

HD24398

1800 – 2000MHz Low Noise Amplifier

Features

- Frequency Range: 1800-2000MHz
- Gain: 16dB
- P_{1dB} : +26dBm
- IP3: +39dBm
- Noise Figure: 1.1dB
- DC Power: 5V/160mA
- SMA Connector

Performance measured @ 1900MHz

Description

HD24398 is a high dynamic range Low Noise Amplifier as well as 400mW Driver Amplifier operates with frequency range from 1.8 to 2.0GHz PCS Band.



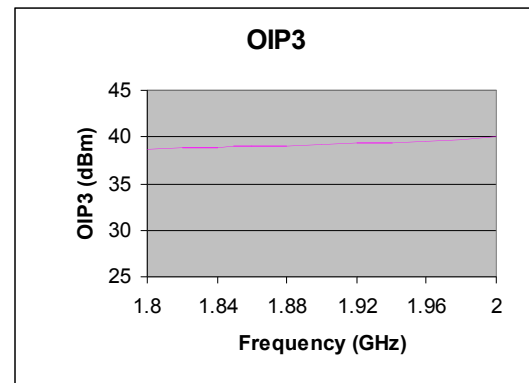
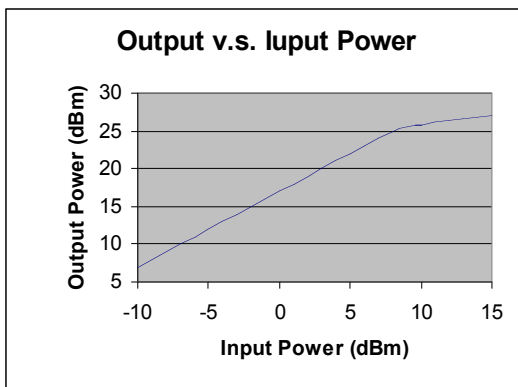
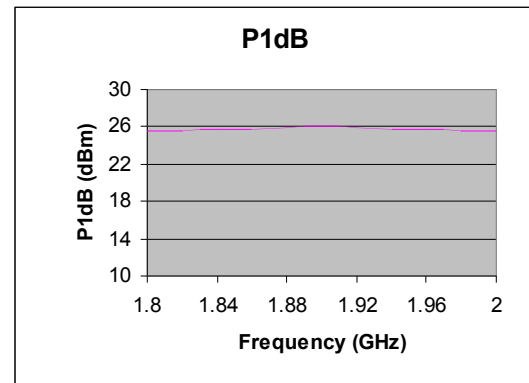
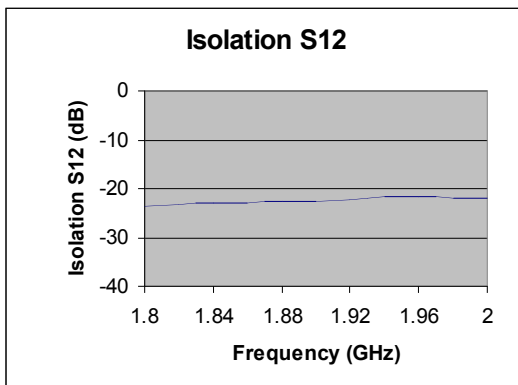
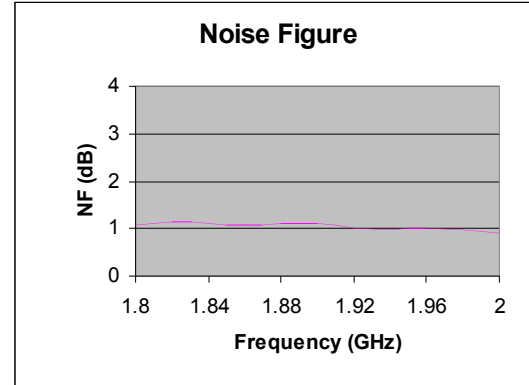
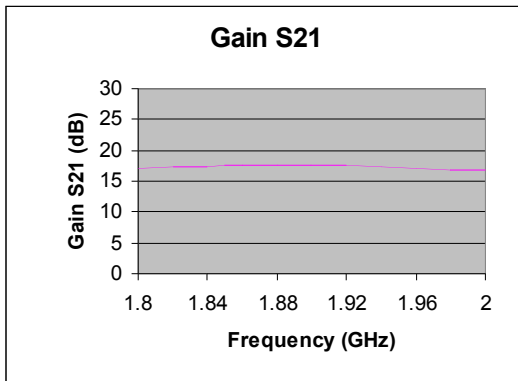
Electrical Specifications @ +25 °C, $Z_{in} = Z_{out} = 50 \Omega$, $V_{cc} = +5.0V$

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	1800		2000
Gain $f = 1800\text{MHz}$	dB		16	
$f = 1900\text{MHz}$	dB		16	
$f = 2000\text{MHz}$	dB		16	
P_{1dB} $f = 1900\text{MHz}$	dBm		+26	
IP3 $f = 1900\text{MHz}$	dBm		+39	
Noise Figure	dB		1.1	1.2
Reverse Isolation	dB		-21	
VSWR $f = 1900\text{MHz}$				
Input VSWR			1.7:1	
Output VSWR			1.4:1	
DC Power Supply	V	4.75	5	5.25
Supply Current	mA		160	

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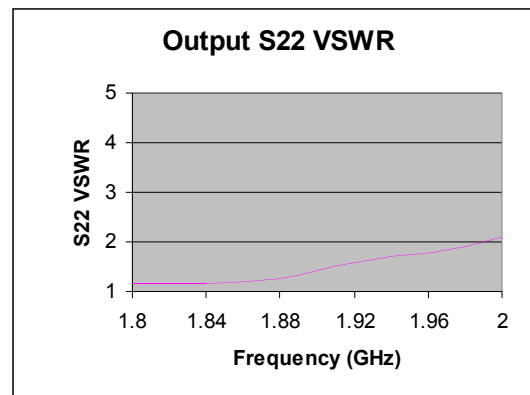
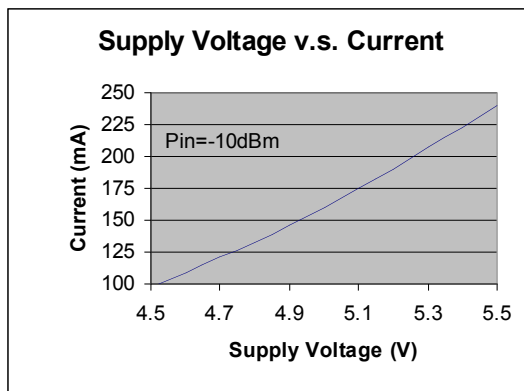
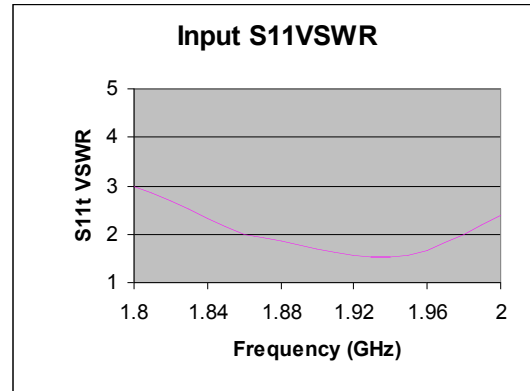
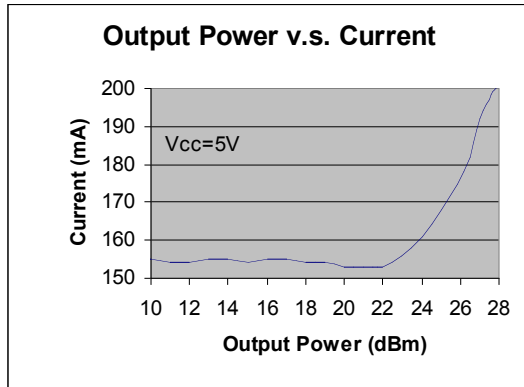
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Typical Performance @ +25 °C



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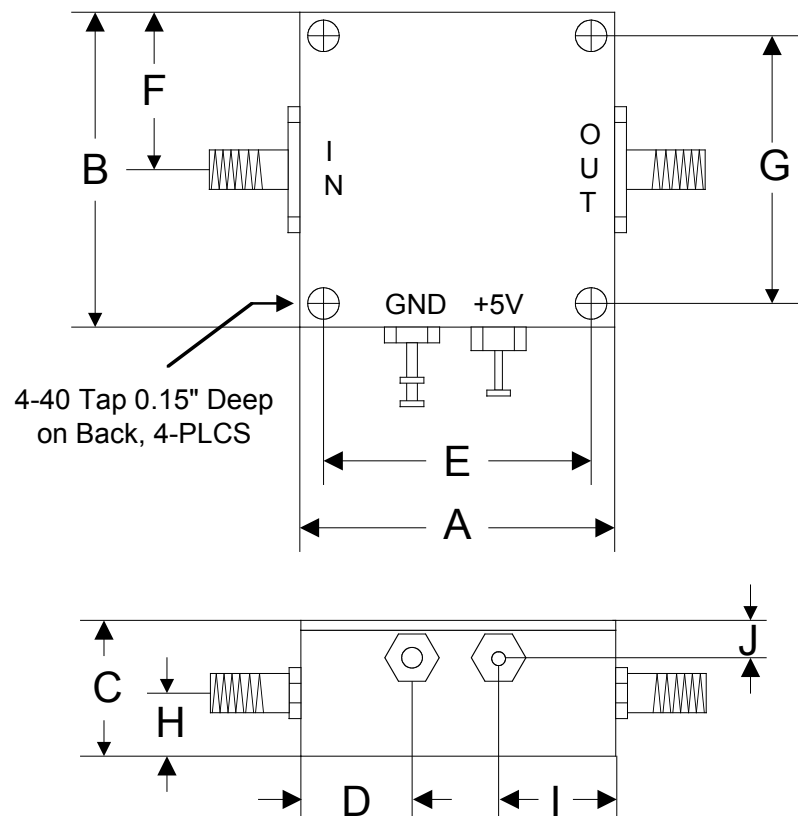
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1800 – 2000MHz Low Noise Amplifier

Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+20dBm
Supply Voltage	+6V
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