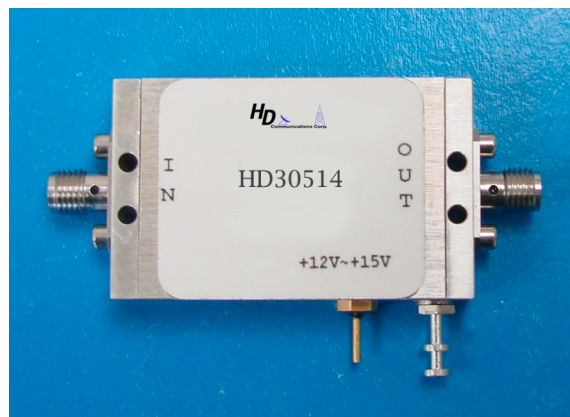


HD30514

100 – 2000 MHz Low Noise Amplifier

Features

- Frequency Range: 100-2000MHz
- Gain: 60dB
- P_{1dB} : +19dBm
- OIP3: +33dBm
- Noise Figure: 2.5dB (typ.)
- DC Power: 12V to 15V @ 170mA
- SMA-female



Description

HD30514 is a high performance Low Noise (& Driver) Amplifier, with standard frequency range of 100 to 2000MHz.

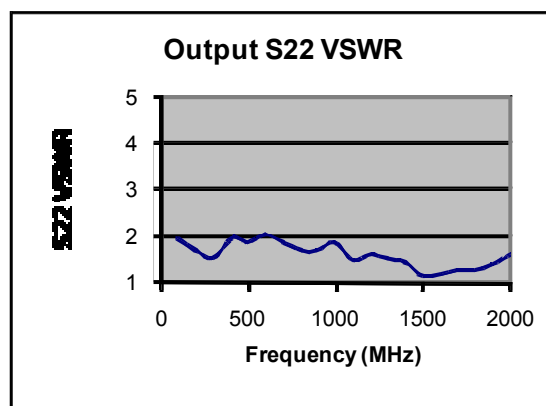
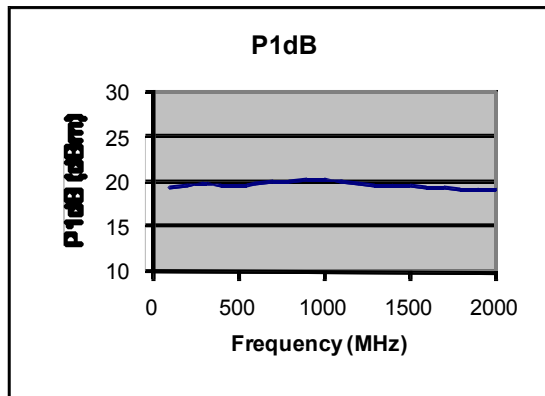
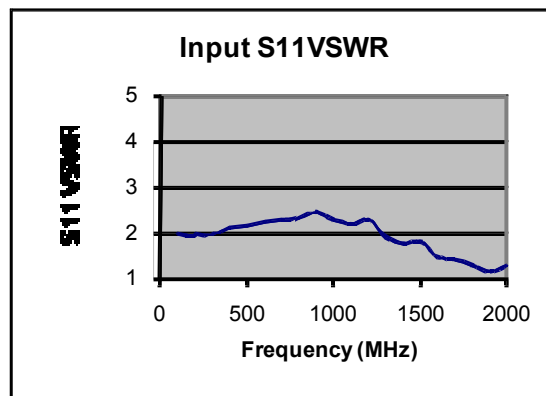
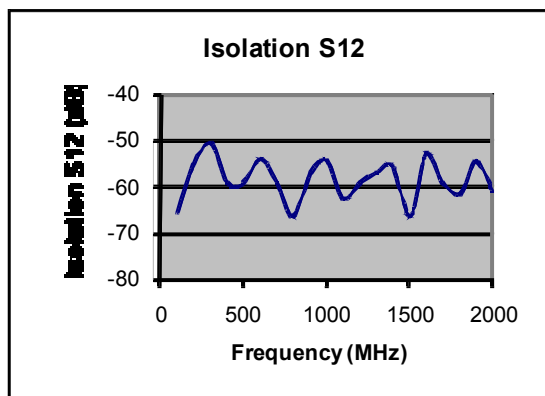
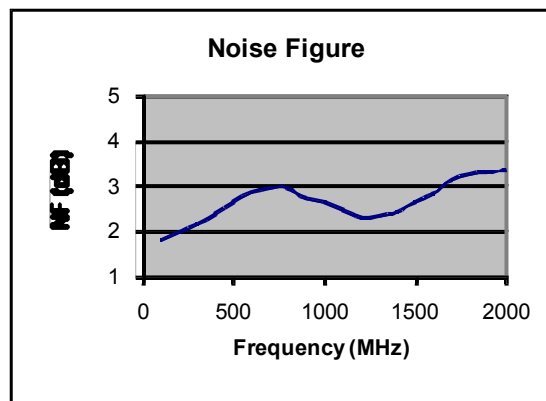
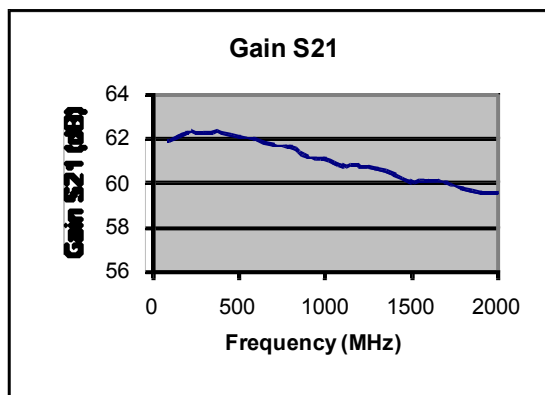
Electrical Specifications @+25 °C, $Z_{in}=Z_{out}=50 \Omega$, $V_{supply} = +12VDC$

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	100		2000
Gain (S21) f = 100MHz	dB		61.5	
f = 1000MHz	dB	60.0	61.0	
f = 2000MHz	dB		59.5	
Gain Flatness	dB		± 1.0	
Output Power P_{1dB}	dBm		+19	
Saturated Output Power P_{Sat}	dBm		+21	
Output Third Order Intercept IP3	dBm		+33	
Noise Figure	dB		2.5	3.5
Reverse Isolation (S12) @1000MHz	dB		-55	
VSWR-Input (S11)	ratio:1	1.8@100MHz	2.3@1000MHz	1.3@2000MHz
VSWR-Output (S22)	(unitless)	2.0@100MHz	1.9@1000MHz	1.6@2000MHz
DC Power Supply - voltage	V	11	12	15
DC Power Supply - current	mA		170	
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		

HD30514

100 – 2000 MHz Low Noise Amplifier

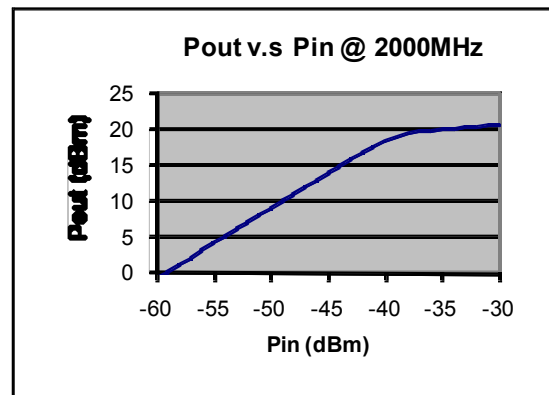
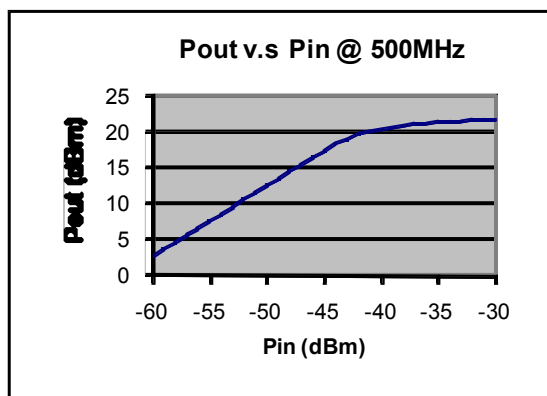
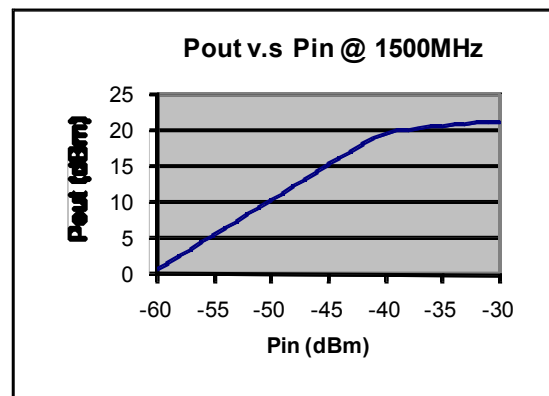
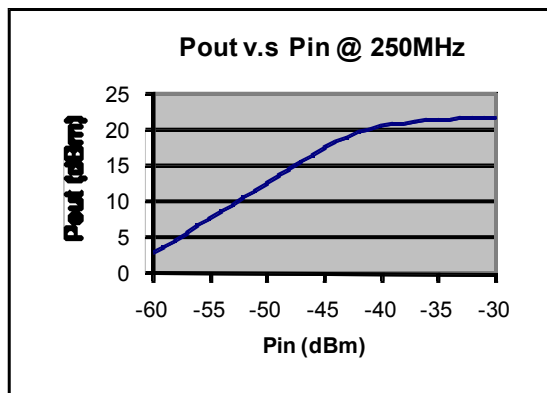
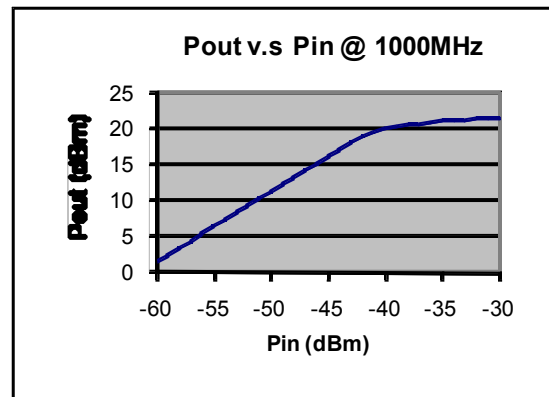
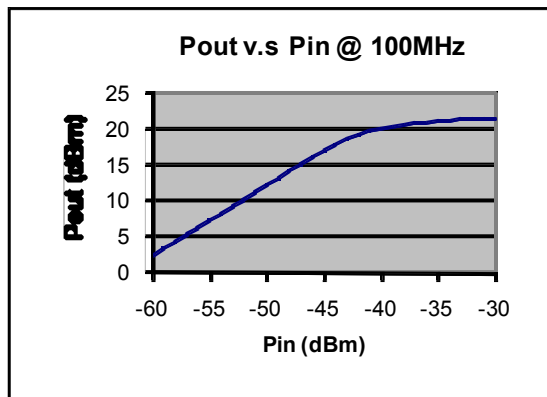
Typical Performance @+25 °C



HD30514

100 – 2000 MHz Low Noise Amplifier

Typical Performance @+25 °C



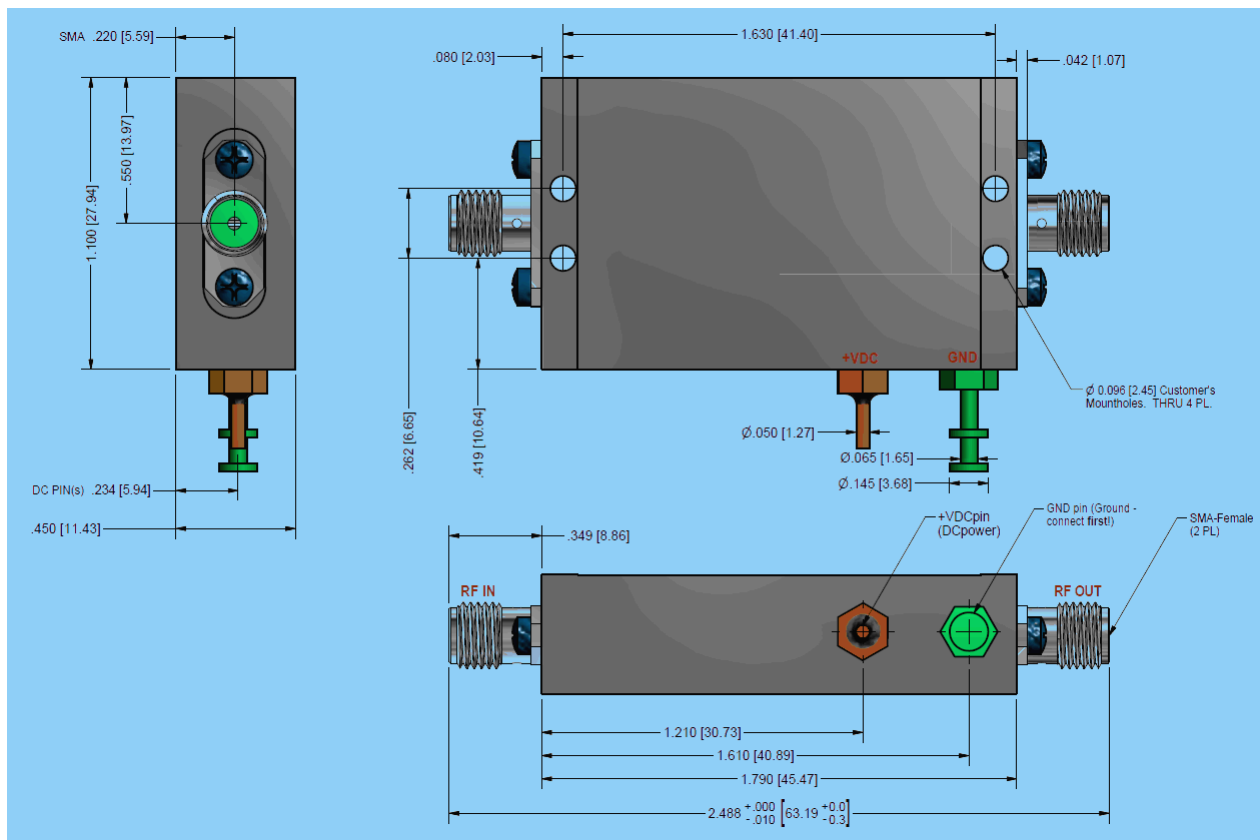
HD30514

100 – 2000 MHz Low Noise Amplifier

Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+13dBm
Supply Voltage	+20V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

Outline



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01/15

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