

HD29162

1 – 8 GHz Low Noise Amplifier

Features

- Frequency Range: 1- 8GHz
- Gain: 24dB
- P_{1dB}: +6.3dBm
- IP3: +16dBm
- Noise Figure: 1.6dB
- DC Power: 7- 20V
- SMA Connector

Performance measured @ 4GHz

Description

HD29162 is a wideband Low Noise Amplifier operates with frequency range usable from 1GHz to 8GHz.



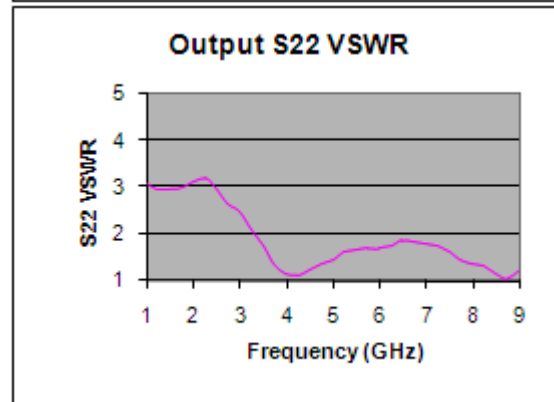
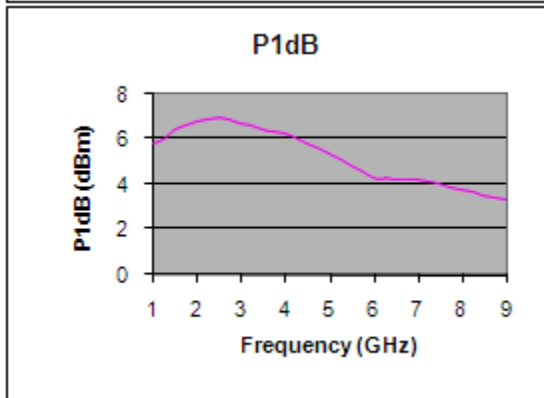
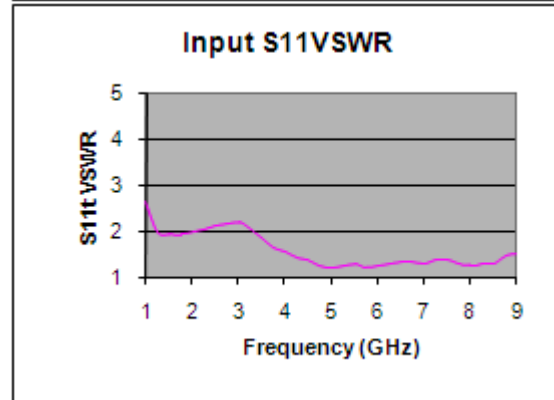
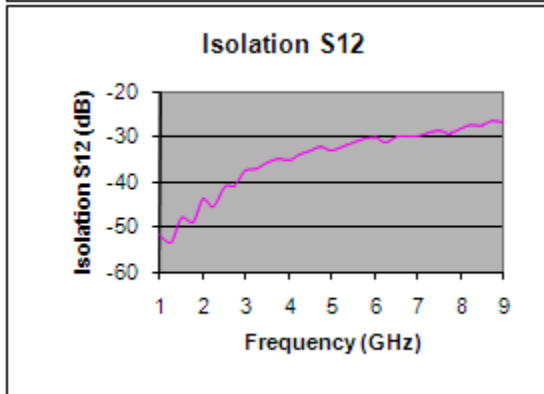
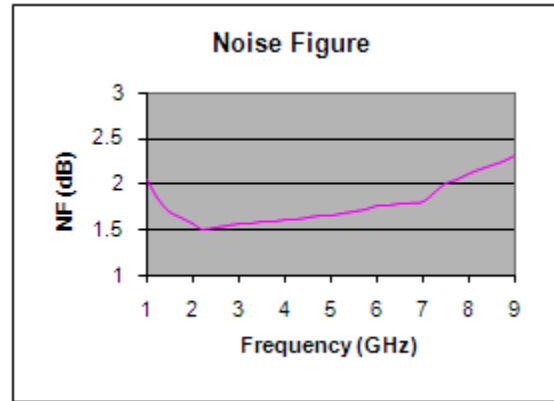
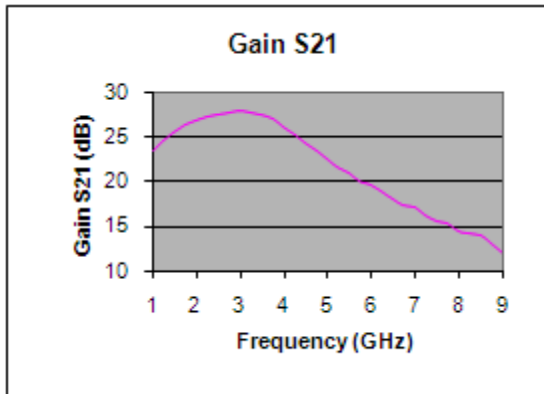
Electrical Specifications @ +25 °C, Z_{in}=Z_{out}= 50 Ω, V_{cc}= 12V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	1		8
Gain	f = 1GHz		23	
	f = 4GHz		25	
	f = 8GHz		14	
P _{1dB}	f = 1GHz		+5.8	
	f = 4GHz		+6.3	
	f = 8GHz		+3.8	
IP3	f= 4GHz		+16	
Noise Figure	f = 1GHz		2.0	
	f = 4GHz		1.6	
	f = 8GHz		2.1	
VSWR	f = 4GHz			
	Input VSWR		1.5:1	
	Output VSWR		1.2:1	
DC Power Supply	V	7	12	20
Supply Current	mA		20	

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Typical Performance @ +25 °C



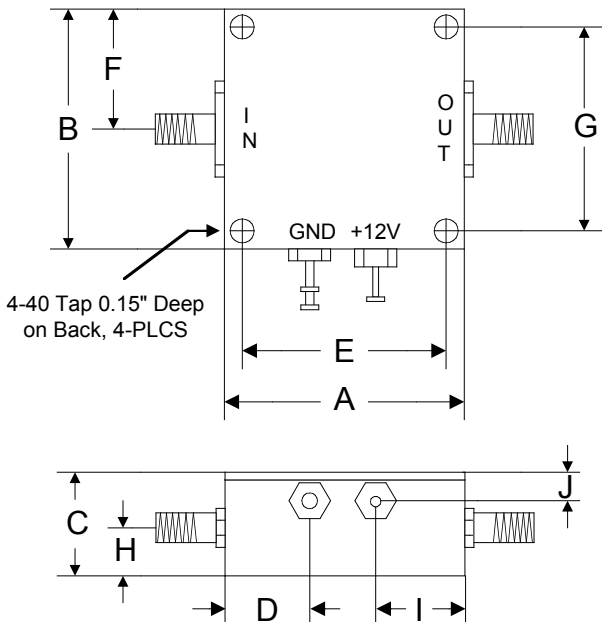
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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+13dBm
Supply Voltage	+30V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °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