

HD27029

5MHz–2400Mhz RF Amplifier

Features

- Frequency Range: 5-2400MHz
- Gain: 20dB
- P_{1dB} : +9dBm
- IP3: +18dBm
- Noise Figure: 6.0dB
- DC Power: 3V/37mA
- SMA Connector

Performance Test @ 1500MHz

Description

HD27029 is a wideband low voltage RF Amplifier operates with frequency range from 5MHz to 2400MHz.



Electrical Specifications @ +25 °C, $Z_s = Z_L = 50 \Omega$, $V_{cc} = +3V$

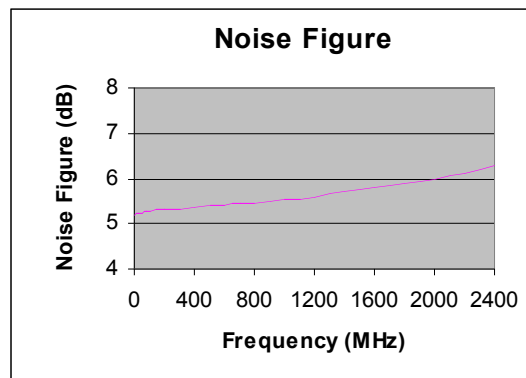
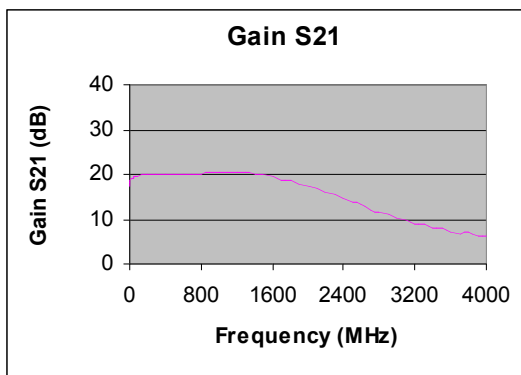
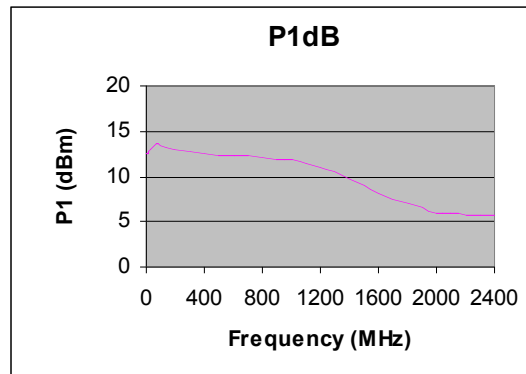
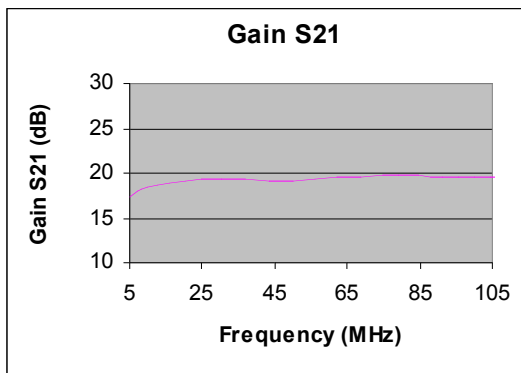
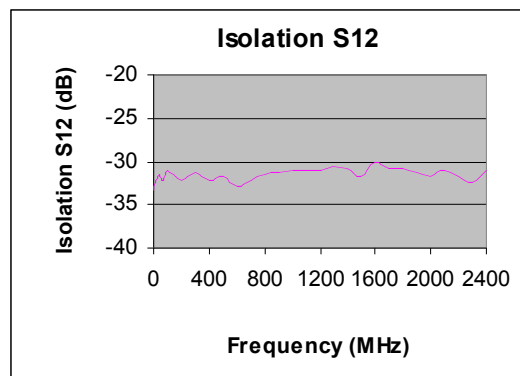
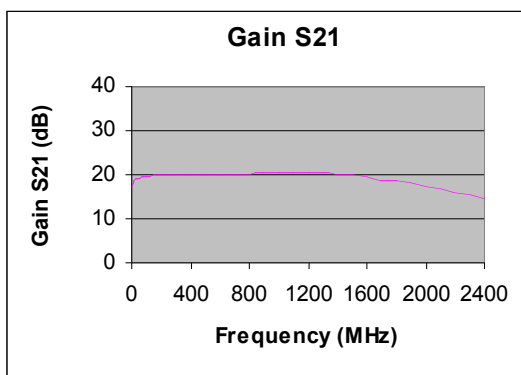
Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	5		2400
Gain $f = 5$ MHz	dB		17	
$f = 500$ MHz	dB		20	
$f = 1000$ MHz	dB		20	
$f = 1500$ MHz	dB		20	
$f = 2000$ MHz	dB		17	
$f = 2400$ MHz	dB		15	
P_{1dB} at 1500MHz	dBm		+9	
P_{SAT} at 1500MHz	dBm		+11	
IP3 at 1500MHz	dBm		+18	
Noise Figure at 1500MHz	dB		6	7.5
Reverse Isolation	dB		-30	
VSWR Input VSWR			1.6:1	
Output VSWR			2.5:1	

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DC Power Supply	V	2.7	3.0	3.3
Supply Current	mA		37	

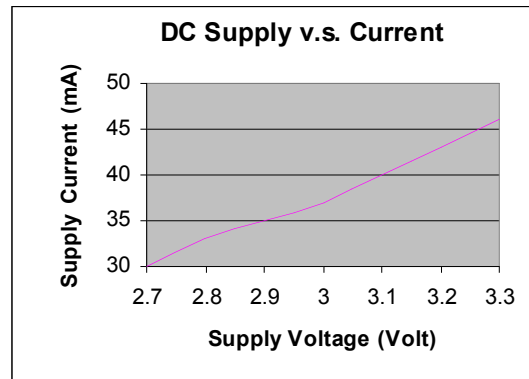
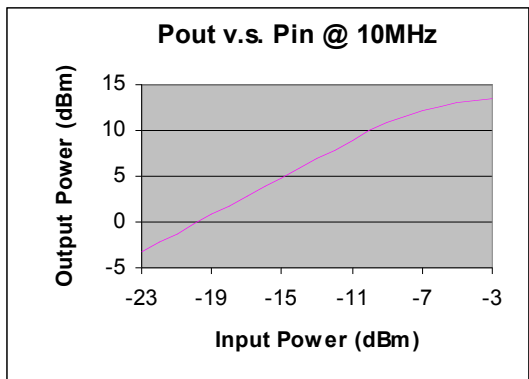
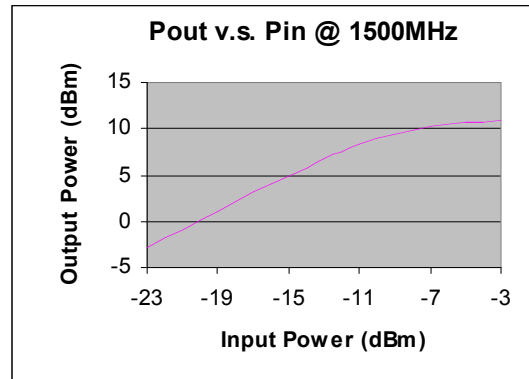
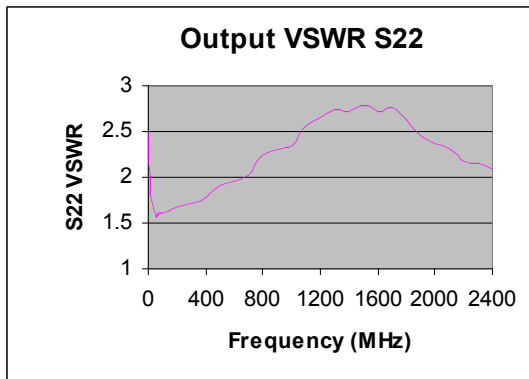
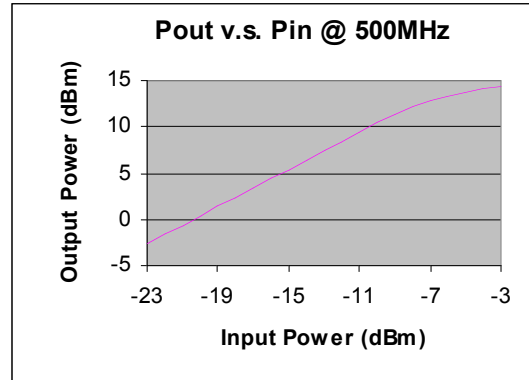
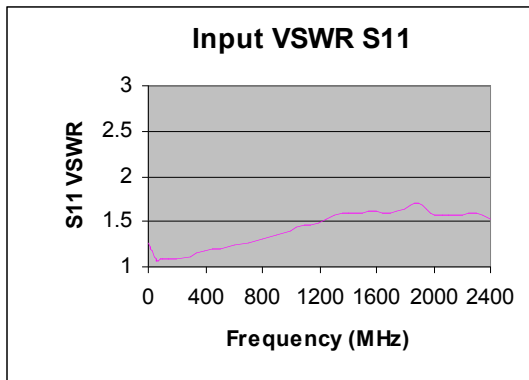
Typical Performance @ +25 °C



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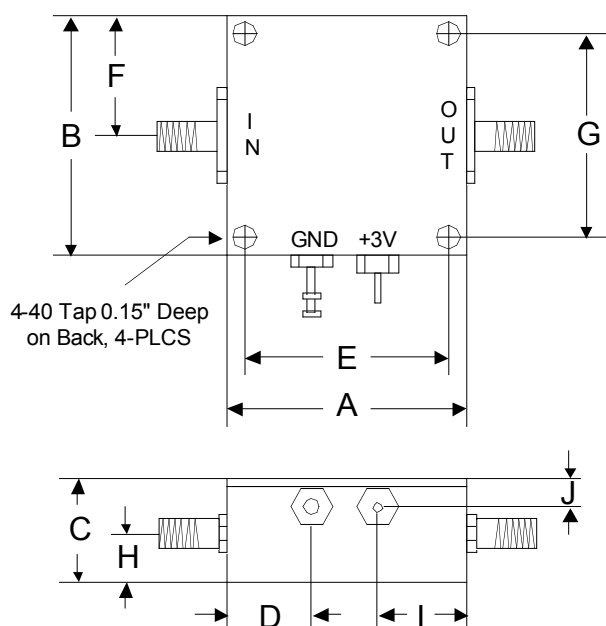
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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+13dBm
Supply Voltage	+3.6V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +100 °C

Outline



	A	B	C	D	E	F	G	H	I	J
Inch	1.250	1.250	0.563	0.450	1.000	0.625	1.000	0.250	0.500	0.187
mm	31.75	31.75	14.29	11.43	25.40	15.88	25.40	6.35	12.70	4.76