

HD24305

2400 – 2500MHz Low Noise Amplifier

Features

- Frequency Range: 2400-2500MHz
- Gain: 14dB
- P_{1dB}: +26dBm
- IP3: +39dBm
- Noise Figure: 0.85dB
- DC Power: 5V/170mA
- SMA Connector

Performance measured @ 2450MHz

Description

HD24305 is a high dynamic range Low Noise Amplifier as well as 400mW Driver Amplifier operates with frequency range from 2400 to 2500MHz ISM Band.



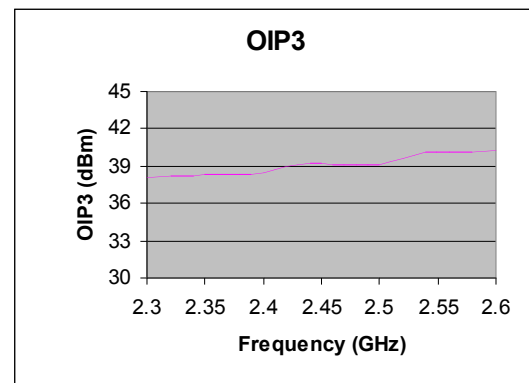
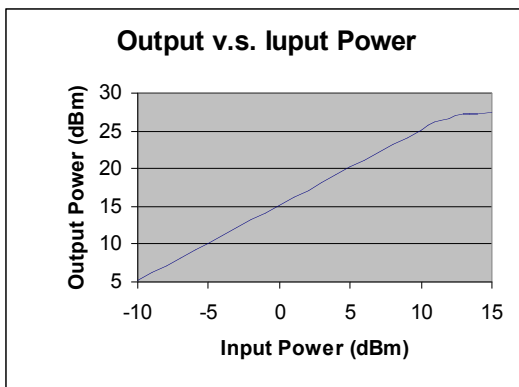
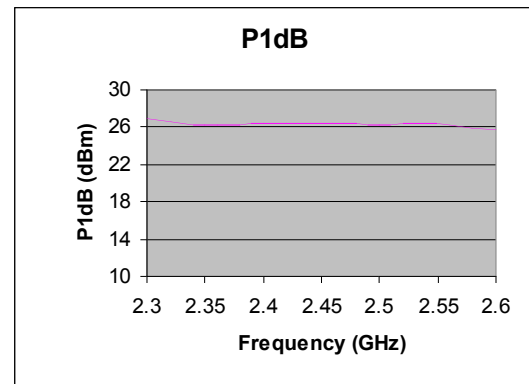
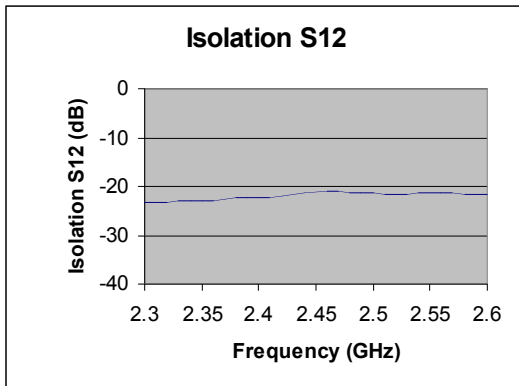
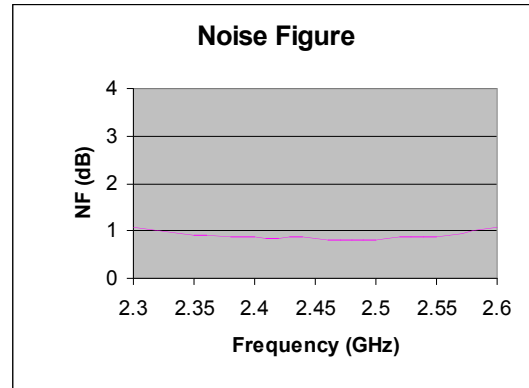
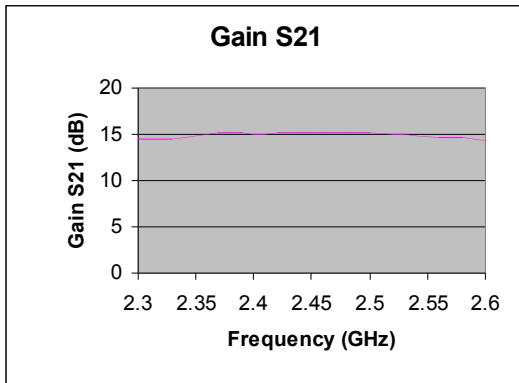
Electrical Specifications @ +25 °C, Z_{in} = Z_{out} = 50 Ω, V_{cc} = +5.0V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	2400		2500
Gain f = 2400MHz	dB		14	
f = 2450MHz	dB		14	
f = 2500MHz	dB		14	
P _{1dB} f = 2450MHz	dBm		+26	
IP3 f= 2450MHz	dBm		+39	
Noise Figure	dB		0.85	1.00
Reverse Isolation	dB		-20	
VSWR f = 2450MHz				
Input VSWR			1.9:1	
Output VSWR			1.2:1	
DC Power Supply	V	4.75	5	5.25
Supply Current	mA		170	

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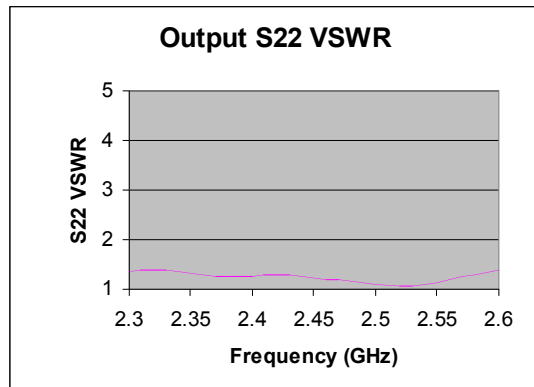
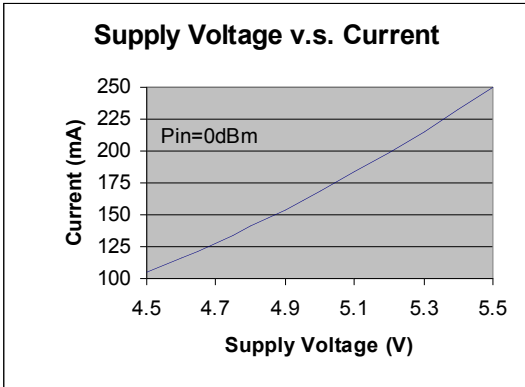
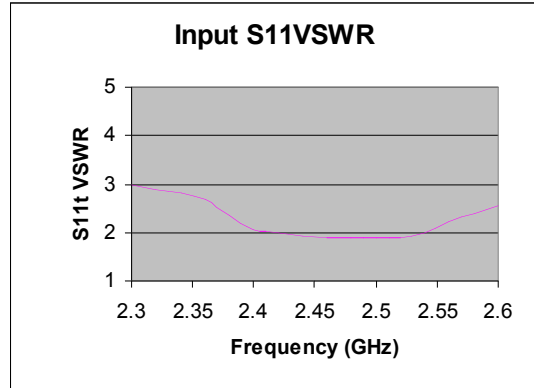
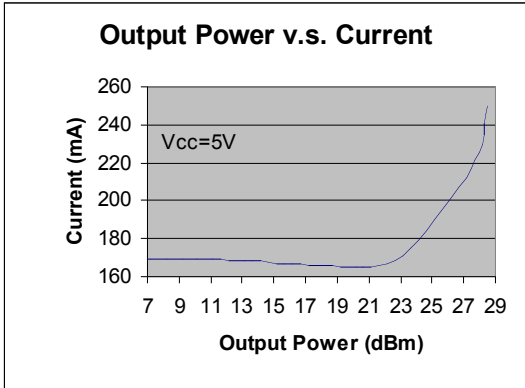
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Typical Performance @ +25 °C



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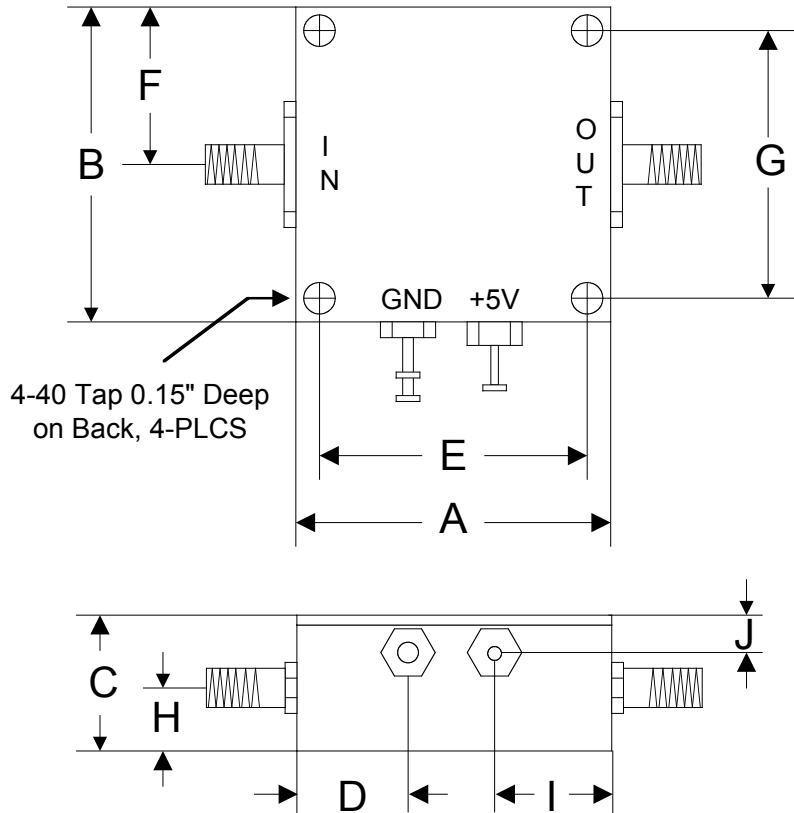
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Absolute Maximum Ratings

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