

HD27033

5MHz–1000MHz RF Amplifier

Features

- Frequency Range: 5-1000MHz
- Gain: 32dB
- P_{1dB}: +8.5dBm
- IP3: +19dBm
- Noise Figure: 3.5dB
- DC Power: 5V/25mA
- SMA Connector

Performance Test @ 500MHz

Description

HD27033 is a wideband low voltage RF Amplifier operates with frequency range from 5MHz to 1000MHz.



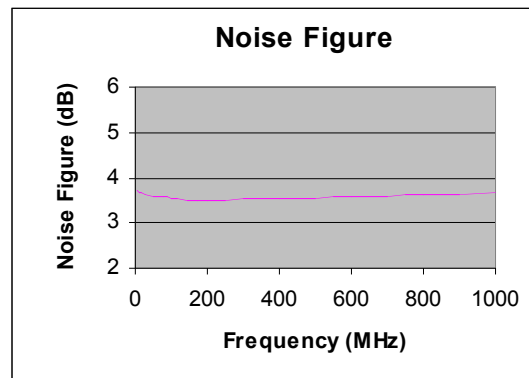
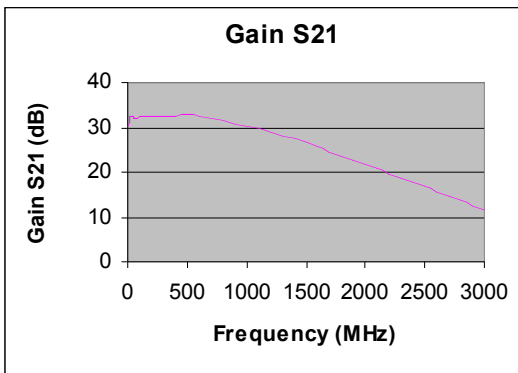
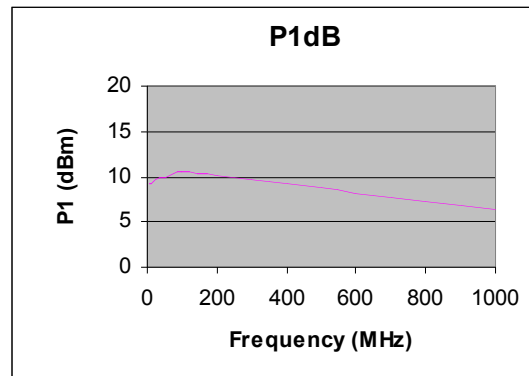
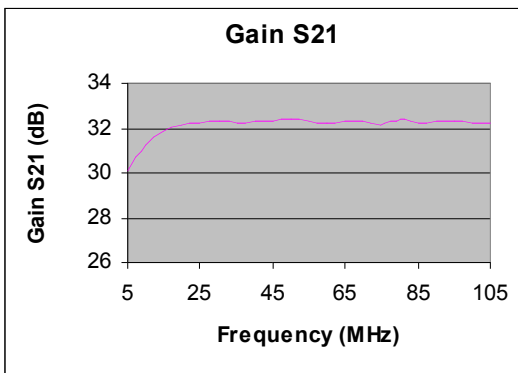
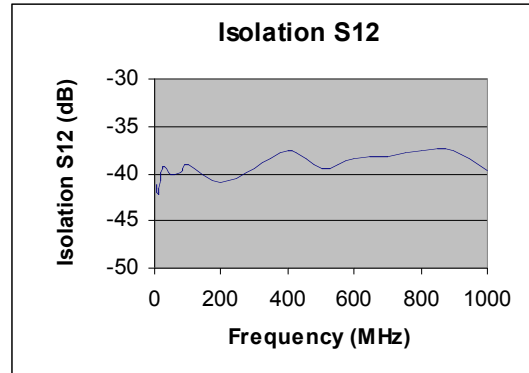
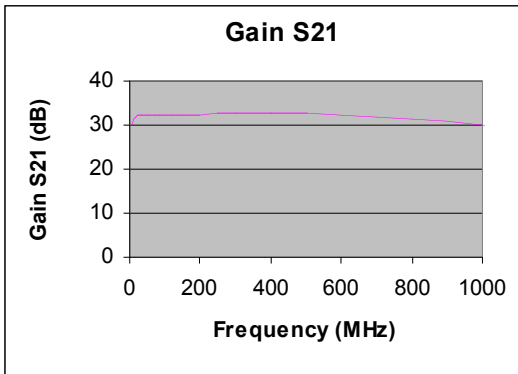
Electrical Specifications @ +25 °C, Z_S = Z_L = 50 Ω, V_{cc}= +5V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	5		1000
Gain f = 5 MHz	dB		30	
f = 100 MHz	dB		32	
f = 500 MHz	dB		32	
f = 1000MHz	dB		30	
P _{1dB} at 500MHz	dBm		+8.5	
P _{SAT} at 500MHz	dBm		+14	
IP3 at 500MHz	dBm		+19	
Noise Figure at 500MHz	dB		3.5	5.0
Reverse Isolation	dB		-39	
VSWR Input VSWR			2.2:1	
Output VSWR			1.5:1	
DC Power Supply	V	4.5	5.0	5.5
Supply Current	mA		25	

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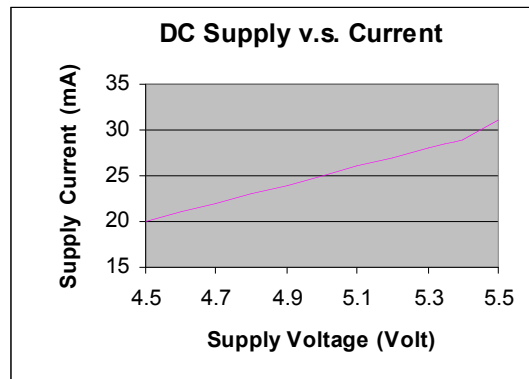
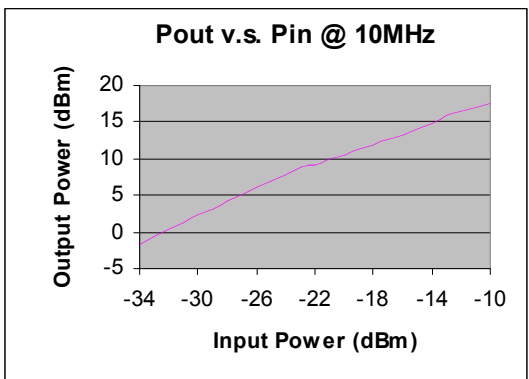
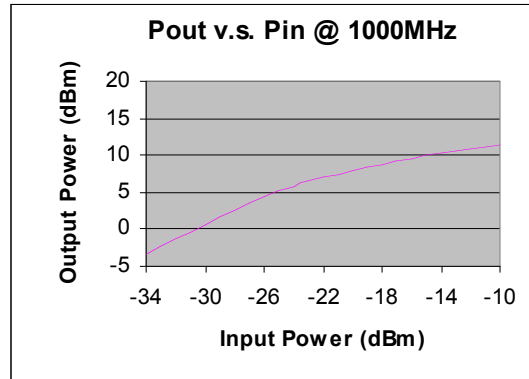
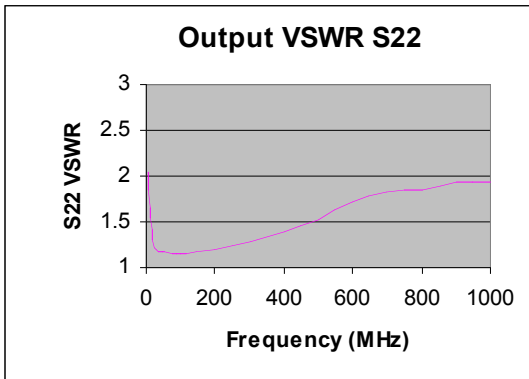
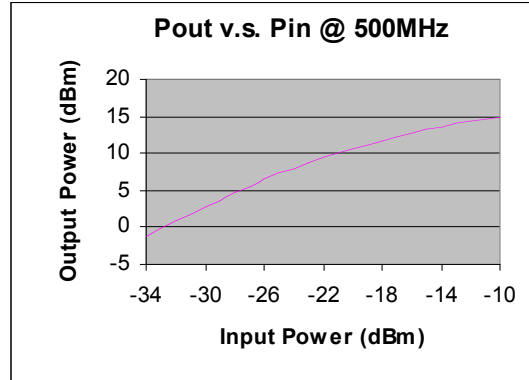
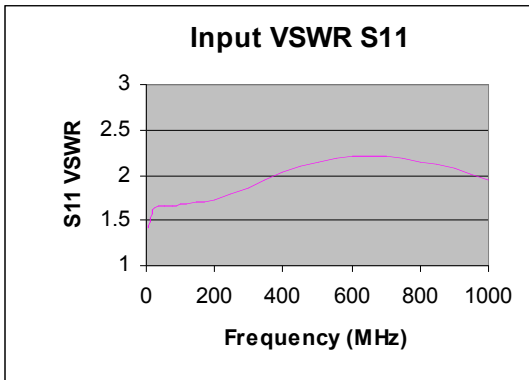
Typical Performance @ +25 °C



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Typical Performance @ +25 °C



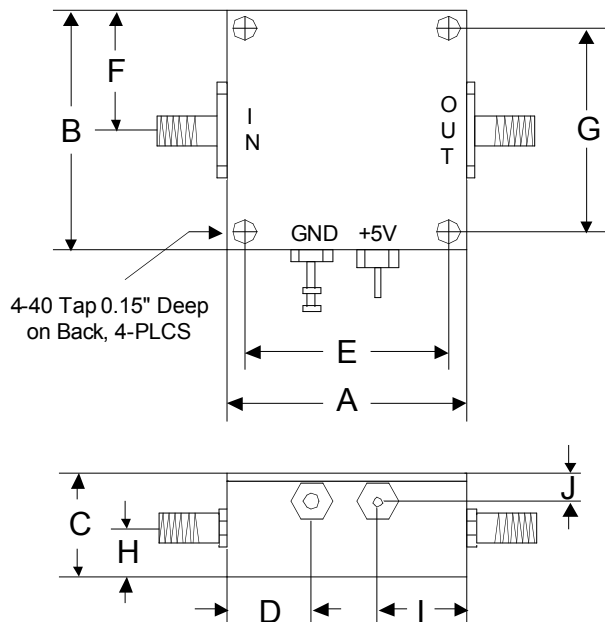
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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+10dBm
Supply Voltage	+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