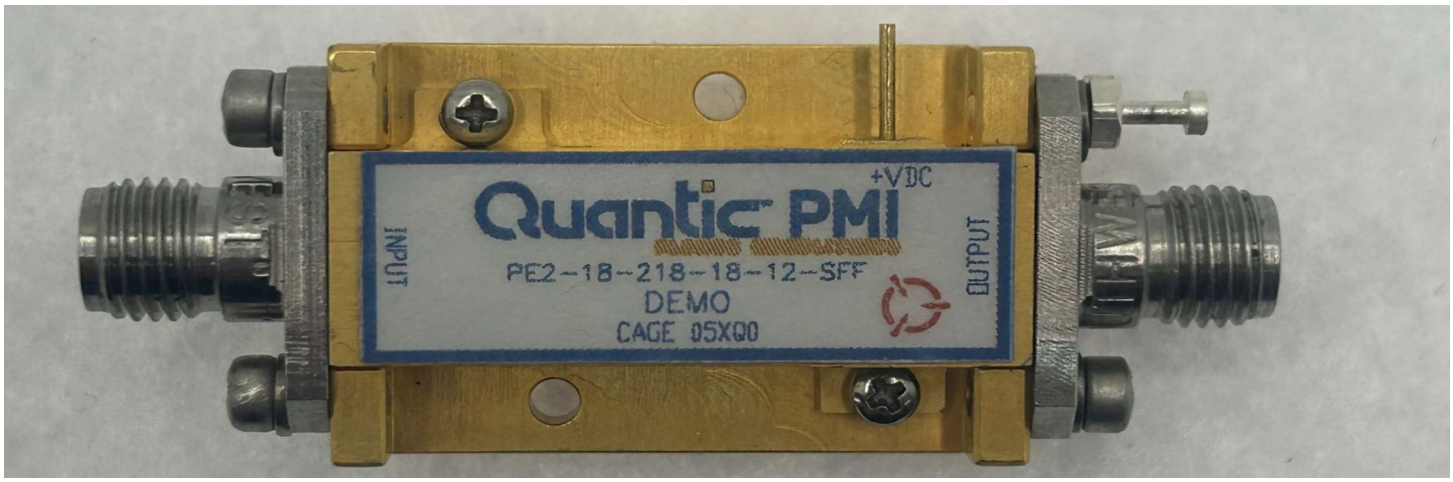
Typical Characteristics ON PE2-18-218-18-12-SFF

PMI MODEL NUMBER PE2-18-218-18-12-SFF IS A 2 TO 18 GHz AMPLIFIER. THIS AMPLIFIER IS SUPPLIED IN OUR STANDARD PE2 HOUSING THAT CAN BE USED AS A SMA CONNECTORIZED OR SURFACE MOUNT COMPONENT.



TESTED AND REPORTED BY
R. SIRK

DATE
July 21, 2025

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

Typical Characteristics ON PE2-18-218-18-12-SFF

Outline Drawing

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	5/1/24	

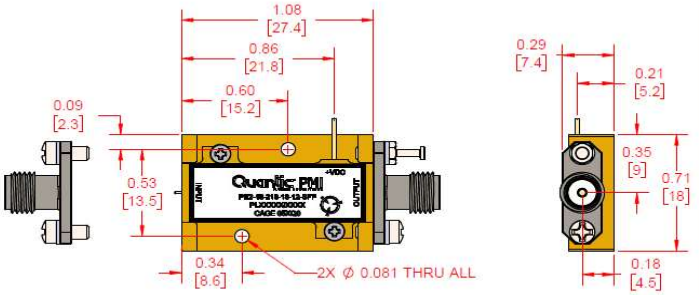
DESCRIPTION:

PMI MODEL NUMBER PE2-18-218-18-12-SFF IS A 2 TO 18 GHz LOW NOISE AMPLIFIER. THIS AMPLIFIER IS SUPPLIED IN OUR STANDARD PE2 HOUSING THAT CAN BE USED AS A SMA CONNECTORIZED OR SURFACE MOUNT COMPONENT.

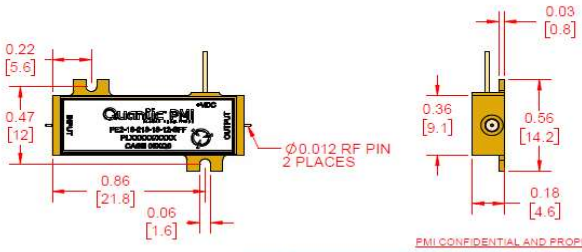
SPECIFICATIONS:

- FREQUENCY RANGE: ..... 2.0 TO 18.0 GHz
- GAIN: ..... 18 dB TYP
  17 dB MIN
- GAIN FLATNESS: ..... ±1.25 dB MAX
- NOISE FIGURE: ..... 6 dB MAX
- OP1dB: ..... +18 dBm MIN
- RF INPUT POWER: ..... +23 dBm MAX
- INPUT VSWR: ..... 2.0:1 MAX
- OUTPUT VSWR: ..... 2.0:1 MAX
- DC VOLTAGE SUPPLY: ..... +12 TO +15 VDC
- DC CURRENT DRAW: ..... Iq = 250 mA MAX
  Ipsat = 300 mA MAX
- CONNECTORS: ..... SMA FEMALE
- FINISH: ..... GOLD PLATED

PE2 HOUSING WITH CARRIER



PE2 HOUSING WITHOUT CARRIER



ENVIRONMENTAL RATINGS:

- TEMPERATURE: ..... -55°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

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

PMI CONFIDENTIAL AND PROPRIETARY

APPROVALS	DATE
DRAWN: R. SIRK	5/1/24
REDRAWN	
ISSUED	

TITLE: OUTLINE
PE2-18-218-18-12-SFF
SIZE: B | FSCM NO.: 05XQ0 | DWG NO.: 27048760 | REV: A1
SCALE: 2:1 | SHEET 1 OF 1

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Quantic PMI
PLANAR MONOLITHICS

Typical Characteristics ON PE2-18-218-18-12-SFF

Technical Specifications

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	Test Results		
			-55°C	+25°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	Gain:	18 dB Typ 17 dB Min	**+18.21 dB Min.** **+20.18 dB Max.** **See Graph**	**+18.01 dB Min.** **+19.89 dB Max.** **See Graph**	**+17.59 dB Min.** **+19.49 dB Max.** **See Graph**
3	Gain Flatness:	±1.25 dB Max	**± 0.99 dB**	**± 0.94 dB**	**± 0.95 dB**
4	Noise Figure:	6 dB Max	**4.48 dB** **See Graph**	**5.38 dB** **See Graph**	**5.67 dB** **See Graph**
5	OP1dB:	18 dBm Min	**+19.16 dBm** **See Graph**	**+19.6 dBm** **See Graph**	**+18.24 dBm** **See Graph**
6	VSWR In:	2 :1 Max	**1.54 :1** **See Graph**	**1.51 :1** **See Graph**	**1.51** **See Graph**
7	VSWR Out:	2 :1 Max	**1.68 :1** **See Graph**	**1.64 :1** **See Graph**	**1.69 :1** **See Graph**
8	DC Supply:	12 to 15 V @ Iq = 250 mA Max Ipsat = 300 mA Max	**+12 to +15 VDC** **@ Iq = 169 mA** **Ipsat = 214 mA**	**+12 to +15 VDC** **@ Iq = 207 mA** **Ipsat = 222 mA**	**+12 to +15 VDC** **@ Iq = 221 mA** **Ipsat = 222 mA**

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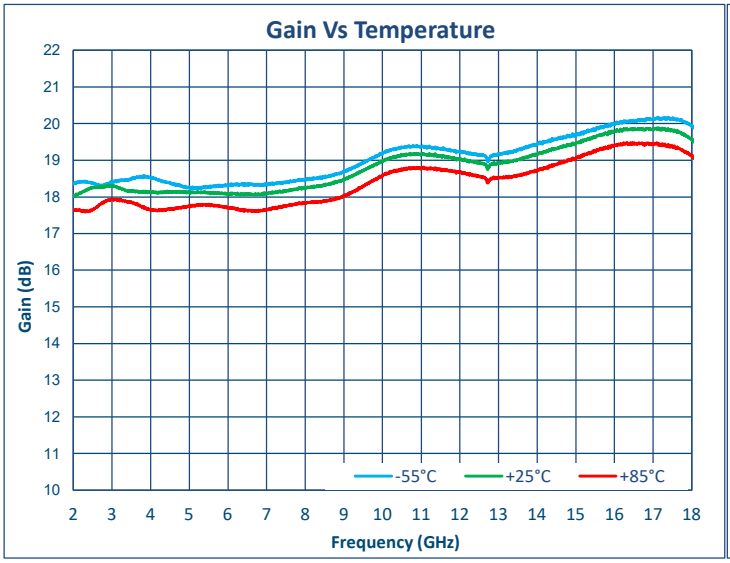

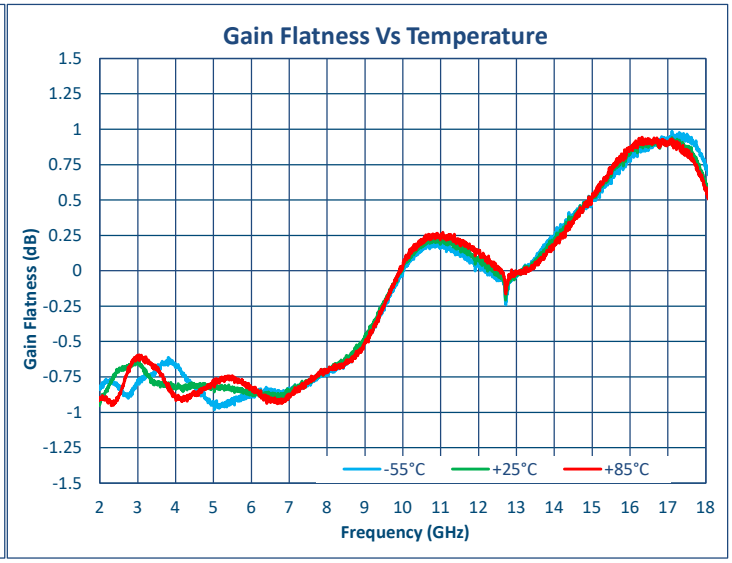

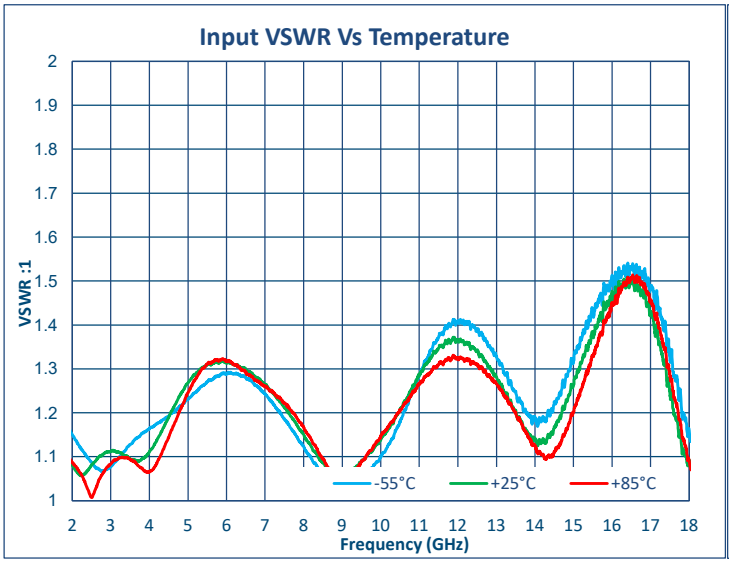

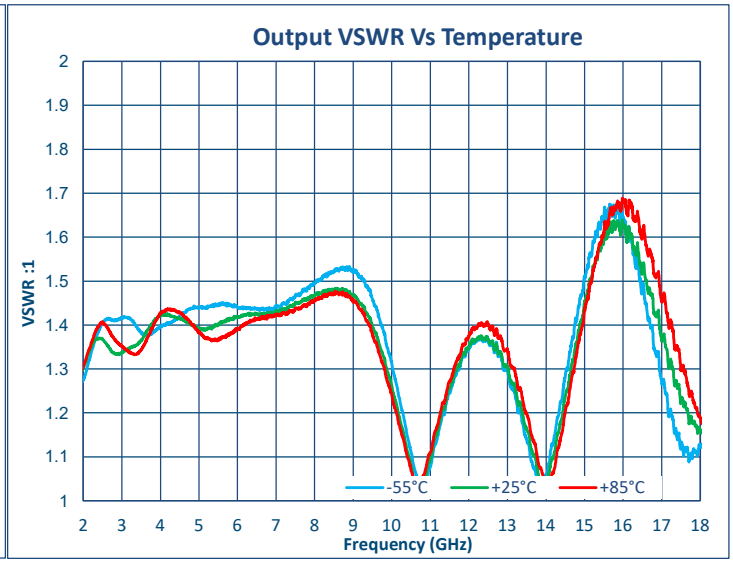

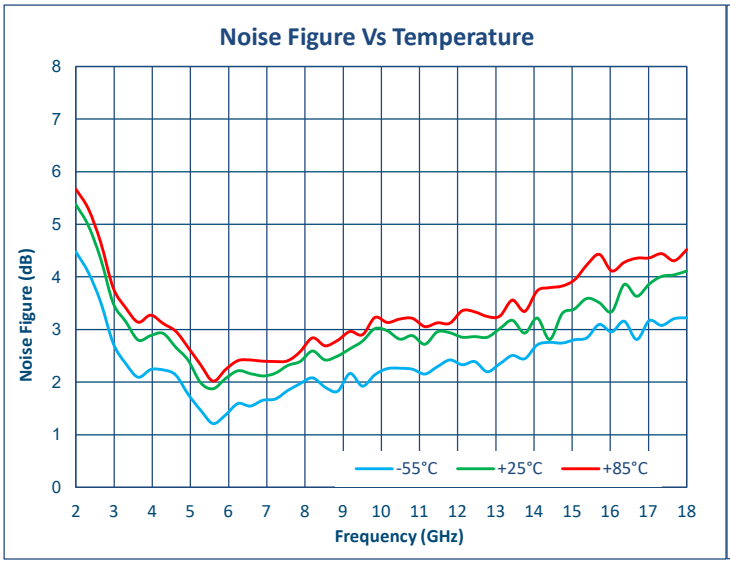

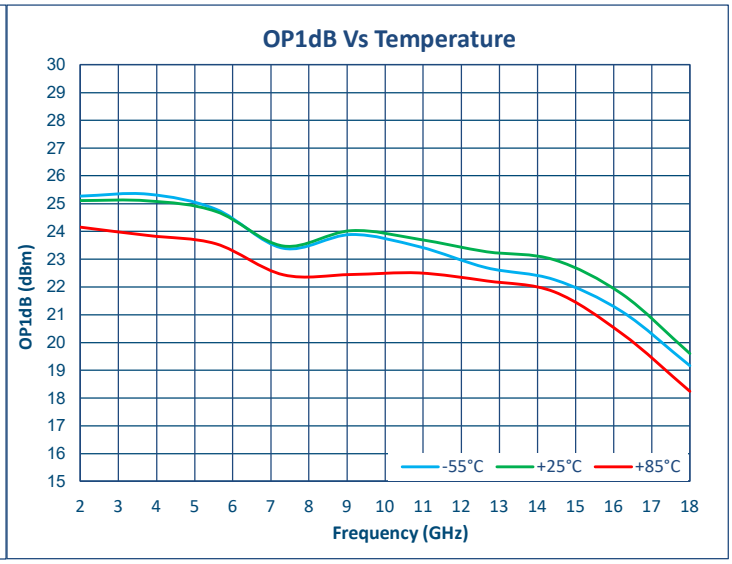

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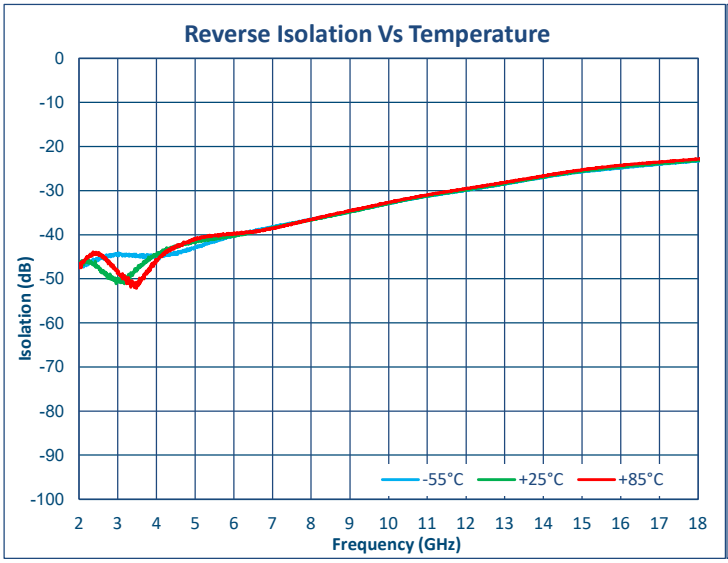

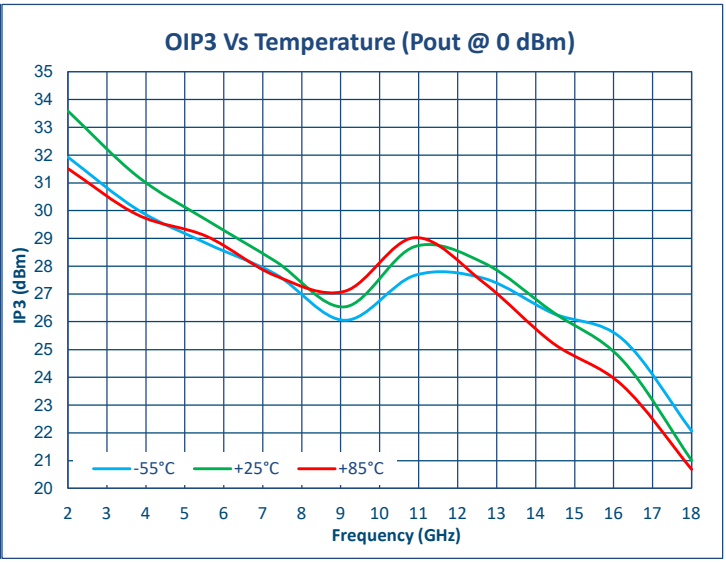

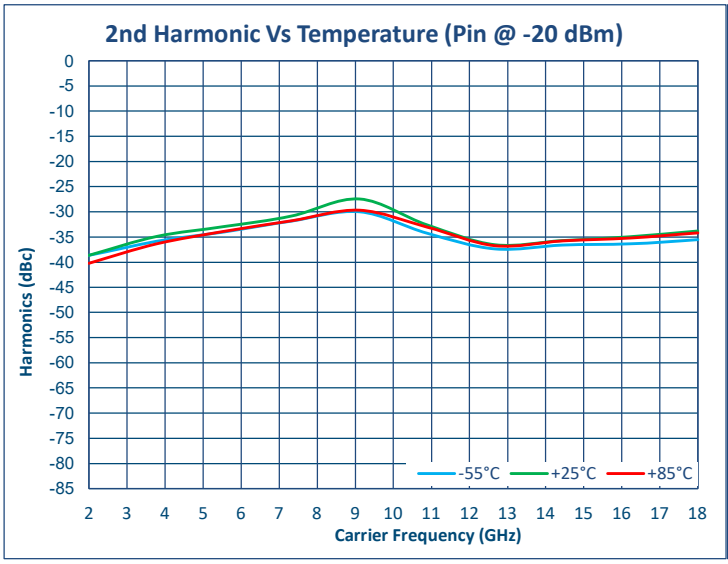

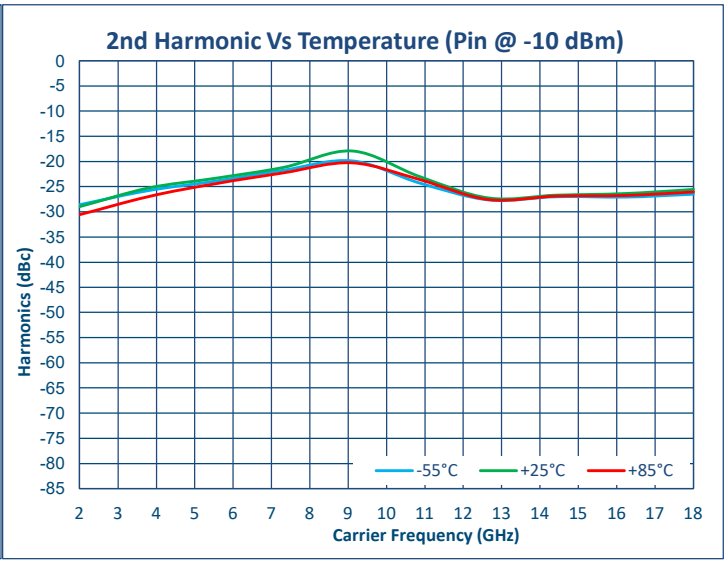

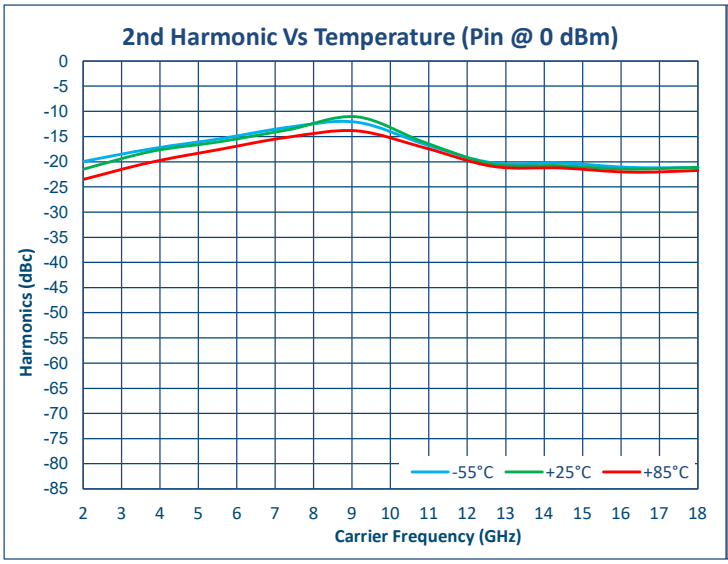

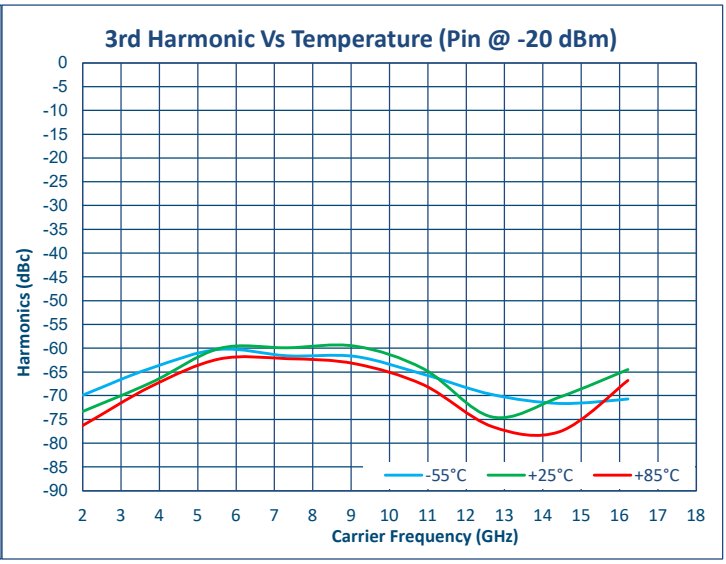

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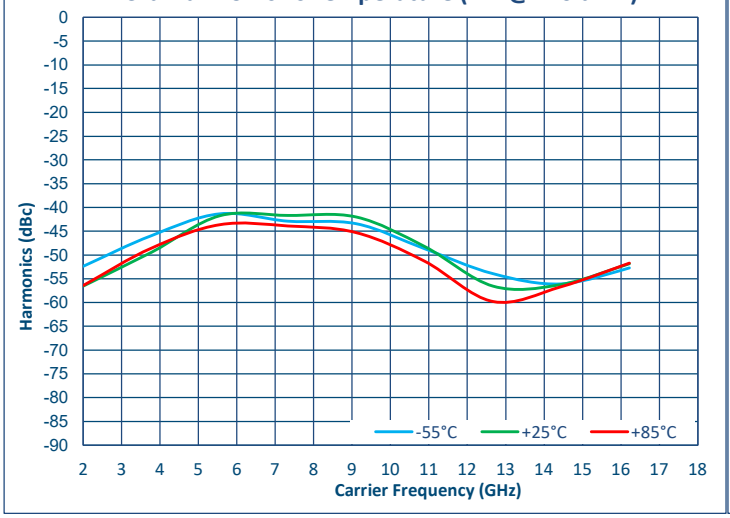

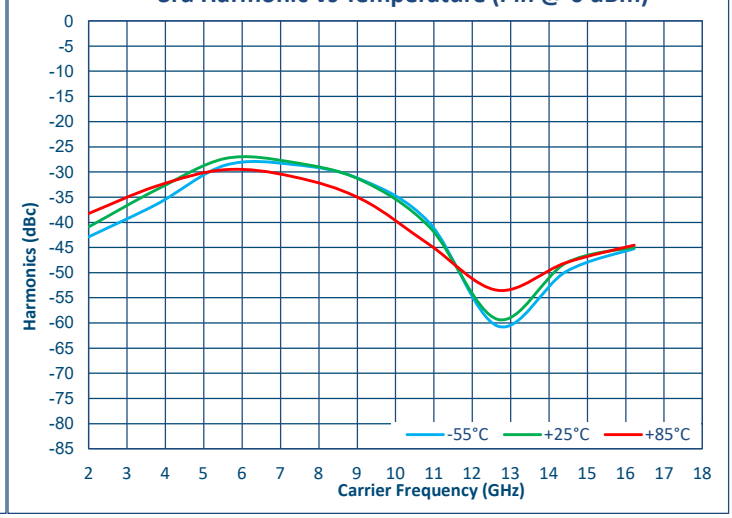

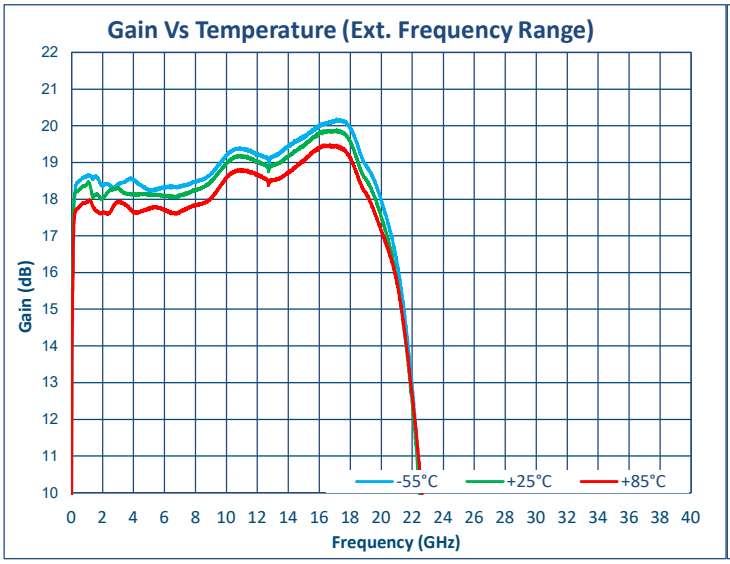

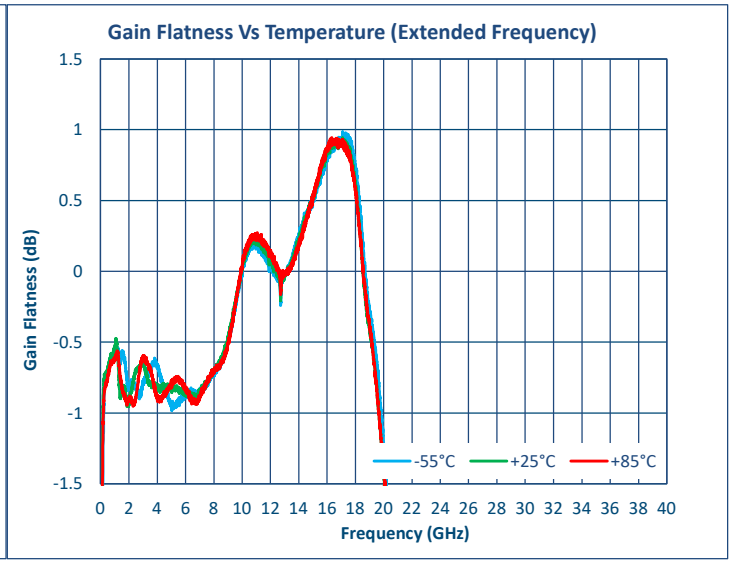

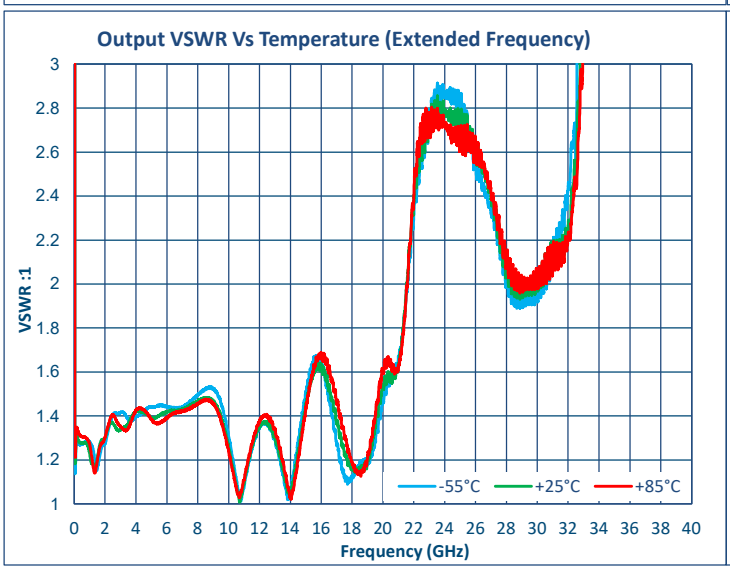

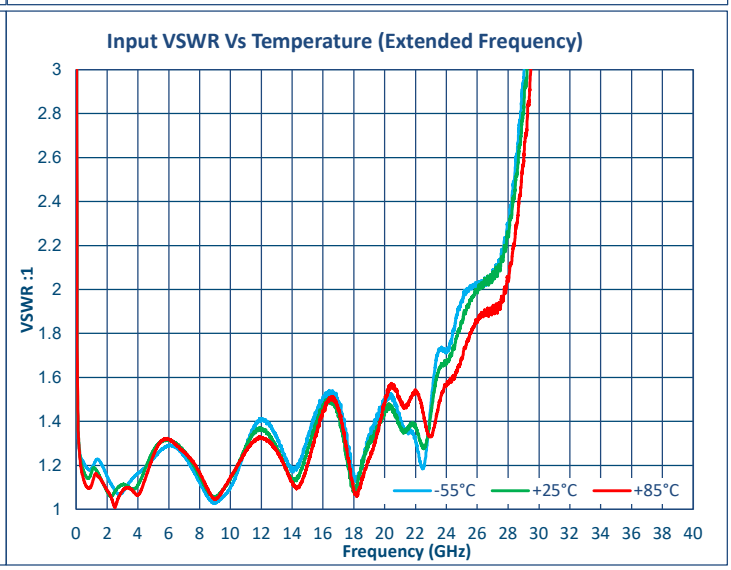

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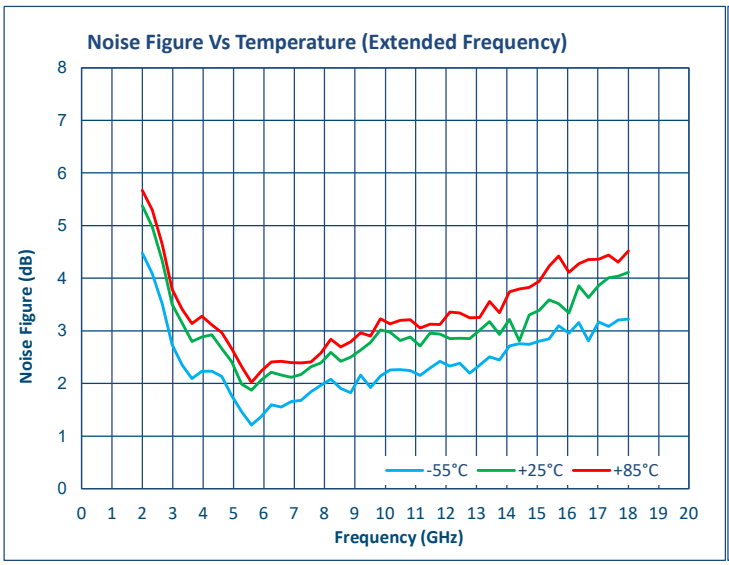

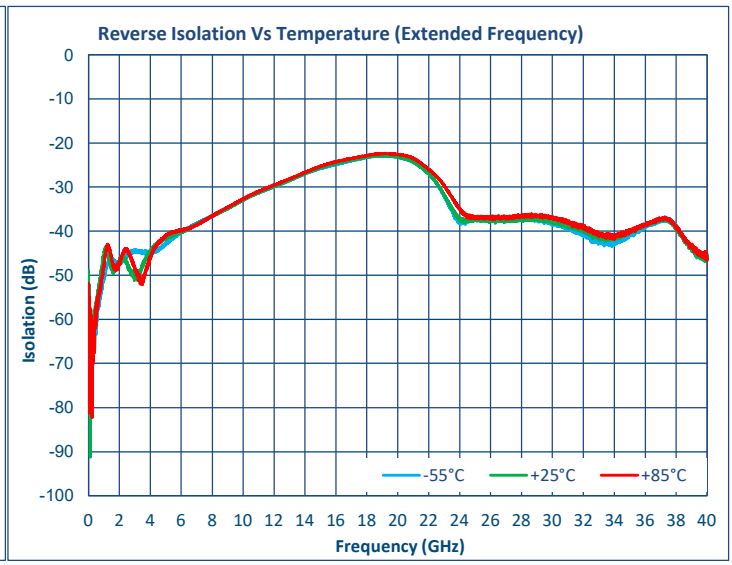

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