

HD27028

7-14GHz Low Noise Amplifier

Features

- Frequency Range: 7-14GHz
- Gain: 17dB
- P_{1dB}: +13dBm
- IP3: +25dBm
- Noise Figure: 1.8dB
- DC Power: 4.5V-16V/60mA
- SMA Connector



Description

HD27028 is a high performance wideband Low Noise Amplifier and Driver Amplifier operates with frequency range from 7 to 14GHz.

Electrical Specifications @ +25 °C, Z_{in} = Z_{out} = 50 Ω, V_{cc} = +5V

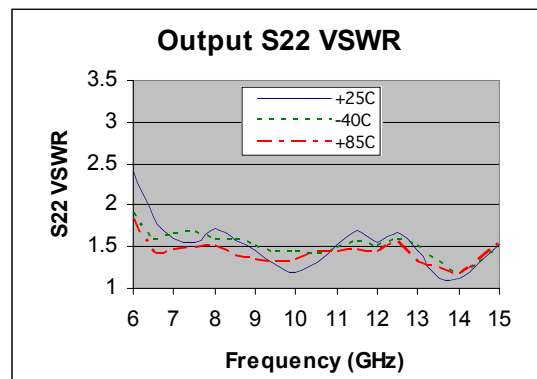
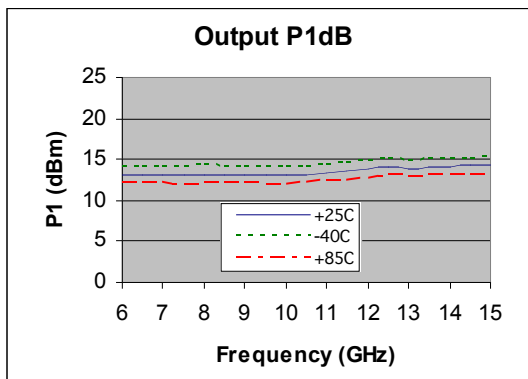
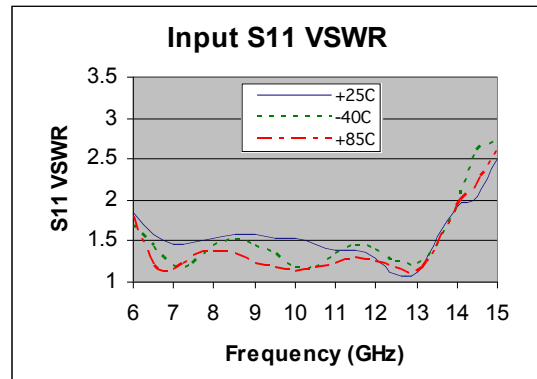
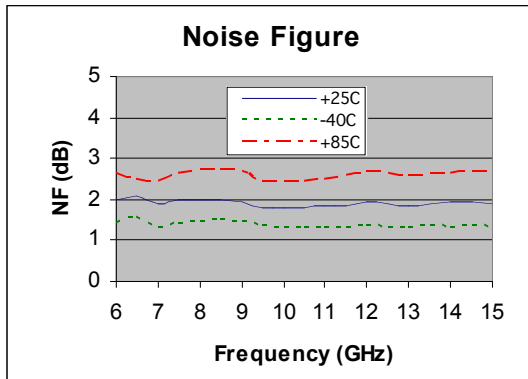
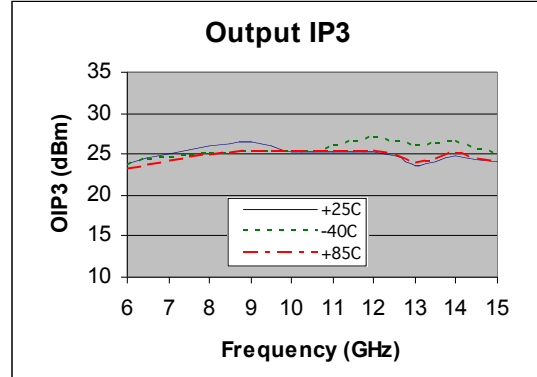
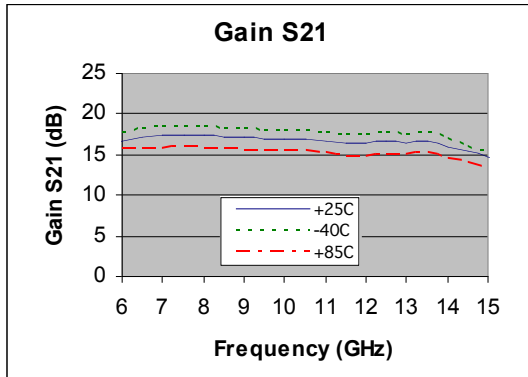
Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	7		14
Gain f = 7GHz	dB		17.0	
f = 10GHz	dB		17.0	
f = 14GHz	dB		16.0	
Gain Variation Over Temperature	dB/°C		0.02	0.03
Output Power P _{1dB}	dBm		+13	
Saturated Output Power P _{Sat}	dBm		+14.5	
Output Third Order Intercept IP3	dBm		+25	
Noise Figure	dB		1.8	2.2
Reverse Isolation f = 10GHz	dB		-34	
VSWR Input VSWR			1.5:1	
Output VSWR			1.5:1	
DC Power Supply	V	4.5	5	16
Supply Current	mA		60	75
Operating Temperature	°C	-40		+85
Size (excluding RF Connectors)	Inch	1.250" (L) x 1.250" (W) x 0.563" (H)		

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Weight	Oz.	1.5
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Typical Performance @ +25 °C



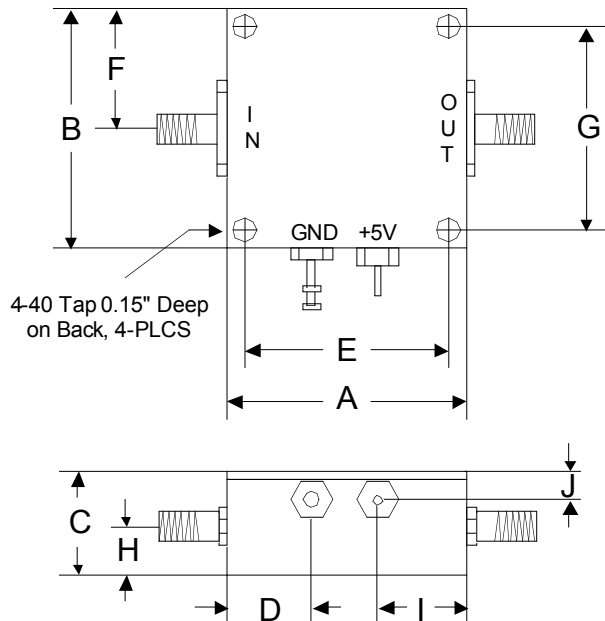
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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+5dBm
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