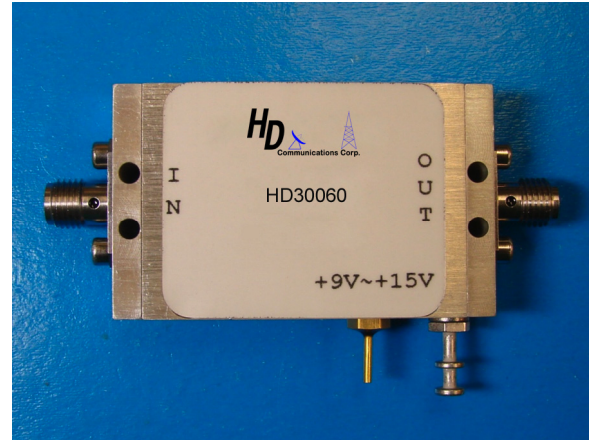


HD30060

500 – 1000 MHz Low Noise Amplifier

Features

- Frequency Range: 500-1000MHz
- Gain: 30dB
- P_{1dB}: +21dBm
- OIP3: +33dBm
- Noise Figure: 0.85dB (typ.)
- DC Power: 9V to 15V @ 160mA
- SMA-female connectorized



Description

HD30060 is a high performance Low Noise (& Driver) Amplifier, with standard frequency range of 500 to 1000MHz.

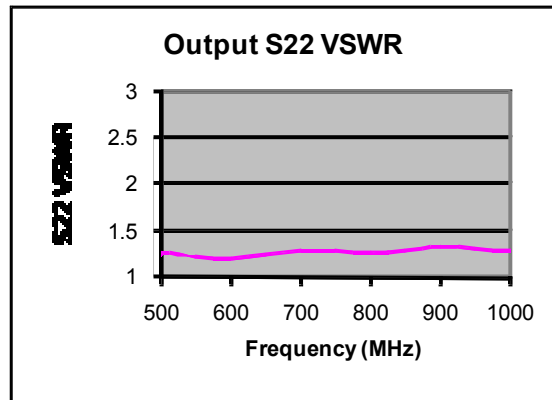
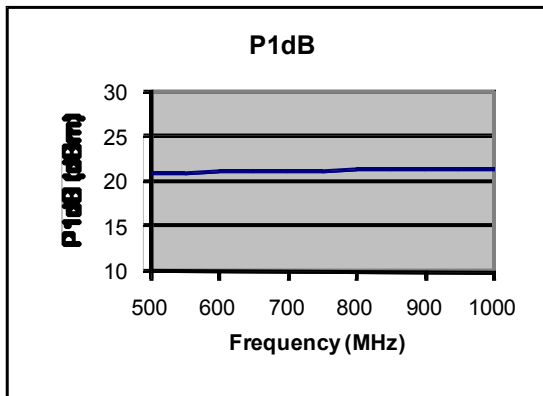
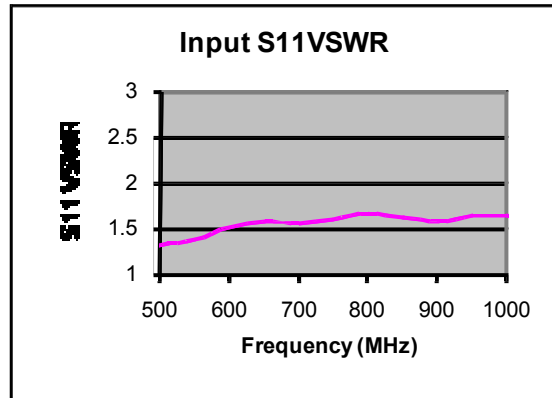
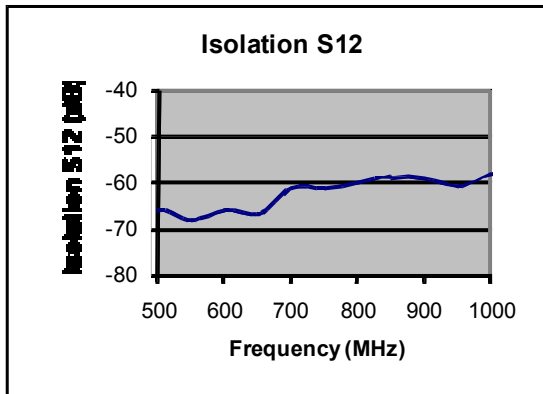
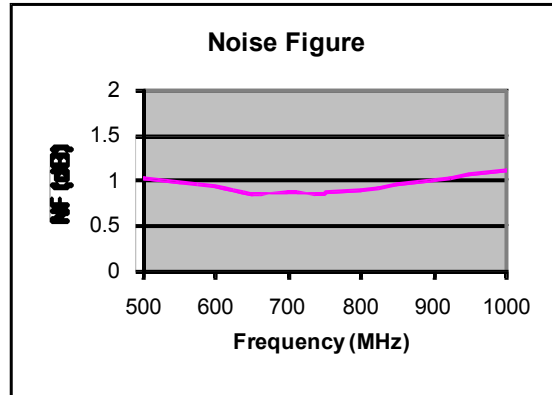
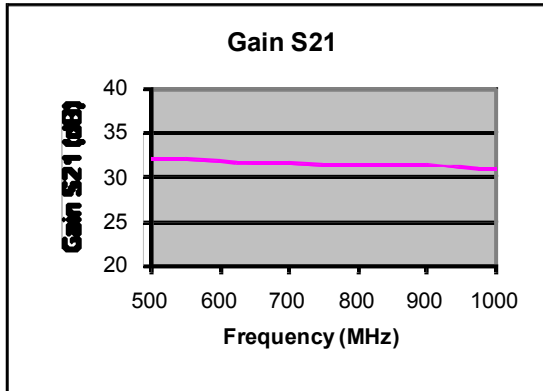
Electrical Specifications @+25 °C, Z_{in}=Z_{out}=50 Ω, V_{supply} = +12VDC

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	500		1000
Gain (S ₂₁) f = 500MHz	dB		31.5	
f = 750MHz	dB	30.0	31.0	
f = 1000MHz	dB		30.5	
Gain Flatness	dB		±0.5	
Gain Variation Over Temperature	dB/°C		0.02	0.03
Output Power P _{1dB}	dBm		+21	
Saturated Output Power P _{Sat}	dBm		+24	
Output Third Order Intercept IP3	dBm		+33	
Noise Figure	dB		0.85	1.0
Reverse Isolation (S ₁₂) @750MHz	dB		-60	
VSWR-Input (S ₁₁)	ratio:1	1.3@500MHz	1.6@750MHz	1.6@1000MHz
VSWR-Output (S ₂₂)	(unitless)	1.3@500MHz	1.3@750MHz	1.3@1000MHz
DC Power Supply - voltage	V	9	12	15
DC Power Supply - current	mA		160	
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		

HD30060

500 – 1000 MHz Low Noise Amplifier

Typical Performance @+25 °C



HD30060

500 – 1000 MHz Low Noise Amplifier

Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+25dBm
Supply Voltage	+20V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

Outline

