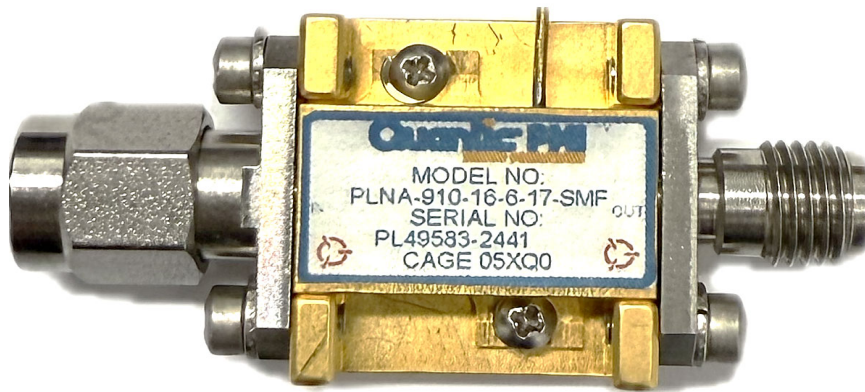


**TYPICAL CHARACTERISTICS  
ON  
PLNA-910-16-6-17-SMF**

PLANAR MONOLITHICS INDUSTRIES MODEL NUMBER PLNA-910-16-6-17-SMF IS A LOW NOISE AMPLIFIER OPERATING OVER THE FREQUENCY RANGE OF 9.0 TO 10.0 GHz. IT HAS A MINIMUM GAIN OF 16 dB, A P1dB OF +17, WITH AN OUTPUT NOISE FIGURE OF 6 dB MAX. THIS PRODUCT COMES WITH ONE SMA MALE AND ONE SMA FEMALE CONNECTOR ON A REMOVABLE CARRIER.



**REPORTED BY S AZHAR**  
**AUTHOR S AZHAR**  
**DATE OCT 10th 2024**

# TYPICAL CHARACTERISTICS ON PLNA-910-16-6-17-SMF PRODUCT FEATURE

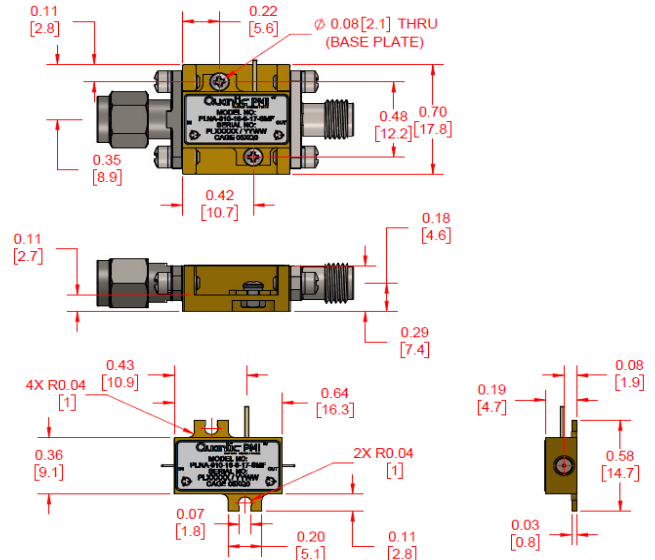
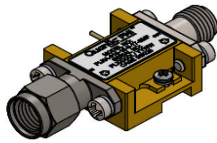
**DESCRIPTION:**

PLANAR MONOLITHICS INDUSTRIES MODEL NUMBER PLNA-910-16-6-17-SMF IS A LOW NOISE AMPLIFIER OPERATING OVER THE FREQUENCY RANGE OF 9.0 TO 10.0 GHz. IT HAS A MINIMUM GAIN OF 16 dB, A P1dB OF +17, WITH AN OUTPUT NOISE FIGURE OF 3 dB MAX. THIS PRODUCT COMES WITH ONE SMA MALE AND ONE SMA FEMALE CONNECTOR ON A REMOVABLE CARRIER.

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	11/09/2023	
	A2	ECN # 25-0238	01/10/2024	

**SPECIFICATIONS:**

- FREQUENCY RANGE:..... 9.0 TO 10.0 GHz
- SMALL SIGNAL GAIN:..... 16 dB MIN
- GAIN FLATNESS:..... ± 1.0 dB MAX
- OUTPUT P1dB:..... +17 dBm MIN
- NOISE FIGURE:..... 3.0 dB MAX
- VSWR:..... 2.0:1 IN/OUT
- MAXIMUM INPUT POWER:..... +15 dBm
- SUPPLY VOLTAGE :..... +12V @ 125 mA MAX
- CONNECTORS:..... SMA MALE AND SMA FEMALE (FIELD REPLACEABLE)
- FINISH:..... GOLD



**ENVIRONMENTAL RATINGS:**

- TEMPERATURE:..... -54°C TO +85°C (OPERATING)  
-60°C TO +125°C (STORAGE)
- HUMIDITY:..... MIL-STD-202, METHOD 103B COND. B
- MECHANICAL SHOCK:..... MIL-STD-202, METHOD 213B COND. B
- VIBRATION:..... MIL-STD-202, METHOD 204D COND. B
- ALTITUDE:..... MIL-STD-202, METHOD 105C COND. B
- TEMPERATURE CYCLE:..... MIL-STD-202, METHOD 105C COND. B

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

PMI CONFIDENTIAL AND PROPRIETARY

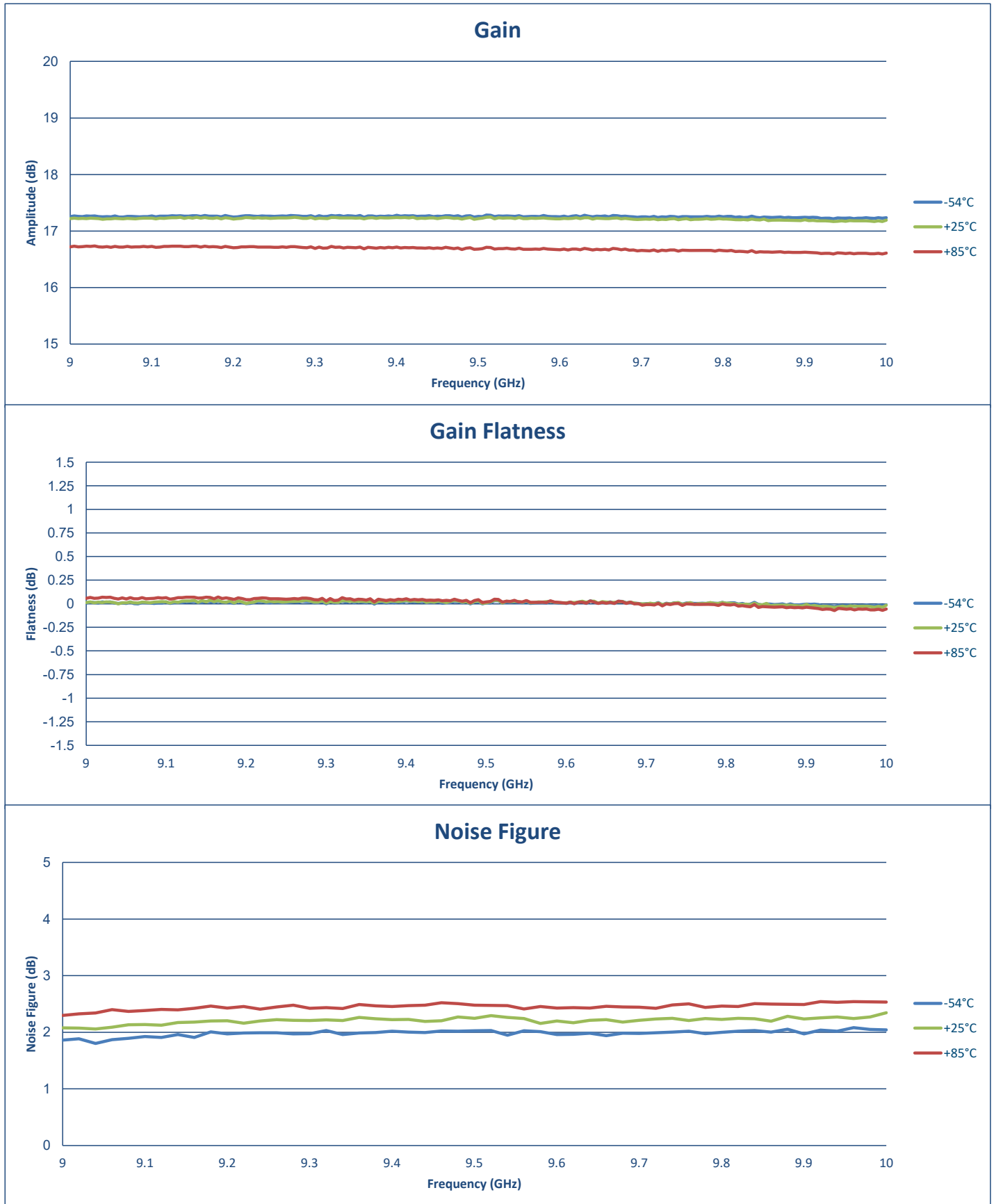
APPROVALS		DATE	TITLE	
DESIGNED BY: S AZHAR		12/10/2023	OUTLINE	
CHECKED BY: [Blank]			PLNA-910-16-6-17-SMF	
REVISIONS			27047460	
ISSI	PKB	PMI INC.	REV	
B	05XQ0		A2	
SCALE 2:1			SHEET 1 OF 1	

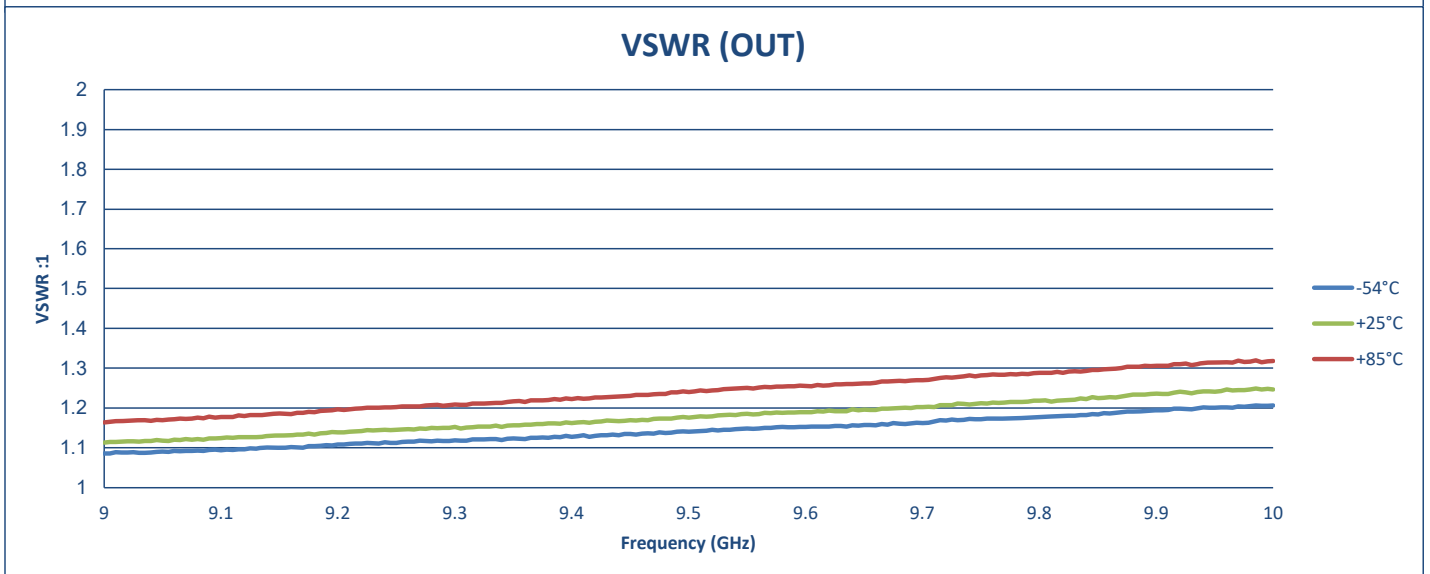
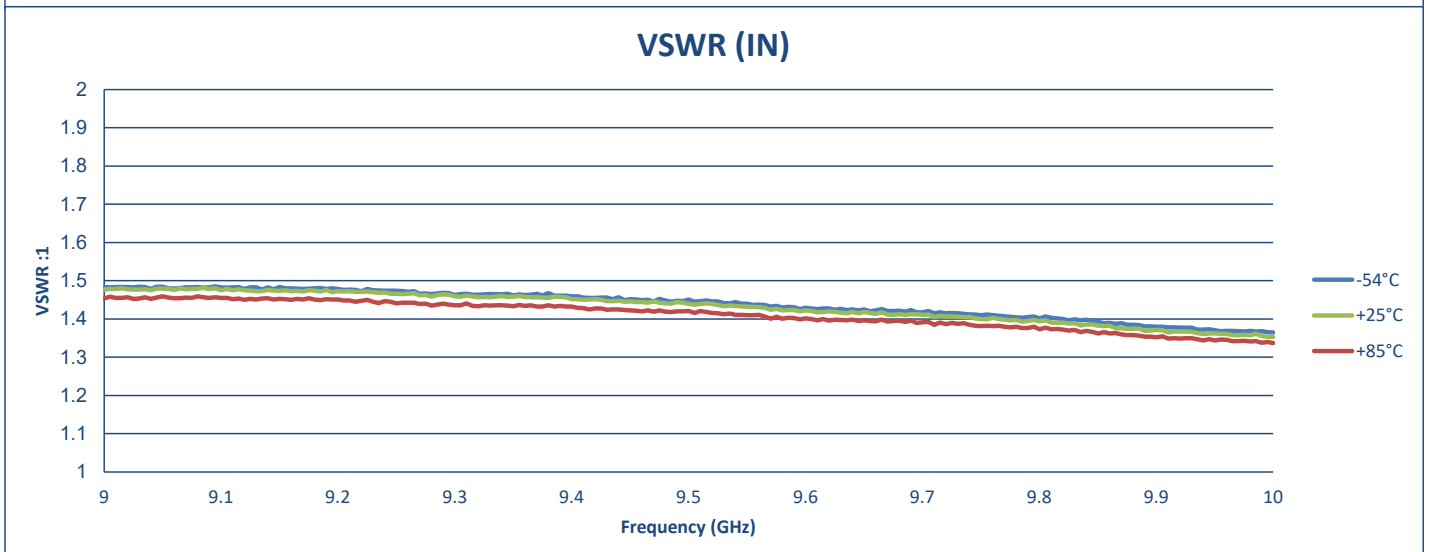
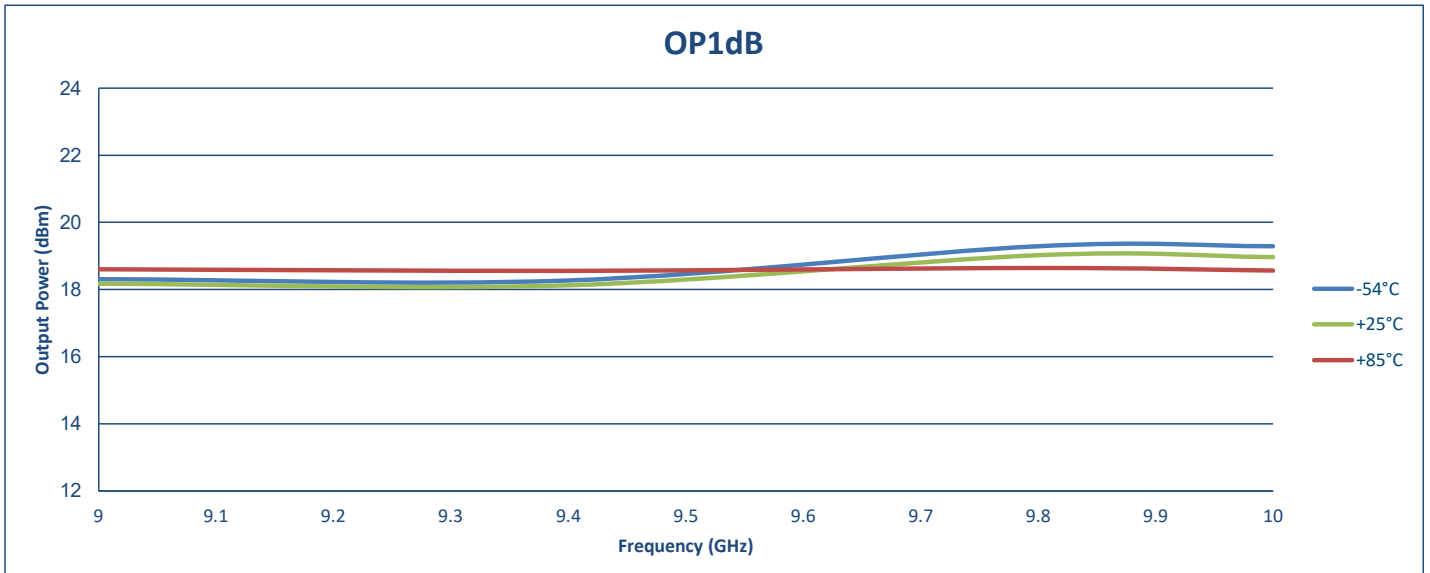
**TEST DATA**

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	Test Results			QA QC
			-54°C	+25°C	+85°C	
1	Frequency Range:	9-10 GHz	9-10 GHz	9-10 GHz	9-10 GHz	
2	Gain:	16 dB Min.	+17.3 dB Max. +17.2 dB Min. See Plot	+17.2 dB Max. +17.2 dB Min. See Plot	+16.7 dB Max. +16.6 dB Min. See Plot	
3	Gain Flatness:	±1.0 dB Max.	±0.03 dB See Plot	±0.04 dB See Plot	±0.07 dB See Plot	
4	Noise Figure:	3.0 dB Max.	2.08 dB See Plot	2.34 dB See Plot	2.54 dB See Plot	
5	OP1dB:	+17 dBm Min.	+18.3 dBm See Plot	+18.1 dBm See Plot	+18.6 dBm See Plot	
6	VSWR: (In/Out)	2.0:1 Max.	1.49:1 In 1.21:1 Out See Plot	1.48:1 In 1.25:1 Out See Plot	1.46:1 In 1.32:1 Out See Plot	
7	INPUT POWER:	+15 dBm Max.	+15 dBm See Plot	+15 dBm See Plot	+15 dBm See Plot	
8	DC Supply:	+12 V @ 125 mA Max.	105 mA	109 mA	111 mA	

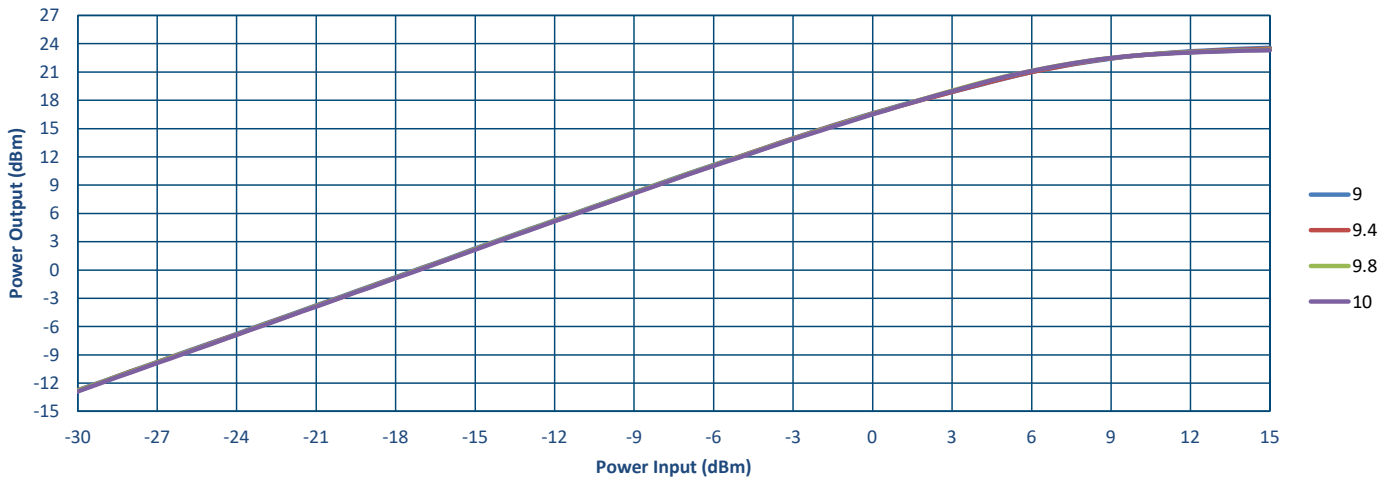
QA/QC Approval: \_\_\_\_\_

Date: \_\_\_\_\_

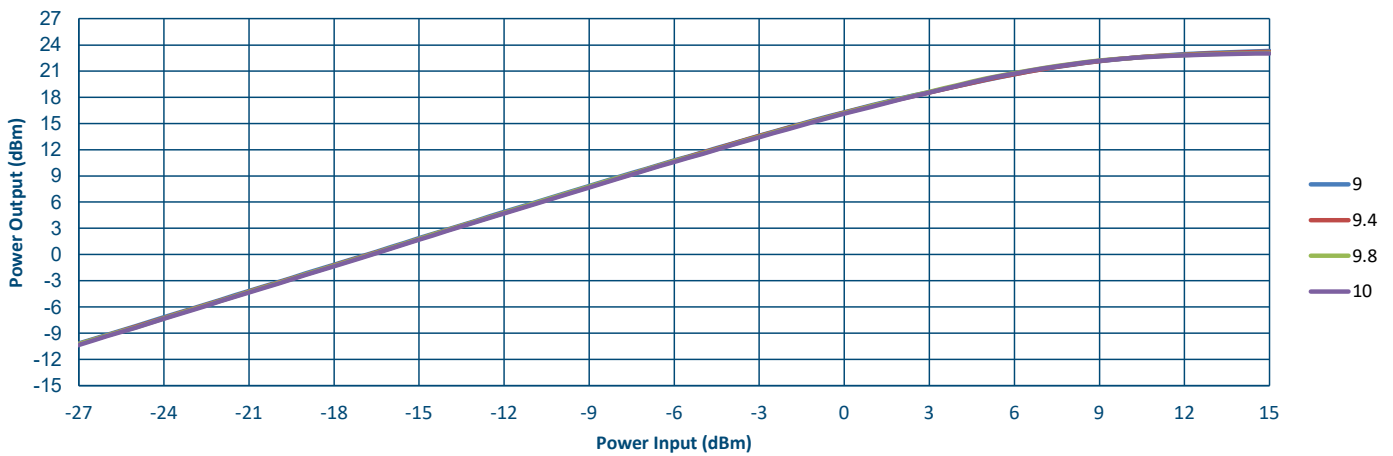




**Power Input Vs Power Output (+25°C)**



**Power Input Vs Power Output (+85°C)**



**Power Input Vs Power Output (-55°C)**

