

HD24842

70MHz - 5500MHz RF Amplifier

Features

- Frequency Range: 70-5500MHz
- Gain: 15dB
- P_{1dB} : +19dBm
- IP3: +35dBm
- Noise Figure: 4.5dB
- DC Power: 5V/80mA
- SMA Connector

Performance Test @ 2000MHz

Description

HD24842 is a 15dB wideband flat response RF Amplifier operates with frequency range from 70MHz to 5500MHz.



Electrical Specifications @ +25 °C, $Z_s = Z_L = 50 \text{ Ohms}$, $V_{cc}=+5V$

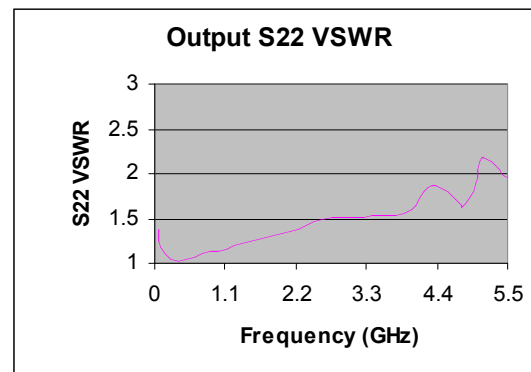
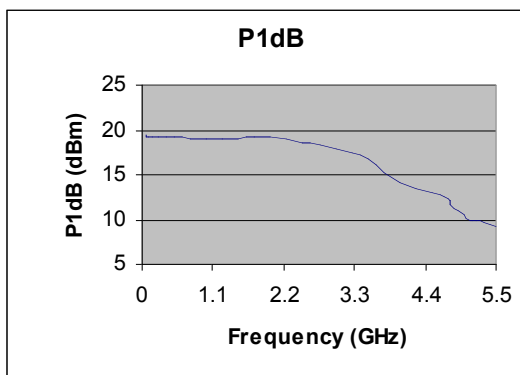
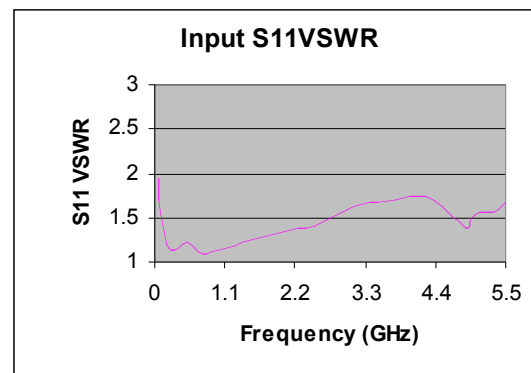
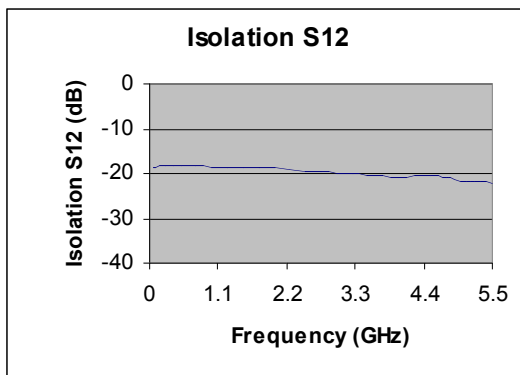
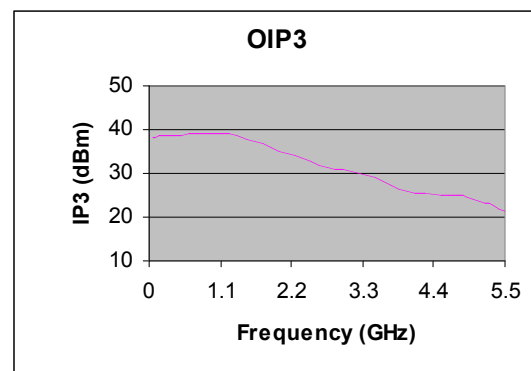
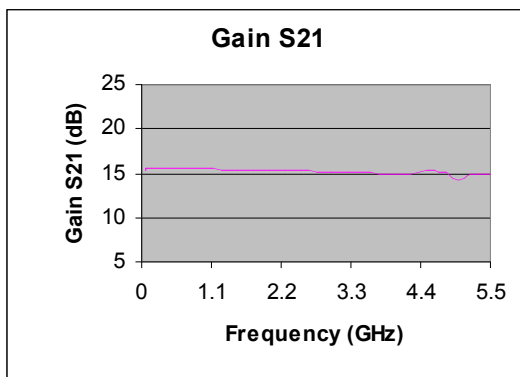
Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	70		5500
Gain $f = 70 \text{ MHz}$	dB		15.3	
$f = 1000 \text{ MHz}$	dB		15.5	
$f = 2000 \text{ MHz}$	dB		15.0	
$f = 4000 \text{ MHz}$	dB		15.0	
$f = 5500 \text{ MHz}$	dB		14.5	
P_{1dB} at 2000 MHz	dBm		+19	
IP3 at 2000 MHz	dBm		+35	
Noise Figure at 2000 MHz	dB		4.5	5.5
Reverse Isolation	dB		-19	
VSWR $f = 70\text{-}5500 \text{ MHz}$				
Input VSWR			1.5:1	

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Output VSWR			1.5:1	
DC Power Supply	V	4.75	5	5.25
Supply Current	mA	72	80	92

Typical Performance @ +25 °C





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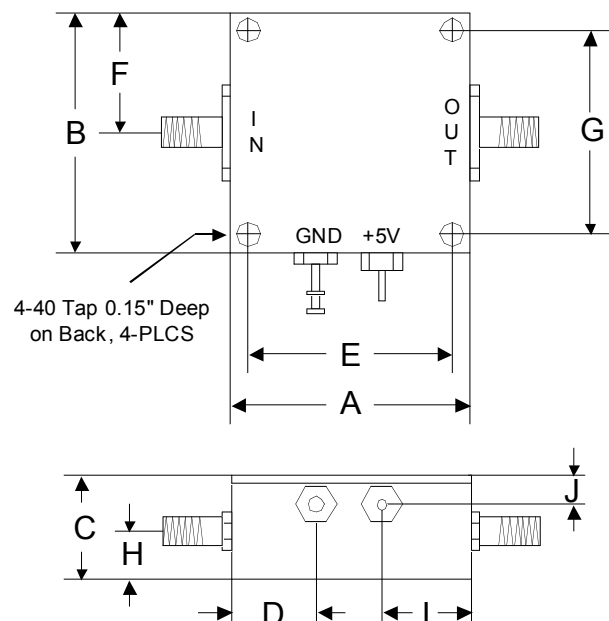
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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+12dBm
Supply Voltage	+5.5V
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