

### Features

- Frequency Range: 1700-2100MHz
- Gain: 30dB
- $P_{1dB}$ : +21dBm
- OIP3: +33dBm
- Noise Figure: 1.2dB (typ.)
- DC Power: 9V to 15V @ 160mA
- SMA-female connectorized



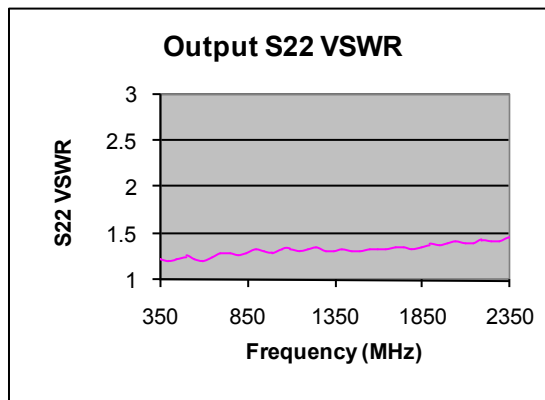
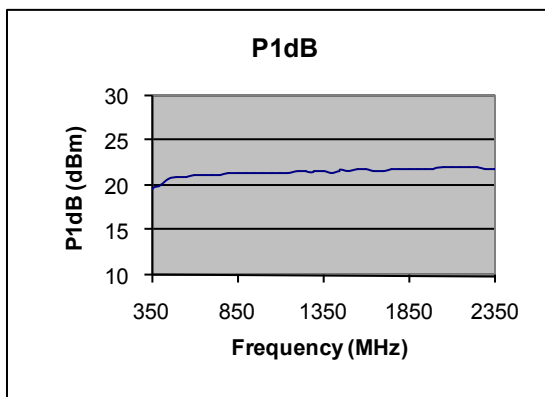
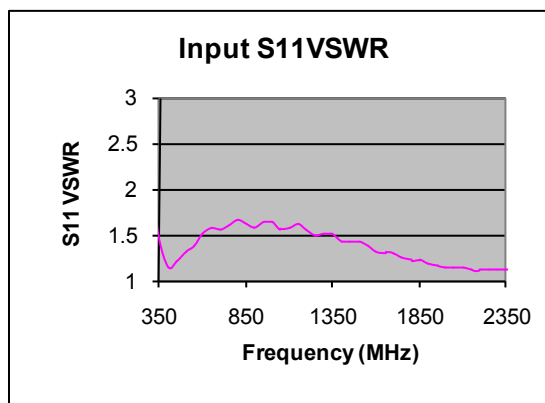
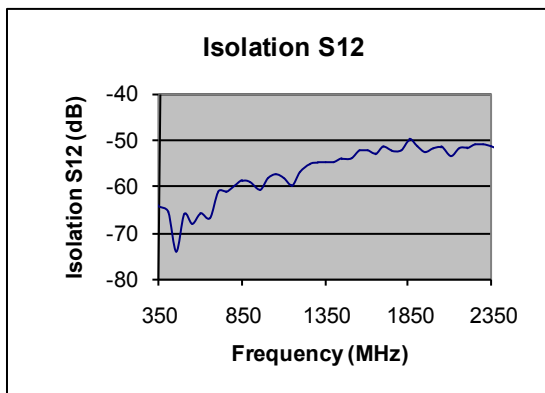
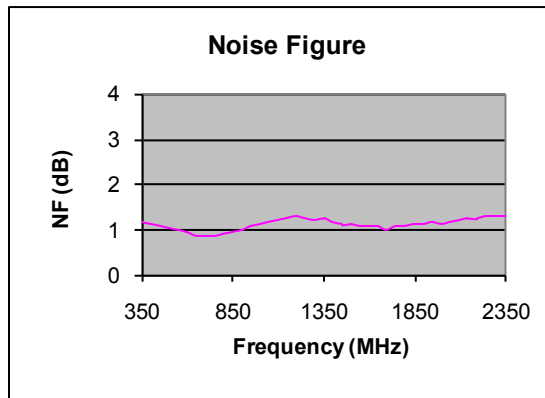
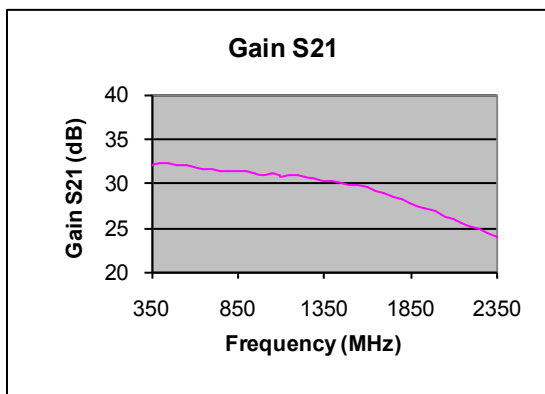
### Description

HD31306 is a high performance Microwave Low Noise (& Driver) Amplifier, with standard frequency range of 1700MHz to 2100MHz.

### Electrical Specifications @+25 °C, $Z_{in}=Z_{out}=50 \Omega$ , $V_{supply} = +12VDC$

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	1700		2100
Gain (S21) f = 1700MHz	dB		31.0	
f = 1900MHz	dB		30.5	
f = 2100MHz	dB		24.0	
Gain Variation Over Temperature	dB/°C		0.02	0.03
Output Power $P_{1dB}$	dBm		+21	
Saturated Output Power $P_{Sat}$	dBm		+24	
Output Third Order Intercept IP3	dBm		+33	
Noise Figure	dB		1.2	1.5
Reverse Isolation (S12) @1900MHz	dB		-55	
VSWR-Input (S11)	ratio:1	1.5@1700MHz	1.5@1900MHz	1.1@2100MHz
VSWR-Output (S22)	(unitless)	1.3@1700MHz	1.3@1900MHz	1.5@2100MHz
DC Power Supply - voltage	V	9	12	15
DC Power Supply - current	mA		160	
Operating Temperature	°C	-40		+85
Size (RF/DC feedthrough excluded)	Inch	1.79 (L) x 1.10 (W) x 0.45 (H)		
Weight	Oz	1.4		

**Typical Performance @+25 °C**



**Absolute Maximum Ratings**

Parameter	Absolute Maximum
RF Input Power	+25dBm
Supply Voltage	+20V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

**Outline**

