

Features

- Frequency Range: 10-600MHz
- Gain: 40dB
- P_{1dB}: +17dBm
- OIP3: +31dBm
- Noise Figure: 0.9dB (typ.)
- DC Power: 9V to 15V @ 140mA
- SMA-female connectorized



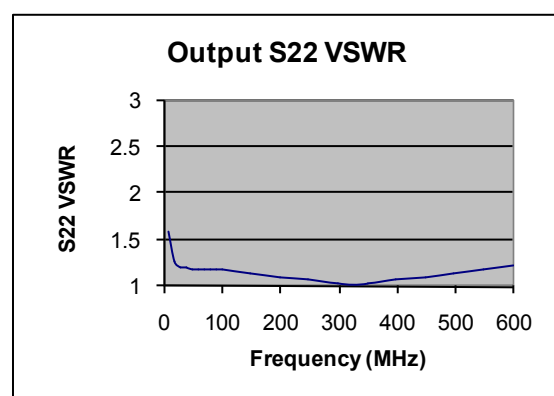
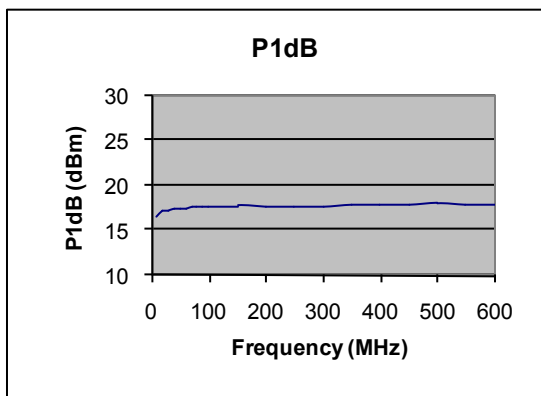
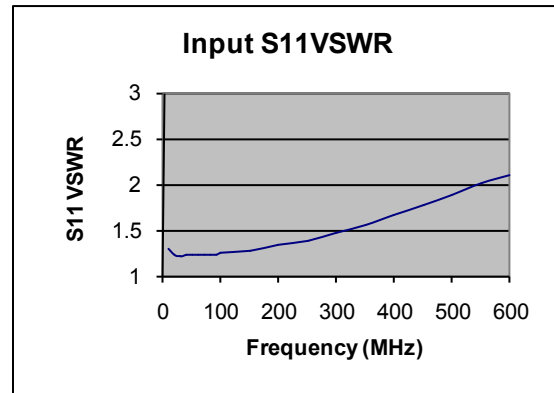
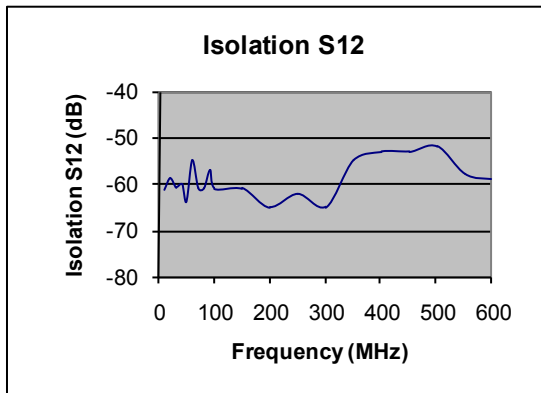
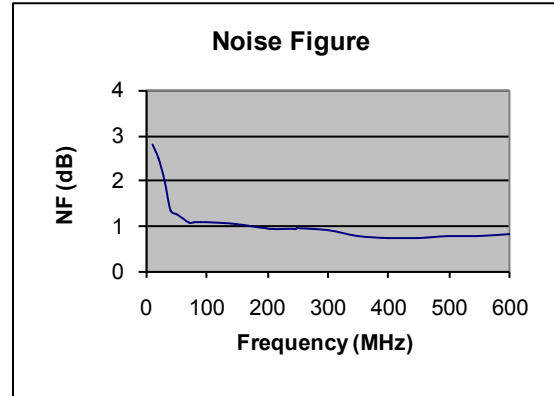
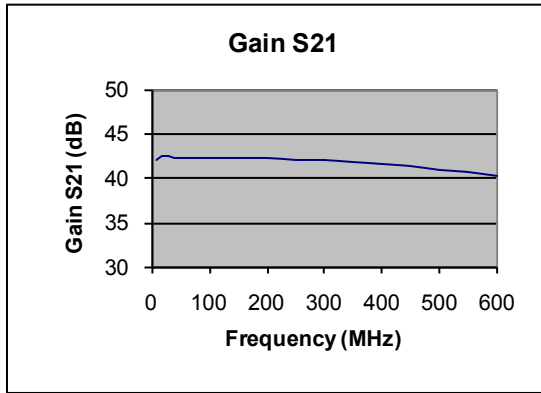
Description

HD31303 is a high performance Low Noise (& Driver) Amplifier, with standard frequency range of 10 to 600MHz.

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

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	10		600
Gain (S21) f = 10MHz	dB		41.5	
f = 300MHz	dB	40.0	41.0	
f = 600MHz	dB		40.0	
Gain Flatness	dB		±1.0	
Gain Variation Over Temperature	dB/°C		0.02	0.03
Output Power P _{1dB}	dBm		+17	
Saturated Output Power P _{Sat}	dBm		+20	
Output Third Order Intercept IP3	dBm		+31	
Noise Figure	dB		0.9	1.1
Reverse Isolation (S12) @300MHz	dB		-60	
VSWR-Input (S11)	ratio:1	1.3@10MHz	1.5@300MHz	2.1@600MHz
VSWR-Output (S22)	(unitless)	1.6@10MHz	1.1@300MHz	1.3@600MHz
DC Power Supply - voltage	V	9	12	15
DC Power Supply - current	mA		140	
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	+15dBm
Supply Voltage	+20V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

Outline

