

Features

- Center Frequency: 2450 MHz
- Gain: 40dB
- Bandwidth: 100MHz
- P_{1dB}: +4dBm
- IP3: +15dBm
- Noise Figure: 2dB
- DC Power: 12V/30mA
- Internal Voltage Regulated
- Reverse DC Protection
- SMA Connector



Performance measured @ 2450MHz

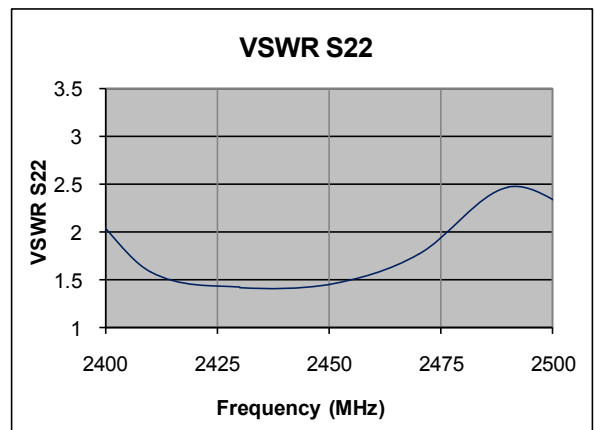
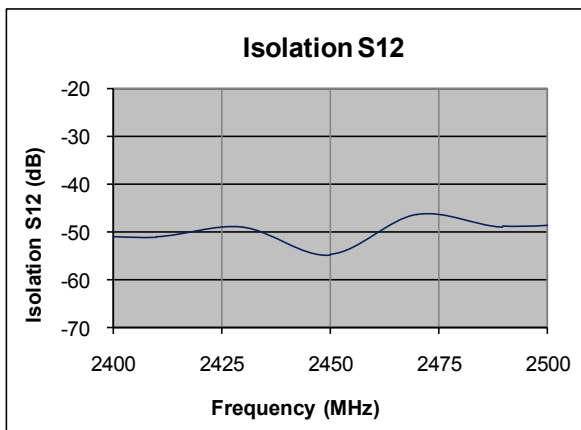
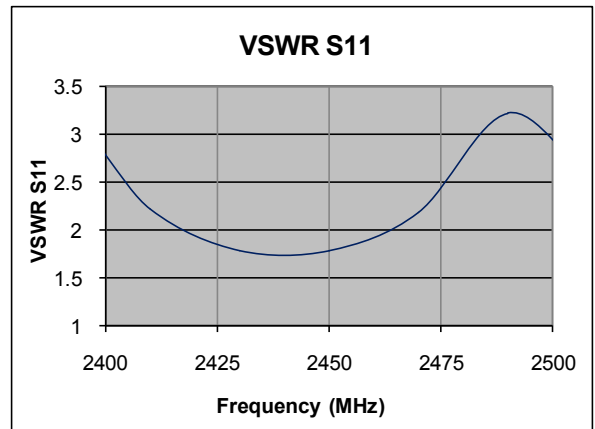
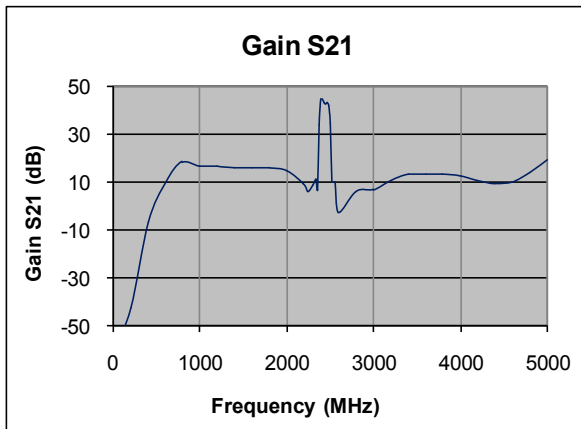
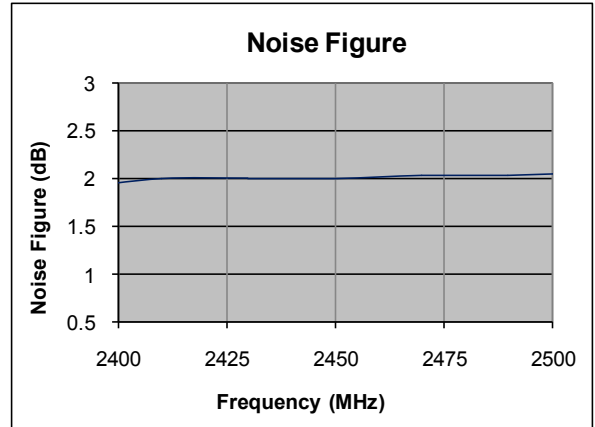
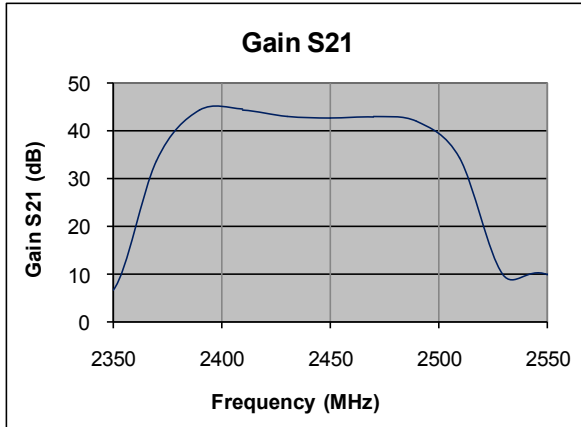
Description

HD31312 is Band Limited Low Noise Amplifier designed for 2.4GHz ISM Band receives application.

Electrical Specifications @ +25 °C, Z_{in} = Z_{out} = 50 Ω, V_{cc} = 12V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	2400	2450	2500
Bandwidth	MHz		±50	
Gain	dB		40	
Gain Flatness	dB		± 2.0	± 2.5
P _{1dB}	dBm		+4	
IP3	dBm		+15	
Noise Figure	dB		2.0	2.5
Reverse Isolation	dB		-50	
VSWR Input VSWR			1:1.8	
Output VSWR			1:1.5	
DC Power Supply	V	9	12	15
Supply Current	mA		30	

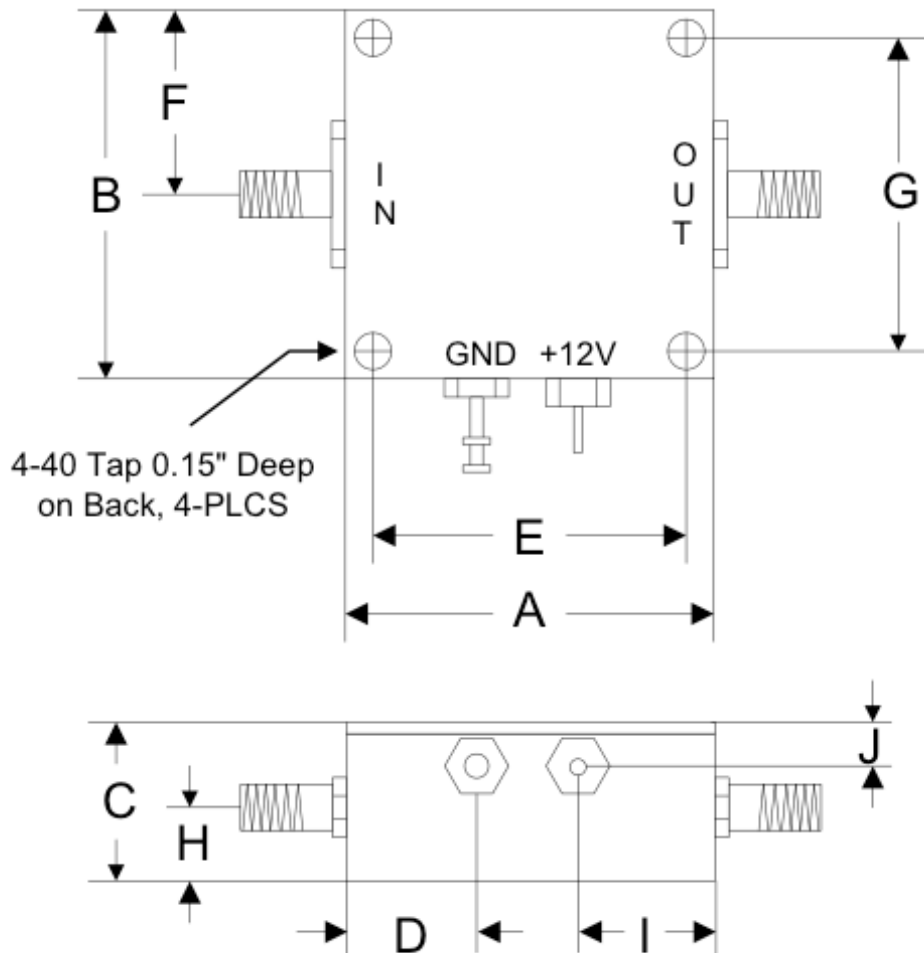
Typical Performance @ +25 °C



Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+15dBm
Supply Voltage	+20V
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