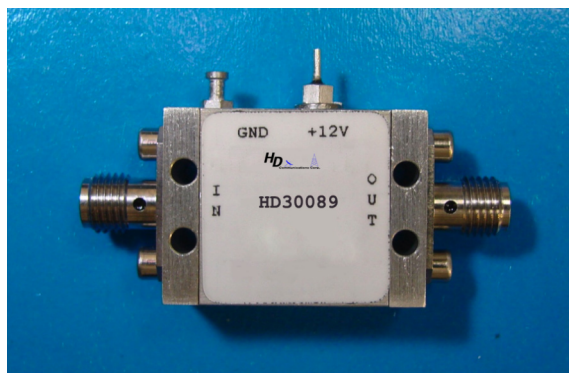


HD30089

500 - 1000 MHz Low Noise Amplifier

Features

- Frequency Range: 500 – 1000MHz
- Gain: 21dB
- P_{1dB} : +21dBm
- IP3: +36dBm
- Noise Figure: 0.4dB (typ.)
- DC Power: 12V @ 80mA
- SMA-female connectorized



Description

HD30089 is a high performance Microwave Low Noise (& Driver) Amplifier, with standard frequency range of 500MHz to 1000MHz.

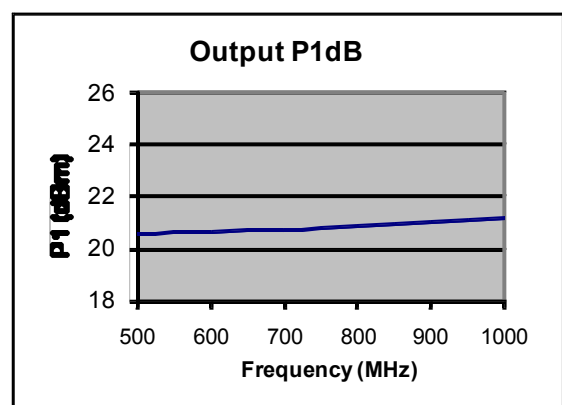
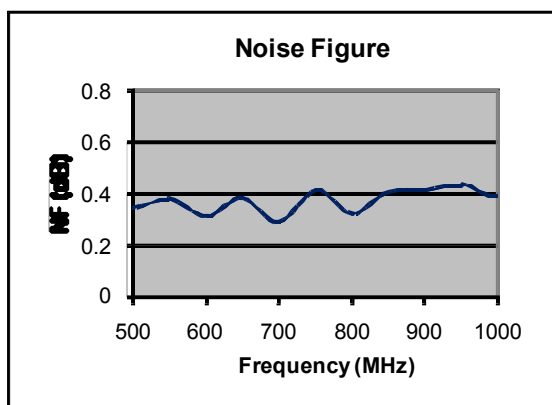
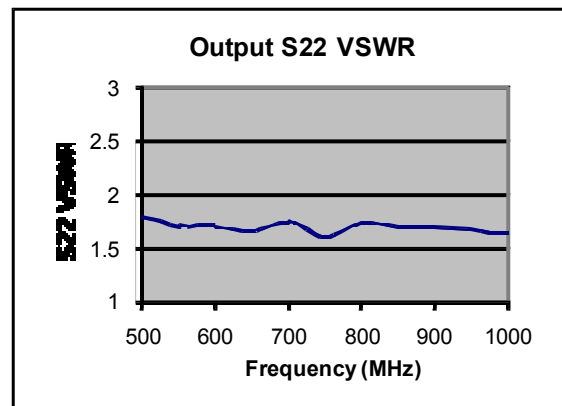
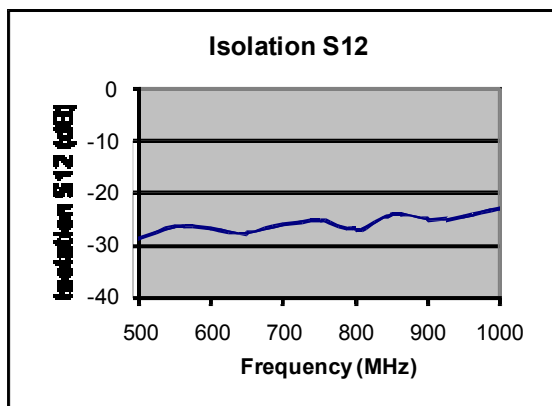
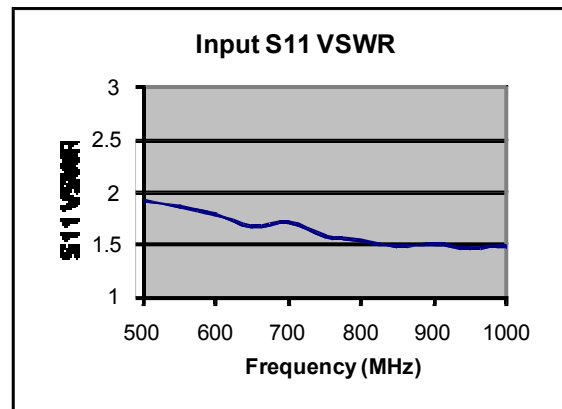
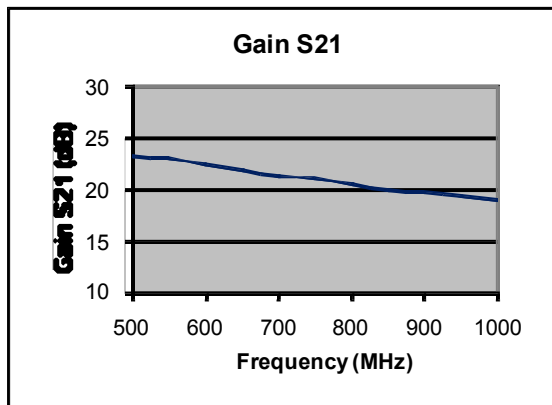
Electrical Specifications @+25 °C, $Z_{in}=Z_{out}=50\ \Omega$, $V_{supply} = +12VDC$

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	500		1000
Gain (S21) f = 500MHz	dB		23	
f = 750MHz	dB		21	
f = 1000MHz	dB		19	
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 @750MHz	dB		0.4	0.6
Reverse Isolation (S12) @750MHz	dB		-25	
VSWR-Input (S11)	ratio:1	2.0@500MHz	1.6@750MHz	1.5@1000MHz
VSWR-Output (S22)	(unitless)	1.8@500MHz	1.6@750MHz	1.7@1000MHz
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)		

HD30089

500 - 1000 MHz Low Noise Amplifier

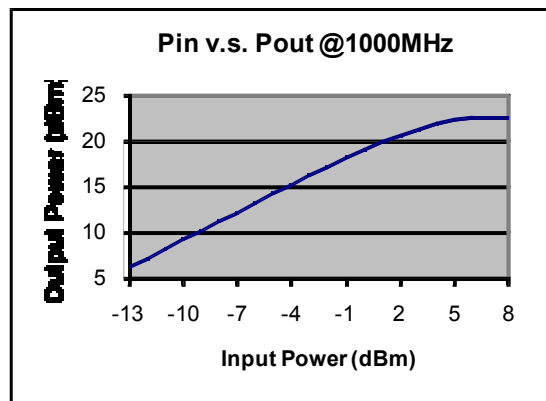
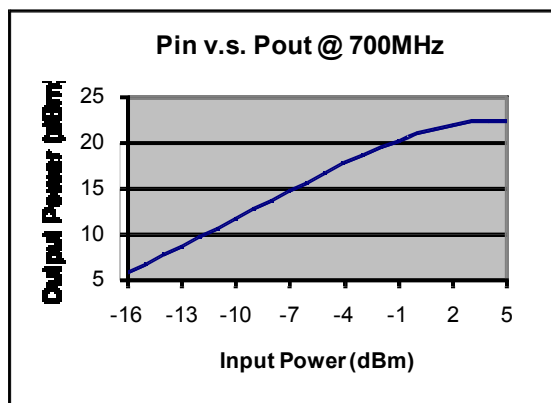
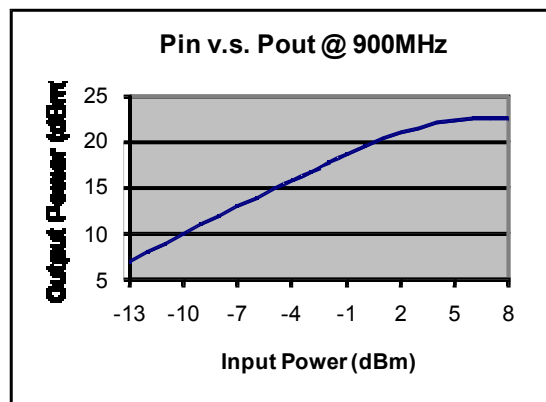
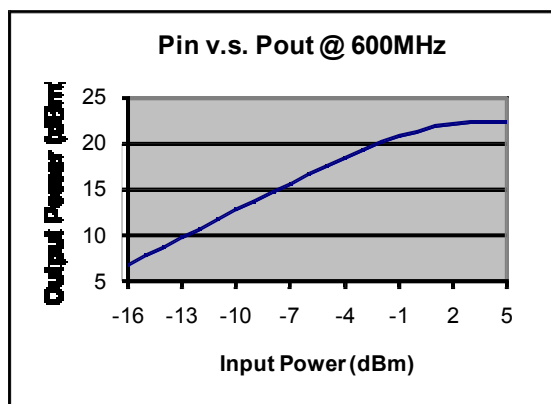
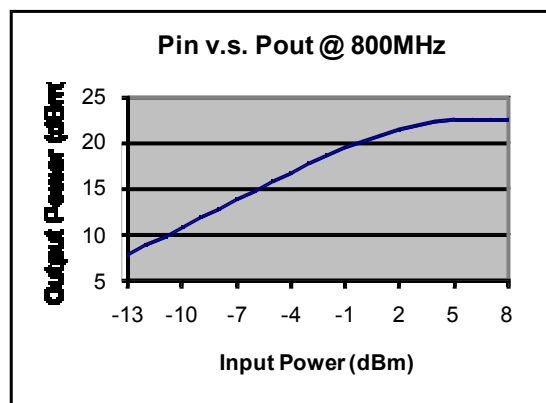
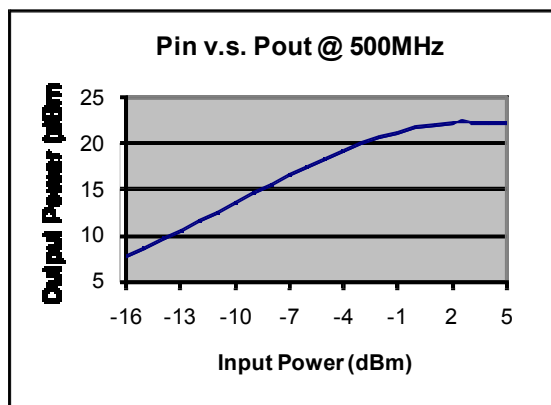
Typical Performance @+25 °C



HD30089

500 - 1000 MHz Low Noise Amplifier

Typical Performance @+25 °C



Absolute Maximum Ratings

