

Features

- Frequency Range: 100-8000MHz
- Gain: 30dB
- P_{1dB}: +10dBm
- OIP3: +23dBm
- Noise Figure: 6dB (typ.)
- DC Power: 9V to 15V @ 120mA
- SMA-female



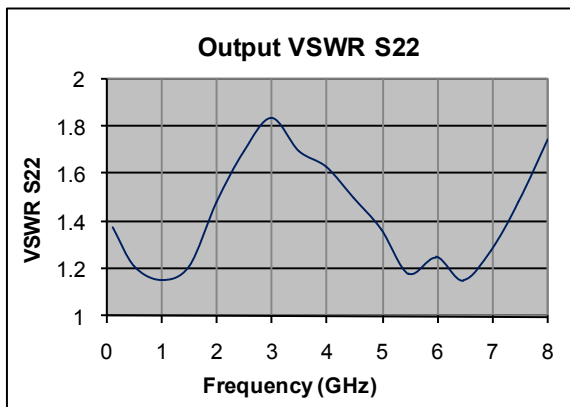
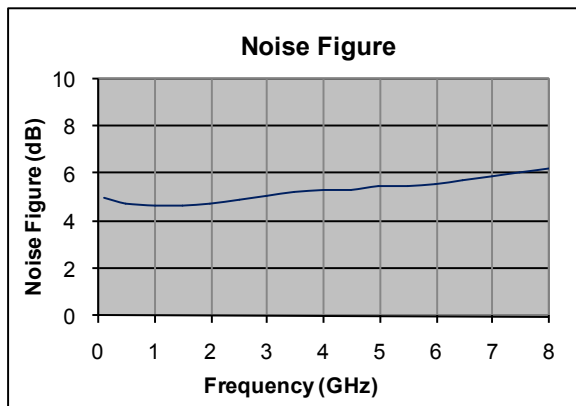
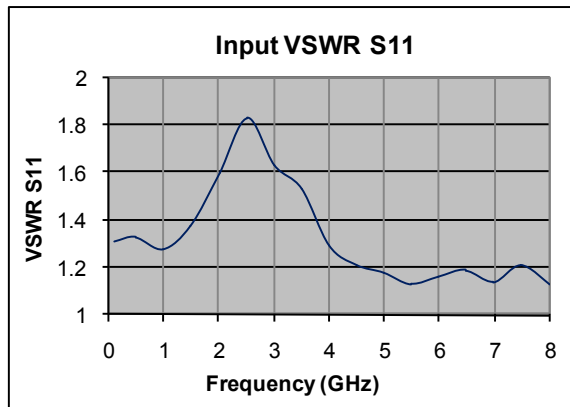
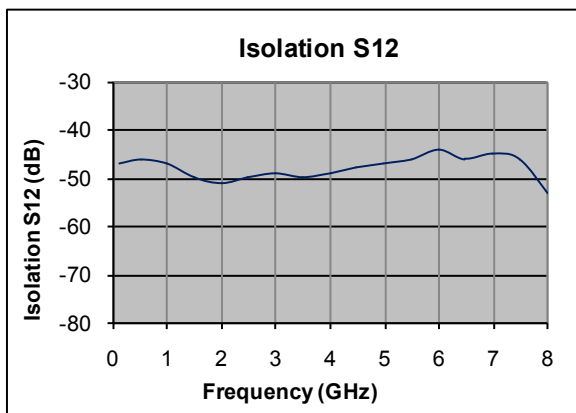
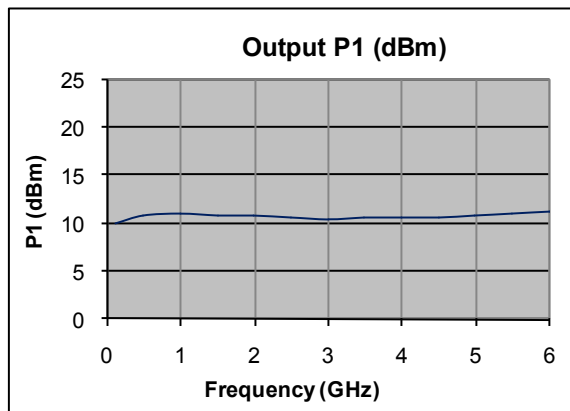
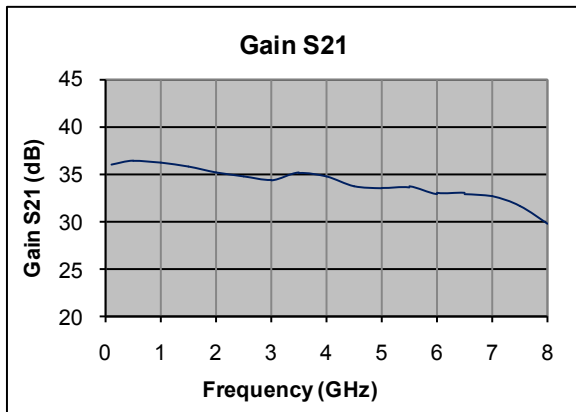
Description

HD31308 is a 30dB gain RF Amplifier, with frequency range of 100 MHz to 8000MHz.

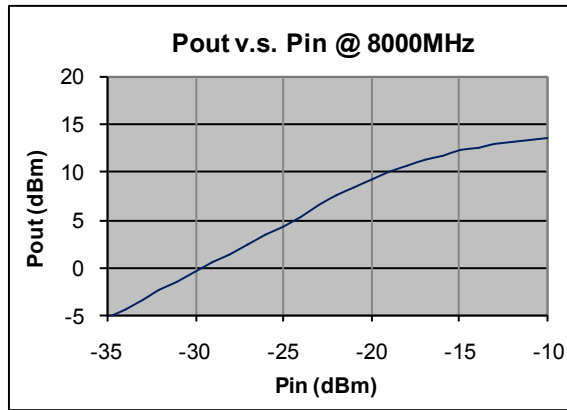
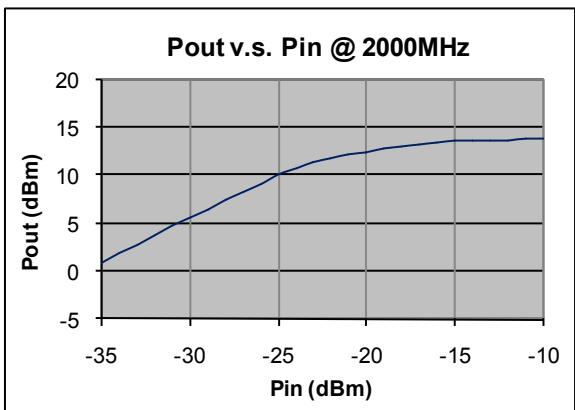
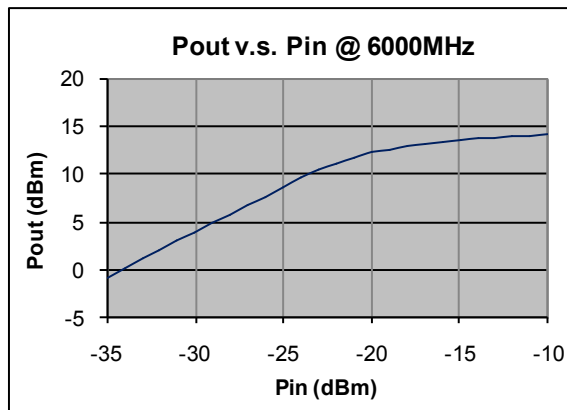
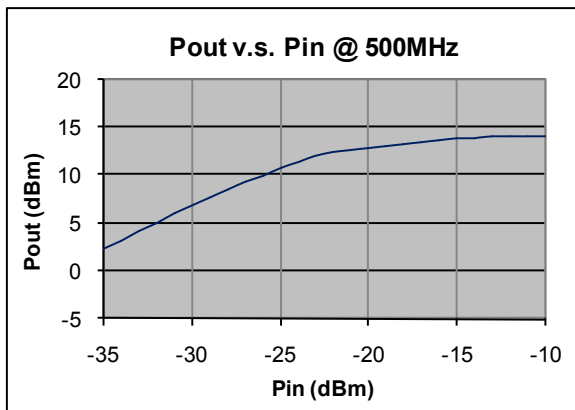
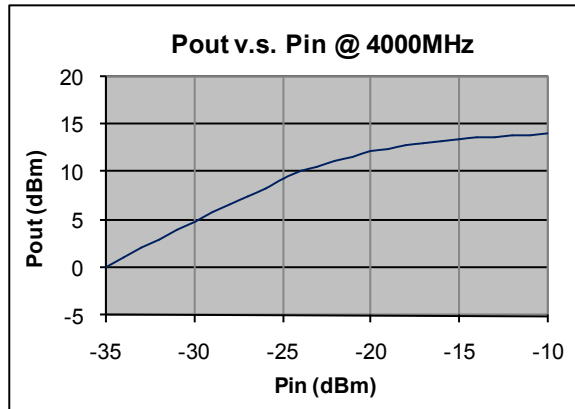
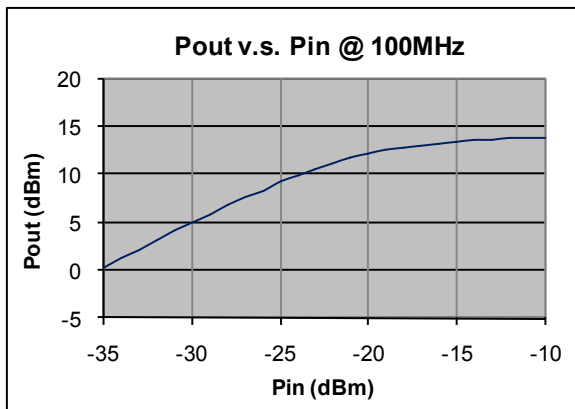
Electrical Specifications @+25 °C, Z_{in}=Z_{out}=50 Ω, V_{supply} = +12VDC

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	100		8000
Gain (S21) f = 100MHz	dB		36.0	
f = 4000MHz	dB		34.7	
f = 8000MHz	dB		29.7	
Gain Flatness	dB		±3.0	
Output Power P _{1dB} @4000MHz	dBm		+10	
Saturated Output Power P _{Sat}	dBm		+13	
Output Third Order Intercept IP3	dBm		+23	
Noise Figure	dB		6.0	6.5
Reverse Isolation (S12) @4000MHz	dB		-45	
VSWR-Input (S11)	ratio:1	1.3@100MHz	1.3@4000MHz	1.2@8000MHz
VSWR-Output (S22)	(unitless)	1.4@100MHz	1.6@4000MHz	1.8@8000MHz
DC Power Supply - voltage	V	9	12	15
DC Power Supply - current	mA		120	135
Operating Temperature	°C	-40		+85
Size	Inch	1.79 (L) x 1.10 (W) x 0.45 (H)		
Weight	Oz	1.4		

Typical Performance @+25 °C



Typical Performance @+25 °C



Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+13dBm
Supply Voltage	+25V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

Outline

