

Features

- Frequency Range: 20-1000MHz
- Gain: 30dB
- P_{1dB}: +17dBm
- OIP3: +31dBm
- Noise Figure: 1.3dB (typ.)
- DC Power: 9V to 15V @ 140mA
- SMA-female connectorized



Description

HD31305 is a high performance Low Noise (& Driver) Amplifier, with standard frequency range of 20 to 1000MHz.

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

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	20		1000
Gain (S ₂₁) f = 20MHz	dB		30.5	
f = 500MHz	dB	30.0	31.0	
f = 1000MHz	dB		29.5	
Gain Flatness	dB		±0.8	
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		1.3	1.5
Reverse Isolation (S ₁₂) @500MHz	dB		-60	
VSWR-Input (S ₁₁)	ratio:1	1.1@20MHz	1.4@500MHz	2.3@1000MHz
VSWR-Output (S ₂₂)	(unitless)	1.6@20MHz	1.2@500MHz	1.5@1000MHz
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



