

HD29188

30-2200MHz 1W Power RF Amplifier

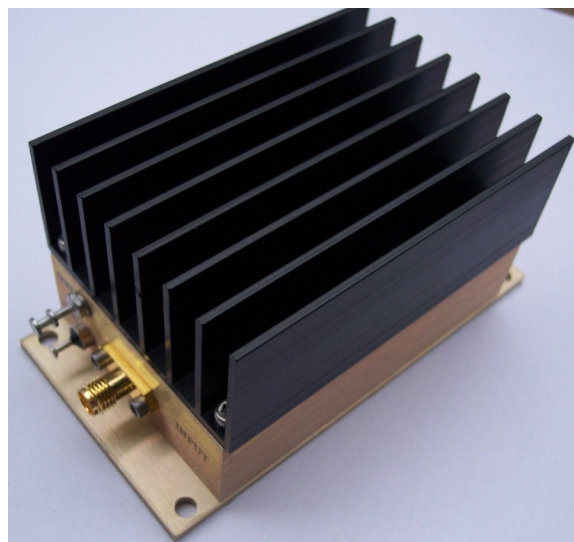
Features

- Frequency Range: 30 - 2200MHz
- Gain: 30dB
- P_{1dB} : +30dBm
- IP3: +41dBm
- Noise Figure: 4.2dB
- DC Power: 12V
- SMA Connector

Performance measured @ 1000MHz

Description

HD29188 is a 30dB gain, +30dBm (1 Watt) output Medium Power RF Amplifier, operating frequency range from 30 - 2200MHz with single 12V DC power supply.



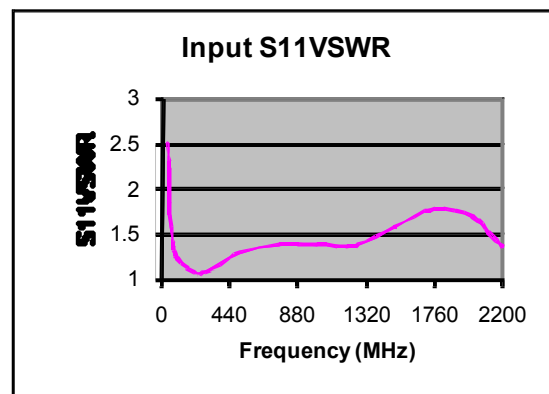
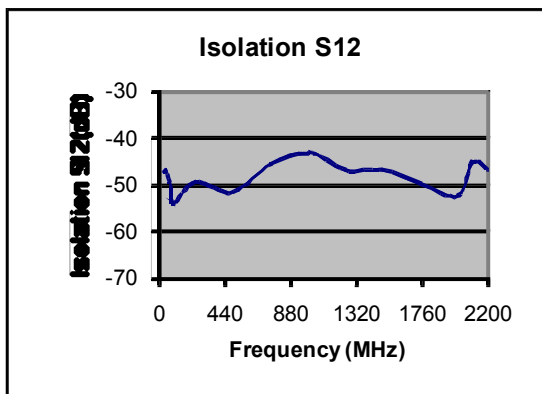
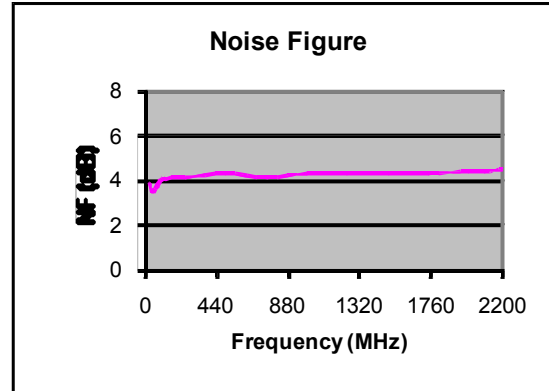
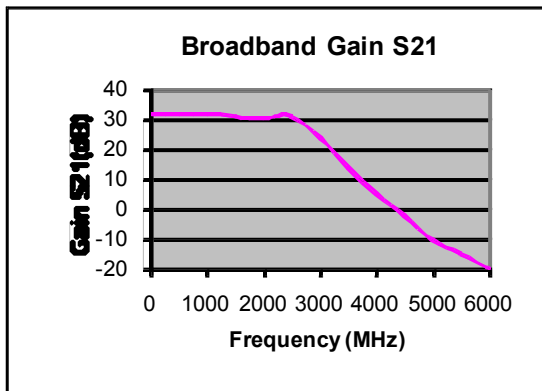
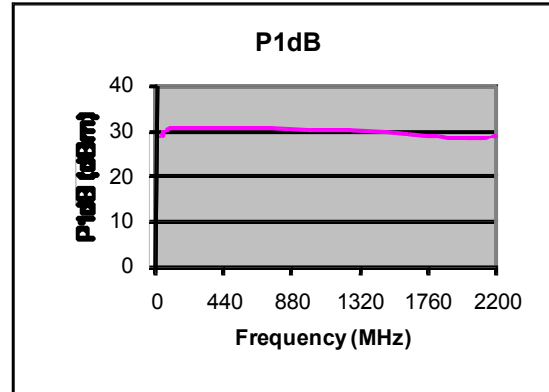
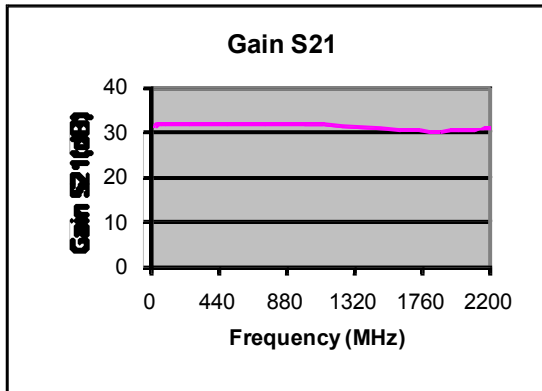
Electrical Specifications @ +25 °C, $Z_s = Z_L = 50 \text{ Ohms}$, $V_{cc} = +12V$

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	30		2200
Gain S_{21} $f = 30\text{MHz}$	dB		31.0	
$f = 500\text{MHz}$	dB		31.5	
$f = 1000\text{MHz}$	dB		31.5	
$f = 1750\text{MHz}$	dB		30.2	
$f = 2200\text{MHz}$	dB		30.5	
P_{1dB}	dBm		+30	
IP3	dBm		+41	
Reverse Isolation S_{12}	dB		-43	
Noise Figure	dB		4.2	
VSWR Input VSWR S_{11}			1:1.4	
Output VSWR S_{22}			1:1.2	
DC Power Supply	V	11	12	13
Supply Current	mA		415	

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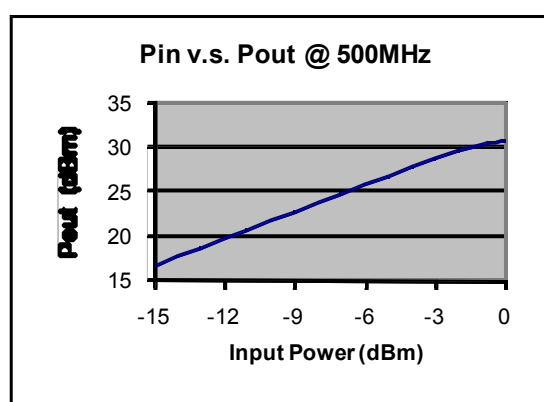
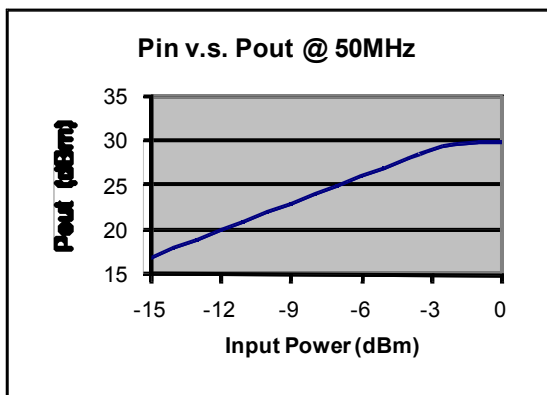
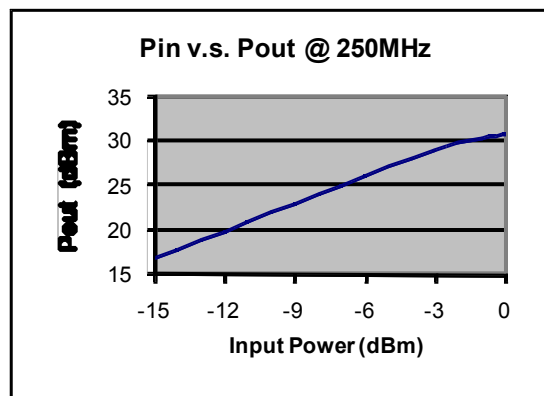
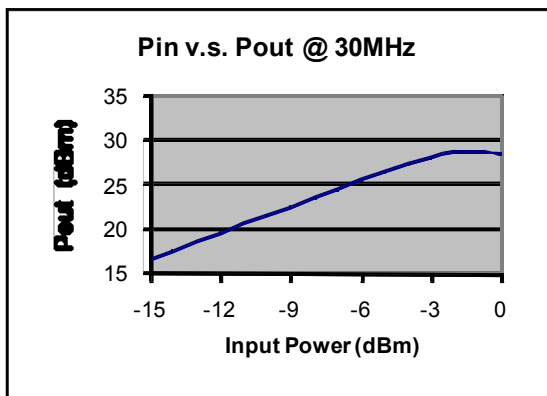
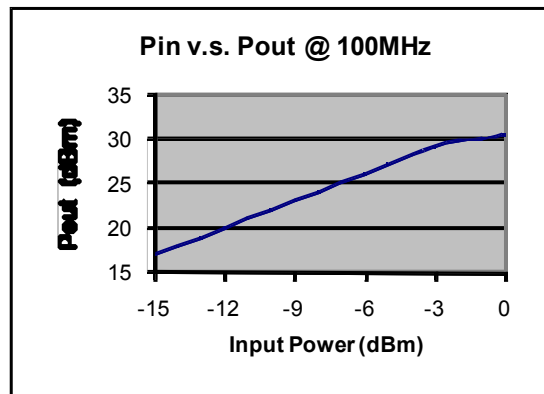
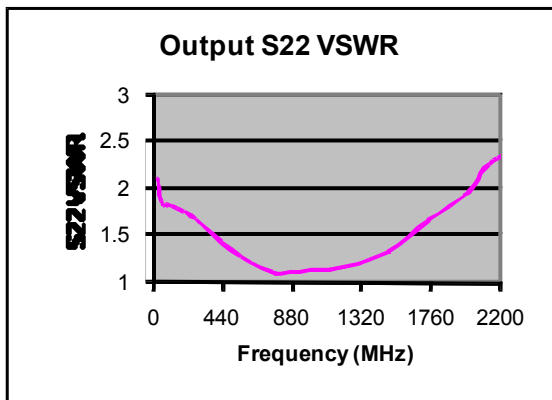
Typical Performance @ +25 °C



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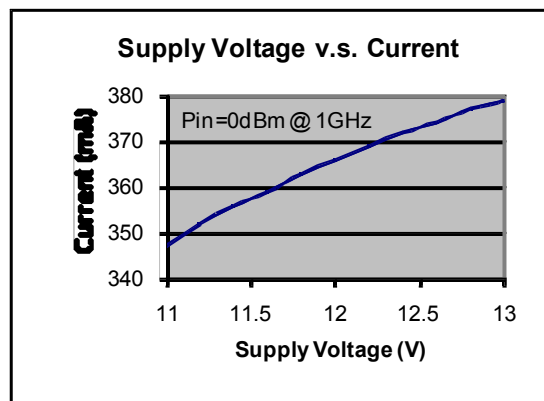
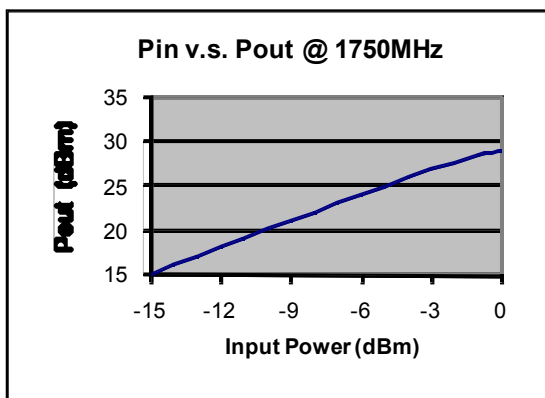
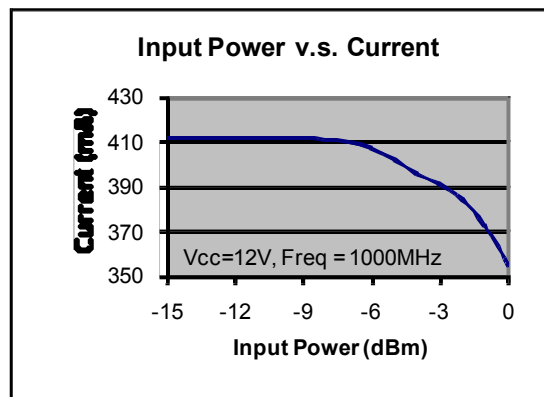
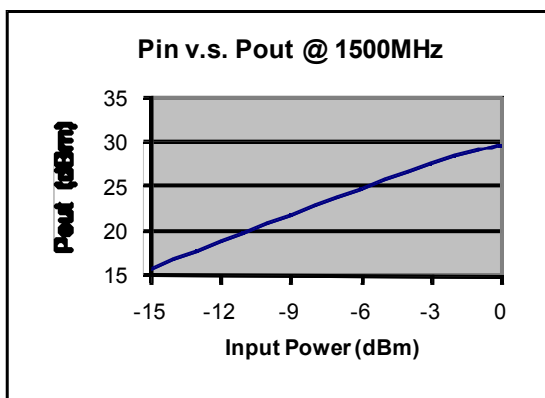
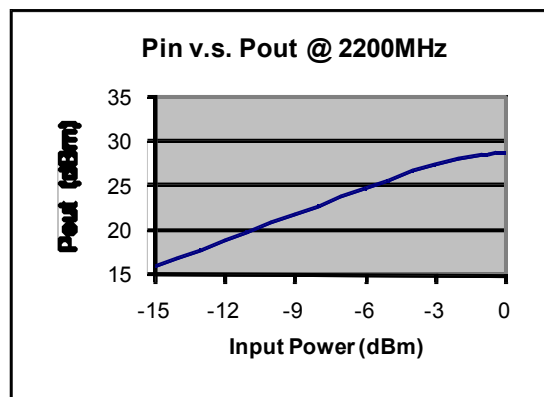
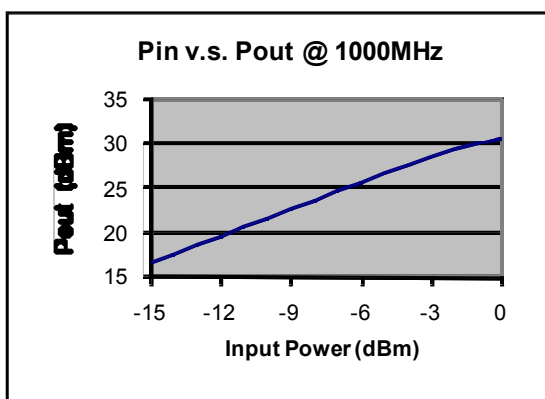
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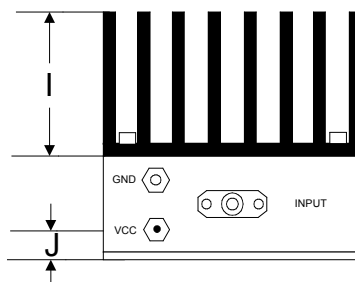
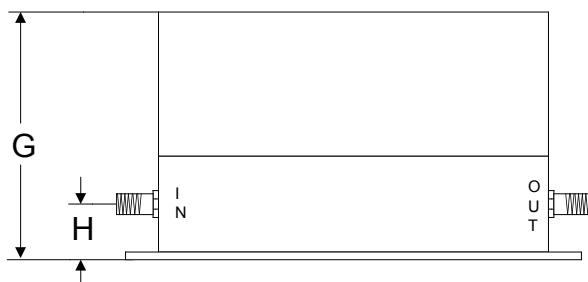
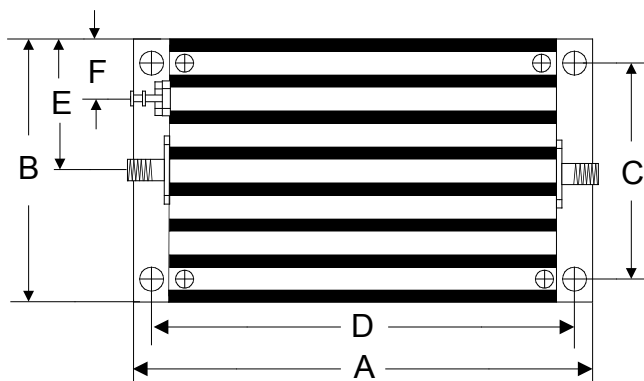
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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+12dBm
Supply Voltage	+13V
Operating Temperature	-40 °C to +70 °C
Storage Temperature	-55 °C to +100 °C

Outline



	A	B	C	D	E	F	G	H	I	J
Inch	3.750	2.000	1.750	3.400	1.000	0.400	1.813	0.375	1.000	0.238
mm	92.25	50.80	44.45	86.36	25.40	10.16	46.05	9.53	25.40	6.03