

**TYPICAL CHARACTERISTICS
ON
QC-2G18G-90**

PMI MODEL NO. QC-2G18G-90 IS A QUADRATURE COUPLER THAT OPERATES OVER THE FREQUENCY RANGE OF 2.0 TO 18.0 GHz. IT HAS A MINIMUM ISOLATION OF 20 dB AND A MAXIMUM INSERTION LOSS OF 1.3 dB. THIS PRODUCT IS OUTFITTED WITH SMA FEMALE CONNECTORS.



Septemeber 26, 2024

Tested By:

Kevin C.

Reported By:

Matt L.

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Outline Drawing

DESCRIPTION:
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SPECIFICATIONS:

- FREQUENCY RANGE: 2.0 TO 18.0 GHz
- NOMINAL SPLIT: 3.01 dB
- INSERTION LOSS @ 25°C: 1.3 dB MAX
- ISOLATION: 20 dB MIN
- AMPLITUDE BALANCE: ± 0.5 dB MAX
- PHASE BLANCE: ± 5° MAX
- VSWR: 1.40:1 MAX
- POWER HANDLING: AVERAGE: 50 WATT MAX
PEAK: 1 kW MAX
- IMPEADANCE: 50 OHMS
- CONNECTORS: SMA FEMALE
- FINISH: PAINTED BLUE

ENVIRONMENTAL RATINGS:

- TEMPERATURE: -55°C TO +85°C (OPERATING)
- ALTITUDE: MIL-STD-202, METHOD 105C COND. B
- HUMIDITY: MIL-STD-202, METHOD 103B COND. B
- SHOCK: MIL-STD-202, METHOD 213B COND. B
MIL-STD-202, METHOD 213B COND. B

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

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	01/02/04	

4X Ø 0.071 [1.8] THRU

SMA FEMALE 4 PLACE

PMI CONFIDENTIAL AND PROPRIETARY

Quantic PMI
PLANAR MONOLITHICS

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WEB: WWW.QUANTICPMI.COM FAX: (301)662-1731
E-MAIL: SALES@PMI-RF.COM

APPROVALS	DATE	TITLE
M. LAULIS	01/02/04	OUTLINE

REV.	FROM NO.	QWS NO.	REV.
B	05X00	27048960	A1

SCALE 2:1 SHEET 1 OF 1

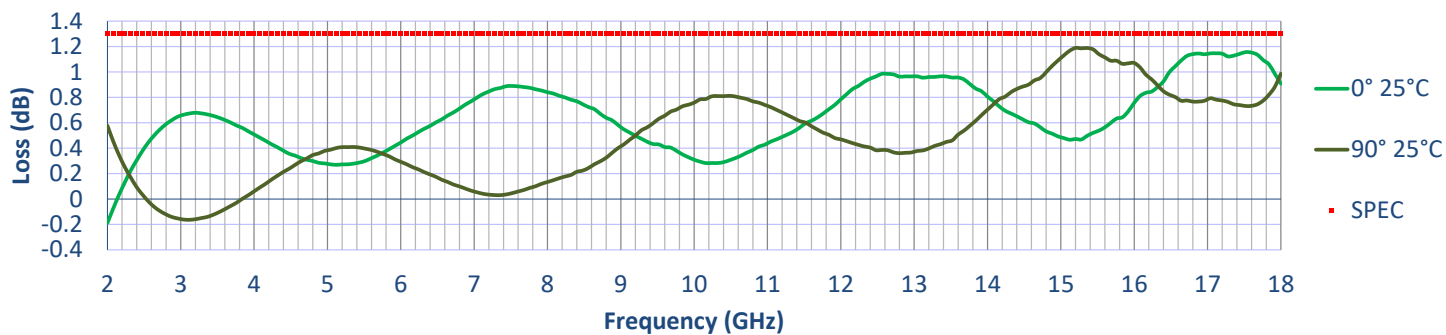
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Typical Characteristics

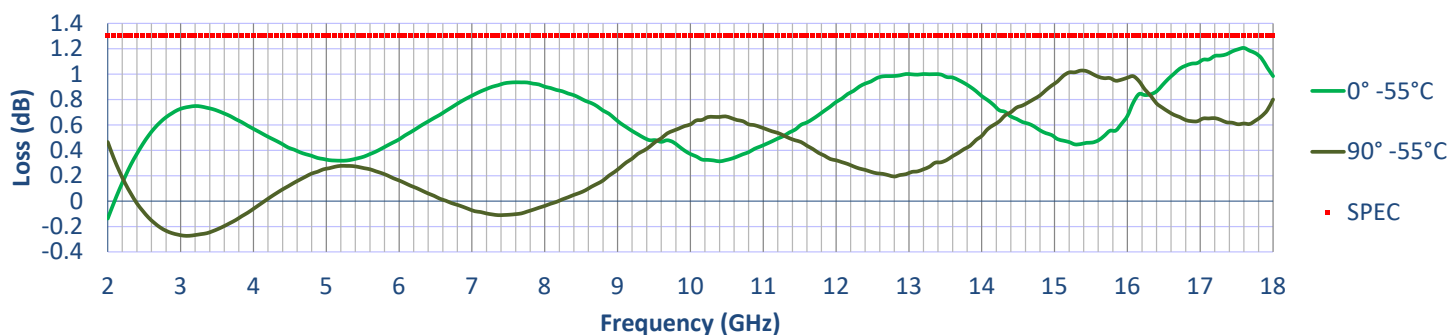
TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	TEST RESULTS		
			+25°C	-55°C	+85°C
1	Frequency Range	2 GHz to 18 GHz	2 GHz to 18 GHz	2 GHz to 18 GHz	2 GHz to 18 GHz
2	Insertion Loss @ + 25°C	1.3 dB Max.	1.19 dB	1.2 dB	1.3 dB
3	Isolation	20 dB Min.	20.5 dB	20.4 dB	20.7 dB
4	VSWR: In/Out	1.4:1 Max.	1.26:1 In	1.27:1 In	1.26:1 In
			1.33:1 Out	1.3:1 Out	1.29:1 Out
5	Amplitude Balance	±0.5 dB Max.	±0.43 dB	±0.5 dB	±0.4 dB
6	Phase Balance	±5° Max.	±0.97°	±0.97°	±0.97°

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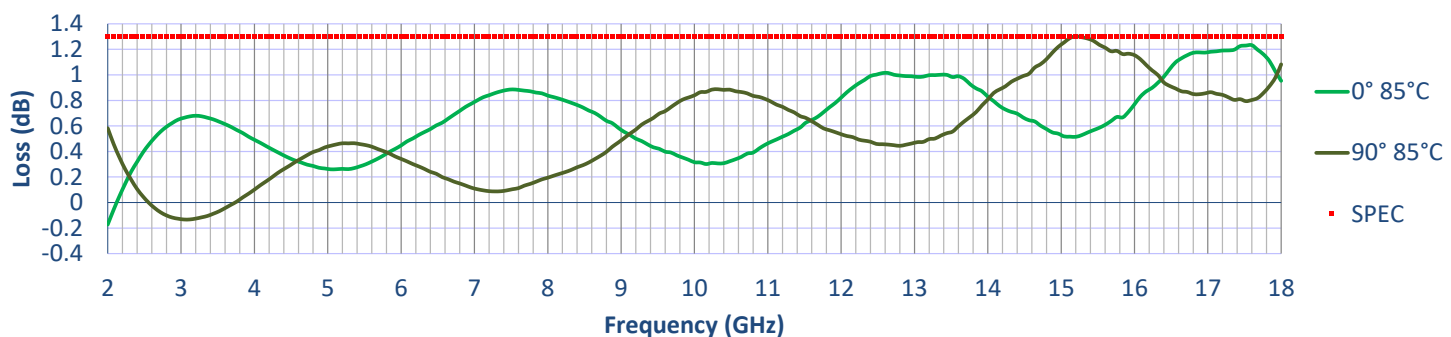
Insertion Loss



Insertion Loss

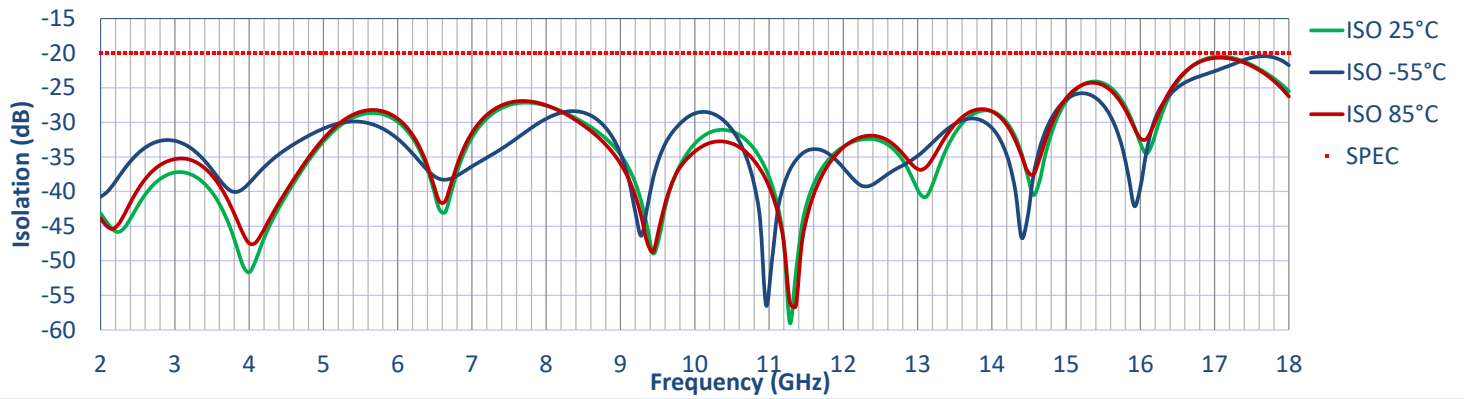


Insertion Loss

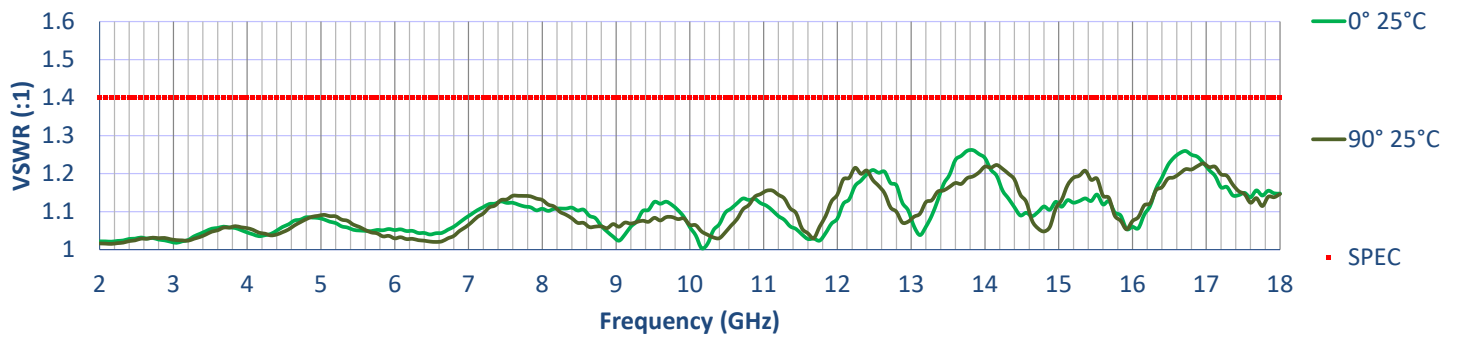


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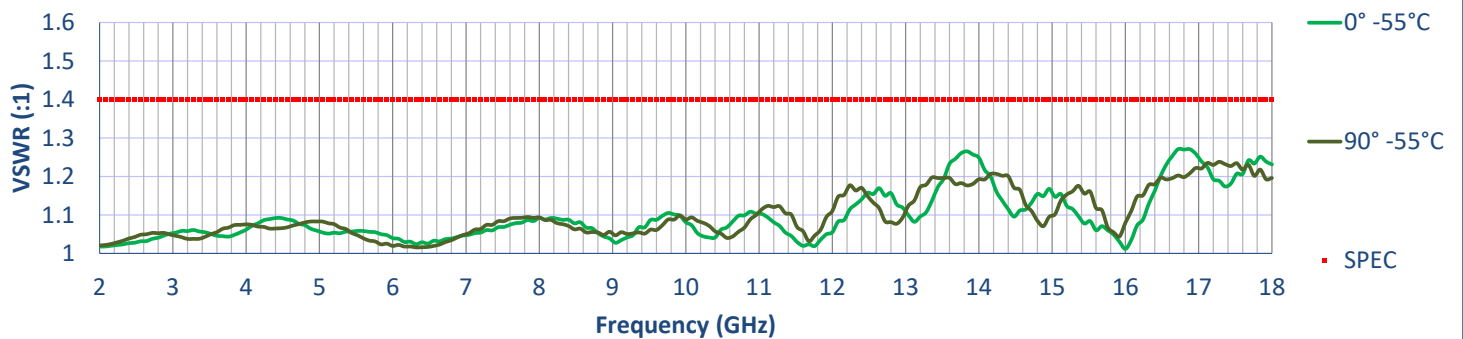
Isolation



Input VSWR

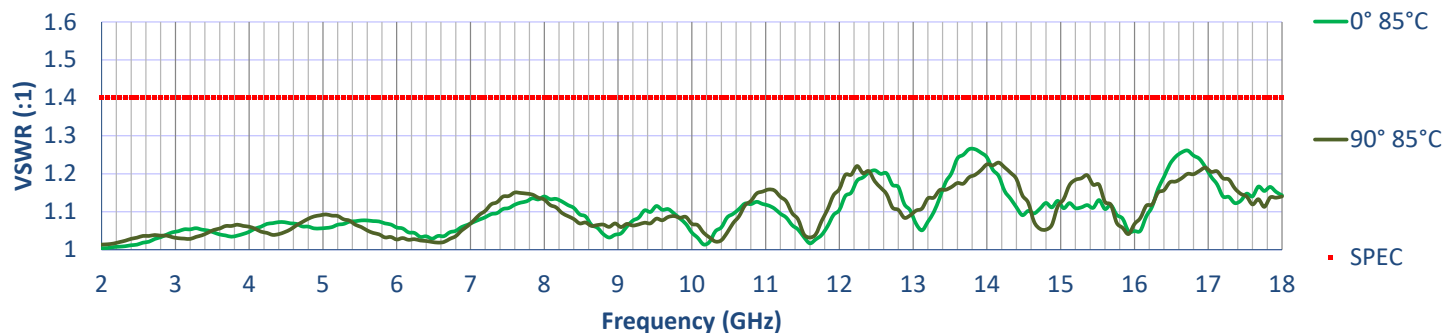


Input VSWR

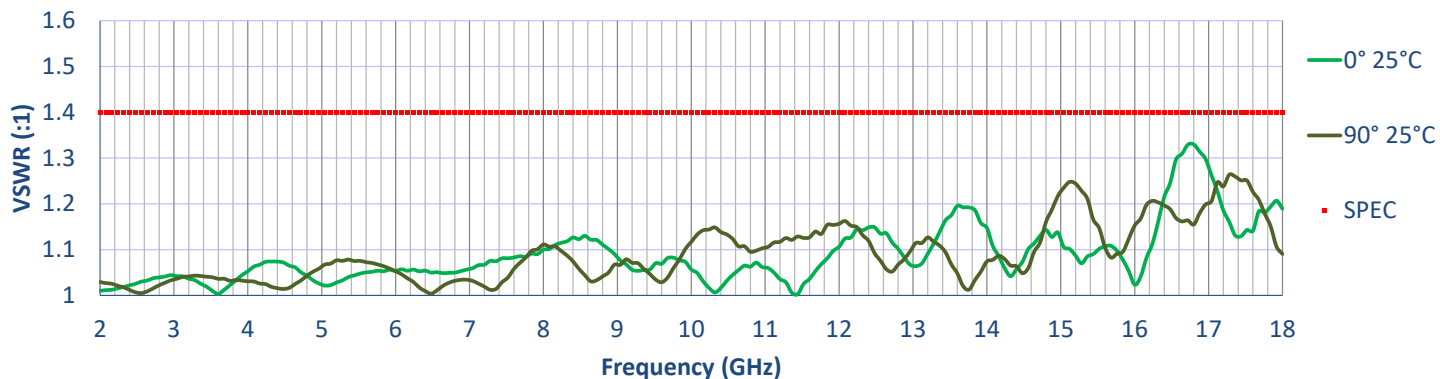


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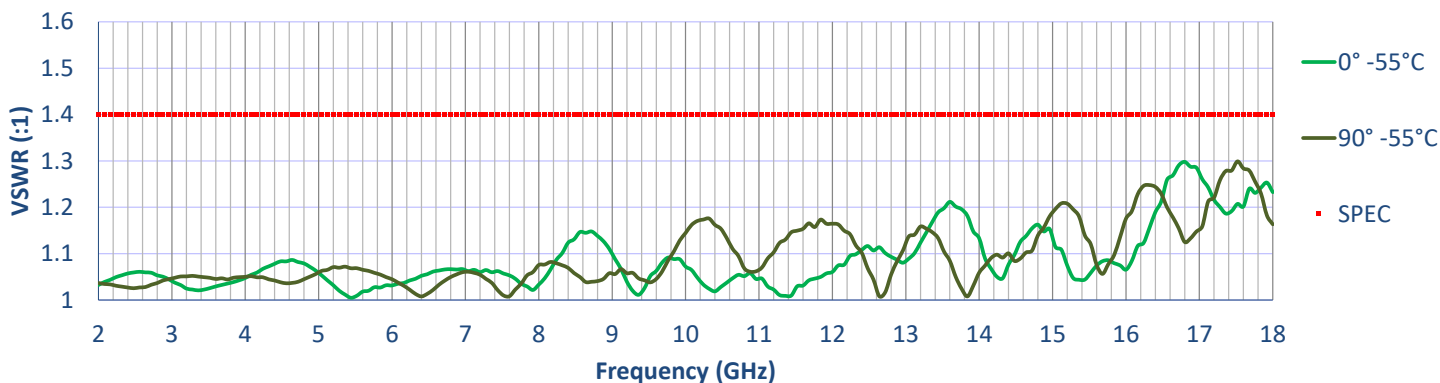
Input VSWR



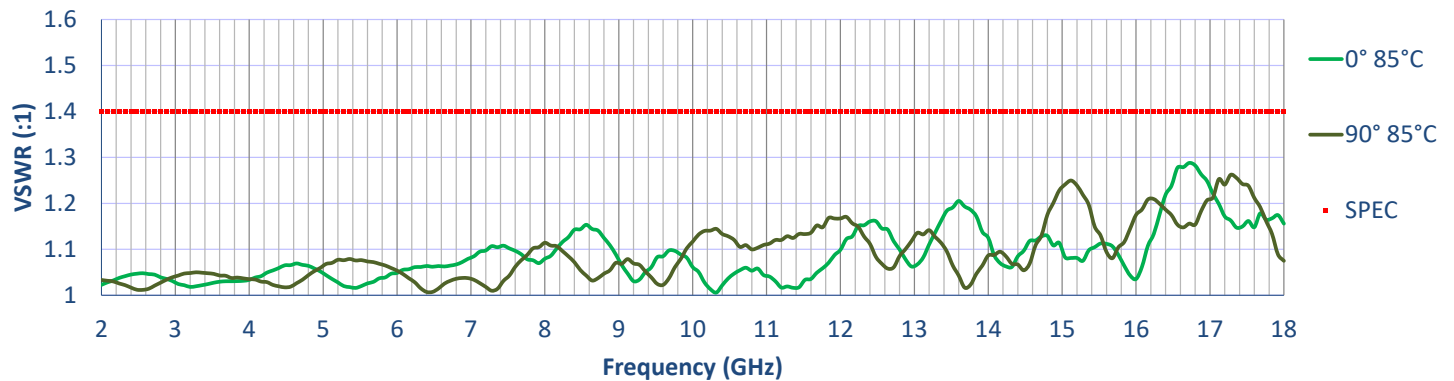
Output VSWR



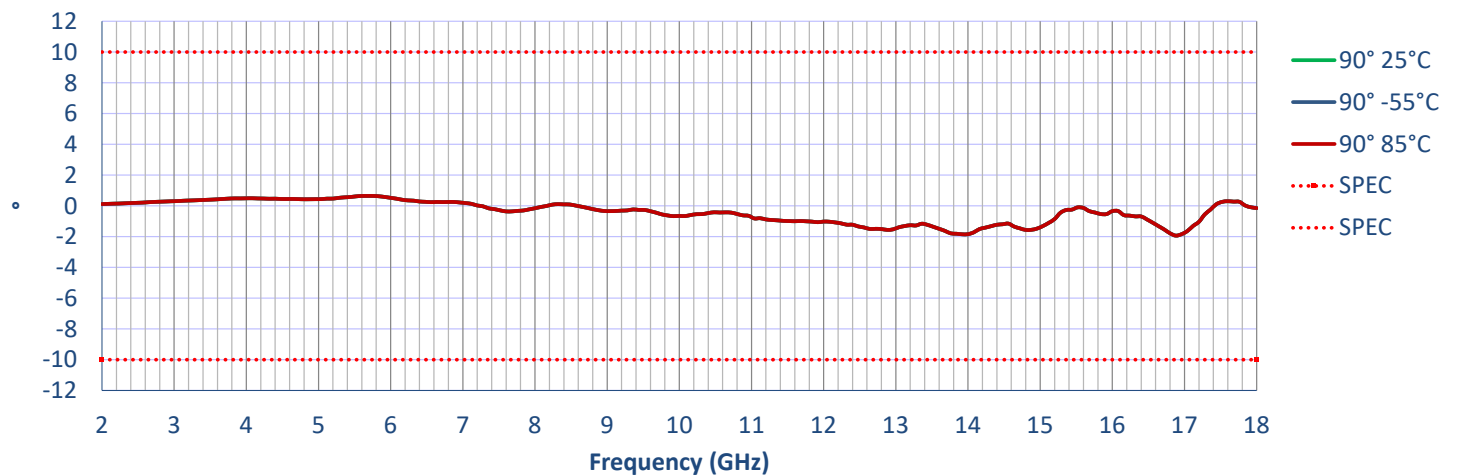
Output VSWR



Output VSWR

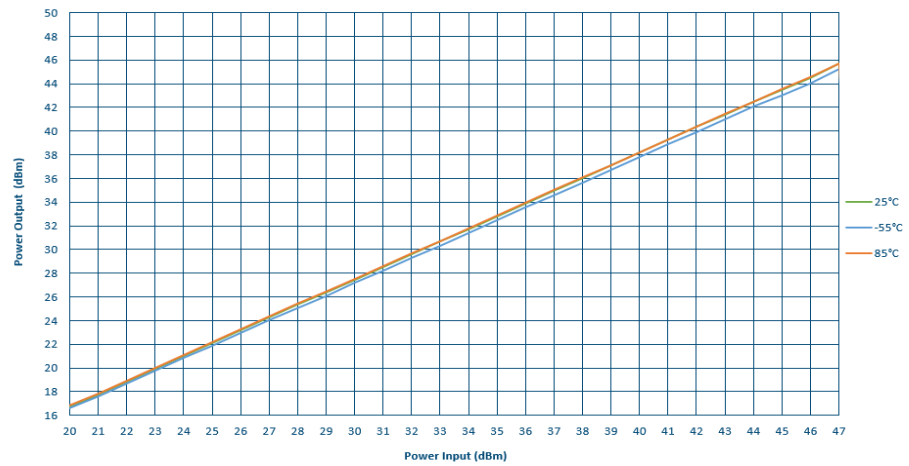


Phase Balance

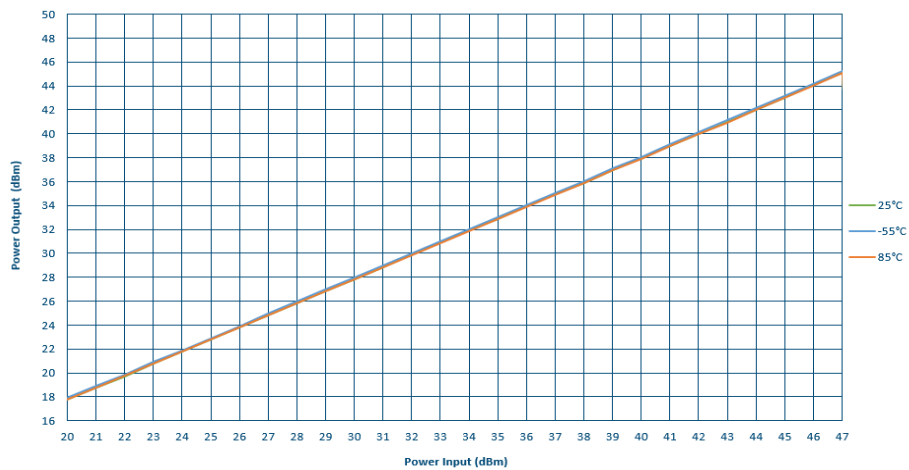


TYPICAL CHARACTERISTICS ON QC-2G18G-90

High Power Test Graph @ 2 GHz



High Power Test Graph @ 8 GHz



High Power Test Graph @ 18 GHz

