

**TYPICAL CHARACTERISTICS
ON
PE2-12-30M40G-5R5-7-12-292FF**

PMI MODEL NUMBER PE2-12-30M40G-5R5-7-12-292FF IS A 0.03 TO 40 GHz AMPLIFIER. THIS AMPLIFIER IS SUPPLIED IN OUR STANDARD PE2 HOUSING THAT CAN BE USED AS A 2.92mm CONNECTORIZED OR A SURFACE MOUNT COMPONENT.



July 18, 2025

Designed By:

Engineering PMI

Drawings By:

Gabriela Mendez

Tested and Reported By:

Alfredo Lopez

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Outline Drawing

DESCRIPTION:

PMI MODEL NUMBER PE2-12-30M40G-5R5-7-12-292FF IS A 30 MHz TO 40 GHz LOW NOISE AMPLIFIER. THIS AMPLIFIER IS SUPPLIED IN OUR STANDARD PE2 HOUSING THAT CAN BE USED AS A 2.92mm(F) CONNECTORIZED OR SURFACE MOUNT COMPONENT.

SPECIFICATIONS:

- FREQUENCY RANGE:..... 0.03 to 40.0 GHz
- GAIN:..... 12 dB TYP
9.5 dB MIN
- GAIN FLATNESS:..... ±2.5 dB MAX
- NOISE FIGURE:..... 7.5 dB MAX @ 30MHz to 10 GHz
4.5 dB MAX @ 10-20 GHz
7.5 dB MAX @ 20-40 GHz
- OP1dB:..... +7 dBm MIN
- VSWR (INPUT/OUTPUT):..... 2.0:1 MAX
- INPUT POWER:..... +17 dBm MAX
- DC VOLTAGE SUPPLY:..... +12 TO +15 VDC
- DC CURRENT DRAW:..... 150 mA MAX
- CONNECTORS:..... 2.92 FEMALE
- FINISH:..... GOLD PLATED

FEATURES:

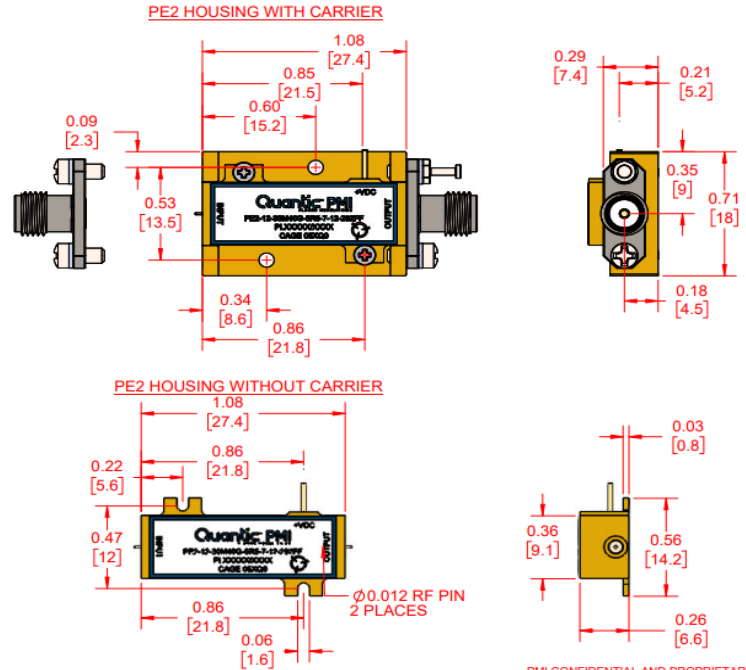
- INTERNAL VOLTAGE REGULATION
- REVERSE VOLTAGE PROTECTION
- UNCONDITIONAL STABILITY

ENVIRONMENTAL RATINGS:

- TEMPERATURE:..... -40°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
- ALTITUDE:..... MIL-STD-202, METHOD 105C COND. B
- TEMPERATURE CYCLE:..... MIL-STD-202, METHOD 107D COND. A

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

ZONE	REV	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	3/17/2023	



PMI CONFIDENTIAL AND PROPRIETARY

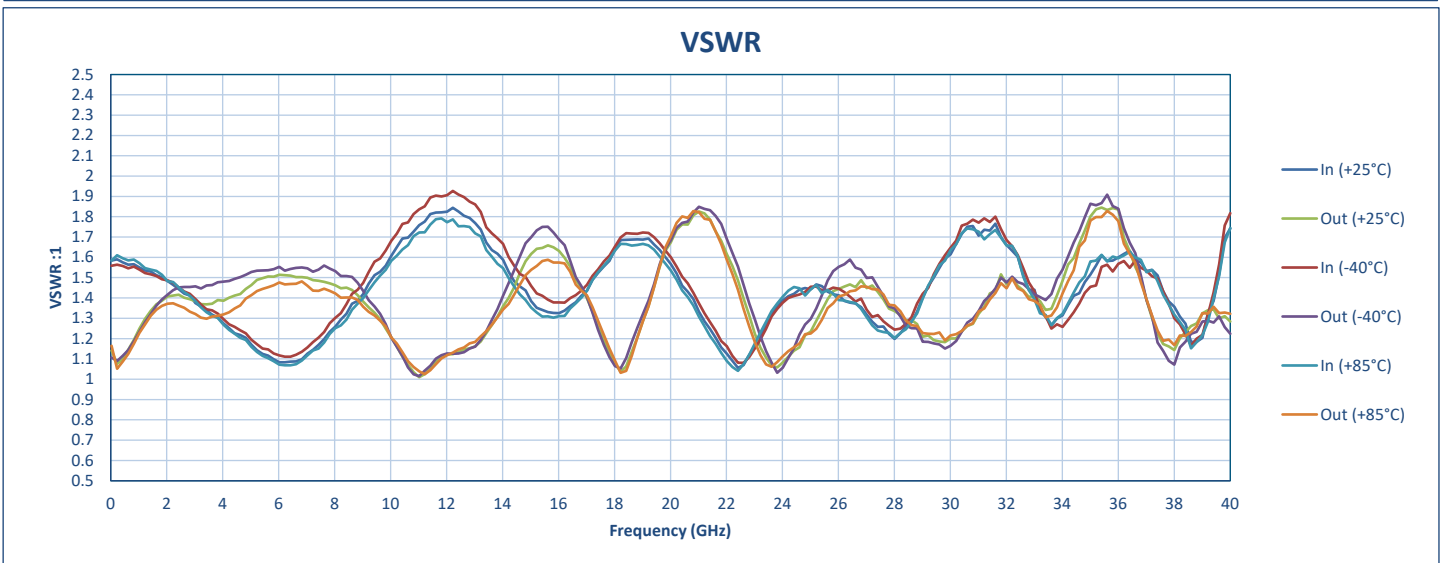
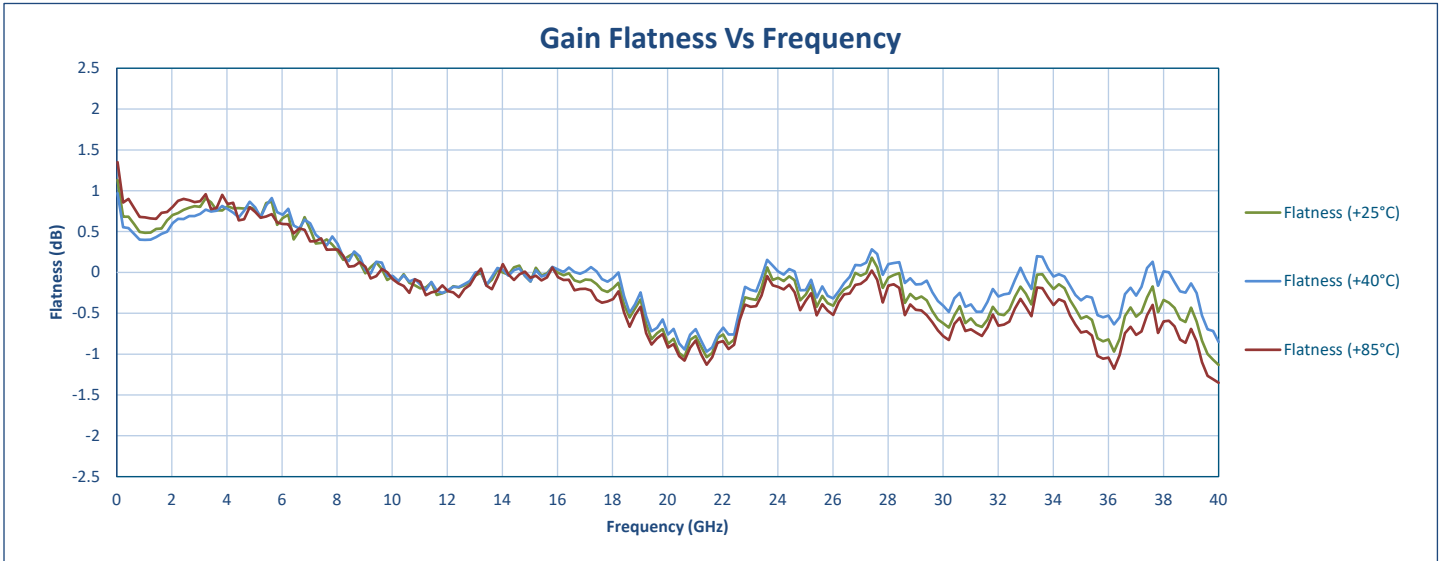
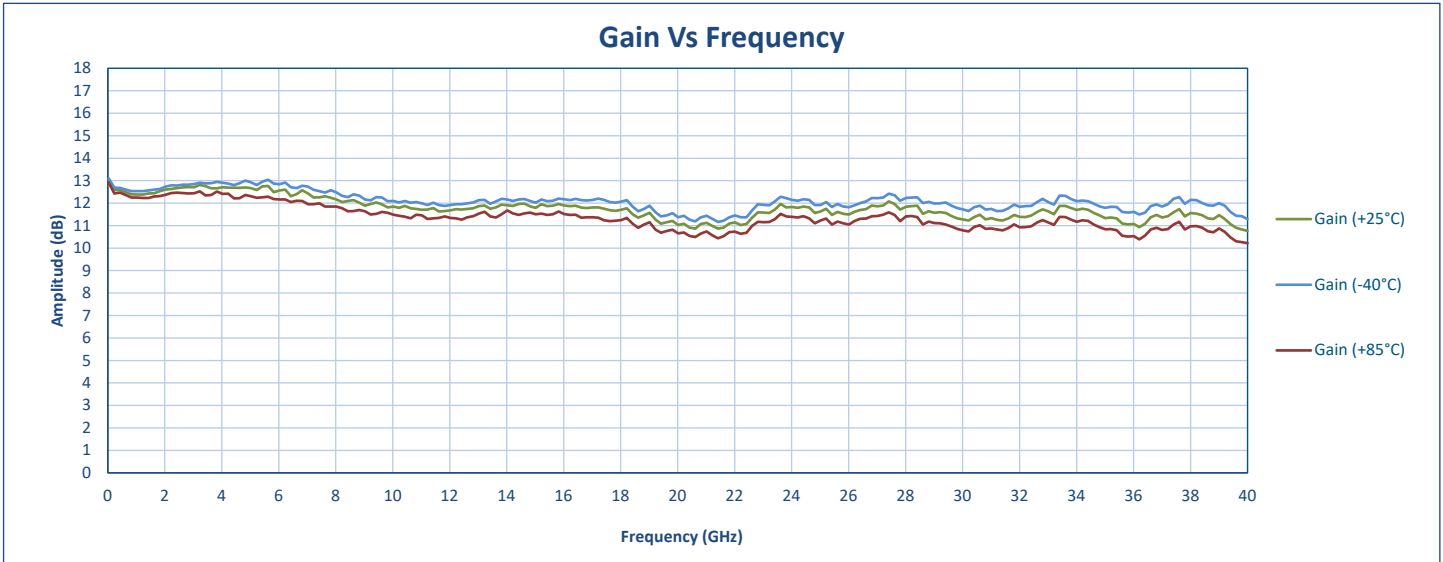
APPROVALS		DATE	TITLE	
DESIGNED	G. MENDEZ	3/17/2023	OUTLINE	
ISSUED			SIZE	REV.
			B 05XQ0	A1
SCALE 2:1			SHEET 1 OF 1	

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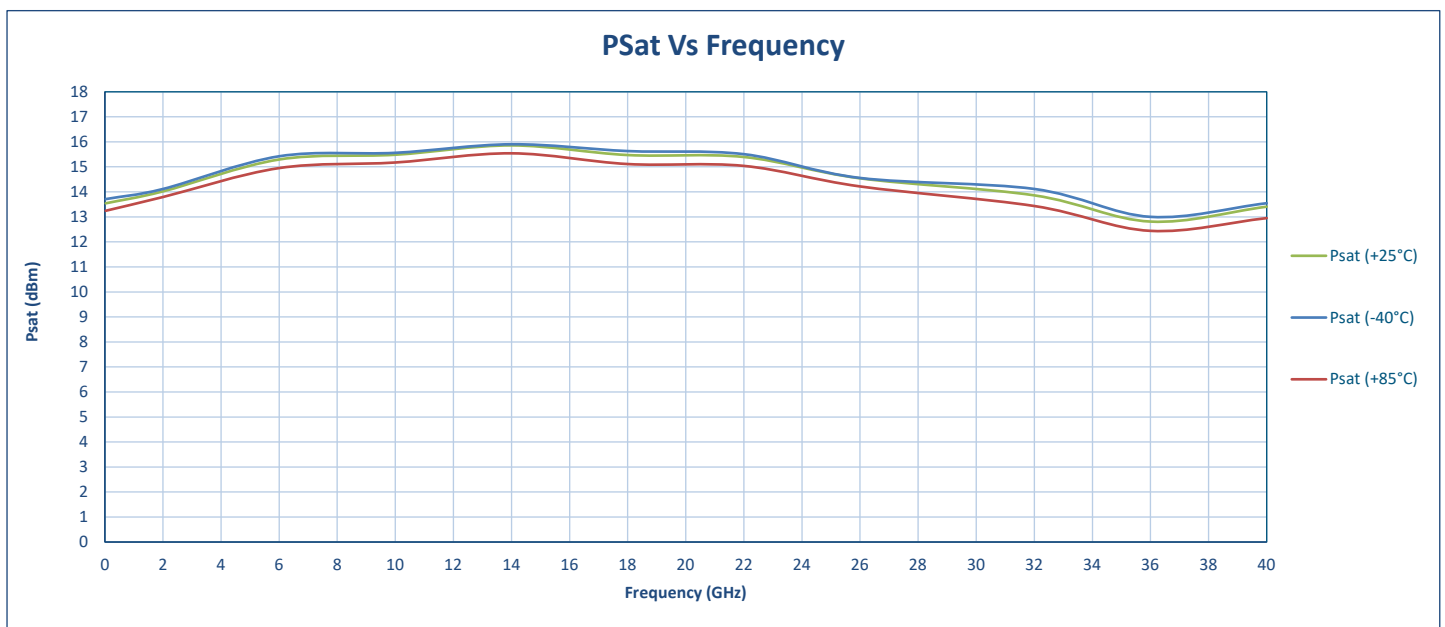
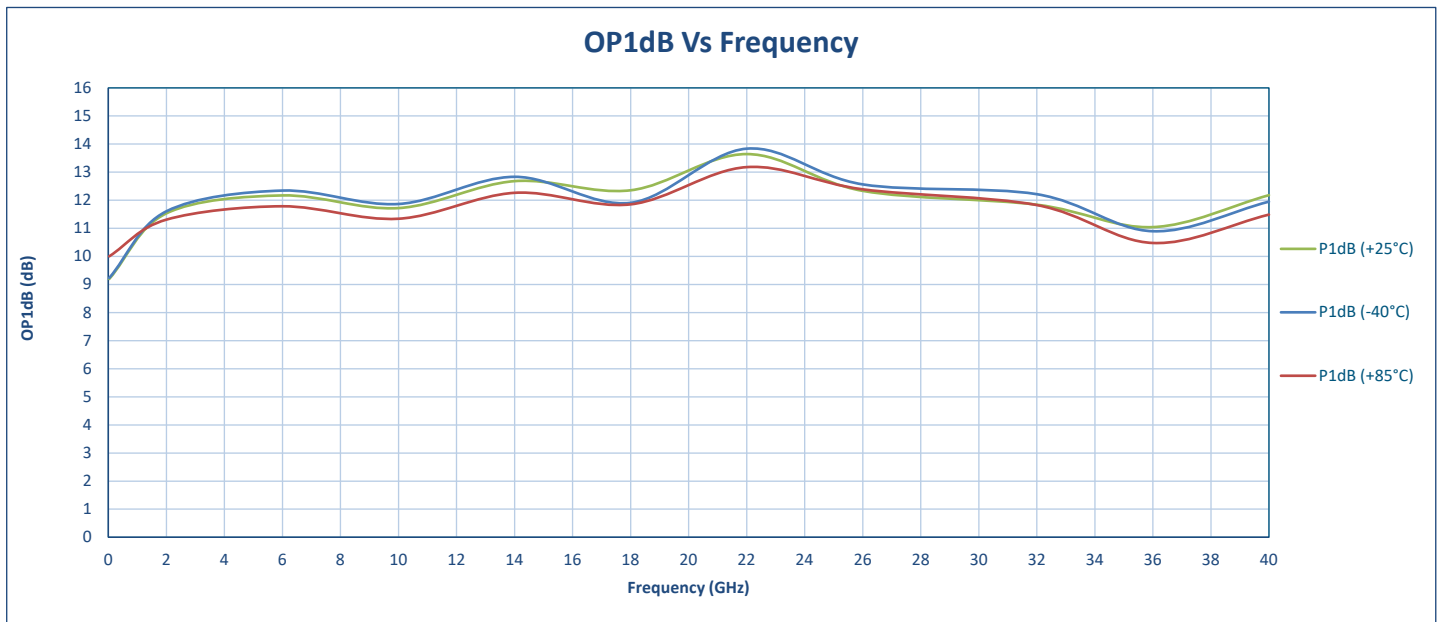
Technical Specifications

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	Test Results		
			+25°C	-40°C	+85°C
1	Frequency Range:	0.03 to 40.0 GHz	0.03 to 40.0 GHz	0.03 to 40.0 GHz	0.03 to 40.0 GHz
2	Gain:	12dB Typ. 9.5 dB Min.	13.03 dB Max. 10.77 dB Min. See Graph	13.1 dB Max. 11.16 dB Min. See Graph	12.92 dB Max. 10.22 dB Min. See Graph
3	Gain Flatness:	±2.5 dB Max.	±1.13 dB See Graph	±0.97 dB See Graph	±1.35 dB See Graph
4	Noise Figure:	7.5 dB Max. (0.03 to 10 GHz)	6.54 dB	5.99 dB	7.08 dB
		4.5 dB Max. (10 to 20 GHz)	3.65 dB	3.1 dB	3.69 dB
		7.5 dB Max. (20 to 40 GHz)	5.89 dB	5.44 dB	6.3 dB
			See Graphs	See Graphs	See Graphs
5	OP1dB:	7 dBm Min.	9.2 dBm See Graph	9.23 dBm See Graph	10 dBm See Graph
6	VSWR Input/Output:	2.0:1 Max.	1.84:1 In 1.84:1 Out See Graph	1.93:1 In 1.91:1 Out See Graph	1.79:1 In 1.83:1 Out See Graph
7	DC Supply:	+12 to +15 VDC @ 150 mA Max.	+12 to +15 VDC @ 94 mA	+12 to +15 VDC @ 95 mA	+12 to +15 VDC @ 92 mA

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