

HD24221

DC – 6000MHz RF Amplifier

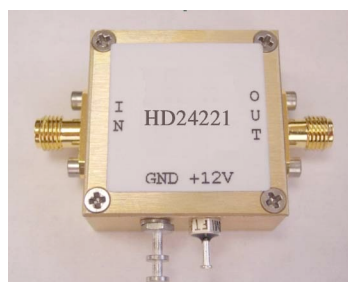
Features

- Frequency Range: 100-6000MHz
- Gain: 15dB
- P_{1dB} : +12.5dBm
- IP3: +26dBm
- Noise Figure: 4dB
- DC Power: 12V
- SMA Connector

Performance measured @ 2000MHz

Description

HD24221 is a wideband, Low Power, RF Amplifier that operates with a frequency range from 100MHz to 6000MHz.



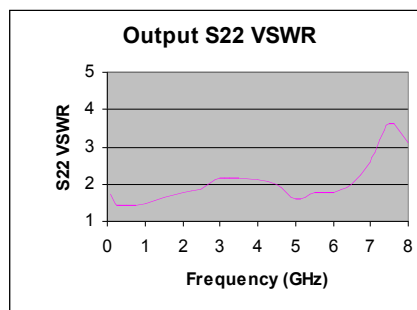
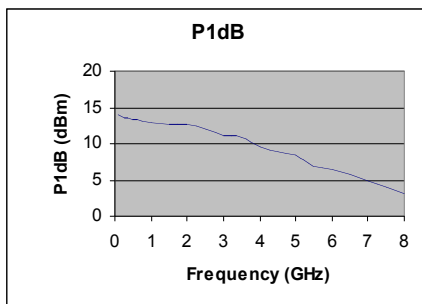
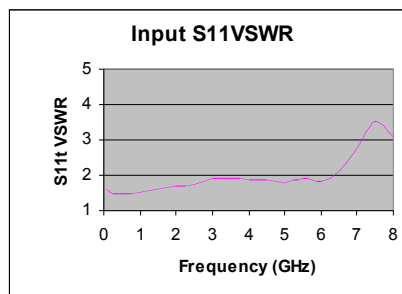
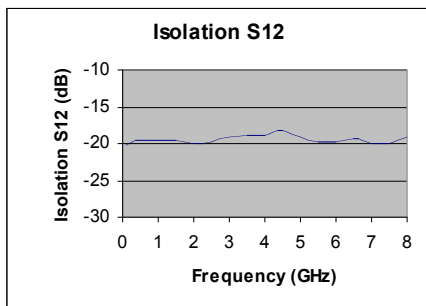
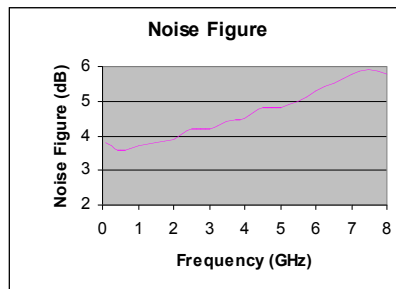
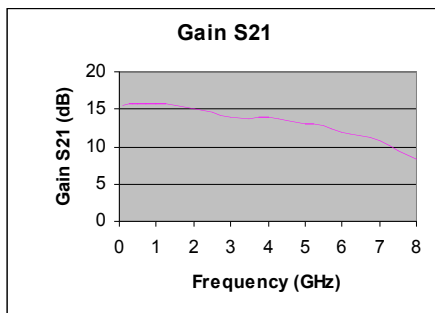
Electrical Specifications @ +25 °C, $Z_s = Z_L = 50 \text{ Ohms}$

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	100		6000
Gain $f = 100\text{MHz}$	dB		15.4	
$f = 2000\text{MHz}$	dB		15.0	
$f = 4000\text{MHz}$	dB		14.0	
$f = 6000\text{MHz}$	dB		12.0	
P_{1dB} $f = 100\text{MHz}$	dBm		+14.0	
$f = 2000\text{MHz}$	dBm		+12.5	
$f = 4000\text{MHz}$	dBm		+9.5	
$f = 6000\text{MHz}$	dBm		+6.5	
IP3 $f = 2000\text{MHz}$	dBm		+26	
Noise Figure $f = 2000\text{MHz}$	dB		4	
VSWR $f = 100\text{-}6000\text{MHz}$				
Input VSWR			2.0:1	
Output VSWR			2.3:1	
DC Power Supply	V	9	12	15
Supply Current	mA		40	

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Typical Performance @ +25 °C



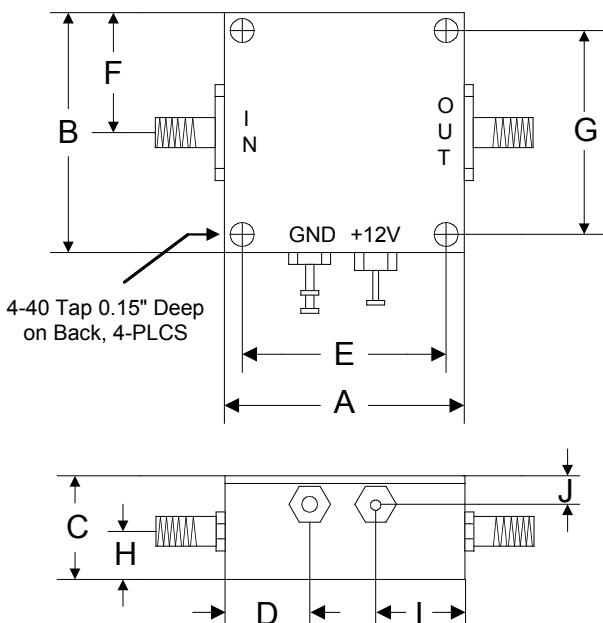
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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+15dBm
Supply Voltage	+16V
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