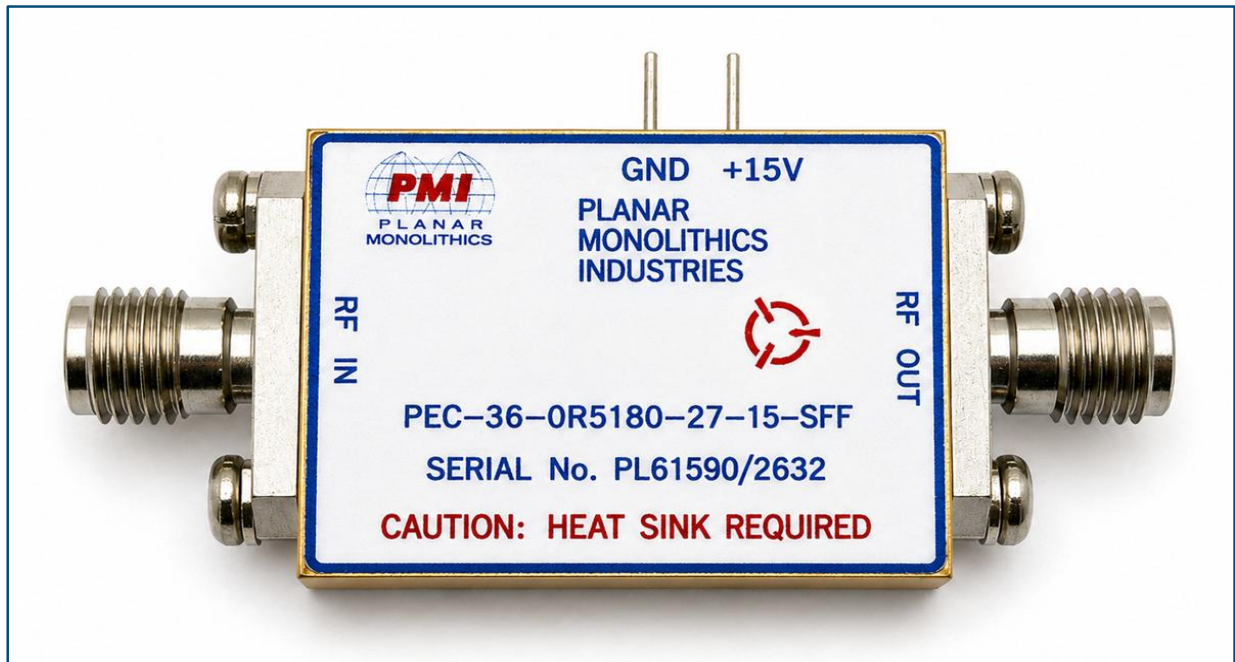


**TYPICAL CHARACTERISTICS
ON
PEC-36-0R518G-4R5-27-15-SFF**

PMI MODEL NUMBER: PEC-36-0R18G-27-15-SFF IS A 0.5 TO 18.0 GHz MEDIUM POWER, LOW NOISE AMPLIFIER OFFERING 38 DB GAIN MIN. AND A P1dB OF +26.5 dBm WITH A LOW NOISE FIGURE OF 5.0 dB.



August 7, 2026

Designed By:

Engineering PMI

Tested and Reported By:

Alfredo Lopez

TYPICAL CHARACTERISTICS ON PEC-36-0R518G-4R5-27-15-SFF

Outline Drawing

DESCRIPTION:

PMI MODEL NUMBER: PEC-36-0R518G-27-15-SFF IS A 0.5 TO 18.0 GHz MEDIUM POWER, LOW NOISE AMPLIFIER OFFERING 38dB GAIN MIN. AND A OP1dB OF +26.5dBm WITH A LOW NOISE FIGURE OF 5.0dB.

SPECIFICATIONS:

FREQUENCY:	0.5 TO 18.0 GHz
GAIN:	40dB TYPICAL 38dB MIN.
GAIN FLATNESS:	+/-2.5dB TYPICAL, +/- 3dB MAX
NOISE FIGURE:	4.5dB TYPICAL, 5.0dB MAX.
OP1dB:	+26.5dBm MIN., +27.5dBm TYPICAL
VSWR INPUT/OUTPUT:	2.0:1 MAX. (IN), 2.2:1 MAX. (OUT)
IMPEDANCE:	50 OHMS
INPUT POWER:	+20dBm CW MAX.
DC VOLTAGE SUPPLY:	+15VDC
DC CURRENT DRAW:	850mA NOMINAL
CONNECTORS IN/OUT:	SMA FEMALE CONNECTORS
FINISH:	GOLD PLATED
SEALING:	HERMETIC

FEATURES:

INTERNAL VOLTAGE REGULATION
REVERSE VOLTAGE PROTECTION
UNCONDITIONAL STABILITY

AVAILABLE OPTIONS:

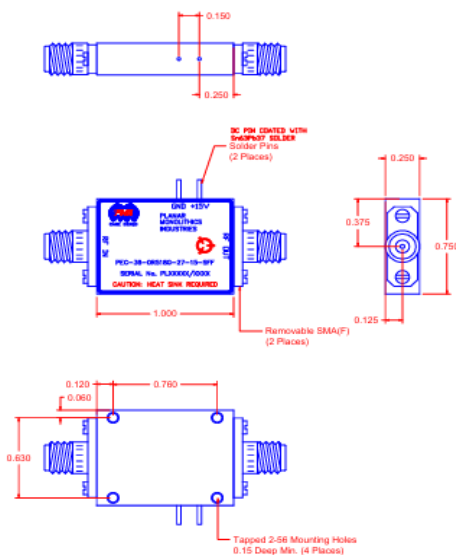
VARIOUS PACKAGE TYPES
VARIOUS CONNECTOR TYPES
HERMETIC SEALING
GAIN AND PHASE MATCHING
MIL-STD-883 SCREENING AVAILABLE

ENVIRONMENTAL RATINGS:

TEMPERATURE:	-55 TO +85 DEG. C (OPERATING) -65 TO +125 DEG. C (STORAGE)
HUMIDITY:	MIL-STD-202, METHOD 103 COND. B
SHOCK:	MIL-STD-202, METHOD 213 COND. C
VIBRATION:	MIL-STD-202, METHOD 204 COND. B
ALTITUDE:	MIL-STD-202, METHOD 105 COND. B
TEMPERATURE CYCLE	MIL-STD-202, METHOD 107 COND. A

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION
NOTE: SPECIFICATIONS ARE VALID AT +25C.

REVISIONS			
ZONE	REV.	DESCRIPTION	DATE
	A1	ORIGINAL RELEASE	8/6/26



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

PMI CONFIDENTIAL AND PROPRIETARY

PLANAR MONOLITHICS INDUSTRIES, INC. 7311-F GROVE ROAD FREDERICK, MARYLAND 21704 USA TEL: 301-662-5019 FAX: 301-662-1731 WEBSITE: www.pmi-rf.com E-MAIL: sales@pmi-rf.com ISO 9001 CERTIFIED					
APPROVALS DRAWN: TG CHECKED: ISSUED:		DATE 8/6/26		TITLE PRODUCT FEATURE PEC-36-0R518G-27-15-SFF	
SIZE: A FSCM NO.: 05XQ0 SCALE: N: S		DWG NO.: 27057020 SHEET: 1 OF 1		REV.: A1	

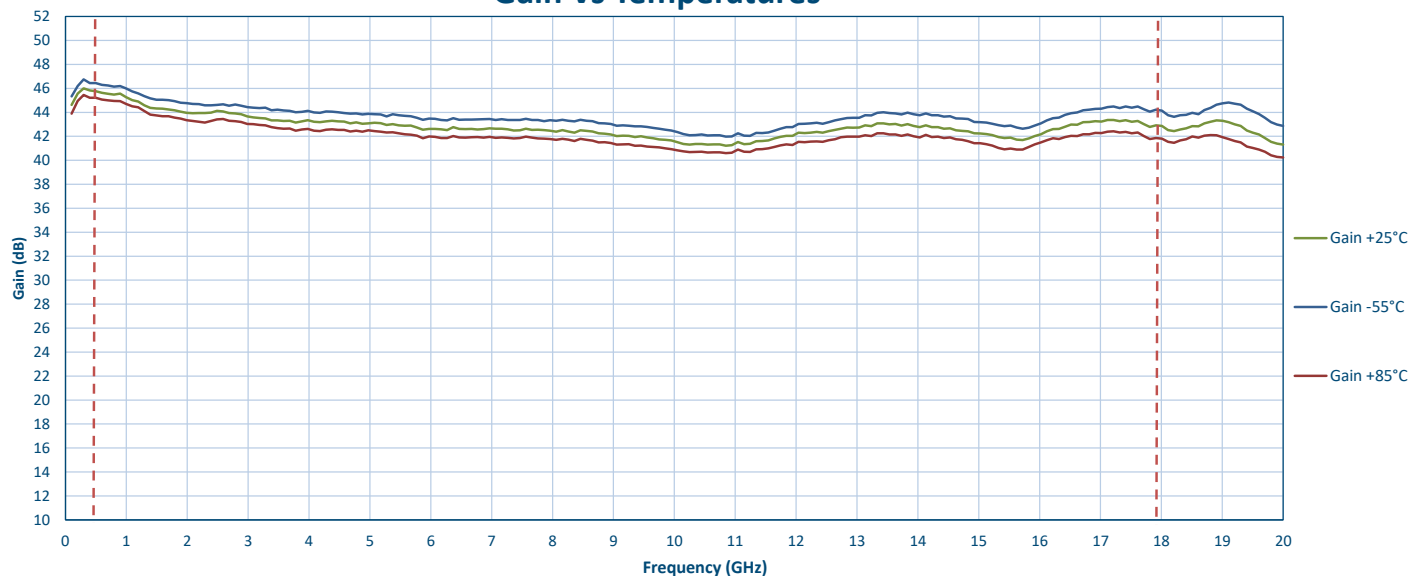
TYPICAL CHARACTERISTICS ON PEC-36-0R518G-4R5-27-15-SFF

Technical Specifications

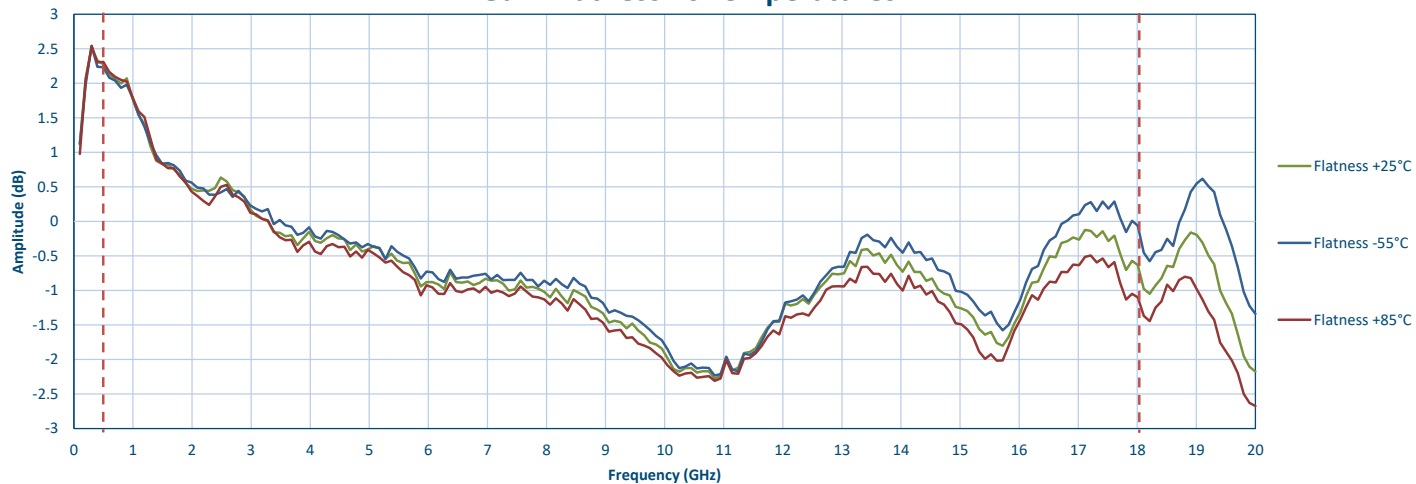
TEST ITEM NO	PARAMETERS	SPECIFIED VALUE	Test Results			QA QC
			+25°C	-55°C	+85°C	
1	Frequency Range:	0.5 - 18 GHz	0.5 - 18 GHz	0.5 - 18 GHz	0.5 - 18 GHz	
2	Gain:	40 dB Typ. 38 dB Min.	+ 45.77 dB Max. + 41.22 dB Min. See Graph	+ 46.44 dB Max. + 41.98 dB Min. See Graph	+ 45.22 dB Max. + 40.6 dB Min. See Graph	
3	Gain Flatness:	±2.5 dB Typ. ±3 dB Max.	±2.28 dB See Graph	±2.23 dB See Graph	±2.31 dB See Graph	
4	Noise Figure:	4.5 dB Typ. 5.0 dB Max	3.51 dB See Graph	3.37 dB See Graph	3.84 dB See Graph	
5	OP1dB:	+26.5 dBm Min +27.5 dBm Typ.	+ 26.95 dBm See Graph	+ 27.24 dBm See Graph	+ 26.94 dBm See Graph	
6	Psat:	Not specified	+ 28.76 dBm See Graph	+ 28.97 dBm See Graph	+ 28.73 dBm See Graph	
7	Input Power:	+20 dBm	Pass	Pass	Pass	
8	VSWR: (Input/Output)	2.0:1 Max. (Input) 2.2:1 Max. (Output)	1.63 :1 (In)	1.65 :1 (In)	1.62 :1 (In)	
			2.07 :1 (Out)	2.08 :1 (Out)	2.08 :1 (Out)	
			See Graph	See Graph	See Graph	
9	DC Voltage Supply:	+15 VDC @ 850 mA Nom	+15 VDC @ 674 mA (Idq) 850 mA @ (Psat)	+15 VDC @ 670 mA (Idq) 840 mA @ (Psat)	+15 VDC @ 678 mA (Idq) 880 mA @ (Psat)	

TYPICAL CHARACTERISTICS ON PEC-36-0R518G-4R5-27-15-SFF

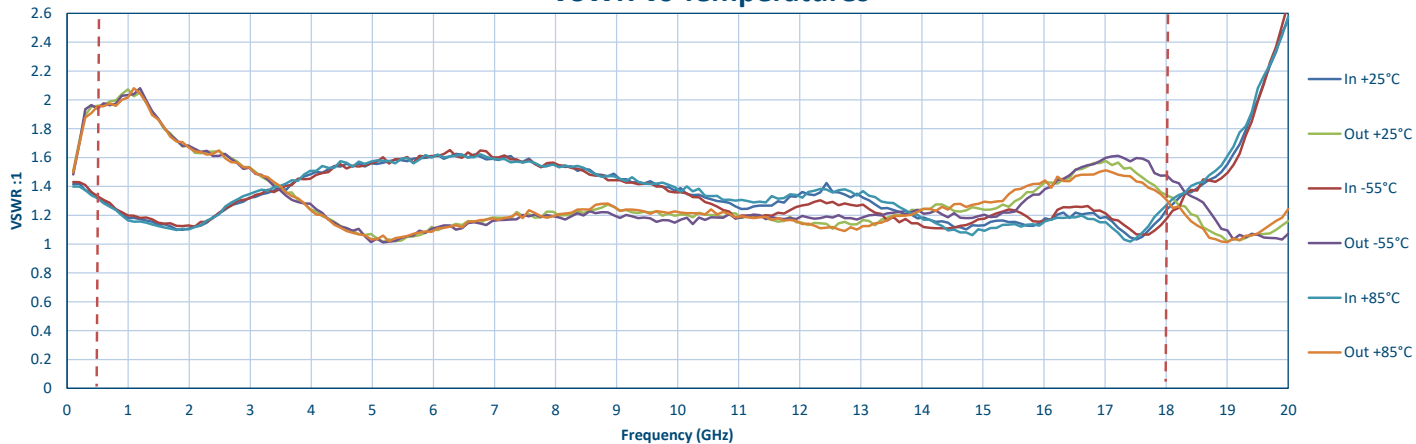
Gain Vs Temperatures



Gain Flatness Vs Temperatures

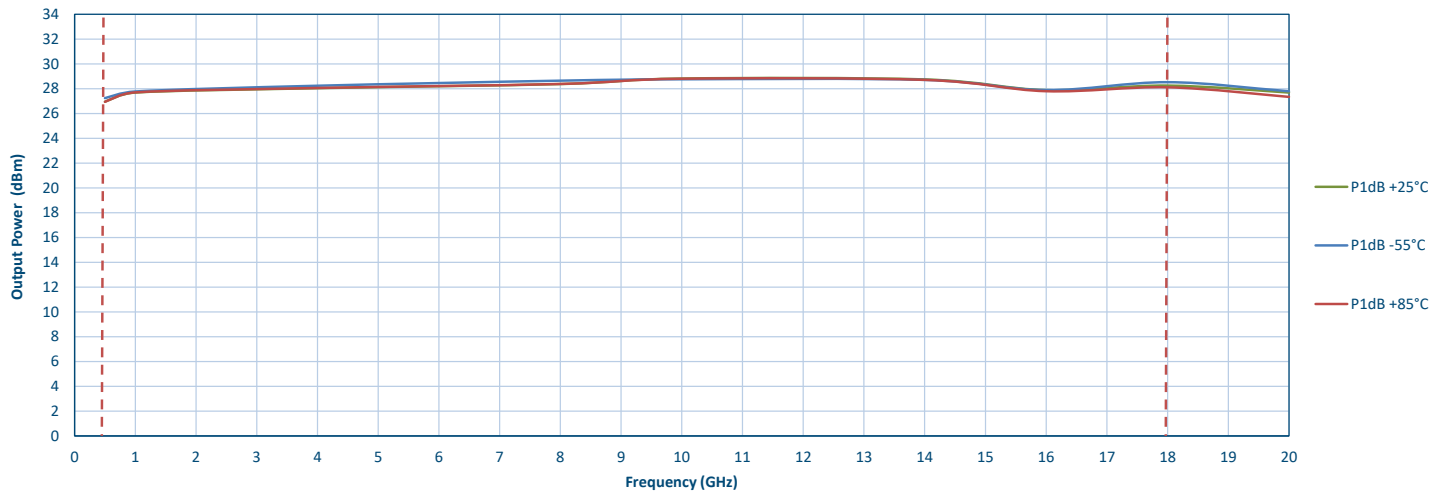


VSWR Vs Temperatures

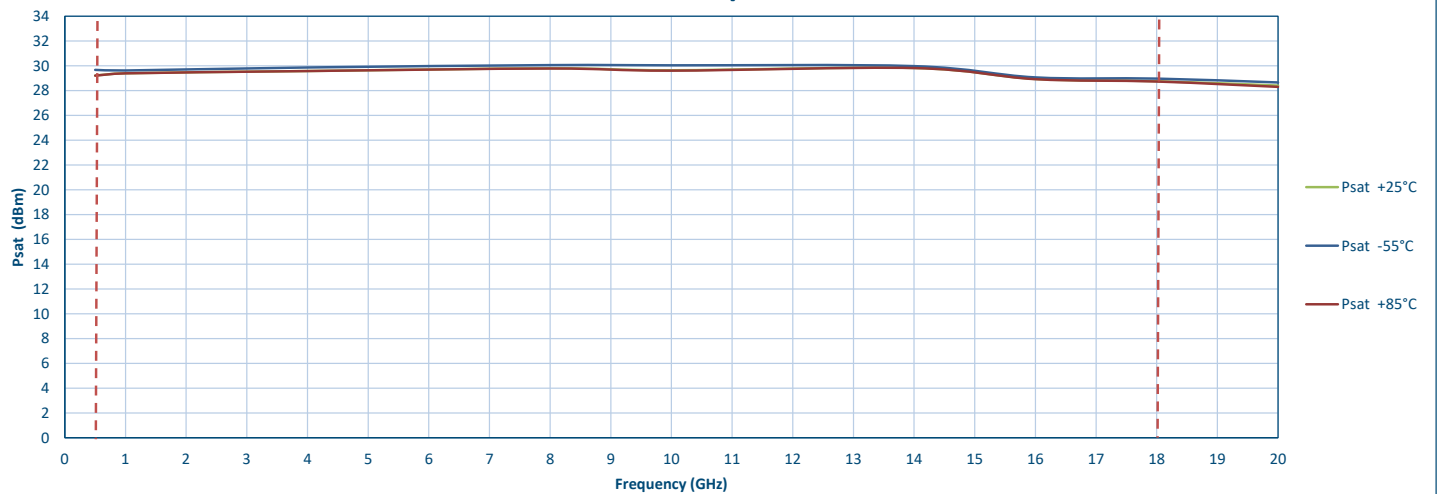


TYPICAL CHARACTERISTICS ON PEC-36-0R518G-4R5-27-15-SFF

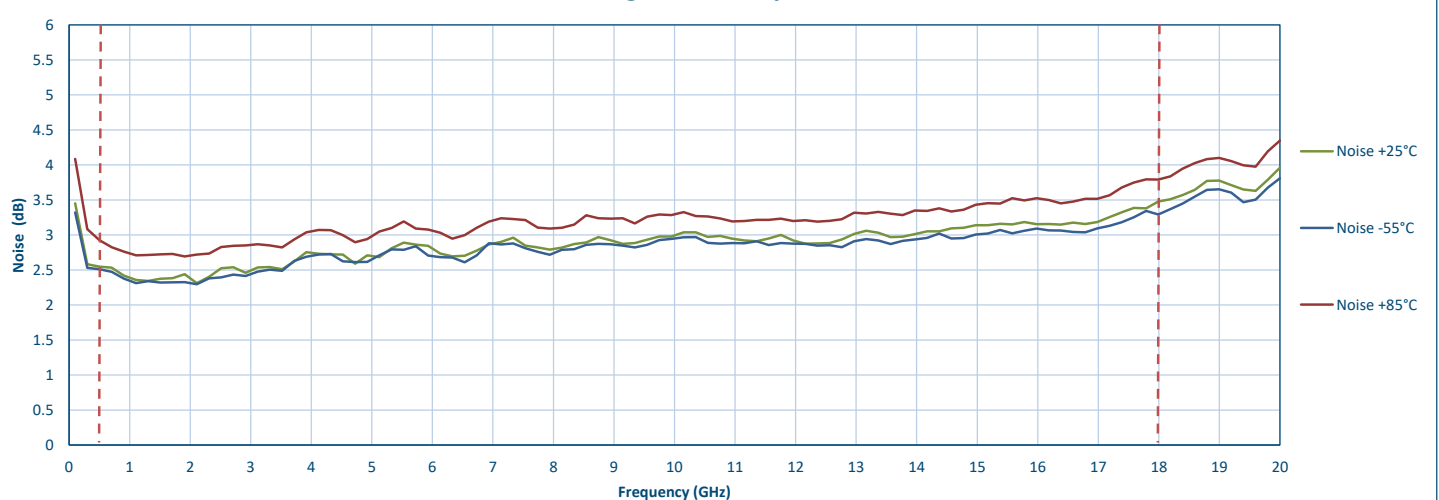
OP1dB Vs Temperatures



PSAT Vs Temperatures

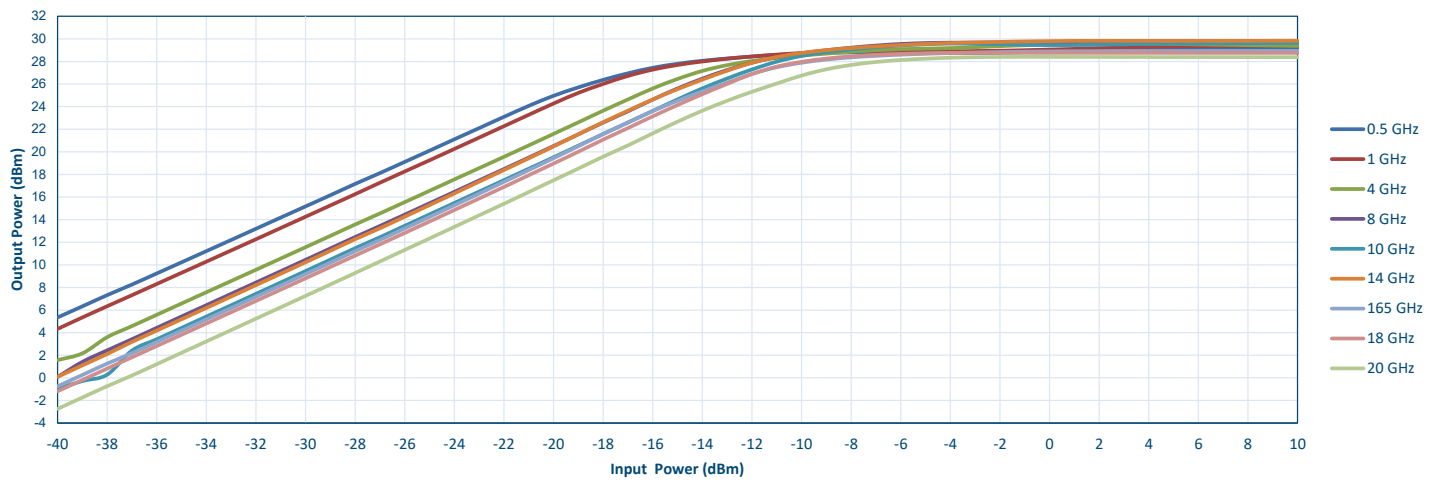


Noise Figure Vs Temperatures

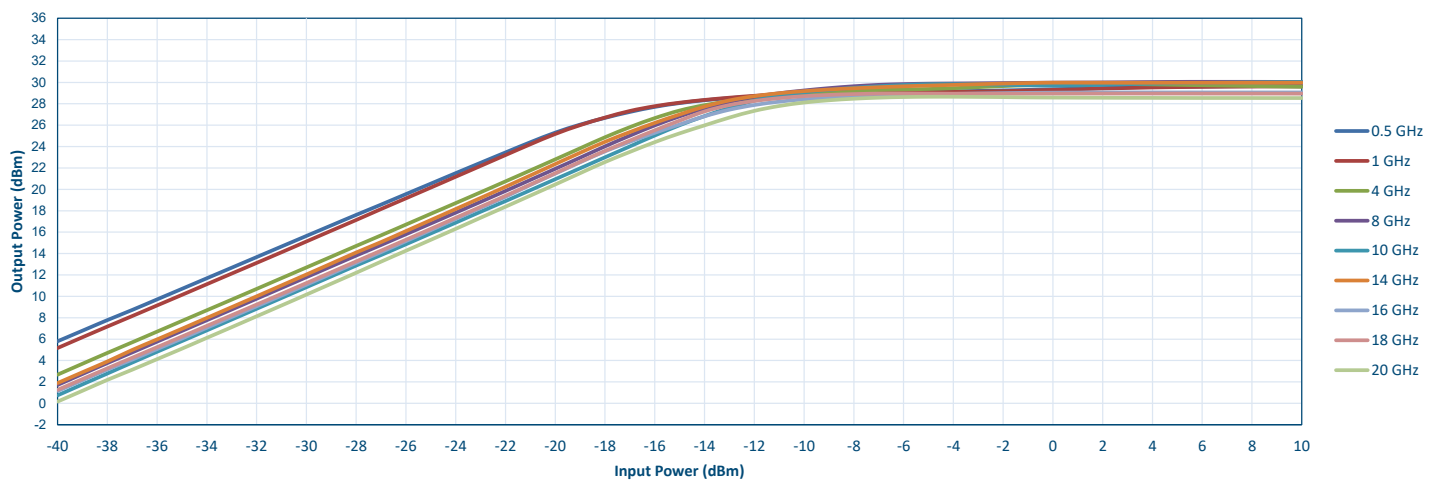


TYPICAL CHARACTERISTICS ON PEC-36-0R518G-4R5-27-15-SFF

Input Power Vs Output Power (+25°C)



Input Power Vs Output Power (-55°C)



Input Power Vs Output Power (+85°C)

