

HD30088

400 - 2000 MHz Low Noise Amplifier

Features

- Frequency Range: 400 – 2000MHz
- Gain: 19dB
- P_{1dB} : +21dBm
- IP3: +36dBm
- Noise Figure: 0.4dB (typ.)
- DC Power: 12V @ 80mA
- SMA-female connectorized

range of 400MHz to 2000MHz.



Description

HD30088 is a high performance Microwave Low Noise (& Driver) Amplifier, with standard frequency

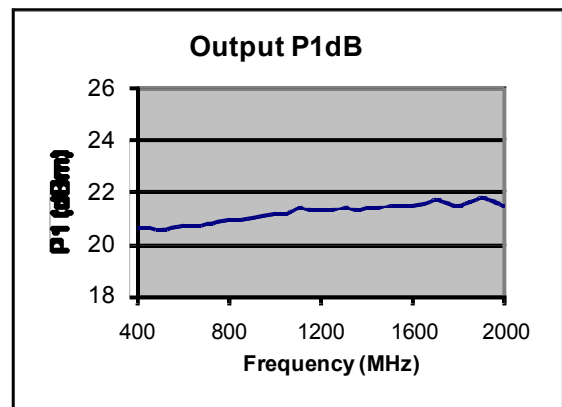
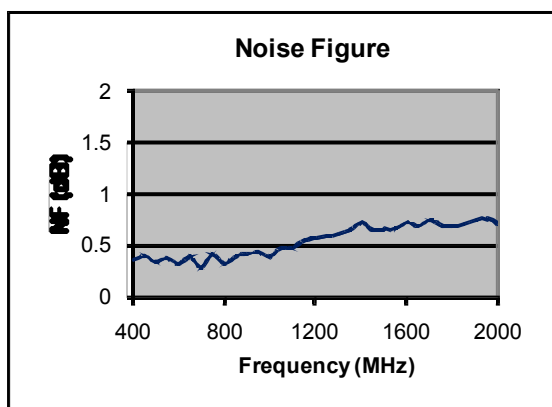
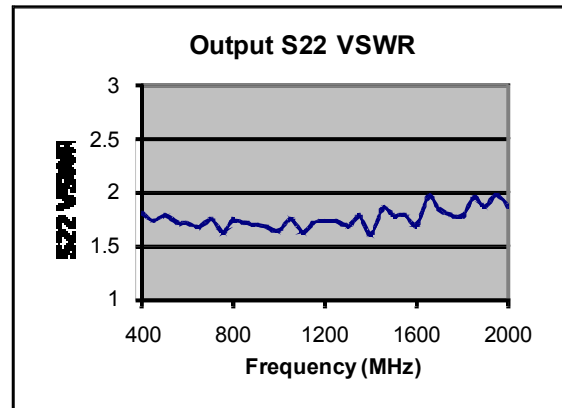
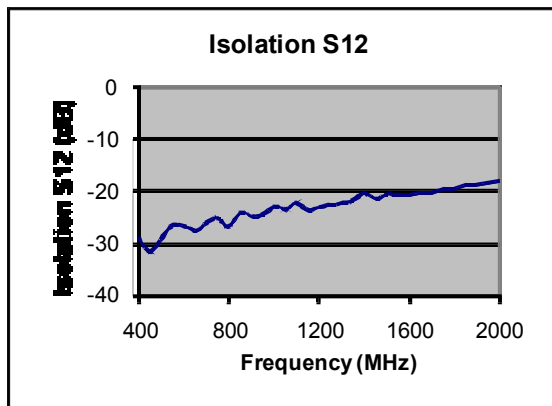
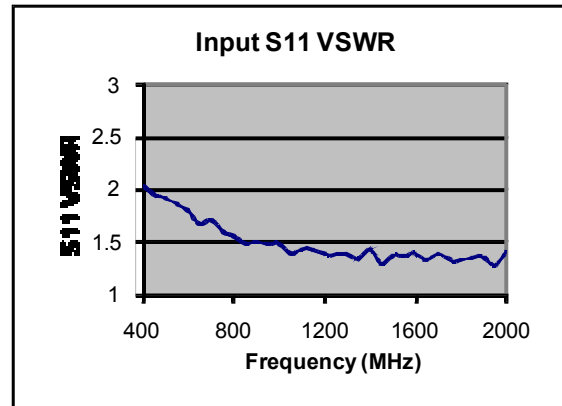
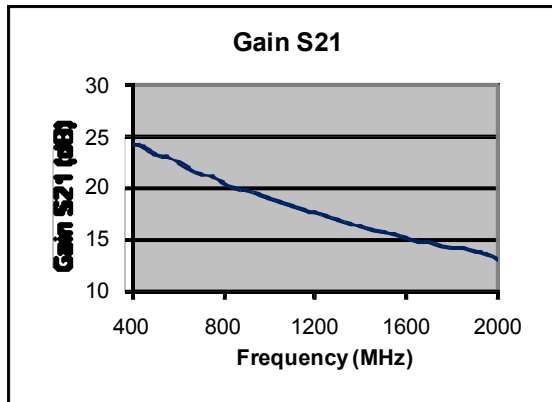
Electrical Specifications @+25 °C, $Z_{in}=Z_{out}=50\text{ Ohm}$, $V_{supply} = +12\text{VDC}$

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	400		2000
Gain (S21) f = 400MHz	dB		24	
f = 1000MHz	dB		19	
f = 2000MHz	dB		13	
Gain Variation Over Temperature	dB/°C		0.02	0.03
Output Power P_{1dB}	dBm	+19	+21	
Saturated Output Power P_{Sat}	dBm		+23	
Output Third Order Intercept IP3	dBm	+32	+36	
Noise Figure @1000MHz	dB		0.4	0.6
Reverse Isolation (S12) @1000MHz	dB		-23	
VSWR-Input (S11)	ratio:1	2.0@400MHz	1.5@1000MHz	1.4@2000MHz
VSWR-Output (S22)	(unitless)	1.8@400MHz	1.6@1000MHz	1.9@2000MHz
DC Power Supply - voltage	V	9	12	15
DC Power Supply - current	mA		80	100
Operating Temperature	°C	-40		+85
Size (RF/DC feedthru's excluded)	Inch	1.00 (L) x 0.75 (W) x 0.45 (H)		
Weight	Oz	0.6 (17 grams)		

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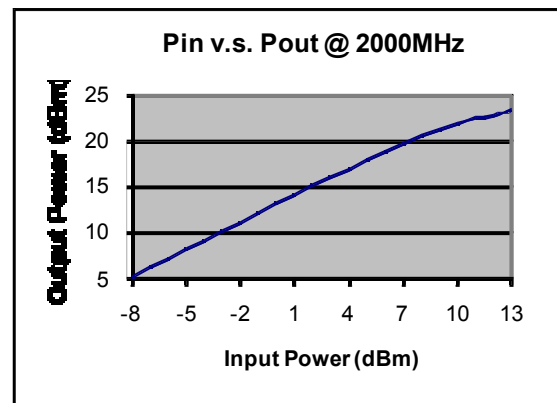
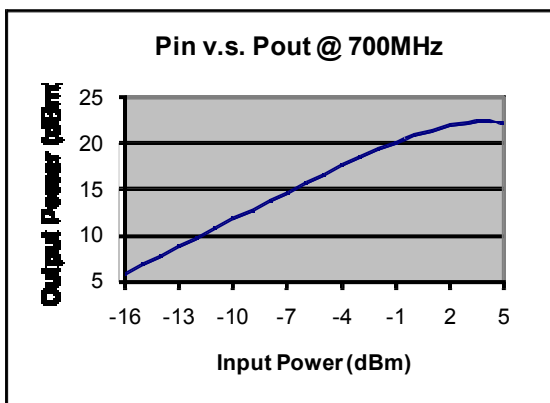
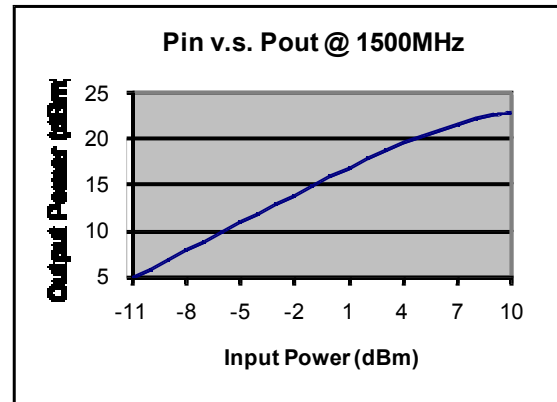
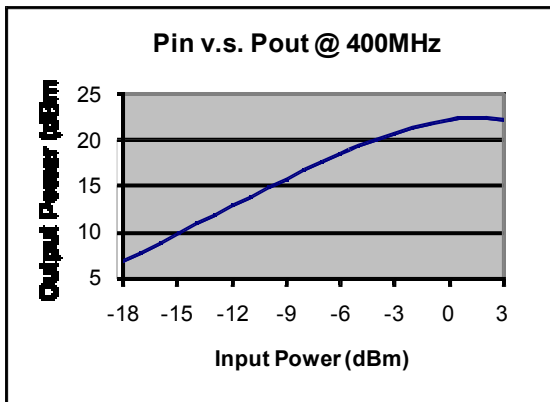
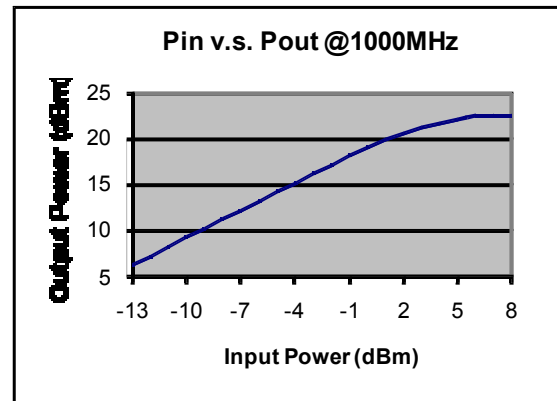
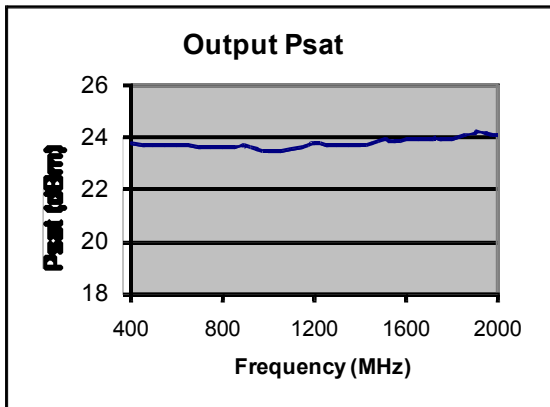
Typical Performance @+25 °C



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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+22dBm
Supply Voltage (Survival)	+24V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

Outline

