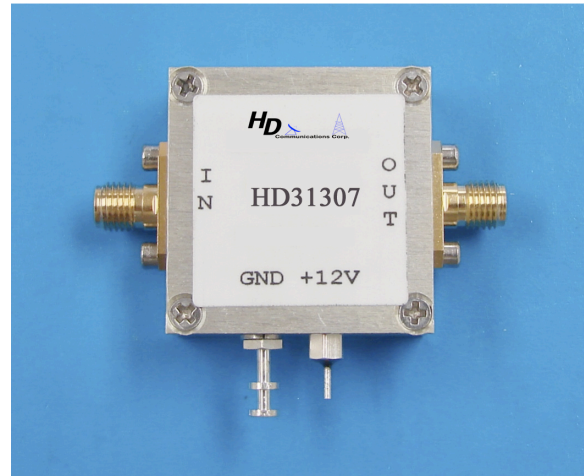


Features

- Frequency Range: 10 - 1300MHz
- Gain: 33dB
- P_{1dB}: +20dBm
- IP3: +34dBm
- Noise Figure: 1.5dB
- DC Power: 12V/165mA
- Internal Voltage Regulated
- Reverse DC Protection
- SMA Connector



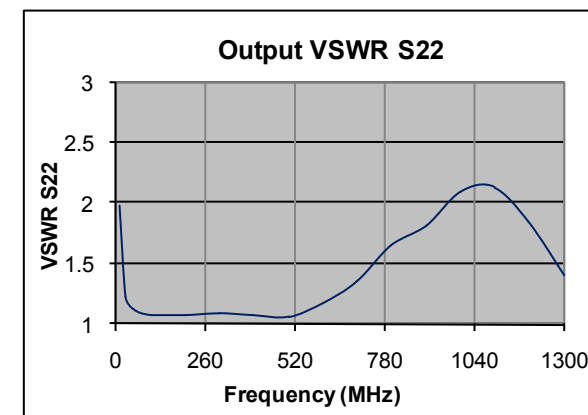
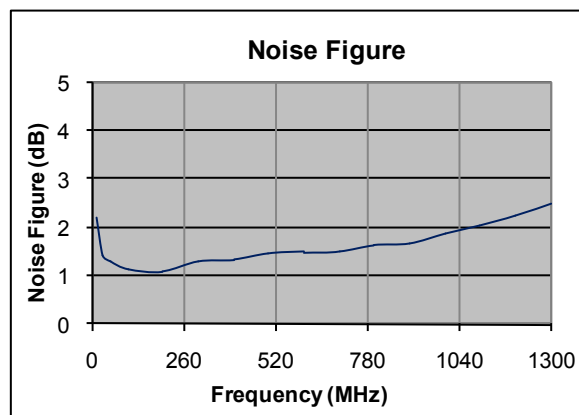
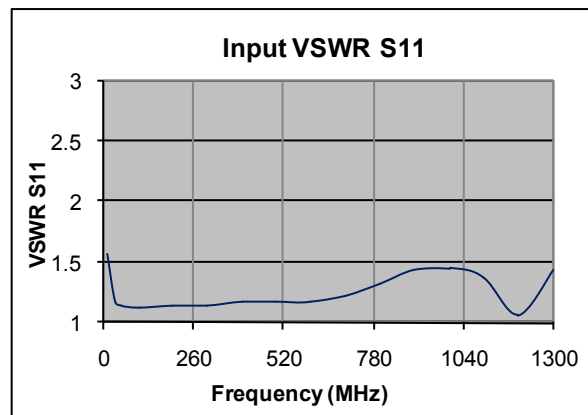
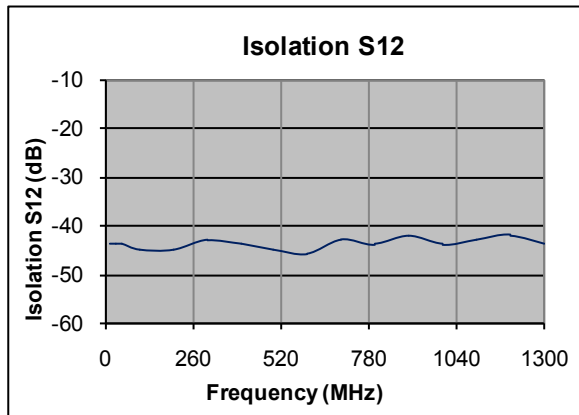
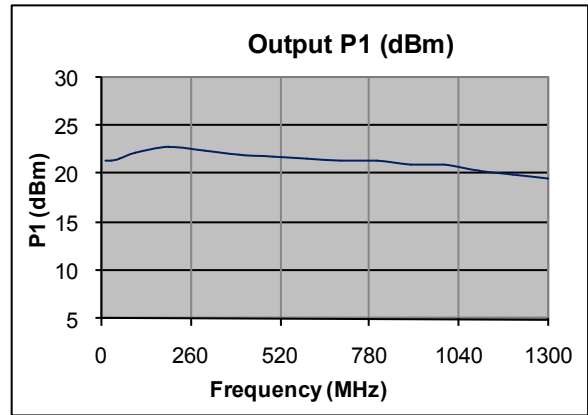
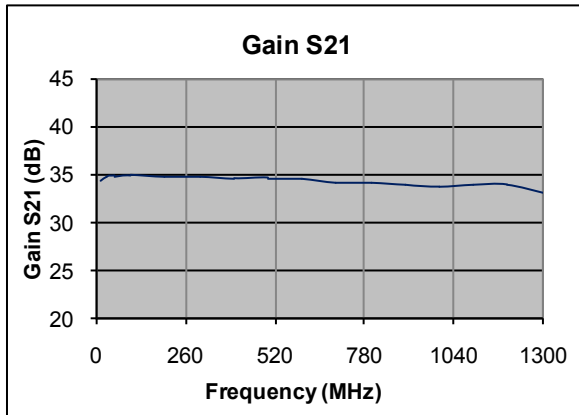
Description

HD31307 is a flat response Low Noise Amplifier operates in frequency range from 10MHz to 1300MHz.

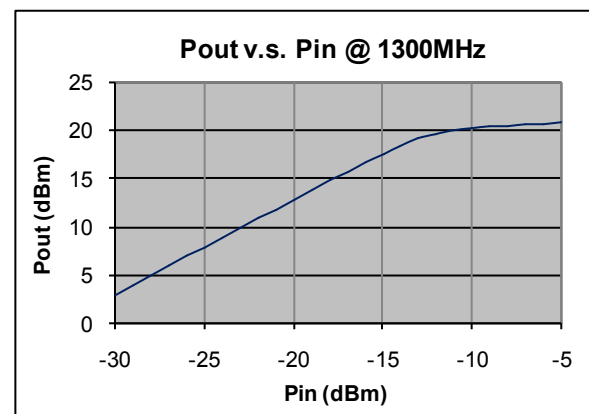
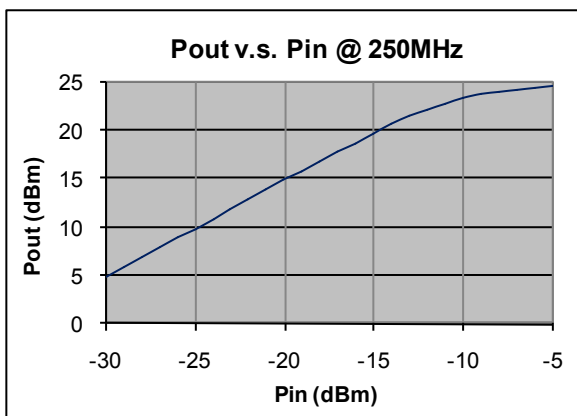
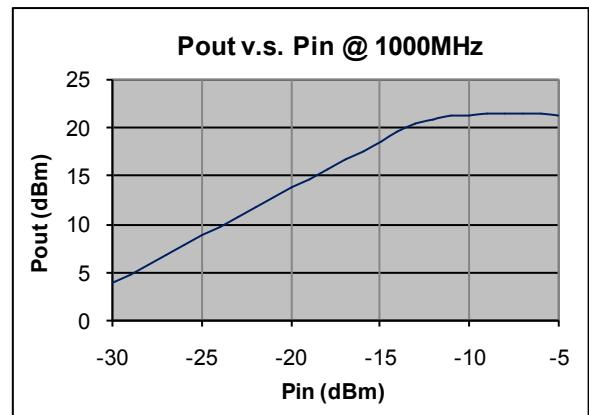
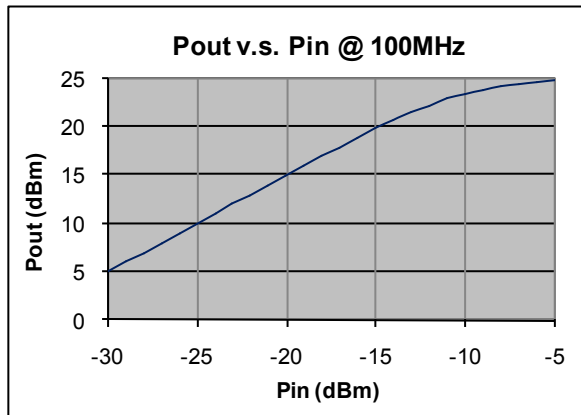
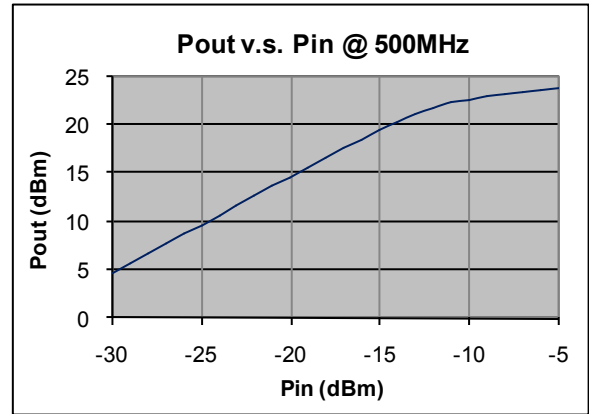
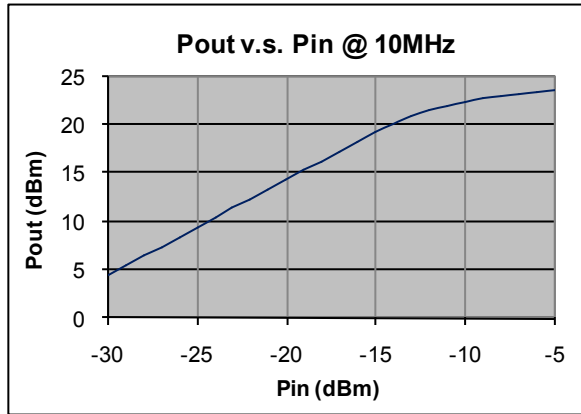
Electrical Specifications @ +25 °C, Z_{in} = Z_{out} = 50 Ω, V_{supply} = 12V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	10		1300
Gain S ₂₁ f = 10MHz	dB		34.4	
f = 250MHz	dB		34.7	
f = 500MHz	dB		34.6	
f = 1000MHz	dB		34.1	
f = 1300MHz	dB		33.0	
Gain Flatness	dB		± 1.0	
P _{1dB}	dBm		+20	
IP3	dBm		+34	
Noise Figure	dB		1.5	
Reverse Isolation S ₁₂	dB		-40	
VSWR Input VSWR S ₁₁			1.3:1	
Output VSWR S ₂₂			1.3:1	
DC Power Supply	V		12	15
Supply Current	mA		165	

Typical Performance @ +25 °C



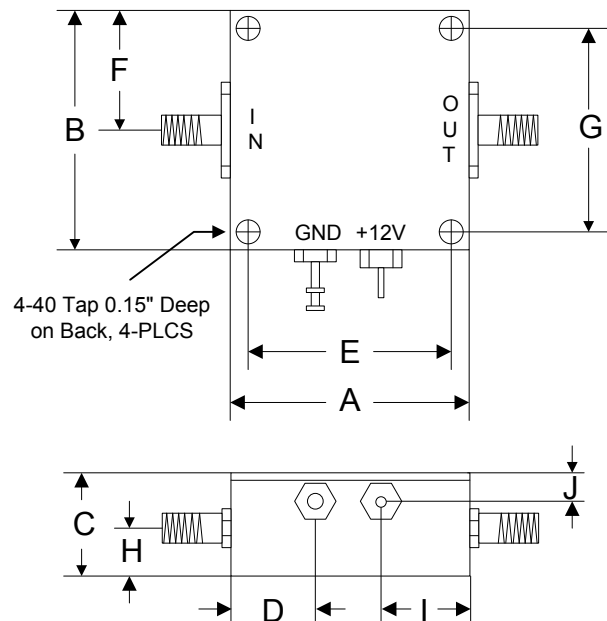
Typical Performance @ +25 °C



Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+15dBm
Supply Voltage	+25V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

Outline



	A	B	C	D	E	F	G	H	I	J
Inch	1.250	1.250	0.563	0.450	1.000	0.625	1.000	0.250	0.500	0.187
mm	31.75	31.75	14.29	11.43	25.40	15.88	25.40	6.35	12.70	4.76