

HD28186

4.5–6.0GHz Low Noise Amplifier

Features

- Frequency Range: 4.5 – 6.0GHz
- Gain: 15dB
- P_{1dB}: +18.4dBm
- IP3: +31.2dBm
- Noise Figure: 1.1dB
- DC Power: 5V/65mA
- SMA Connector

Performance measured @ 5.2GHz

Description

HD28186 is a 1.1dB Noise Figure Low Noise Amplifier operates in wideband

with frequency range from 4.5GHz to 6.0GHz.



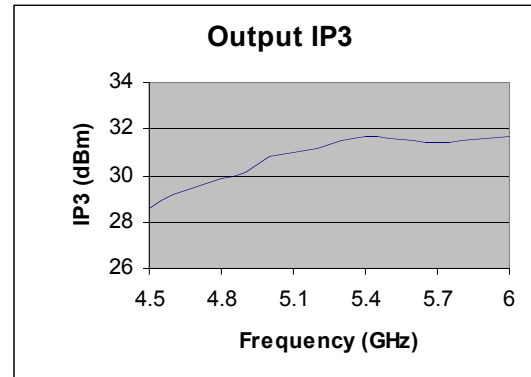
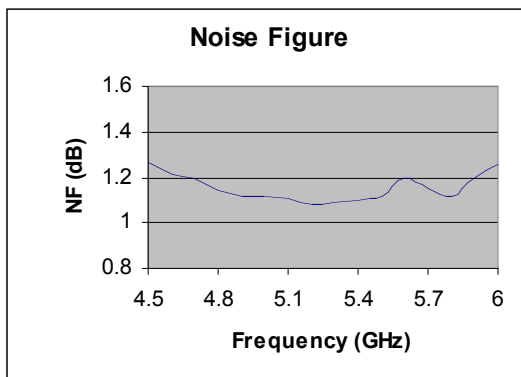
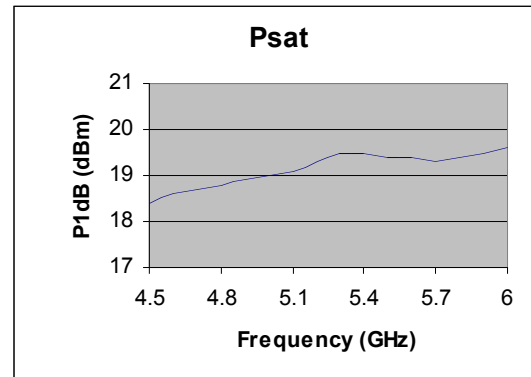
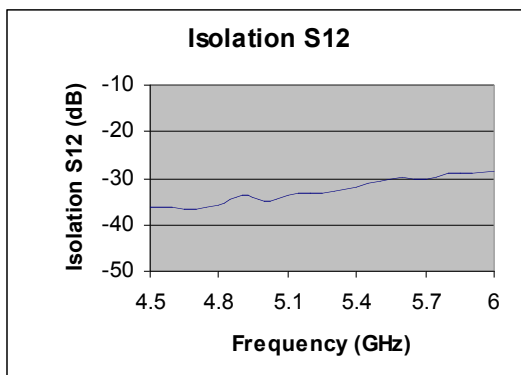
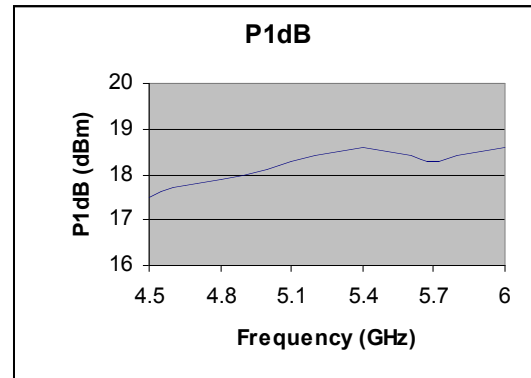
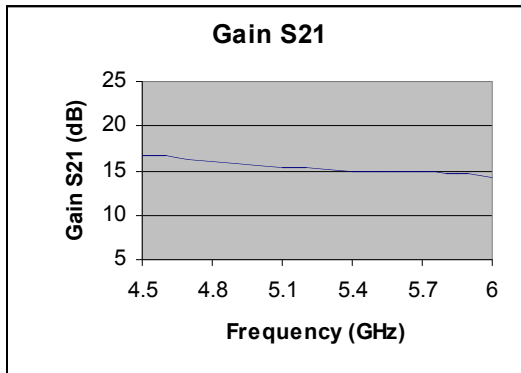
Electrical Specifications @ +25 °C, Z_{in} = Z_{out} = 50 Ω, V_{cc} = 5V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	4.5		6.0
Gain f = 4.5GHz	dB		16.5	
f = 5.2GHz	dB		15.0	
f = 6.0GHz	dB		14.0	
P _{1dB} f = 4.5GHz	dBm		+17.4	
f = 5.2GHz	dBm		+18.4	
f = 6.0GHz	dBm		+18.6	
IP3 f = 4.5GHz	dBm		+28.6	
f = 5.2GHz	dBm		+31.2	
f = 6.0GHz	dBm		+31.7	
Noise Figure	dB		1.1	
Reverse Isolation	dB		-33	
VSWR Input VSWR			2.5:1	
Output VSWR			1.5:1	
DC Power Supply	V	3	5	5.5
Supply Current	mA		70	

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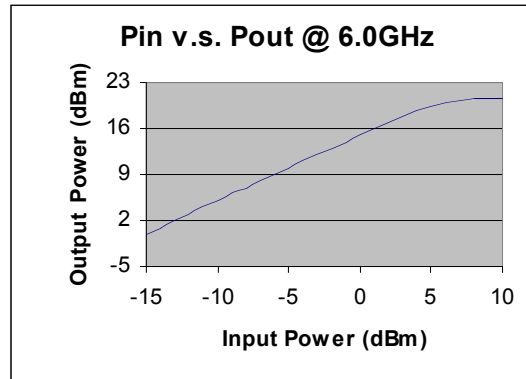
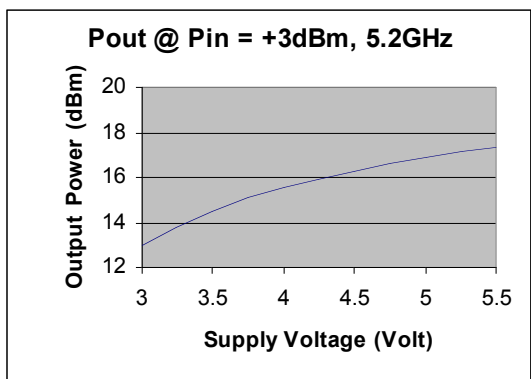
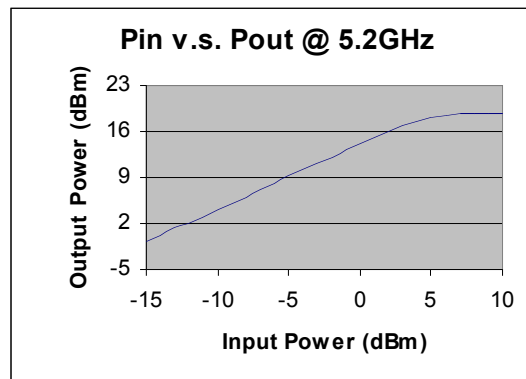
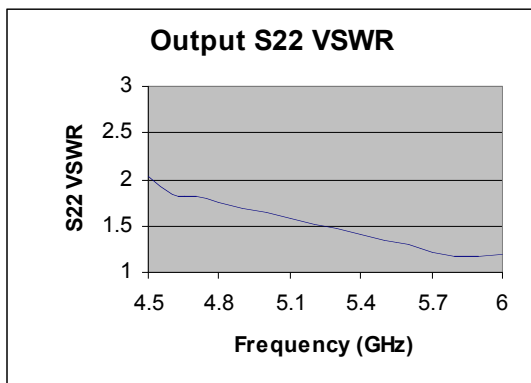
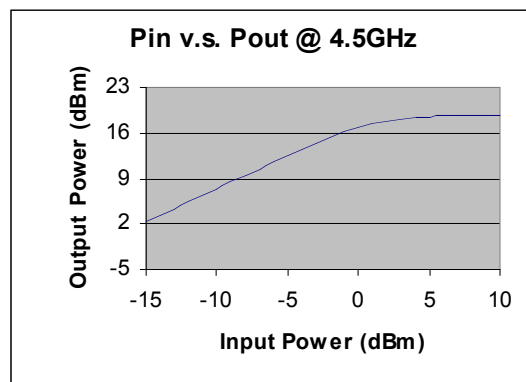
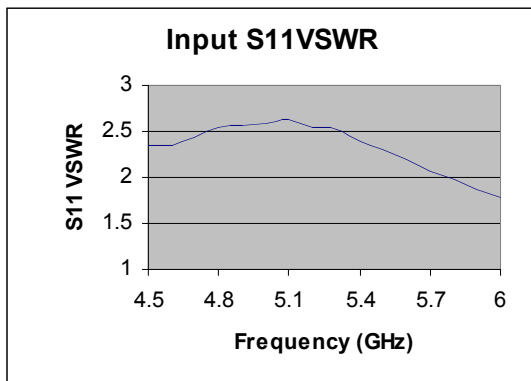
Typical Performance @ +25 °C



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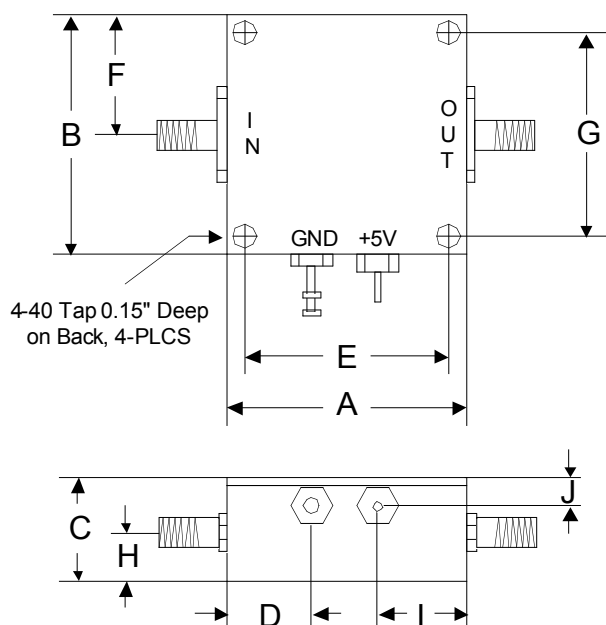
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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+10dBm
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