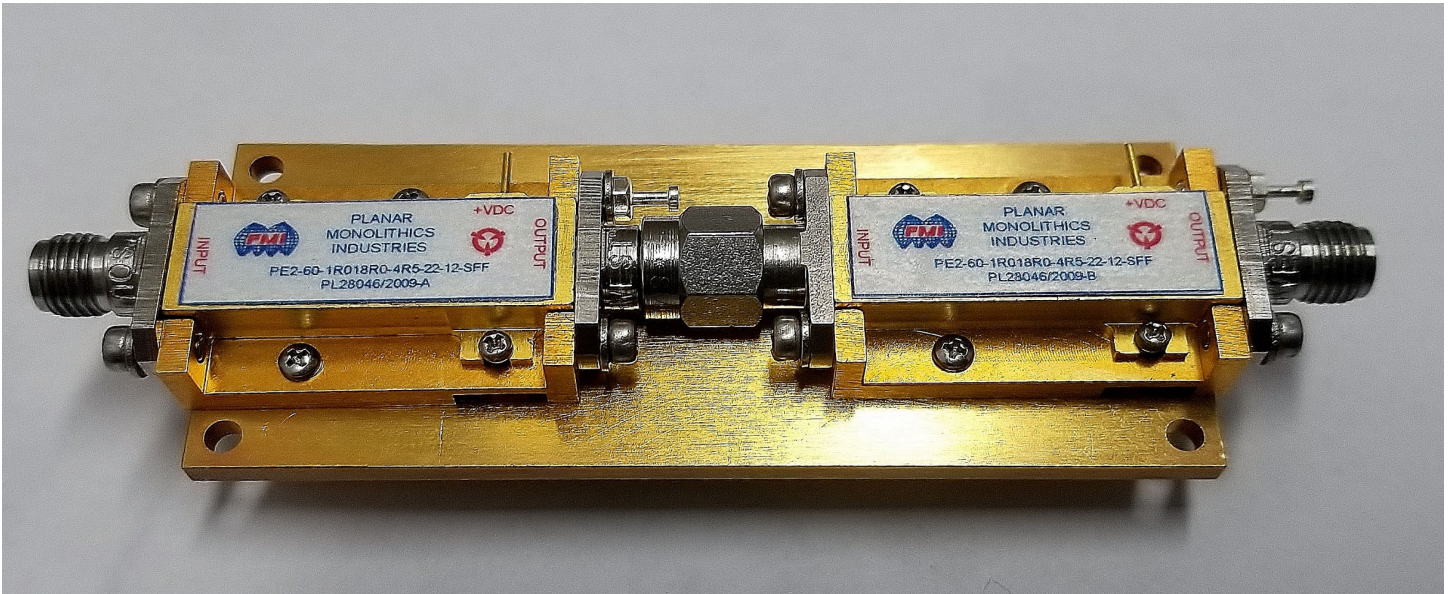




**Typical Characteristics  
ON  
PE2-60-1R018R0-4R5-22-12-SFF**

**PMI MODEL: PE2-60-1R018R0-4R5-22-12-SFF IS A LOW NOISE AMPLIFIER DESIGNED FOR MILITARY AND INDUSTRIAL APPLICATIONS. THIS AMPLIFIER IS SUPPLIED IN OUR PE2 HOUSING THAT CAN BE USED AS AN SMA CONNECTORIZED OR SURFACE MOUNTED COMPONENT. OTHER PACKAGES AND CONNECTOR TYPES ARE AVAILABLE. DATA IS AVAILABLE UPON REQUEST.**



**February 13, 2020  
Designed By: Engineering PMI**

**Tested and Reported By:  
Alfredo Lopez**



# Typical Characteristics ON PE2-60-1R018R0-4R5-22-12-SFF

## Outline Drawing

### DESCRIPTION

PMI MODEL: PE2-60-1R018R0-4R5-22-12-SFF IS A LOW NOISE AMPLIFIER DESIGNED FOR MILITARY AND INDUSTRIAL APPLICATIONS. THIS AMPLIFIER IS SUPPLIED IN OUR PE2 HOUSING THAT CAN BE USED AS AN SMA CONNECTORIZED OR SURFACE MOUNTED COMPONENT. OTHER PACKAGES AND CONNECTOR TYPES ARE AVAILABLE. DATA IS AVAILABLE UPON REQUEST.

### SPECIFICATIONS

- FREQUENCY RANGE: 1.0 TO 18.0 GHz
- GAIN: 60 dB TYPICAL
- GAIN FLATNESS: ±3.0 dB TYPICAL
- NOISE FIGURE: 4.5 dB TYPICAL
- OP1dB: 22 dBm MINIMUM
- VSWR (INPUT/OUTPUT): 2.0:1 MAXIMUM
- DC VOLTAGE SUPPLY: +12 TO +15 VDC
- DC CURRENT DRAW: 650 mA TYPICAL
- CONNECTORS: SMA FEMALE (X2)
- FINISH: GOLD PLATED

### FEATURES

- INTERNAL VOLTAGE REGULATION
- UNCONDITIONAL STABILITY
- STANDARD OPERATING TEMPERATURE (-20 °C TO +70 °C)

### AVAILABLE OPTIONS

- VARIOUS PACKAGE TYPES
- VARIOUS CONNECTOR TYPES
- TEMPERATURE COMPENSATION
- HERMETIC SEALING
- GAIN AND PHASE MATCHING
- MIL-STD-883 SCREENING AVAILABLE

### ENVIRONMENTAL RATINGS

- TEMPERATURE: -20 °C TO +70 °C (OPERATING)  
-55 °C TO +85 °C (AVAILABLE)  
-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

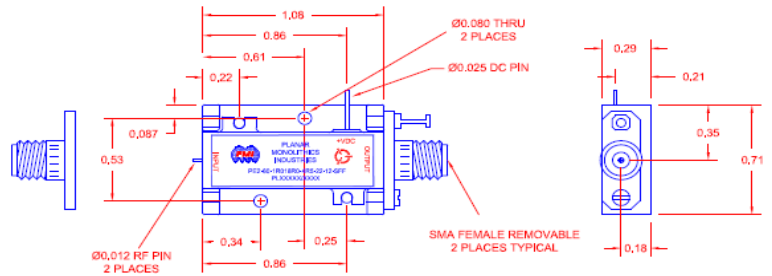
NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE  
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ALL DIMENSIONS ARE IN INCHES  
TOLERANCES:  
X.XX ±0.020  
X.XXX ±0.010

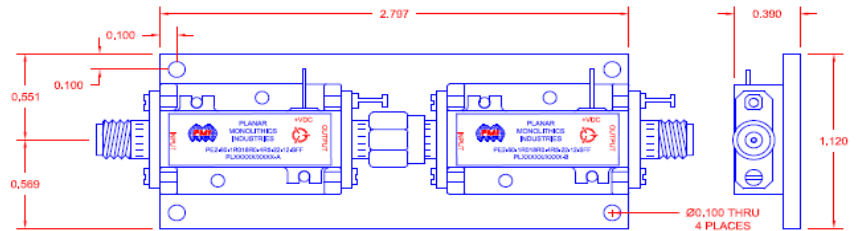
**PMI CONFIDENTIAL AND PROPRIETARY**

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	9/17/19	
	A2	SPEC UPDATES	1/11/20	

### PE2 HOUSING WITH CARRIER



### PE2 HOUSING CASCADE



### PLANAR MONOLITHICS INDUSTRIES, INC.

7311-F GROVE ROAD  
FREDERICK, MARYLAND 21704 USA  
TEL: (301)-662-5019, FAX: (301)-662-1731  
WEB: www.pmi-rf.com, EMAIL: sales@pmi-rf.com  
ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE			
DRAWN NJA		9/17/19	PRODUCT FEATURE PE2-60-1R018R0-4R5-22-12-SFF			
REDRAWN			SIZE A	FORM NO. 05XQ0	DWG NO. 27037100	REV. A2
ISSUED			SCALE N/S		SHEET 1 OF 1	



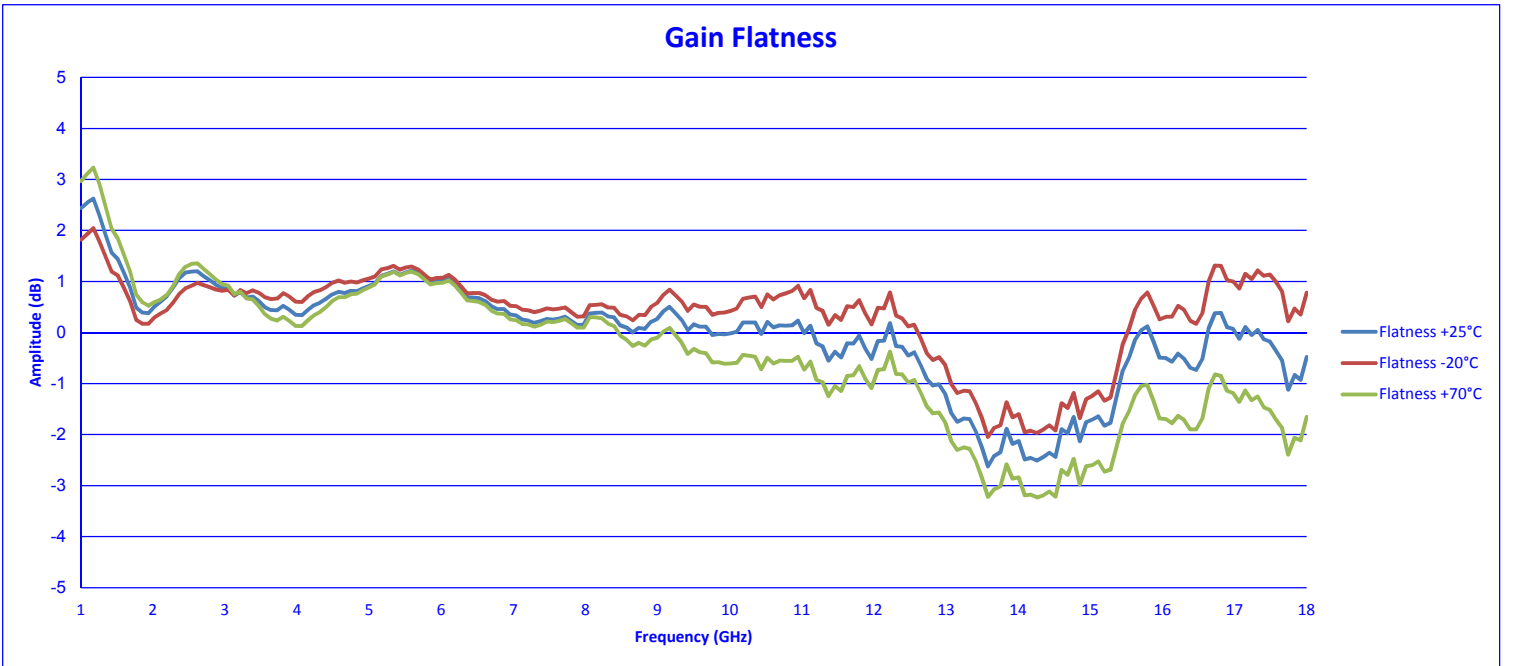
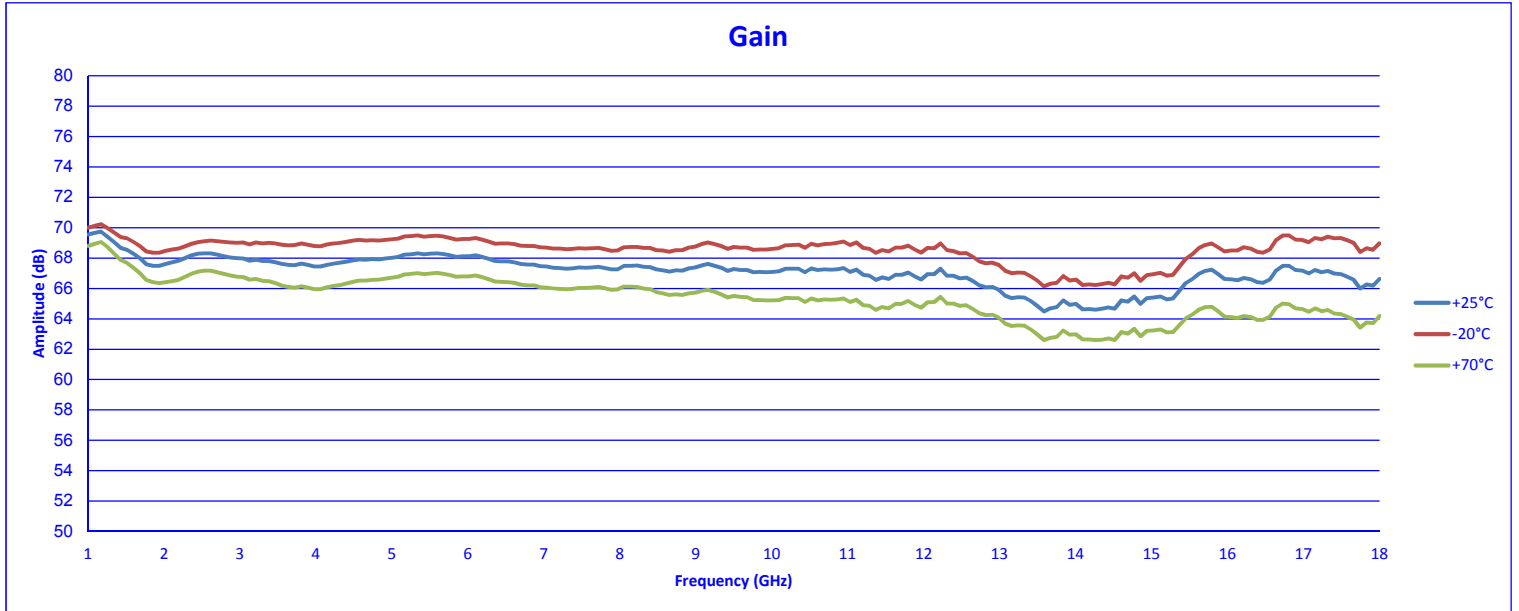
## Typical Characteristics ON PE2-60-1R018R0-4R5-22-12-SFF

### Technical Specifications

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	Test Results			QA QC
			+25°C	-20°C	+70°C	
1	Frequency Range:	1.0 TO 18.0 GHz	1.0 TO 18.0 GHz	1.0 TO 18.0 GHz	1.0 TO 18.0 GHz	
2	Gain:	60 dB TYPICAL	64.48 dB See Graph	66.13 dB See Graph	62.59 dB See Graph	
3	Gain Flatness:	±3.0 dB Typ.	2.62 dB ± See Graph	2.05 dB ± See Graph	3.23 dB ± See Graph	
4	Noise Figure:	4.5 dB Typ. (*)	4.26 dB See Plot	4.26 dB See Plot	4.26 dB See Plot	
5	OP1dB:	22 dBm Min.	24.53 dBm See Graph	24.53 dBm See Graph	24.53 dBm See Graph	
6	VSWR Input/Output:	2.0:1 Max.	1.84 :1 See Graph	1.89 :1 See Graph	1.74 :1 See Graph	
7	DC Supply:	+12 to +15 VDC @ 650 mA Typ.	+12 to +15VDC @ 640mA	+12 to +15VDC @ 620mA	+12 to +15VDC @ 660mA	

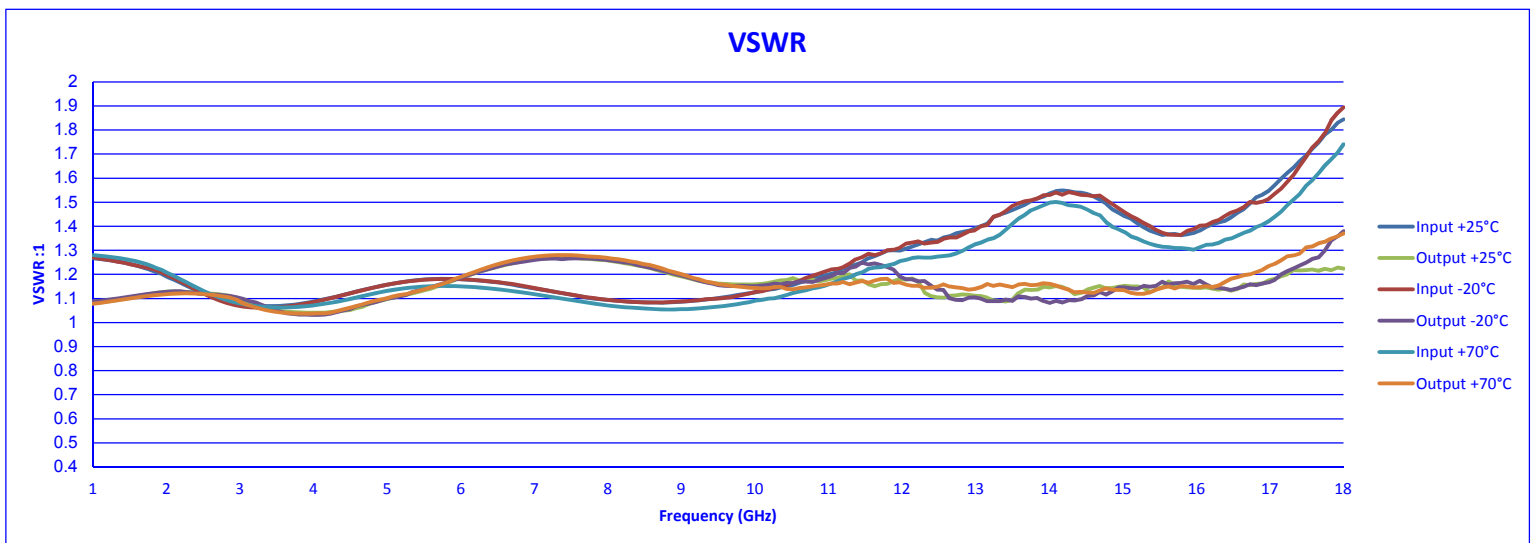
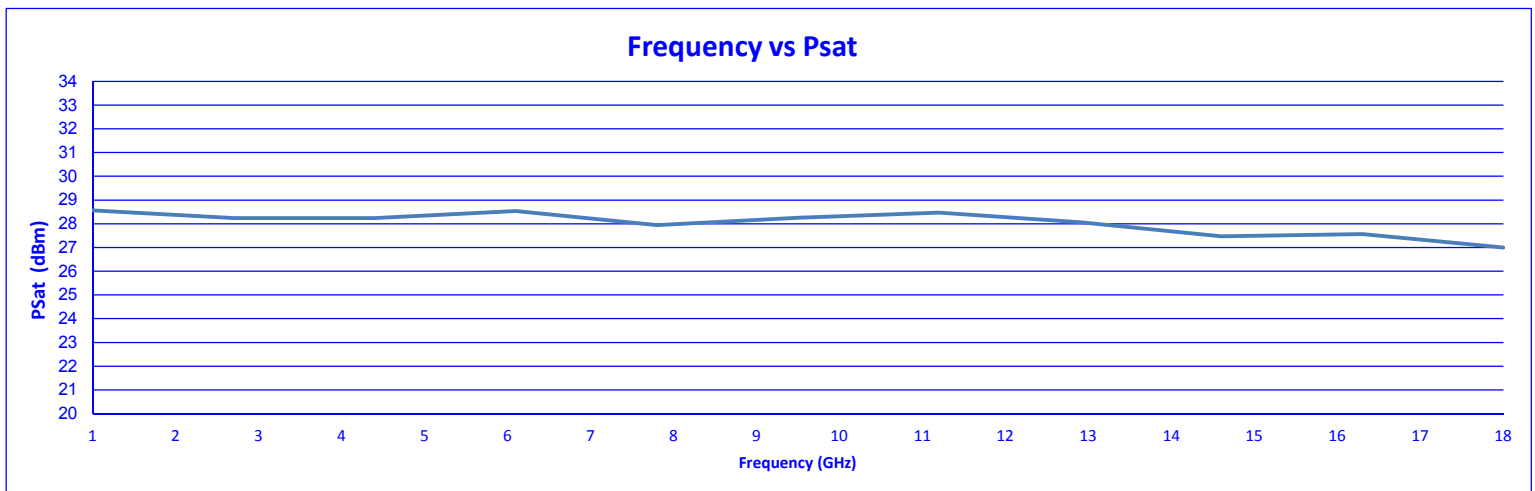
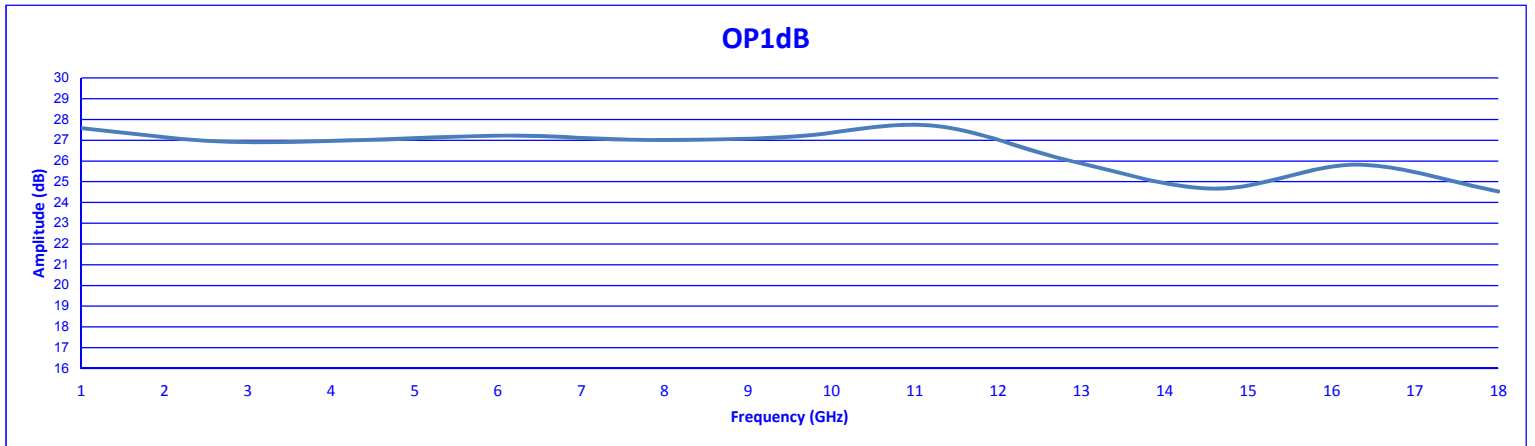


# Typical Characteristics ON PE2-60-1R018R0-4R5-22-12-SFF





# Typical Characteristics ON PE2-60-1R018R0-4R5-22-12-SFF





# Typical Characteristics ON PE2-60-1R018R0-4R5-22-12-SFF

## Noise Figure

