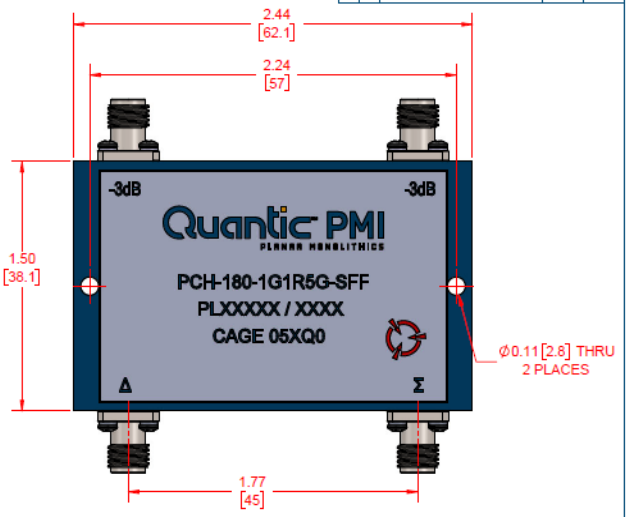
SPECIFICATIONS:

- FREQUENCY RANGE: ..... 1.0 TO 1.5 GHz
- NOMINAL SPLIT: ..... 3.01 dB
- INSERTION LOSS: ..... 0.6 dB MAXIMUM
- ISOLATION: ..... 20 dB MINIMUM
- VSWR: ..... 1.25:1 MAXIMUM
- AMPLITUDE BALANCE: ..... ±0.3 dB MAXIMUM
- PHASE BALANCE: ..... ±3° MAXIMUM
- POWER HANDLING: ..... AVERAGE: 20 W MAXIMUM
  PEAK: 1 kW MAXIMUM
- IMPEDANCE: ..... 50 Ω
- CONNECTORS: ..... SMA FEMALE
- FINISH: ..... PAINTED BLUE

ENVIRONMENTAL RATINGS:

- TEMPERATURE: ..... -55°C TO +85°C (OPERATING)
  -65°C TO +125°C (STORAGE)
- ALTITUDE: ..... MIL-STD-202, METHOD 105C COND. B
- HUMIDITY: ..... UP TO 95%, NON-CONDENSING
- SHOCK: ..... MIL-STD-202, METHOD 213B COND. B
- VIBRATION: ..... MIL-STD-202, METHOD 204D COND. B
- TEMPERATURE CYCLE: ..... MIL-STD-202, METHOD 107D COND. A

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	10/3/2023	
	B1	ECN # 23-0224	11/03/2023	



PMI CONFIDENTIAL AND PROPRIETARY

NEXT ASSY	USED ON				
APPLICATION					

APPROVALS	DATE		
DRAWN: S.AZHAR	10/3/2023		
REDRAWN			
ISSUED			

Quantic PMI
PLANAR MONOLITHICS
7309-A GROVE ROAD FREDERICK, MARYLAND 21704 USA
TEL: (301) 662-5019 FAX: (301) 662-1731
WEB: WWW.QUANTICPMI.COM

TITLE: PCH-180-1G1R5G-SFF
OUTLINE

SIZE	FSCM NO.	DWG NO.	REV.
B	05XQ0	27047480	B1

SCALE 2:1 SHEET 1 OF 1

Quantic PMI
PLANAR MONOLITHICS

TYPICAL CHARACTERISTICS ON PCH-180-1G1R5G-SFF

TEST DATA

TEST ITEM	PARAMETERS	SPECIFIED VALUE	TEST RESULTS		
			25°C	-55°C	85°C
1	Frequency Range	1.0 GHz to 1.5 GHz	**1.0 GHz to 1.5 GHz**		
2	Insertion Loss	0.6 dB Max.	**0.497 dB**	**0.489 dB**	**0.505 dB**
3	VSWR: In/Out	1.25:1 Max.	**1.17 :1**	**1.17 :1**	**1.18 :1**
4	Isolation	20 dB Min.	**31.3 dB**	**30.7 dB**	**31.9 dB**
5	Phase Balance	±3° Max	**±1.04°**	**±1.2°**	**±1.1°**
6	Amplitude Balance	±0.3 dB Max.	**±0.21 dB**	**±0.22 dB**	**±0.2 dB**
7	Power Handling	20 W Max. 1kW Peak	**20 W CW TESTED**	**20 W CW TESTED**	**20 W CW TESTED**

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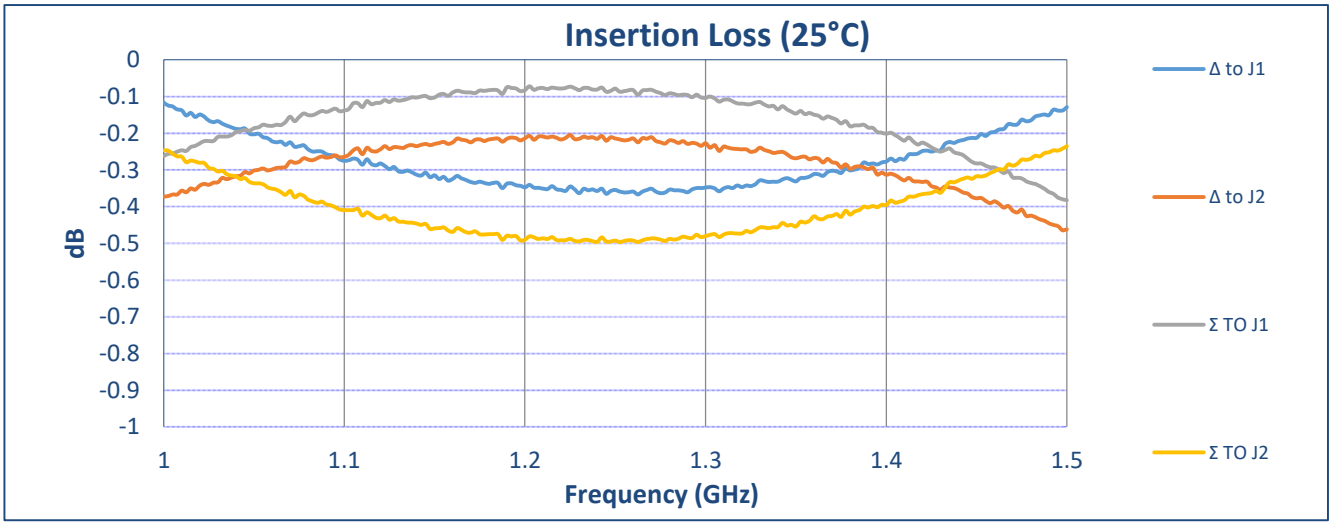

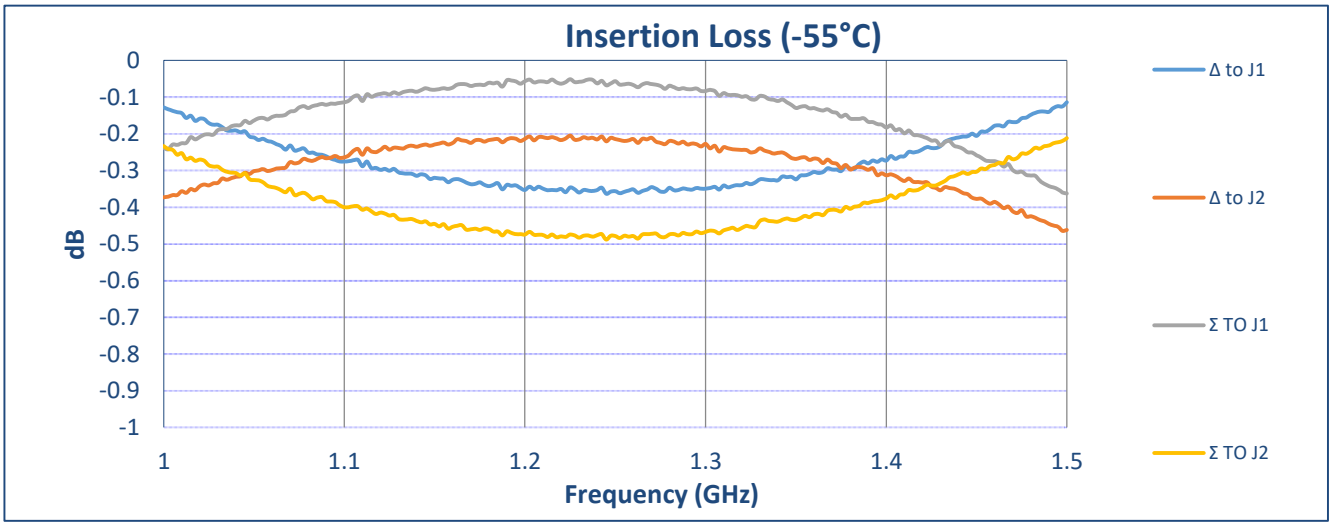

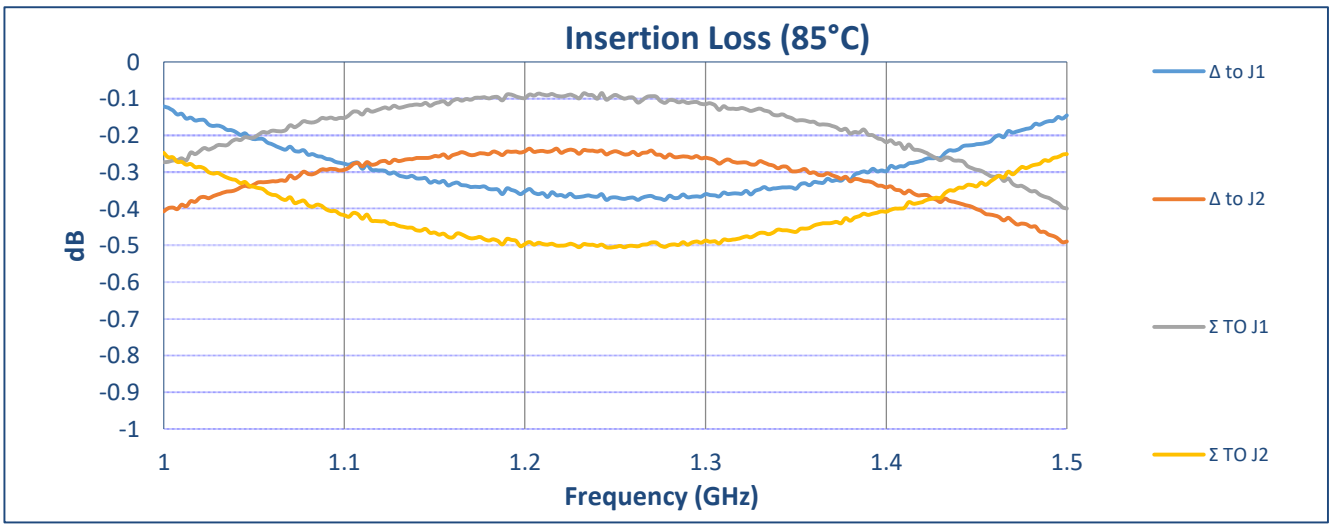

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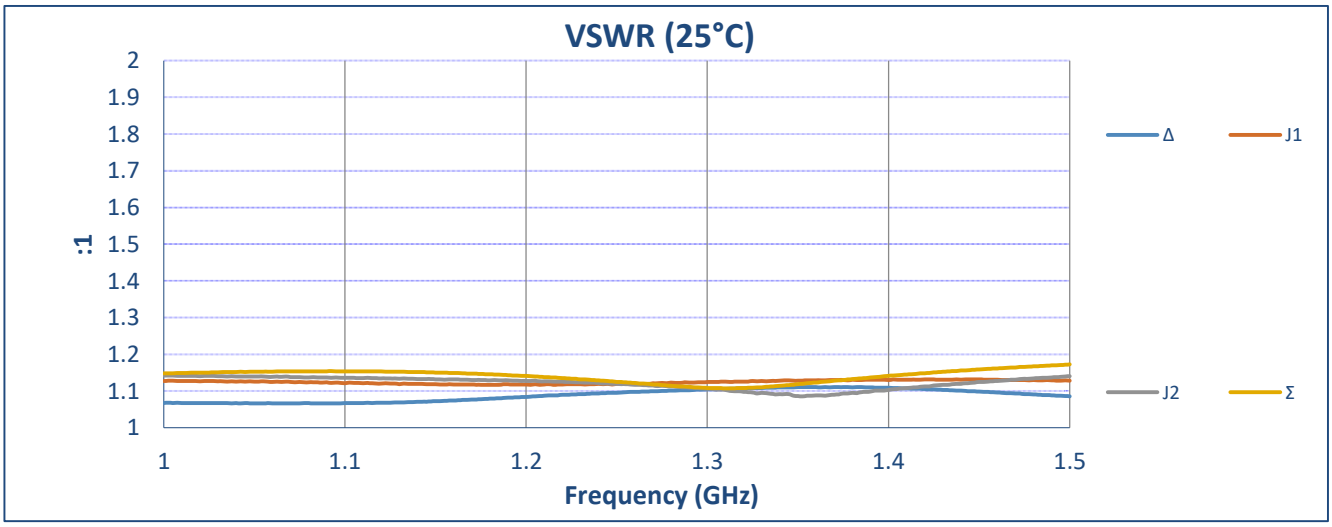

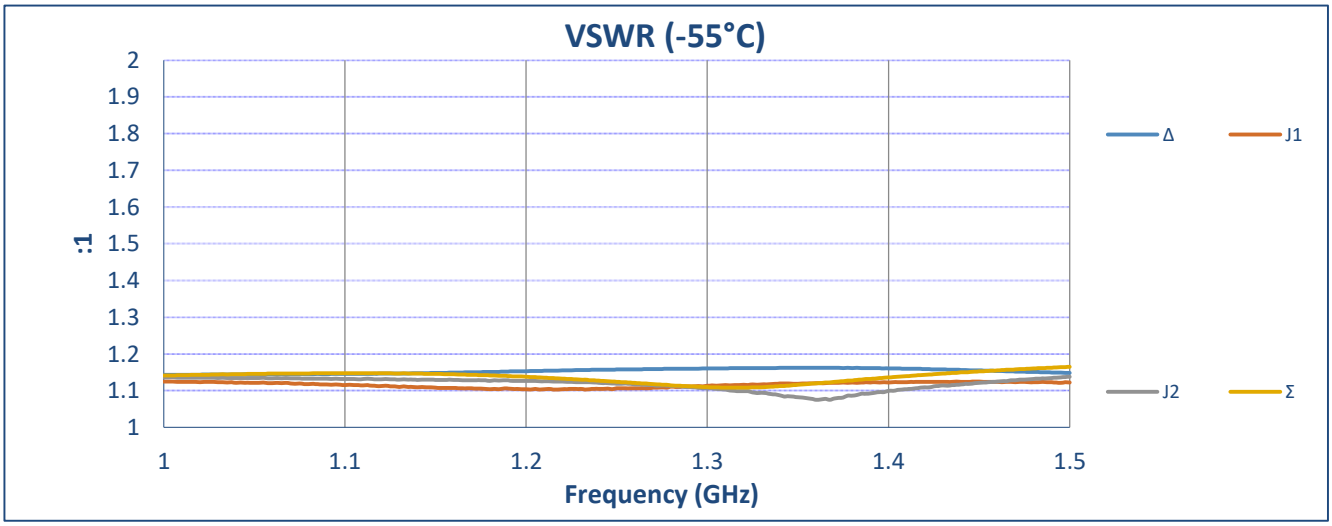

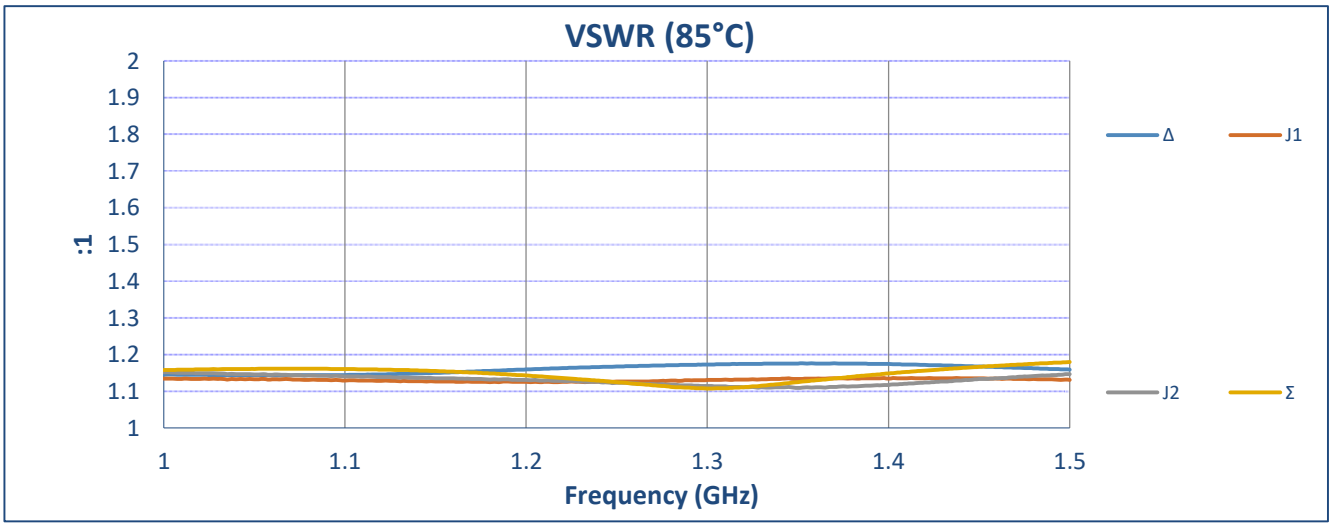

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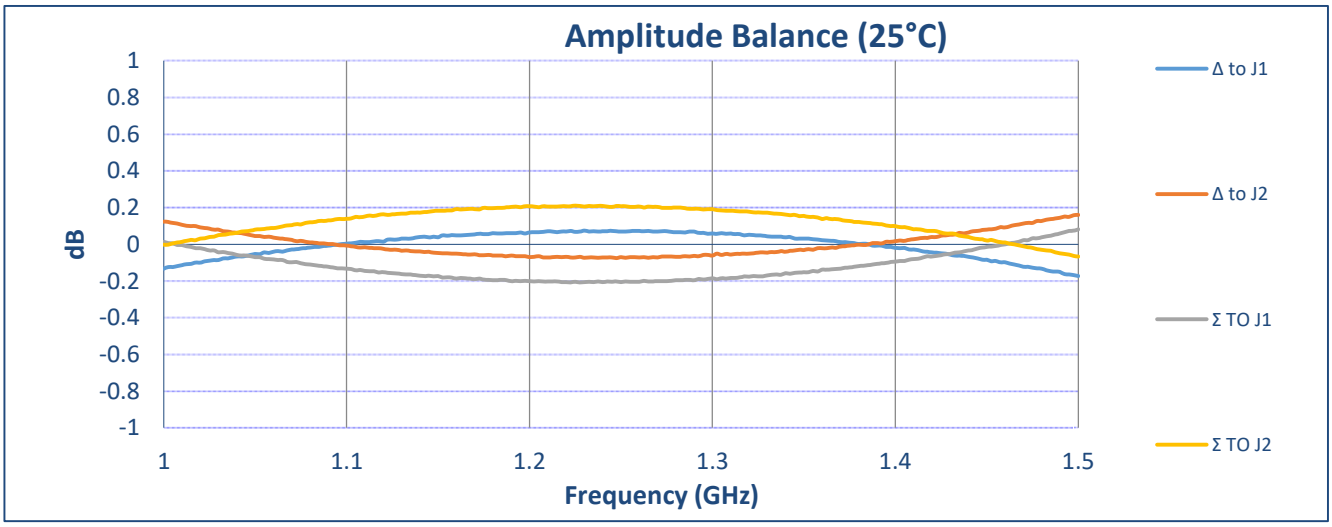

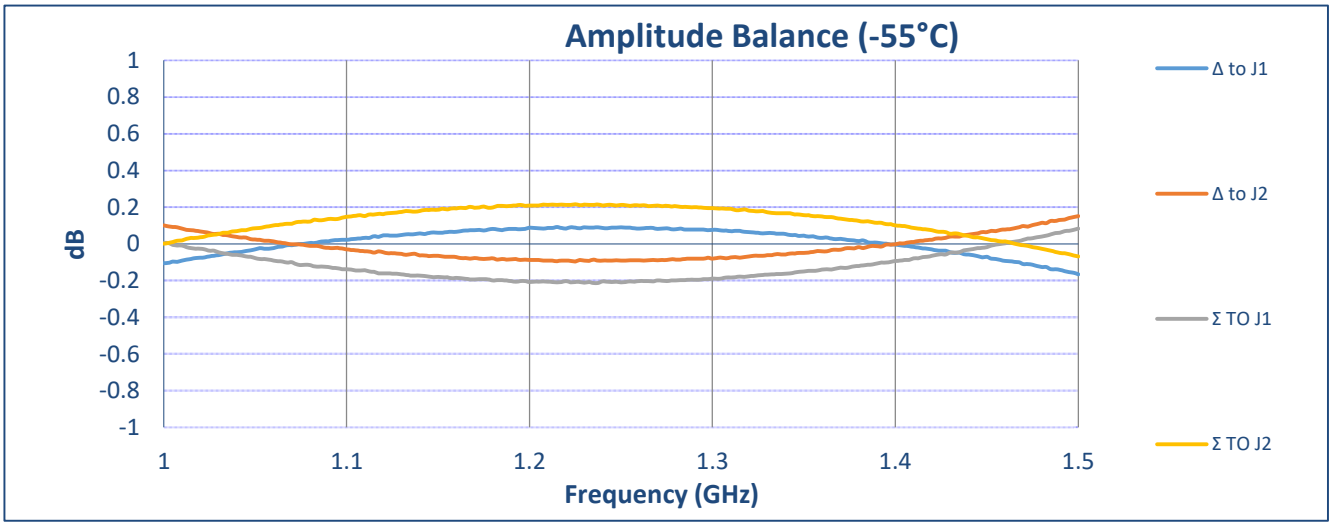

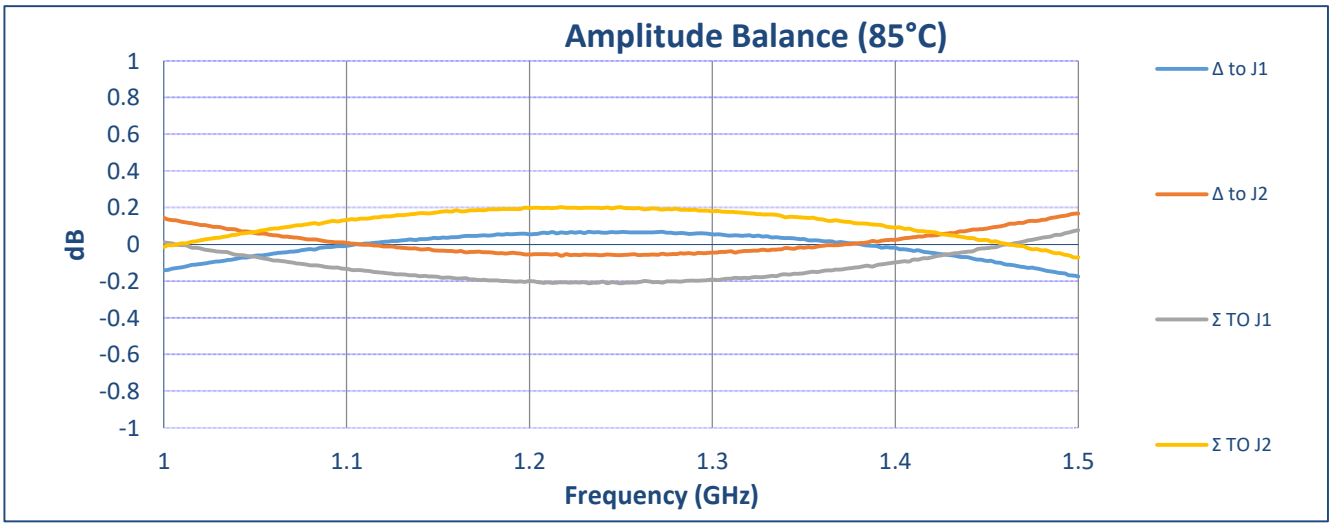

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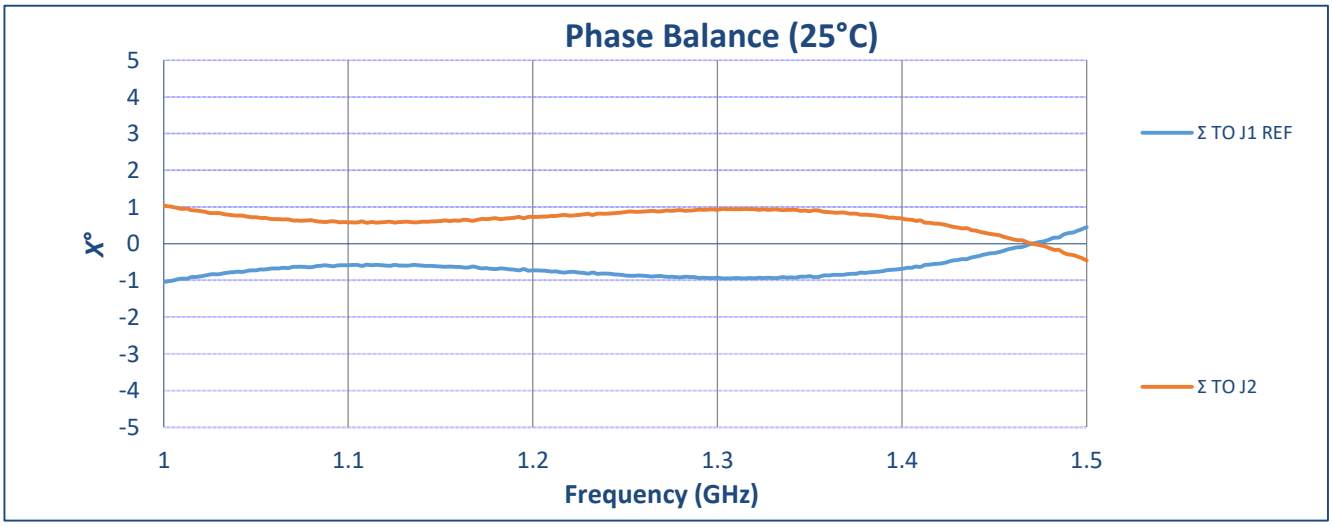

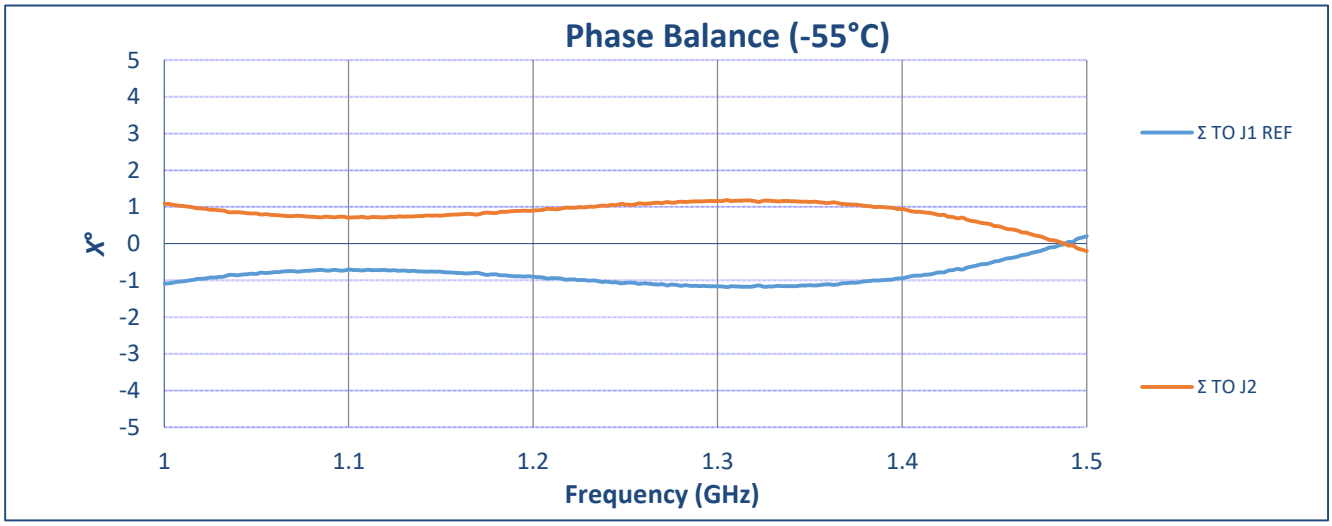

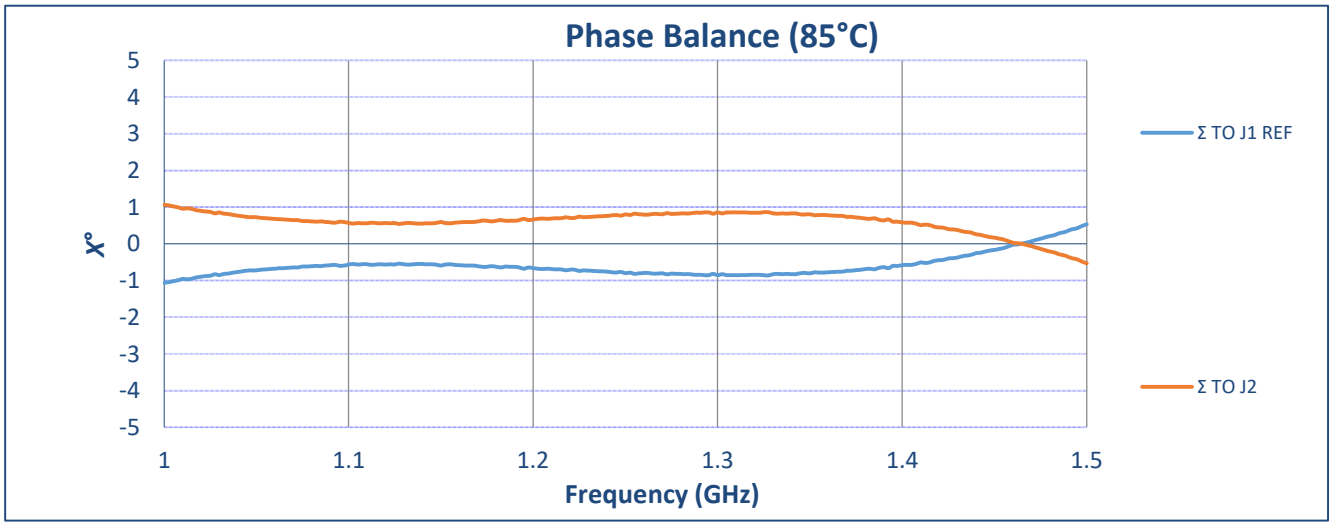

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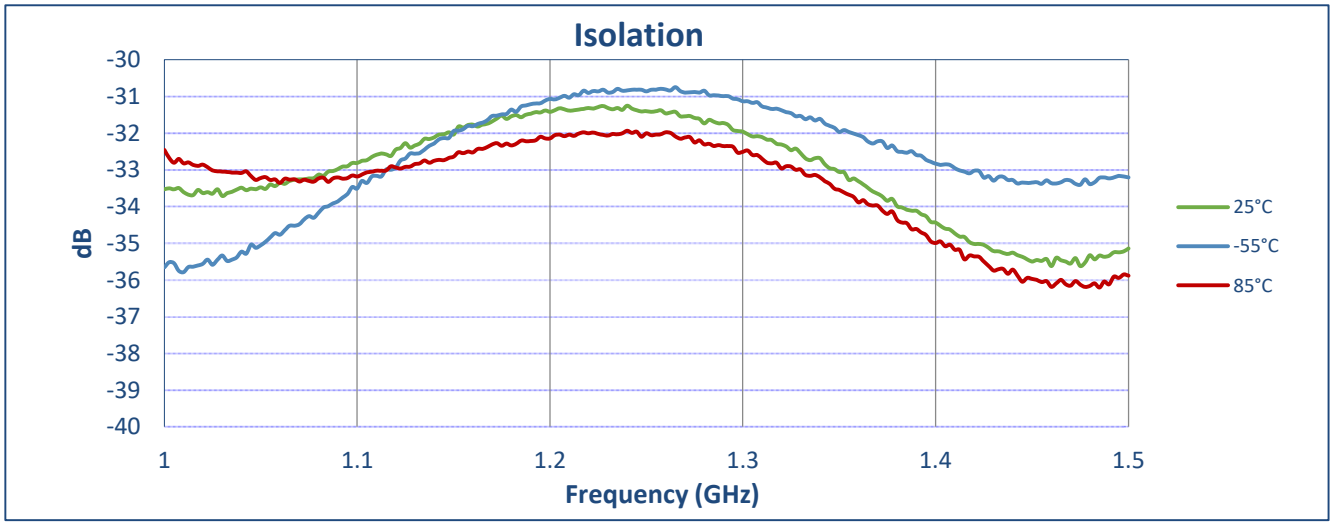

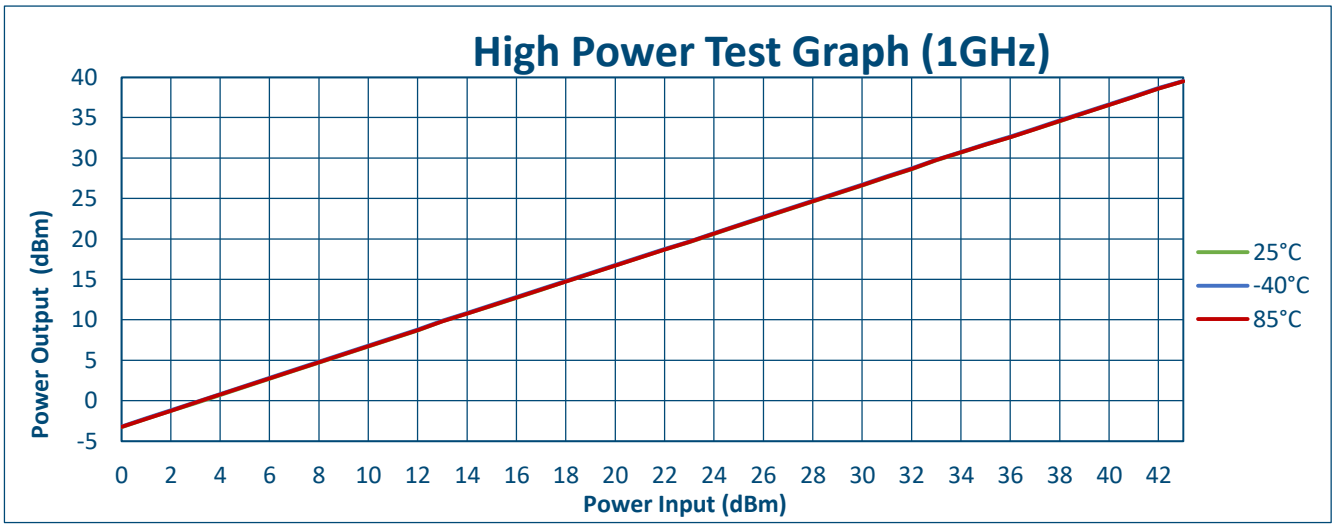

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