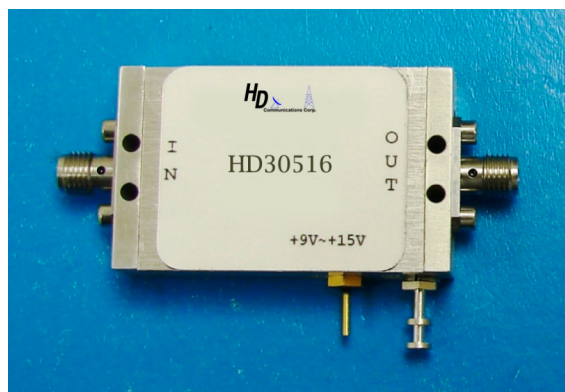


HD30516

50 – 3000 MHz Low Noise Amplifier

Features

- Frequency Range: 50-3000MHz
- Gain: 50dB
- P_{1dB} : +14dBm
- OIP3: +28dBm
- Noise Figure: 3.6dB (typ.)
- DC Power: 9V to 15V @ 155mA
- SMA-female



Description

HD30516 is a 50dB gain RF Amplifier, with frequency range of 50 MHz to 3000MHz.

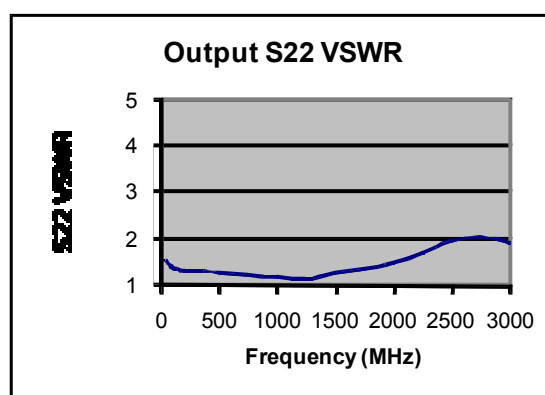
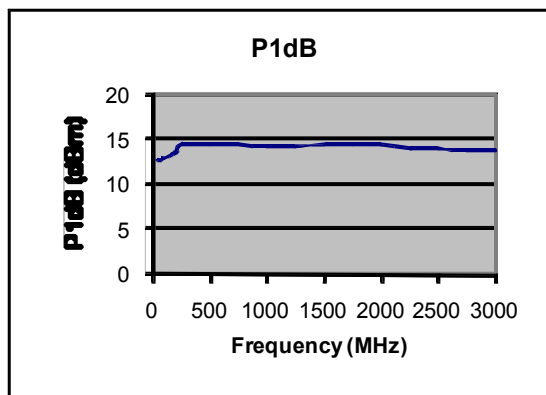
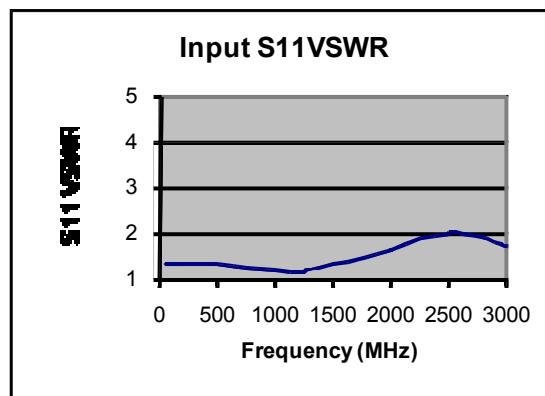
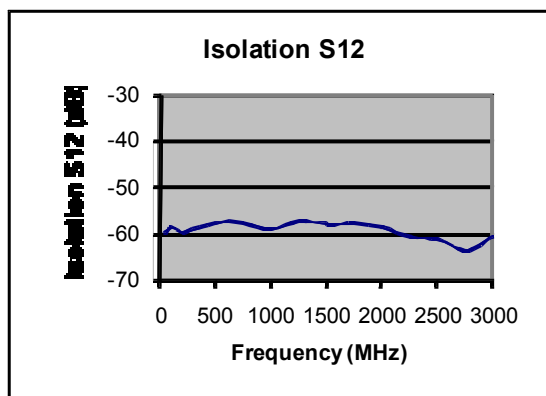
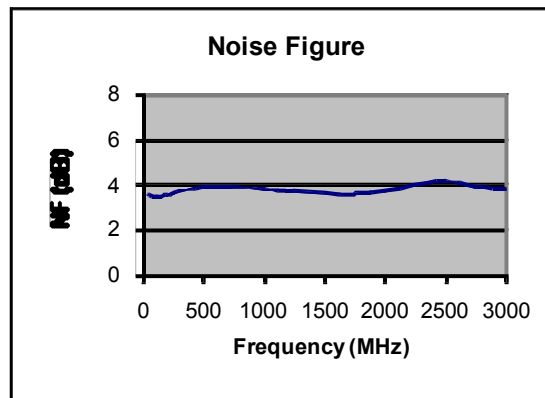
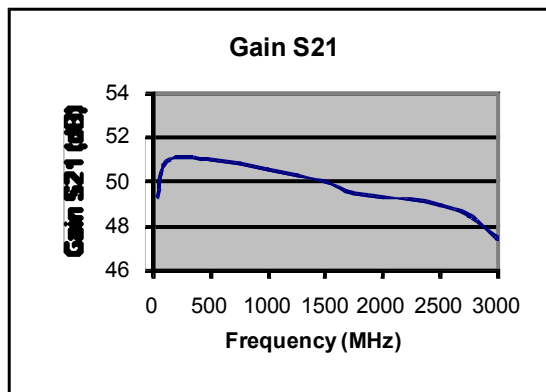
Electrical Specifications @+25 °C, $Z_{in}=Z_{out}=50 \Omega$, $V_{supply} = +12VDC$

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	50		3000
Gain (S21) f = 50MHz	dB		49.3	
f = 100MHz	dB		50.7	
f = 1500MHz	dB		50.0	
f = 3000MHz	dB		47.4	
Gain Flatness	dB		± 1.8	
Output Power P_{1dB}	dBm		+14	
Saturated Output Power P_{Sat}	dBm		+16	
Output Third Order Intercept IP3	dBm		+28	
Noise Figure	dB		3.6	4.5
Reverse Isolation (S12) @1500MHz	dB		-58	
VSWR-Input (S11)	ratio:1	1.3@100MHz	1.3@1500MHz	1.8@3000MHz
VSWR-Output (S22)	(unitless)	1.6@100MHz	1.3@1500MHz	1.9@3000MHz
DC Power Supply - voltage	V	9	12	15
DC Power Supply - current	mA		155	
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		

HD30516

50 – 3000 MHz Low Noise Amplifier

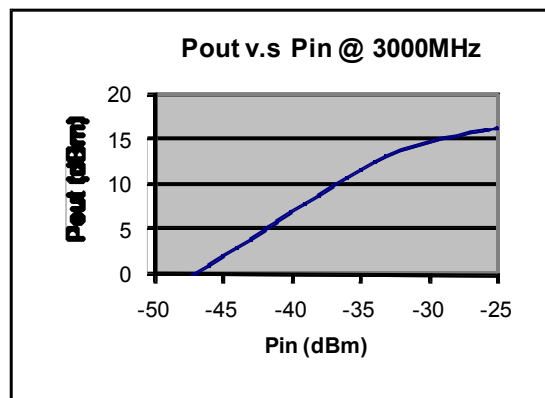
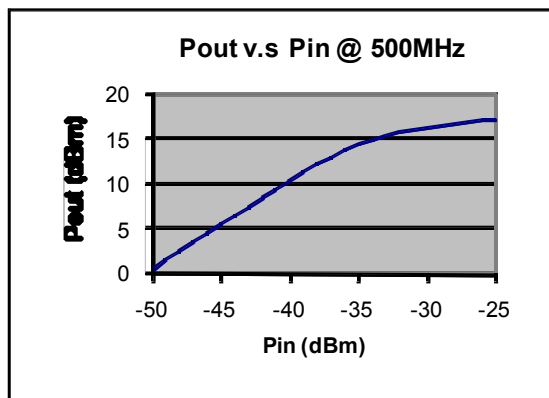
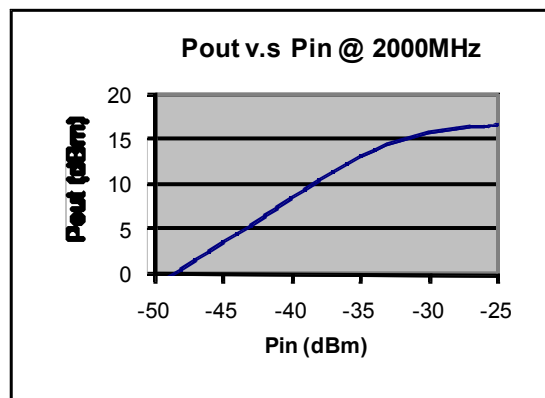
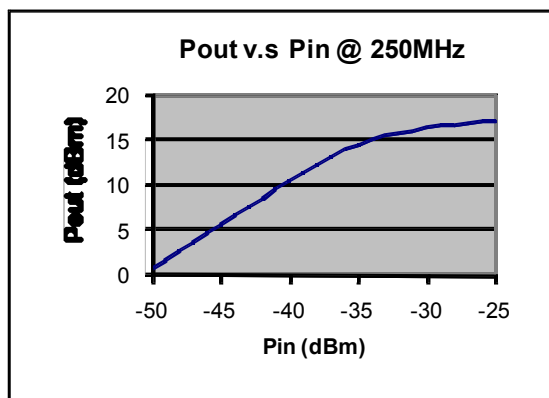
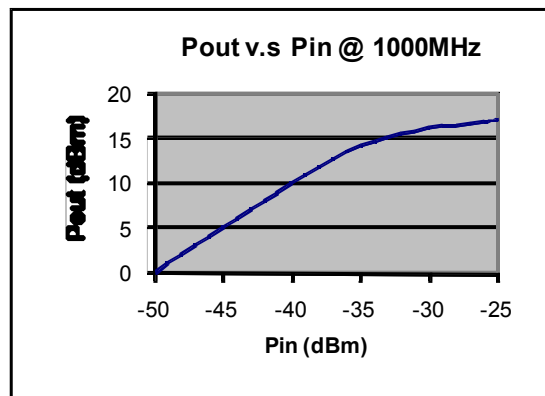
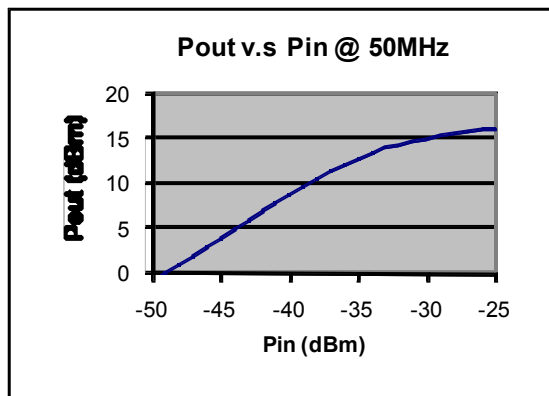
Typical Performance @+25 °C



HD30516

50 – 3000 MHz Low Noise Amplifier

Typical Performance @+25 °C



HD30516

50 – 3000 MHz Low Noise Amplifier

Absolute Maximum Ratings

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

Outline

