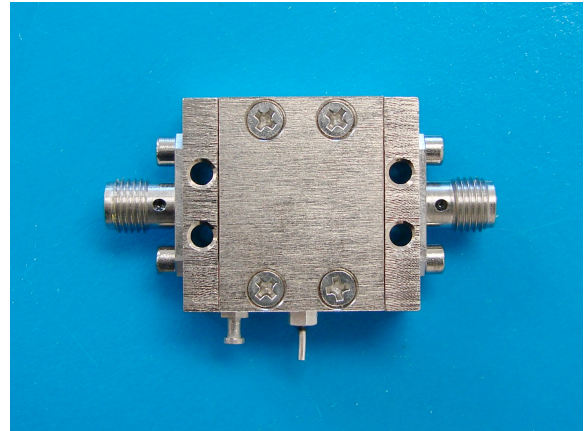


20MHz – 10GHz Low Noise Amplifier

Features

- Frequency Range: 0.02-10GHz
- Gain: 30dB
- P_{1dB}: +18dBm
- IP3: +30dBm
- Noise Figure: 2.5dB @ 6GHz
- DC Power: +12V @ 150mA
- Internally Voltage Regulated
- RF Connector: SMA-Female

Photo



Description

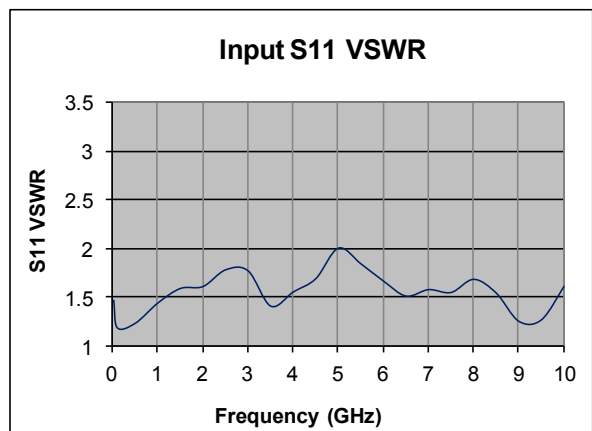
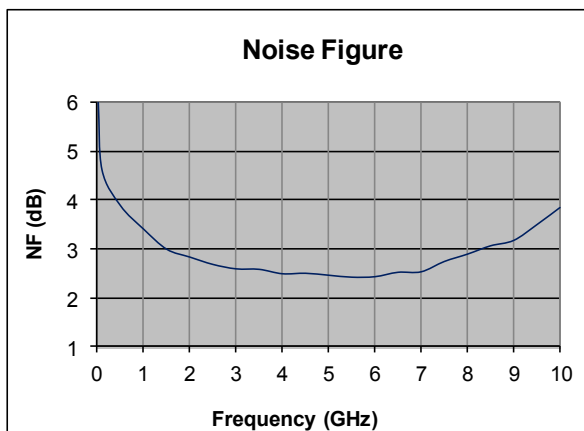
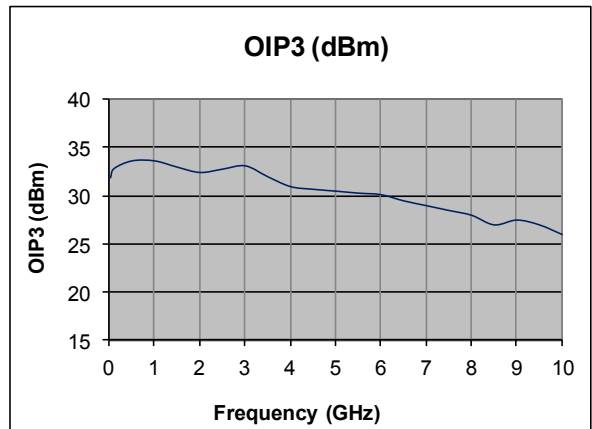
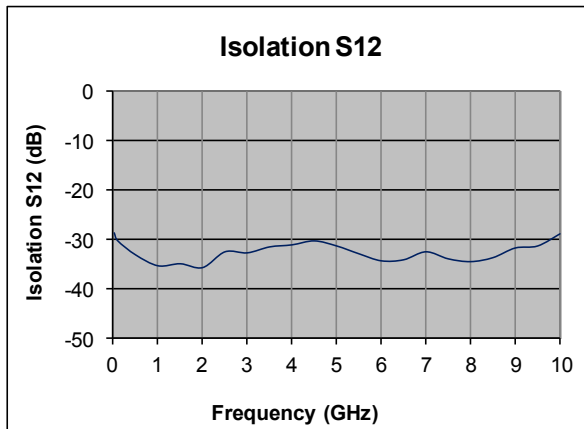
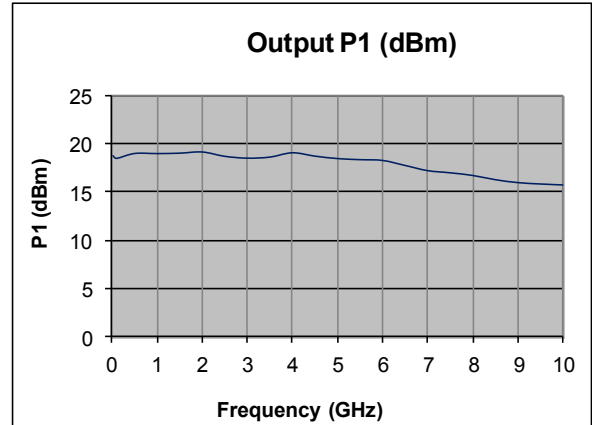
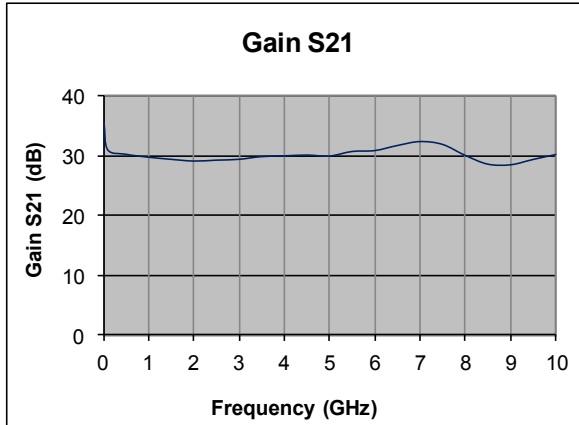
HD31516 is a high performance Microwave Low Noise Amplifier, with standard frequency range of 20MHz to 10GHz.

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

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	0.02		10
Gain (S21) f = 20MHz	dB		35.0	
f = 3GHz	dB		29.5	
f = 6GHz	dB		30.5	
f = 10GHz	dB		30.0	
Gain Flatness	dB		± 2.5	
Output Power P _{1dB}	dBm		+18	
Output Third Order Intercept IP3	dBm		+30	
Noise Figure @ 6GHz	dB		2.5	
Reverse Isolation (S12) @ 6GHz	dB		-33	
VSWR-Input (S11) @ 6GHz			1.7:1	
VSWR-Output (S22) @ 6GHz			1.5:1	
DC Power Supply - voltage	V	9	12	15
DC Power Supply - current	mA		150	
Operating Temperature	°C	-40		+85
Size (RF/DC feedthru's excluded)	Inch	1.00 (L) x 0.90 (W) x 0.45 (H)		
Weight	Oz	0.6 (17 grams)		

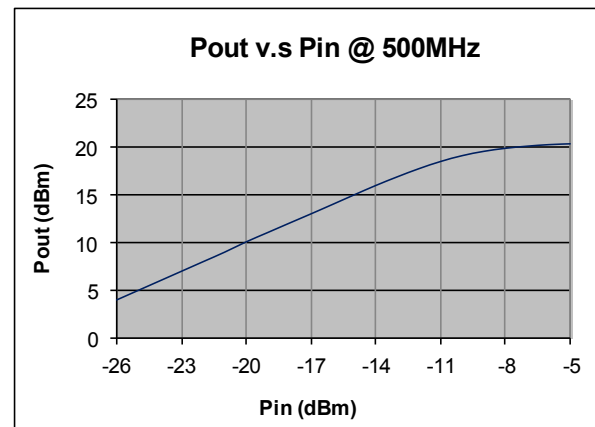
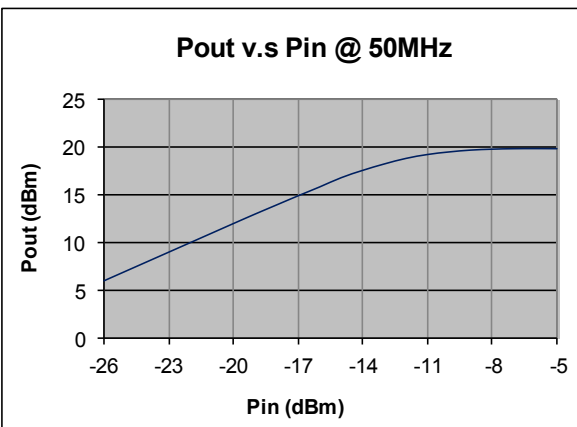
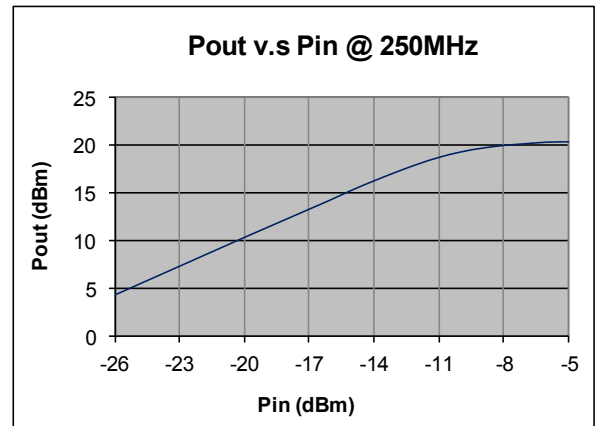
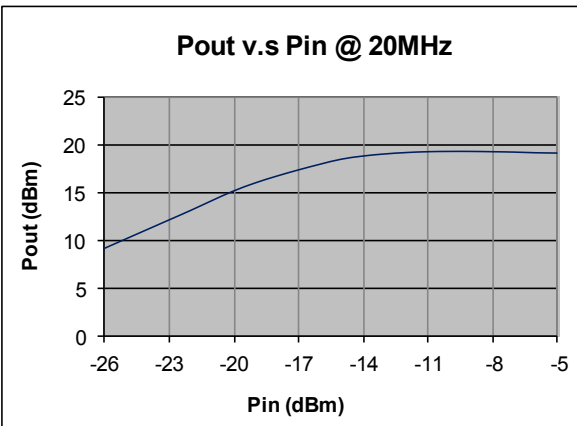
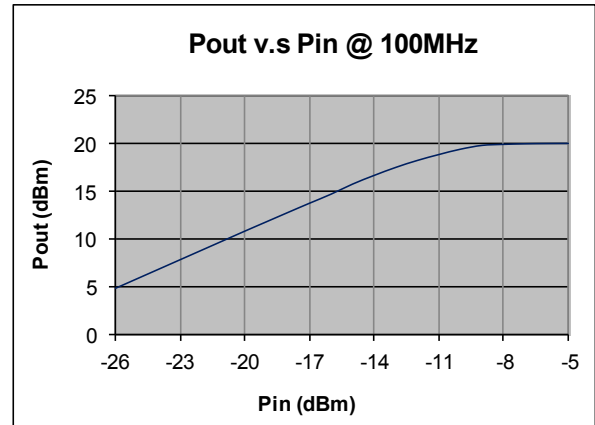
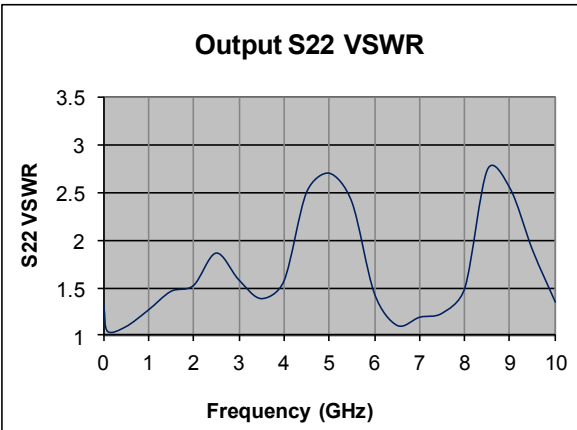
20MHz – 10GHz Low Noise Amplifier

Typical Performance @+25 °C



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Typical Performance @+25 °C



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Typical Performance @+25 °C

