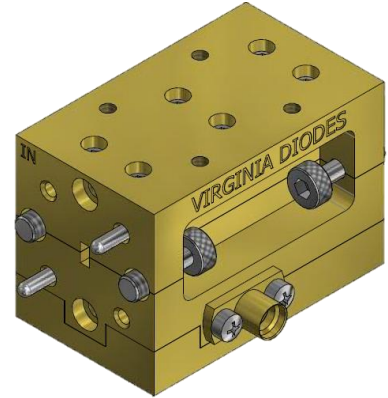


Description

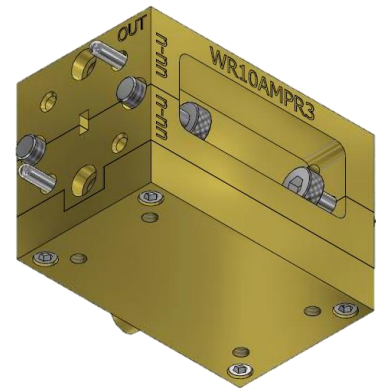
VDI10.0AMP-20-20 is a WR10 waveguide power amplifier with ~20dB gain and ~ +20dBm saturated output power across 75-110 GHz.



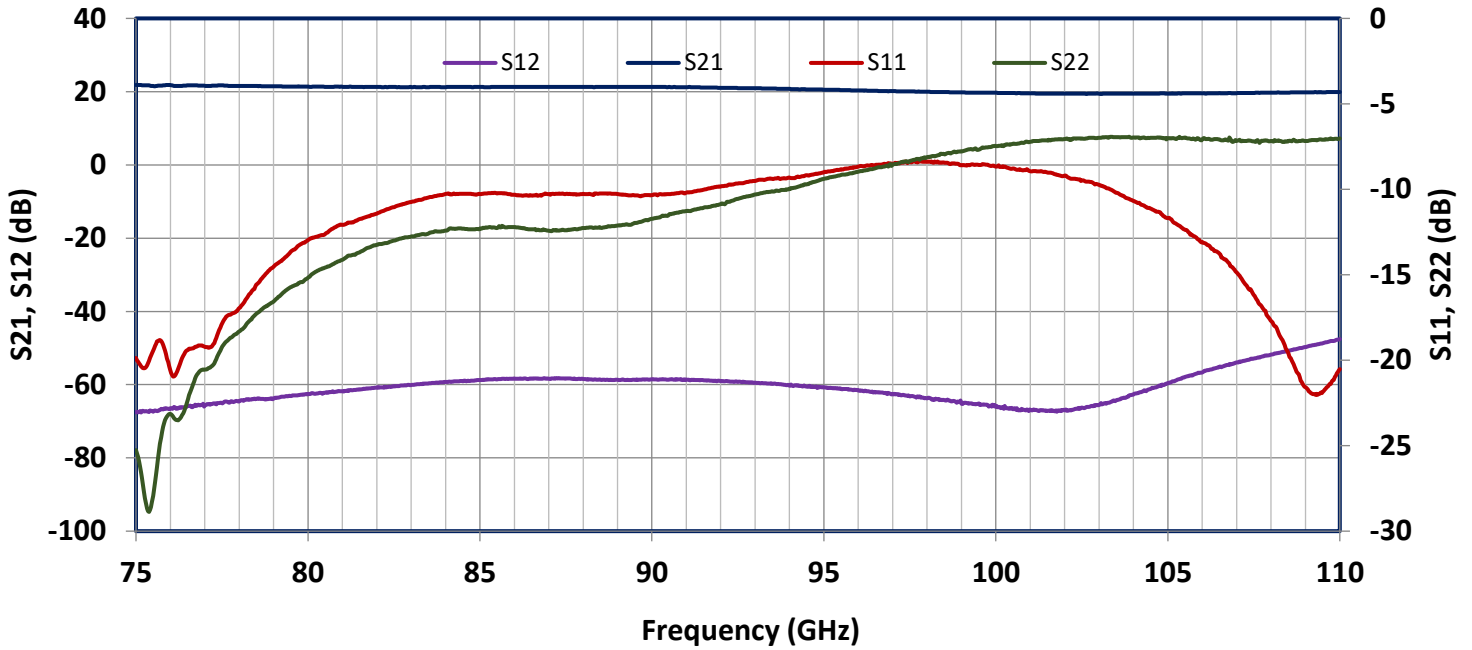
Parameter	Minimum	Typical	Maximum
Frequency	75 GHz		110 GHz
Gain		20 dB	
Input Power			+10 dBm
P _{1dB}		+17 dBm	
OIP3 (est.)		+27 dBm	
Saturated Output Power		+20 dBm	
Input Return Loss		-10 dB	
Output Return Loss		-10 dB	
DC Voltage	+8 V	+9 V	+10 V
DC Current Draw		150 mA	500 mA
Weight	-	~0.1lbs.	-
Case Temperature	20°C	25°C	40°C

Parameter	Specification
Input Flange	WR-10 UG-387/U-M
Output Flange	WR-10 UG-387/U-M
DC Voltage Bias Port	SMP(m)*
Size (without connectors)	0.75" x 0.85" x 1.25"

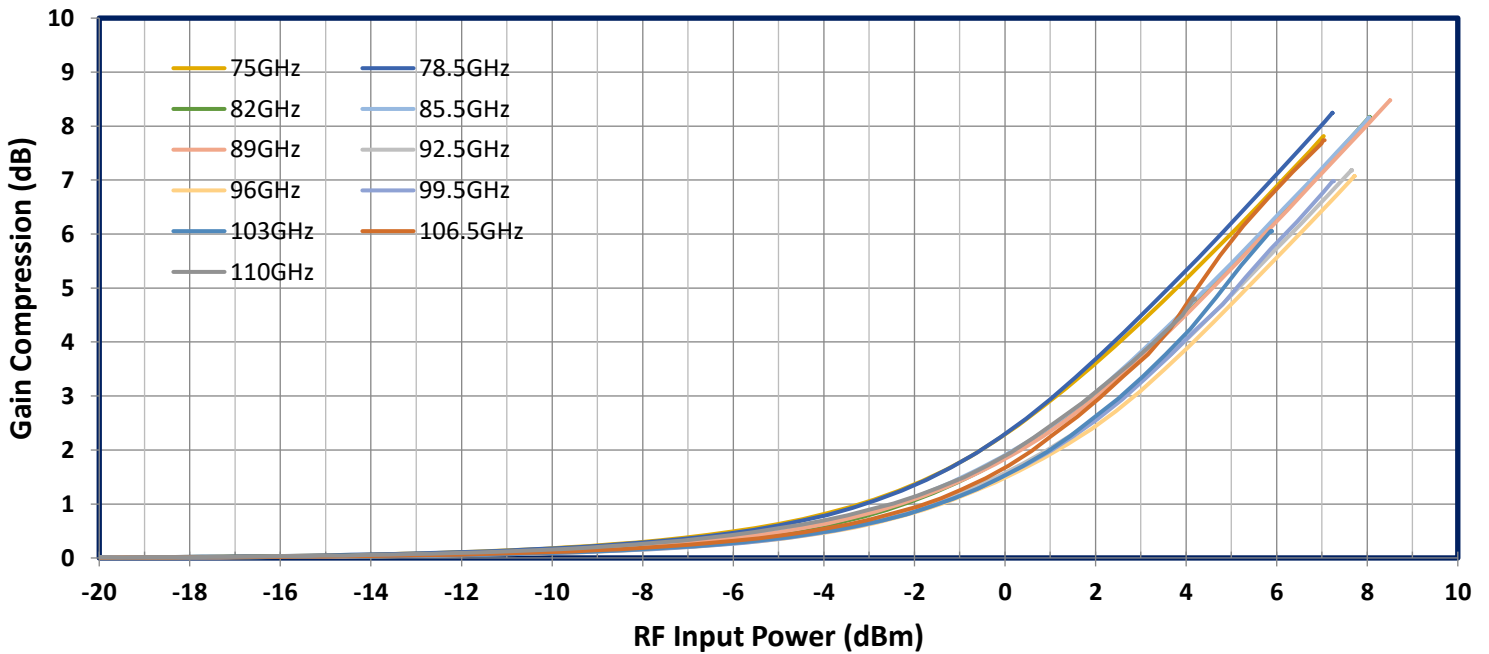
*Bias cable (SMP(f) to LEMO FFA.00.250) cable included.



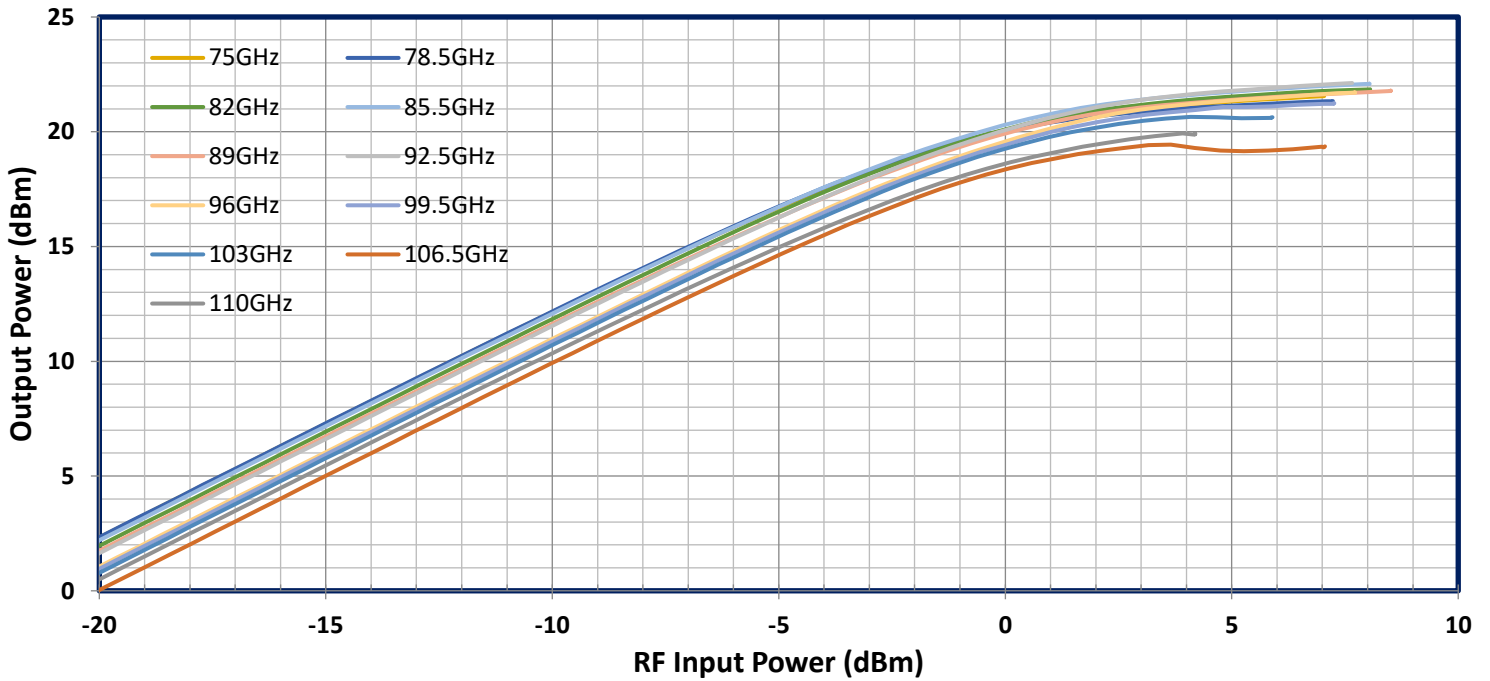
S-Parameters



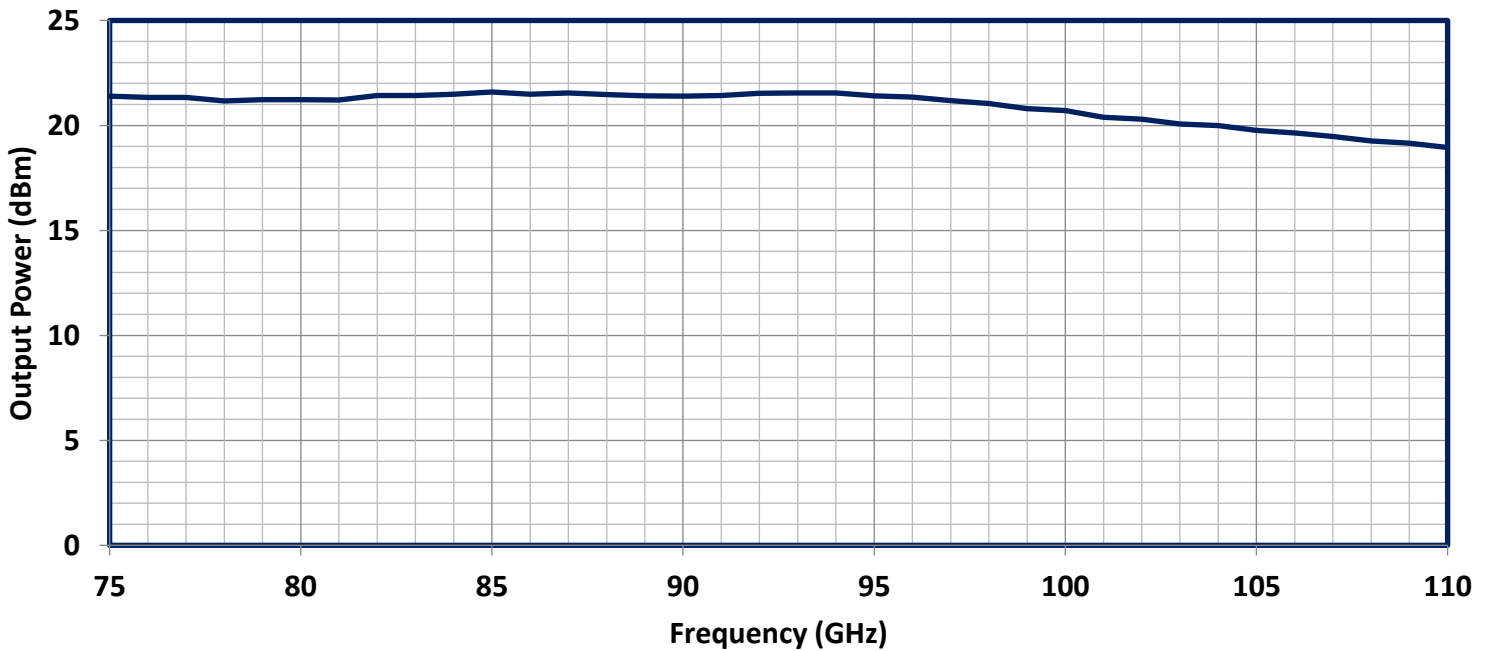
Gain Compression (dB) vs. RF Input Power (dBm)



Output Power (dBm) vs. RF Input Power (dBm)

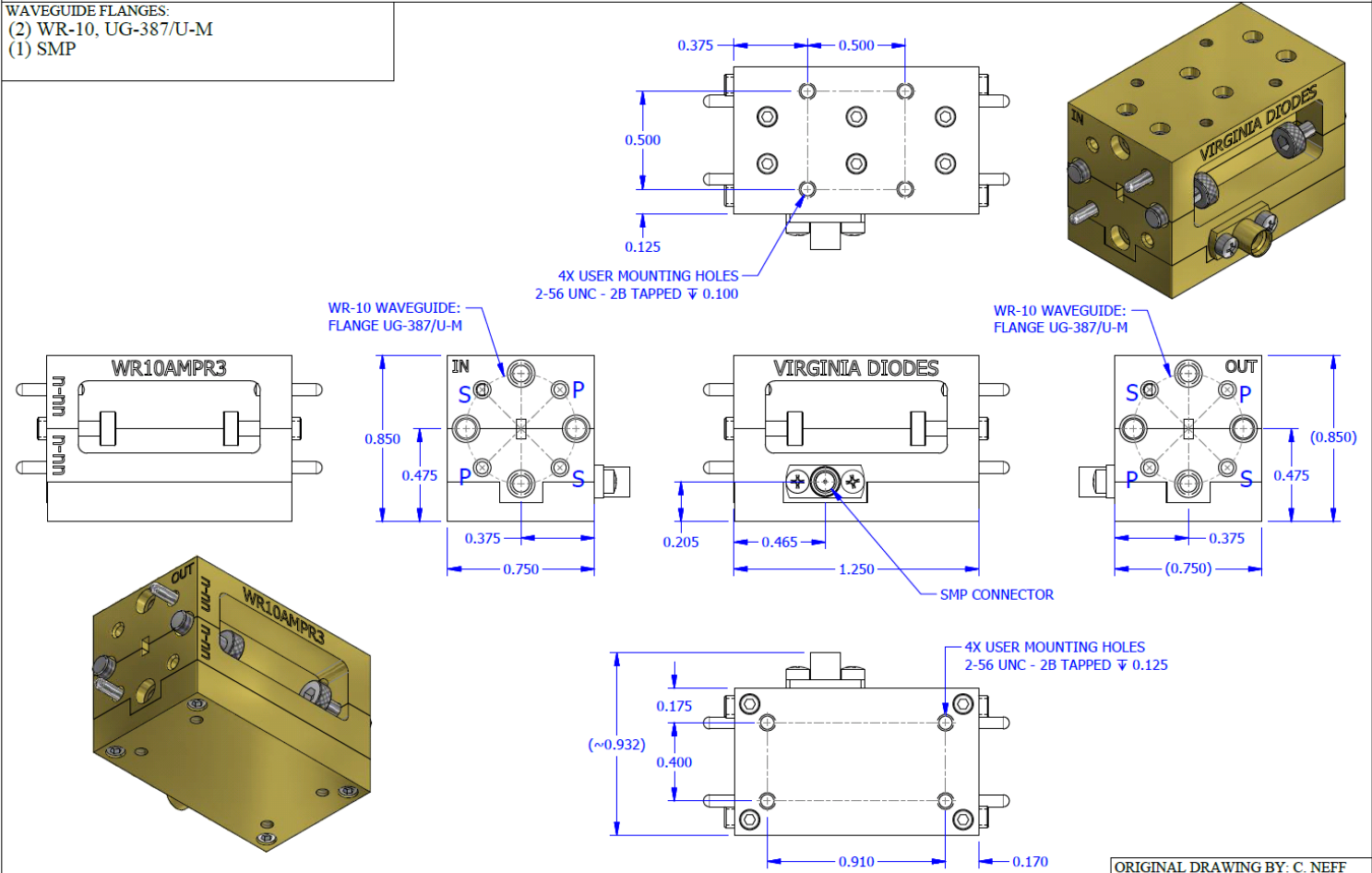


Saturated Output Power (dBm) vs. Frequency (GHz)



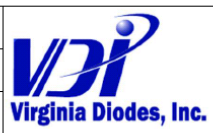
THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPRIETARY PROPERTY OF VIRGINIA DIODES, INC.

WAVEGUIDE FLANGES:
 (2) WR-10, UG-387/U-M
 (1) SMP



NOTE: SPECIFICATIONS AND CHARACTERISTICS ARE TYPICAL AND SUBJECT TO CHANGE AT ANY TIME.

TITLE: WR-10AMP3V1	MATERIAL: ALUMINUM ALLOY (MAY BE GOLD PLATED)
LAST REV. DATE: 1/15/2018	SHEET: 1 OF 1
MODEL #: WR10AMP	LAST REV.: R3V1
	UNITS: INCH



ORIGINAL DRAWING BY: C. NEFF
 SEGARS ENGINEERING for:
VIRGINIA DIODES, INC.
 979 2nd ST. SE, SUITE 309
 CHARLOTTESVILLE, VA 22902
 PHONE: 434.297.3257
 FAX: 434-297-3258
 www.virginiadiodes.com