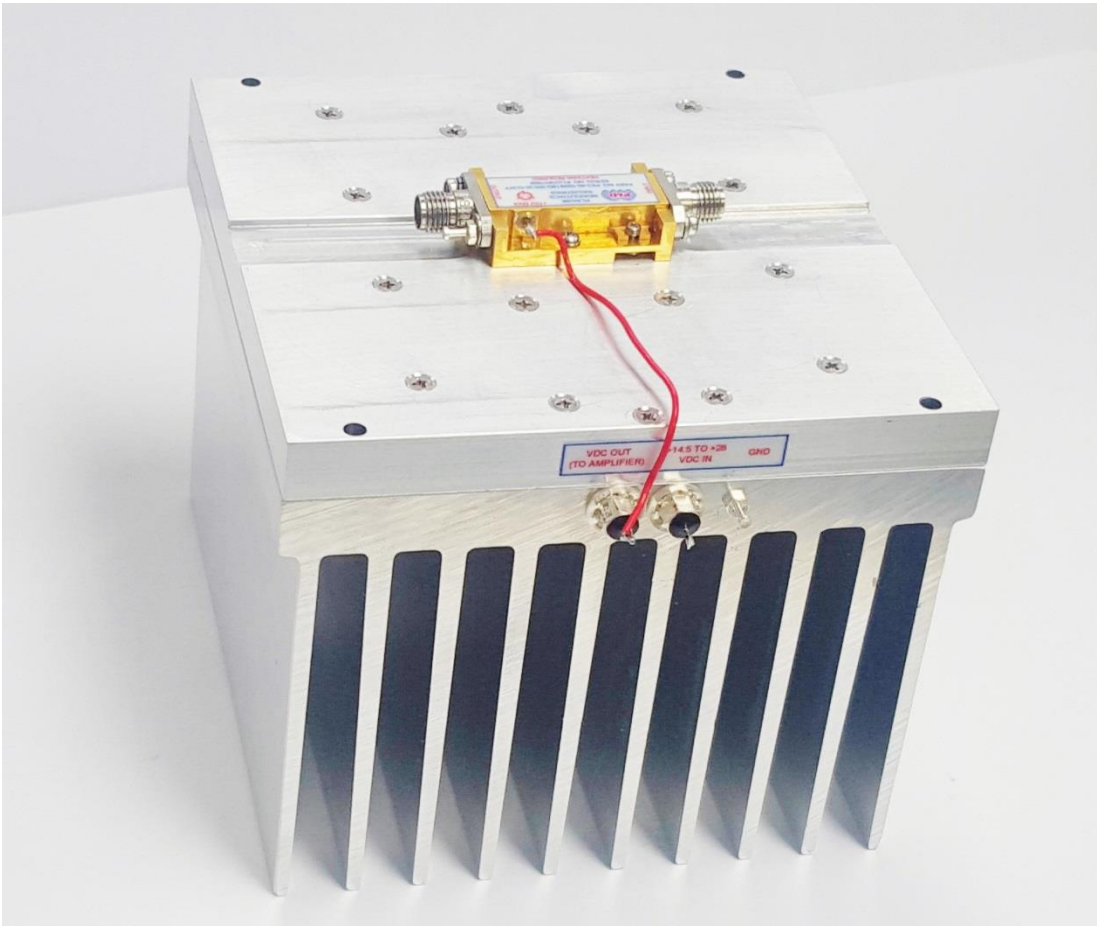
TYPICAL CHARACTERISTICS
ON
PE2-40-100M18G-3R5-20-12-SFF

PMI MODEL: PE2-40-100M18G-3R5-20-12-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.



MARCH 1, 2018

DESIGINED BY: PMI Engineering

TESTED AND REPORTED BY: Randy Combs

7311-F Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731
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TYPICAL CHARACTERISTICS
ON
PE2-40-100M18G-3R5-20-12-SFF

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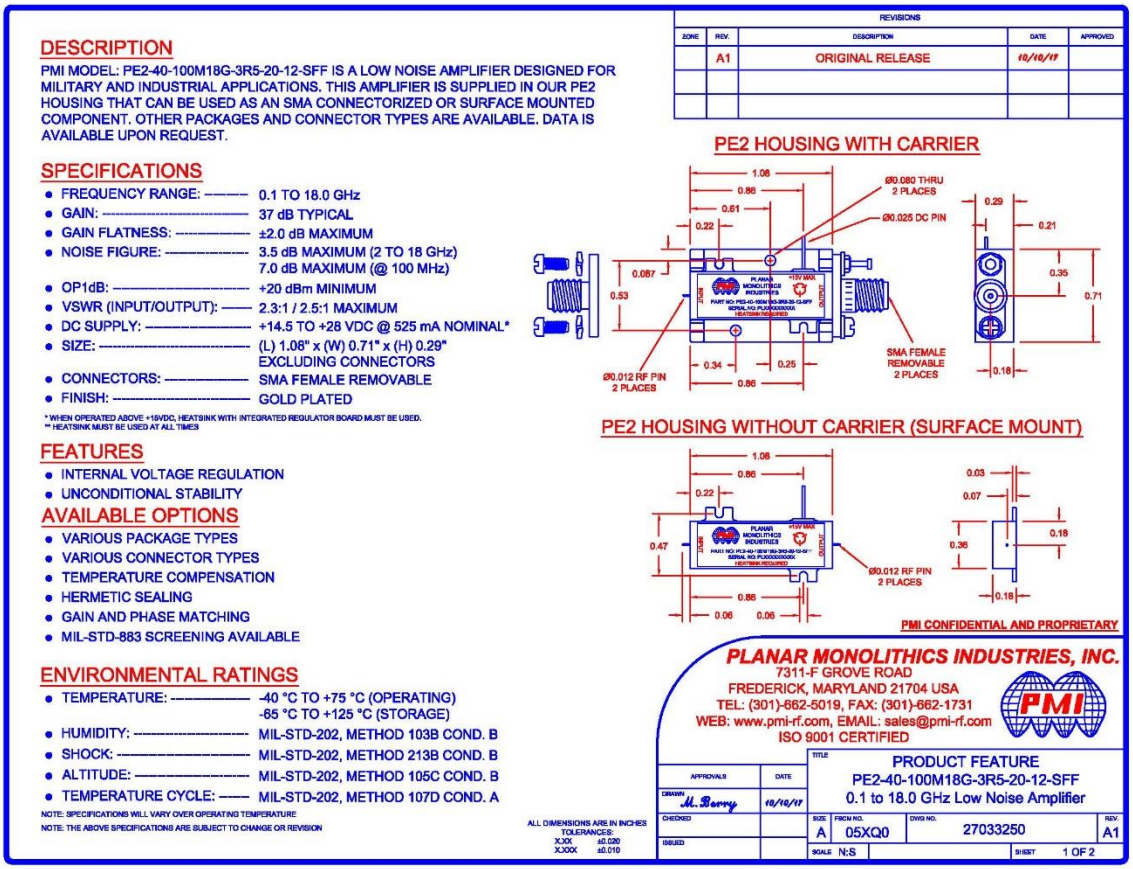
PRODUCT FEATURE



DESCRIPTION

PMI MODEL: PE2-40-100M18G-3R5-20-12-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: ——— 0.1 TO 18.0 GHz
- GAIN: ——— 37 dB TYPICAL
- GAIN FLATNESS: ——— ±2.0 dB MAXIMUM
- NOISE FIGURE: ——— 3.5 dB MAXIMUM (2 TO 18 GHz)
  7.0 dB MAXIMUM (@ 100 MHz)
- OP1dB: ——— +20 dBm MINIMUM
- VSWR (INPUT/OUTPUT): —— 2.3:1 / 2.5:1 MAXIMUM
- DC SUPPLY: ——— +14.5 TO +28 VDC @ 525 mA NOMINAL*
- SIZE: ——— (L) 1.08" x (W) 0.71" x (H) 0.29"
  EXCLUDING CONNECTORS
- CONNECTORS: ——— SMA FEMALE REMOVABLE
- FINISH: ——— GOLD PLATED

* WHEN OPERATED ABOVE +15VDC, HEATSINK WITH INTEGRATED REGULATOR BOARD MUST BE USED.
** HEATSINK MUST BE USED AT ALL TIMES

FEATURES

- INTERNAL VOLTAGE REGULATION
- UNCONDITIONAL STABILITY

AVAILABLE OPTIONS

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

ENVIRONMENTAL RATINGS

- TEMPERATURE: ——— -40 °C TO +75 °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 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

REVISIONS

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	10/10/17	

PE2 HOUSING WITH CARRIER

PE2 HOUSING WITHOUT CARRIER (SURFACE MOUNT)

PMI CONFIDENTIAL AND PROPRIETARY

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
DRAWN M. Berry	10/10/17
CHECKED	
ISSUED	

TITLE: PRODUCT FEATURE
PE2-40-100M18G-3R5-20-12-SFF
0.1 to 18.0 GHz Low Noise Amplifier

SIZE A | FSCM NO. 05XQ0 | DWG NO. 27033250 | REV. A1
SCALE N:S | SHEET 1 OF 2

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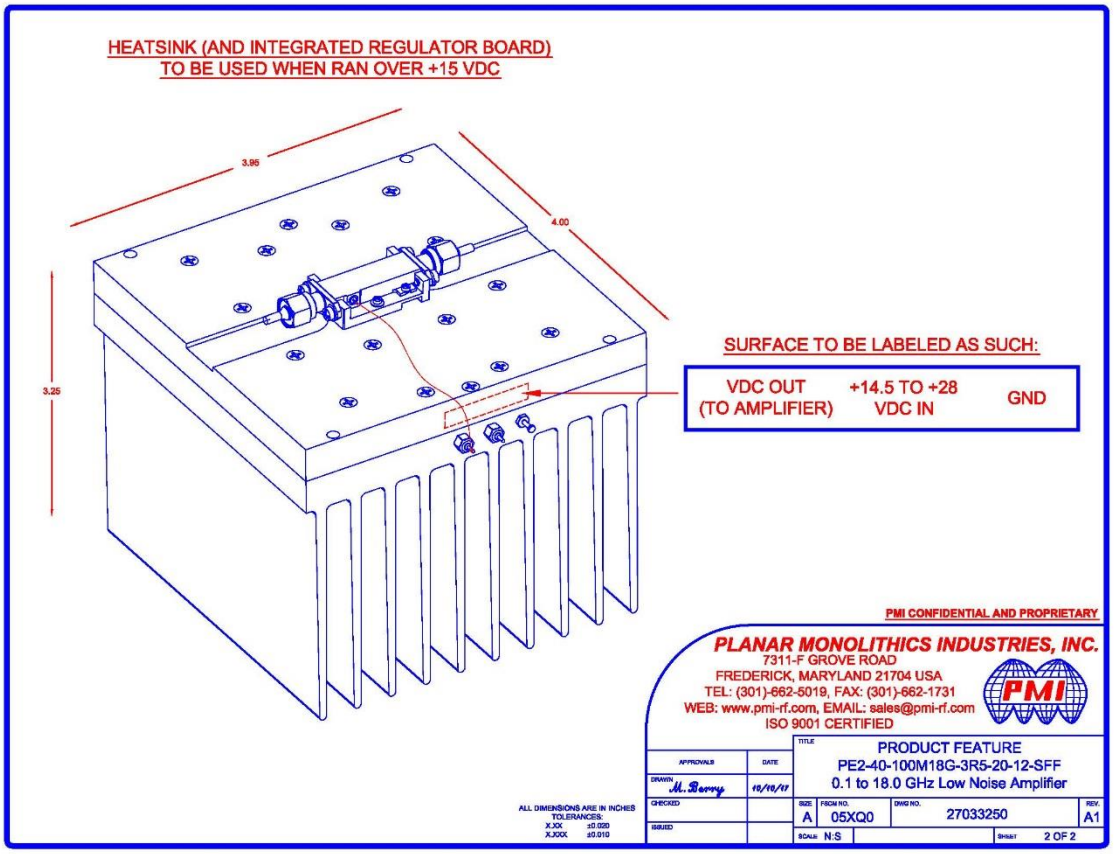

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SUMMARY TEST DATA

TEST ITEM	PARAMETERS	SPECIFIED VALUE	TEST RESULT	QA QC
1	Frequency Range	0.1 to 18.0 GHz	**0.1 to 18.0 GHz (See Plot)**	
2	Gain	37 dB Typical	**42.2 dB to 45.7 dB (See Plot)**	
3	Gain Flatness	±2.0 dB Maximum	**±1.75 dB (See Plot)**	
4	Noise Figure	3.5 dB Maximum (2-18 GHz) 7.0 dB Maximum (@ 100 MHz)	**3.88 dB (See Plot)** **5.65 dB (See Plot)**	
5	OP1dB	+20 dBm Minimum	**+21.5 dBm**	
6	VSWR	2.3:1 Maximum (Input) 2.5:1 Maximum (Output)	**1.36:1 (See Plot)** **1.76:1 (See Plot)**	
7	Power Supply	+14.5 TO +28 VDC @ 525 mA Nominal*	**+14.5 VDC @ 398 mA**	

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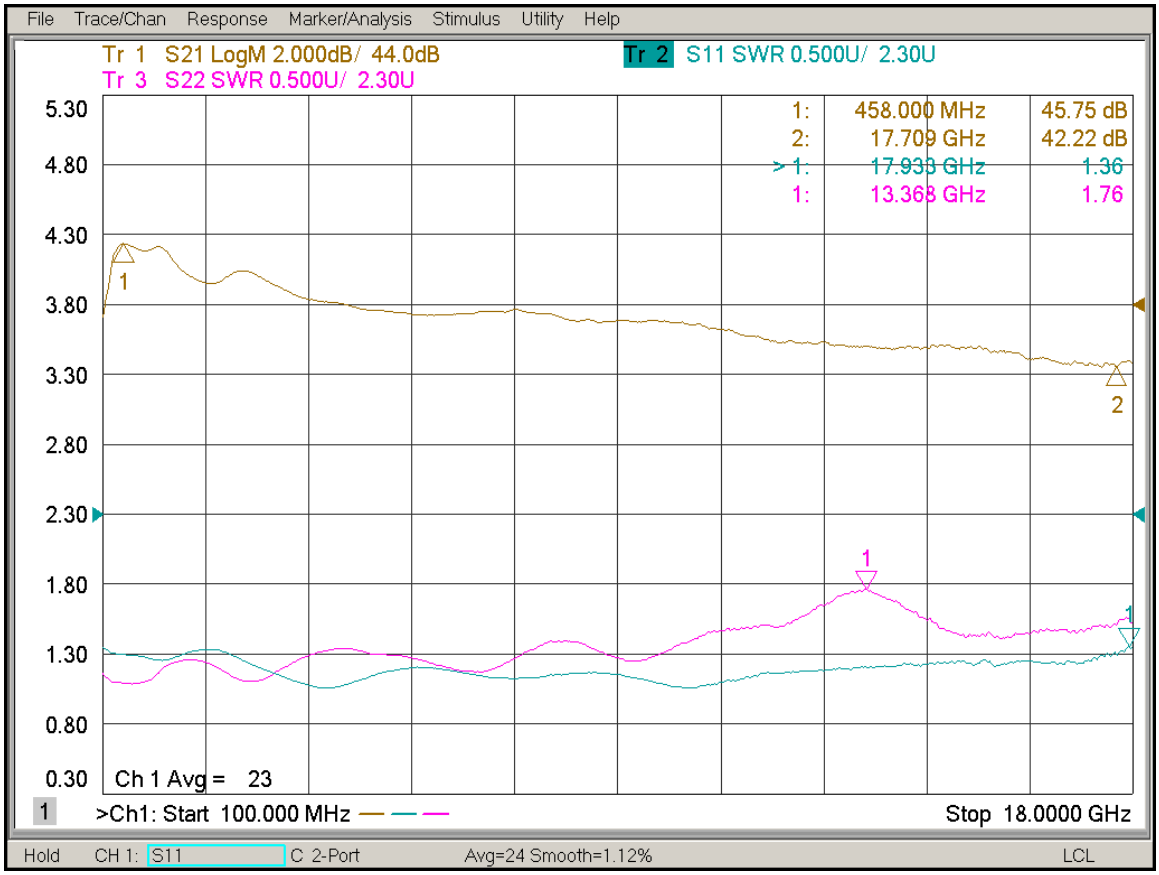
GAIN / GAIN FLATNESS / INPUT VSWR / OUTPUT VSWR



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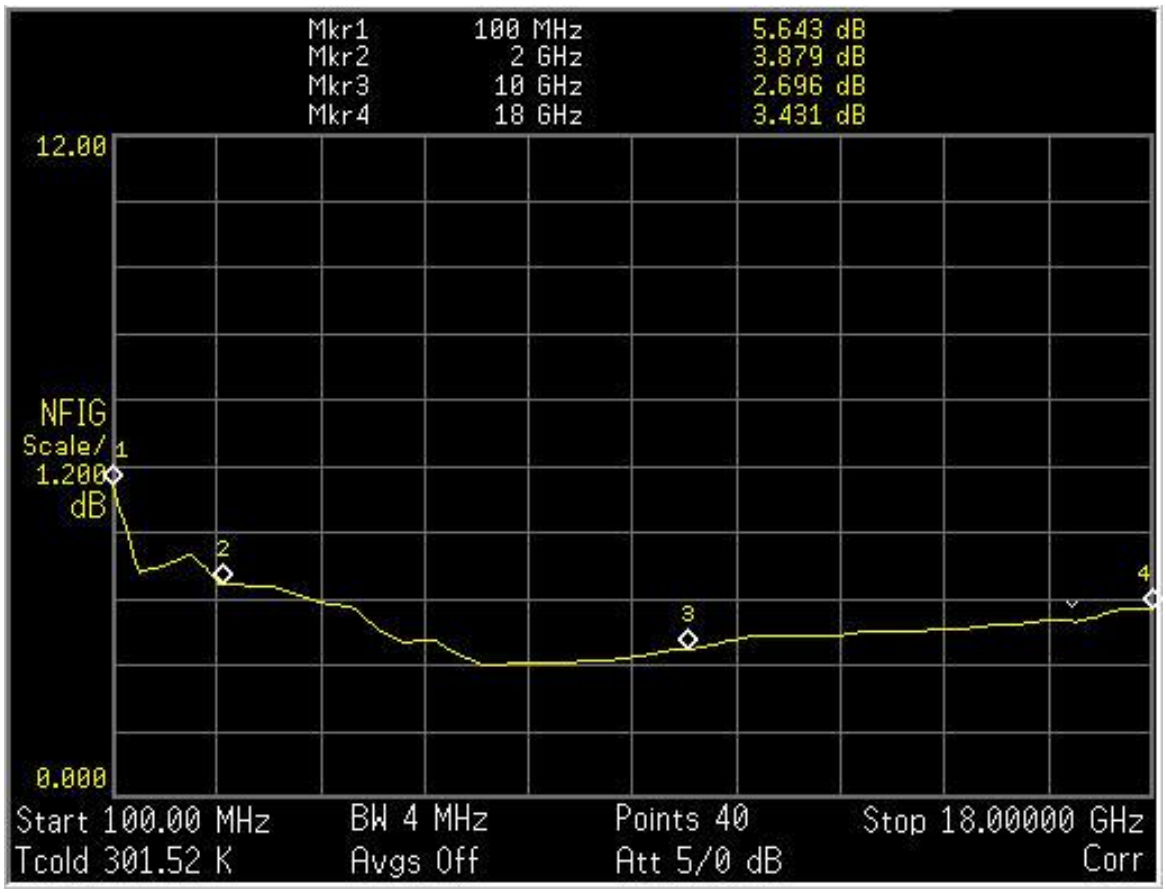
NOISE FIGURE



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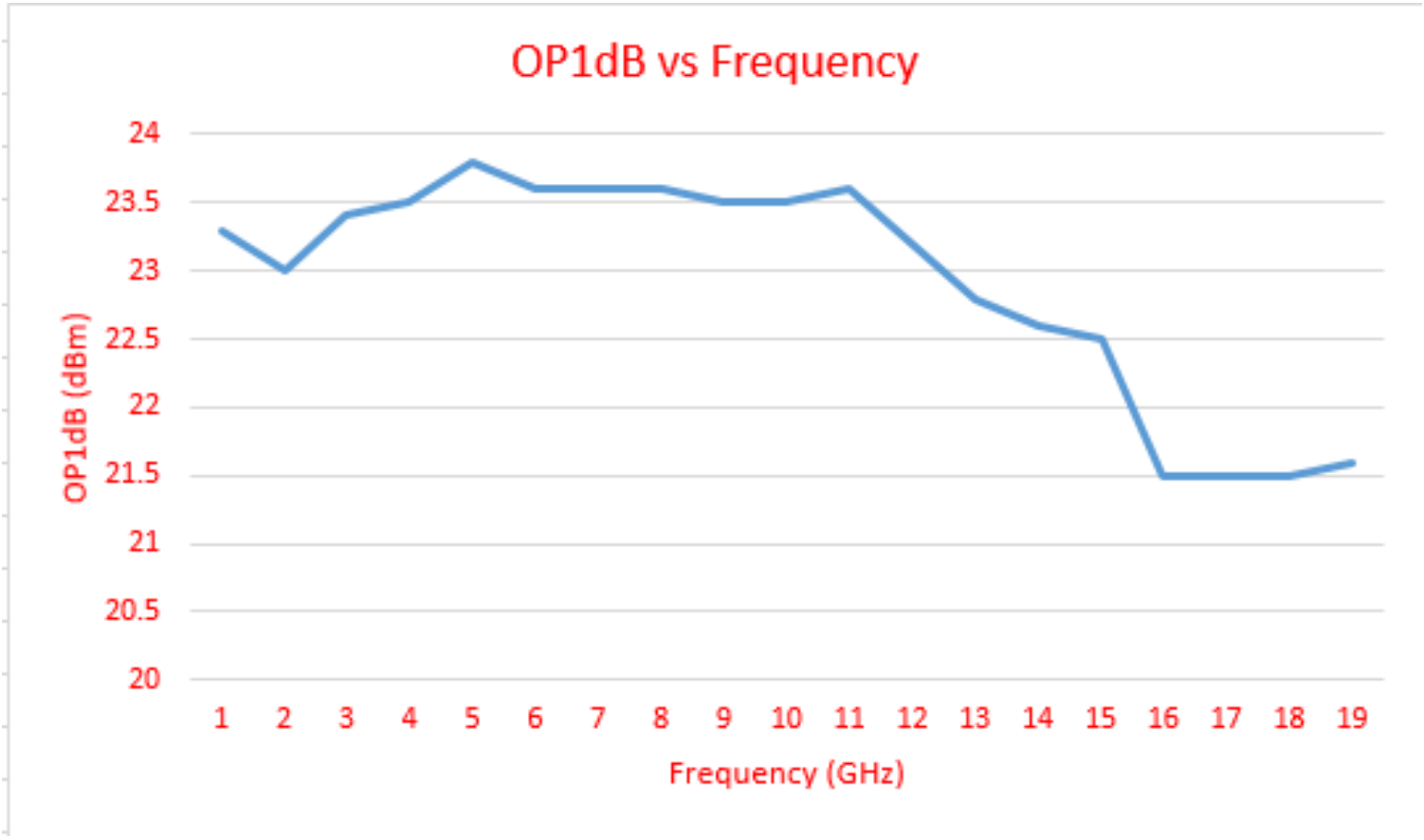

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