

HD24840

100MHz - 5000MHz RF Amplifier

Features

- Frequency Range: 100-5000MHz
- Gain: 15dB
- P_{1dB} : +19dBm
- IP3: +35dBm
- Noise Figure: 4.5dB
- DC Power: 12V/85mA
- SMA Connector

Performance Test @ 2000MHz

Description

HD24840 is a 15dB wideband flat response RF Amplifier operates with frequency range from 100MHz to 5000MHz.



Electrical Specifications @ +25 °C, $Z_s = Z_L = 50 \text{ Ohms}$, $V_{cc}=+12V$

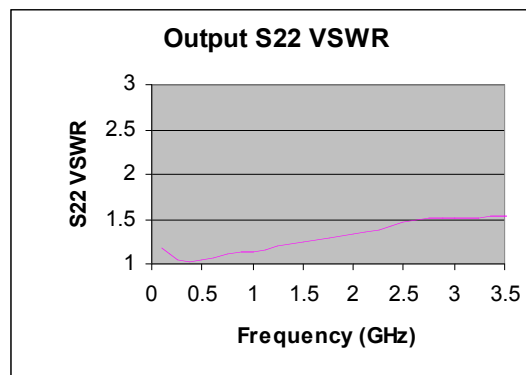
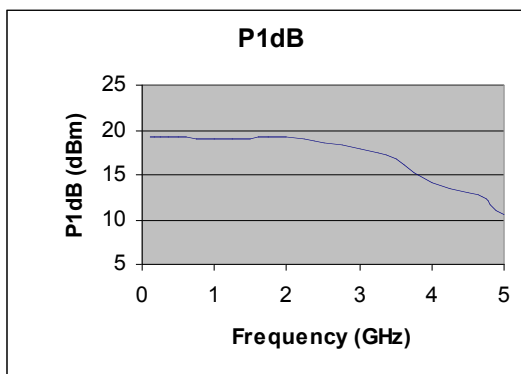
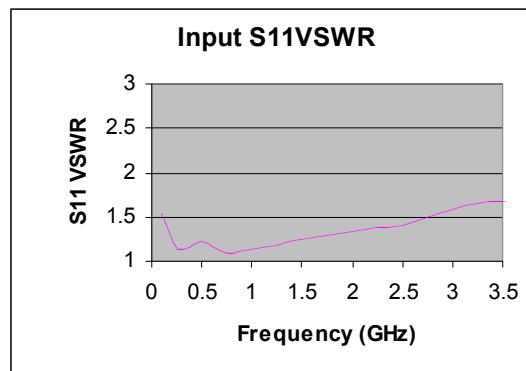
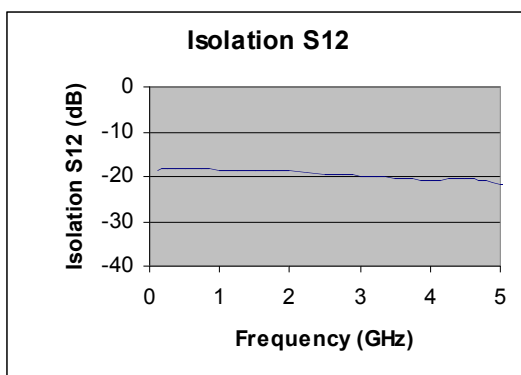
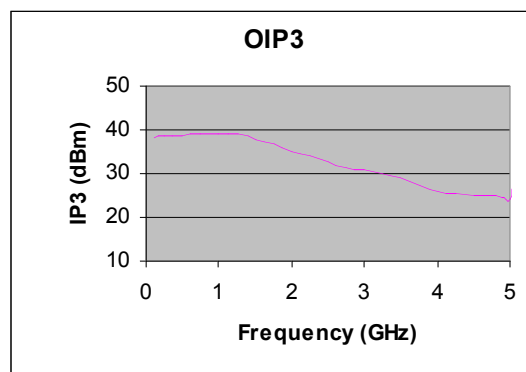
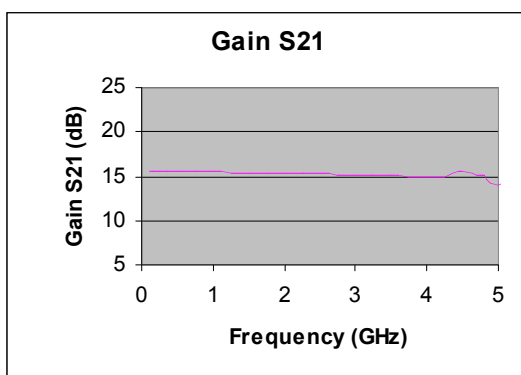
Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	100		5000
Gain $f = 100 \text{ MHz}$	dB		15.5	
$f = 1000 \text{ MHz}$	dB		15.5	
$f = 2000 \text{ MHz}$	dB		15.0	
$f = 4000 \text{ MHz}$	dB		15.0	
$f = 5000 \text{ MHz}$	dB		14.0	
P_{1dB} at 2000MHz	dBm		+19	
IP3 at 2000MHz	dBm		+35	
Noise Figure at 2000MHz	dB		4.5	5.5
Reverse Isolation	dB		-19	
VSWR $f = 100\text{-}5000\text{MHz}$				
Input VSWR			1.5:1	
Output VSWR			1.5:1	

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DC Power Supply	V	7	12	15
Supply Current	mA		85	

Typical Performance @ +25 °C



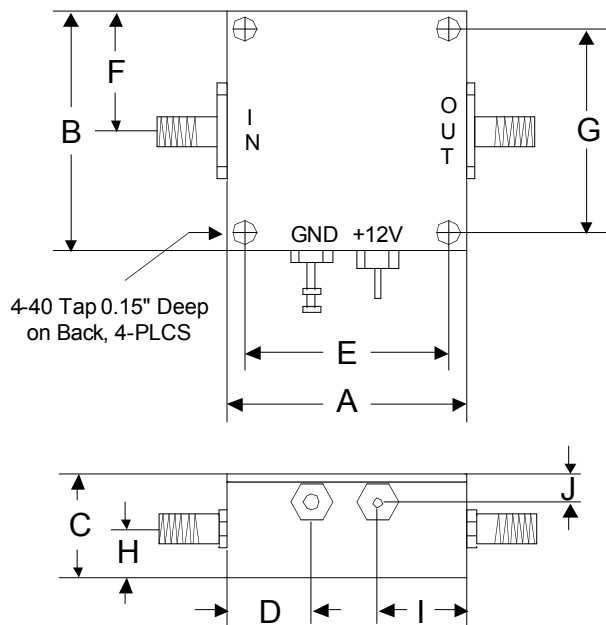
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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+12dBm
Supply Voltage	+25V
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