

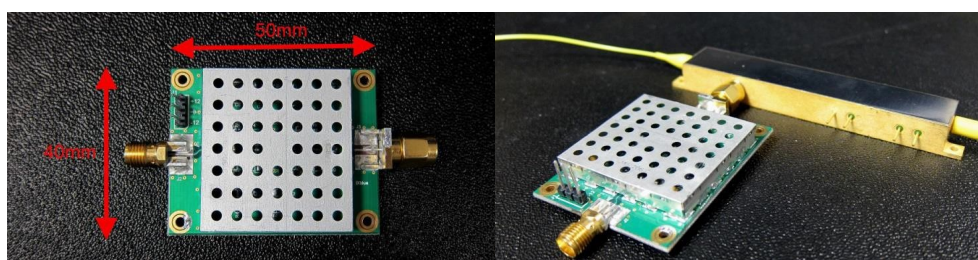
DR-PL-0.1-MO

Specifications

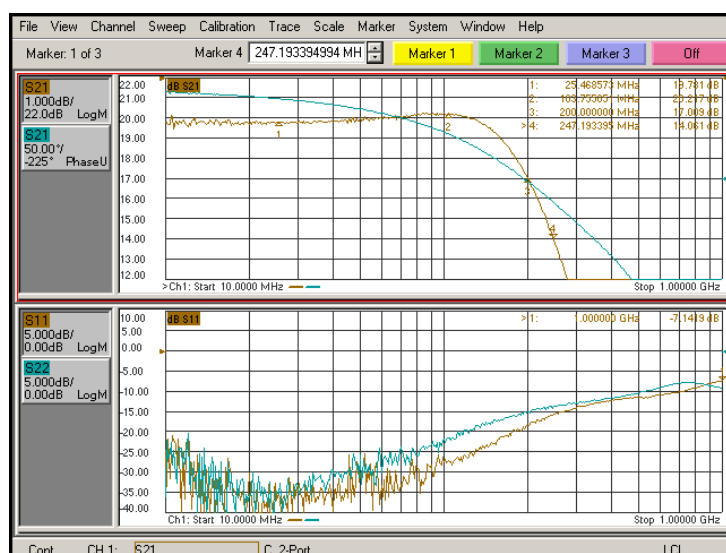
The following table is a summary of both specifications and measurements. All specifications given at 25°C, unless differently specified

RECOMMENDED OPERATING CONDITIONS				
	-	Min	Typ	Max
Input peak-to-peak voltage	V _{pp}	-	1	-
Input impedance	Ω	-	50	-
Voltage gain	V/V	19	20	21
Output voltage peak to peak (@10MHz)	V _{pp}	-	19	-
Electrical frequency range (Defined)	MHz	DC	200	-
Low frequency cutoff (-3dB)	Hz	-	DC	-
High frequency cutoff (-3dB)	MHz	-	200	-
Output impedance matching	kΩ	-	10	-
Rise time	ns	-	6	10
Positive output saturation voltage	V	-	9.8	-
Negative output saturation voltage	V	-	-9.8	-
Power supply voltages V+ (user supplied)	V	11.5	12	13
Current consumption V+	mA	20	-	100
Power supply voltages V-	V	-11.5	-12	-13
Current consumption V-	mA	-20	-	-100
MAXIMUM RATINGS				
Operating temperature	°C	0	-	55
Storage temperature	°C	-40	-	85
Maximum input voltage	V _{pp}	-	10	-
Maximum power supply voltage	V	-16	-	16
MECHANICAL				
Product (module) typical dimension (comes with metallic cover)	mm ³	50 x 40 x 10		
Input RF connector	-	SMA female		
Output RF connector	-	SMA female		

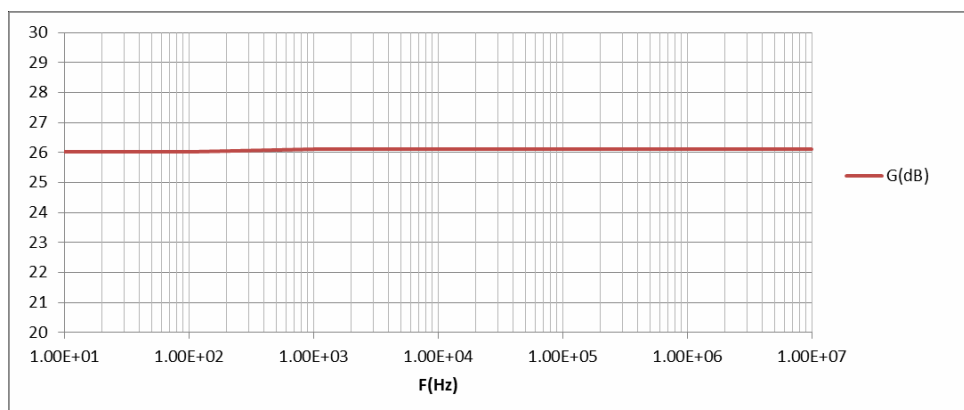
Mechanical dimension and pictures



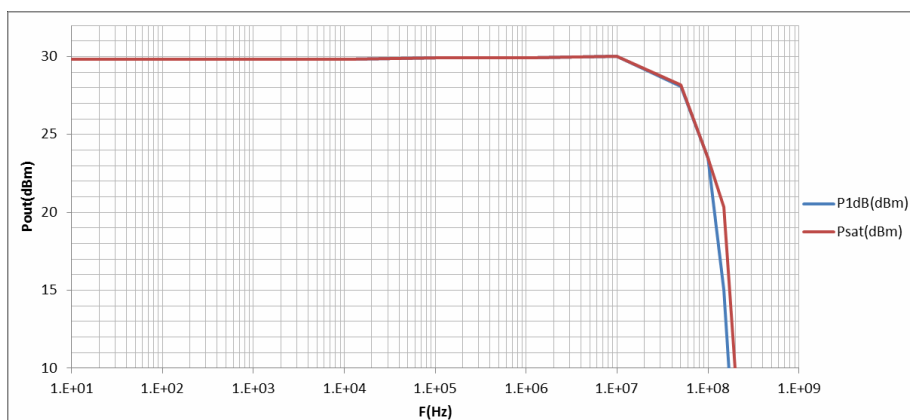
Measured small signal bandwidth 10MHz – 1GHz (Pin= -30dBm)



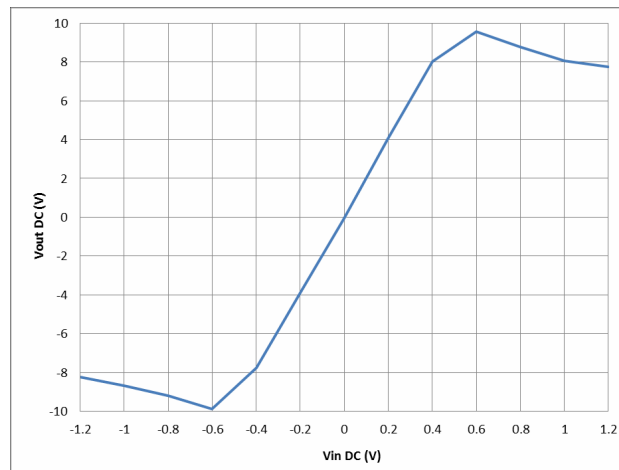
Low frequency bandwidth (Vin= 50mVpp)



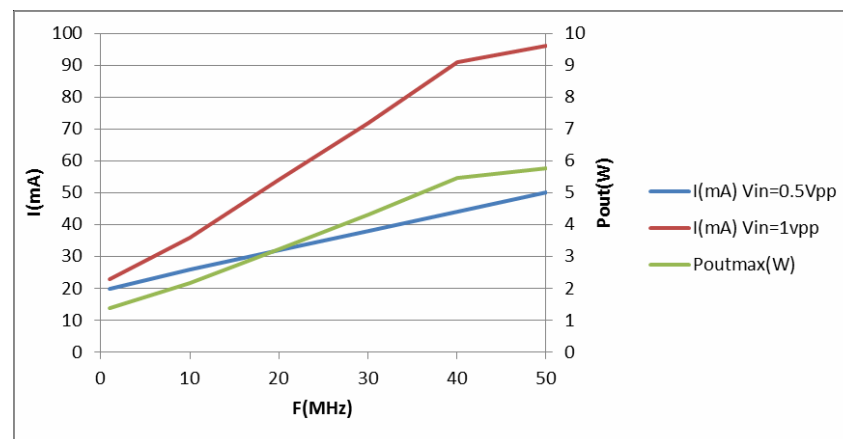
P1dB and Psat function of frequencies



DC measurement, $V_{out} F(V_{in})$



Current consumption on the positive supply



At 10 MHz and $V_{in} = 1 \text{ Vpp}$, the board will consume 36 mA on the positive rail and -36 mA on the negative rail. The amplifier consumes 2 W. For this consumption, the amplifiers do not need a heatsink, for increased consumption fixing the board on a metal baseplate would be necessary.