

MPA Series

1-1000MHz 1W Power RF Amplifier

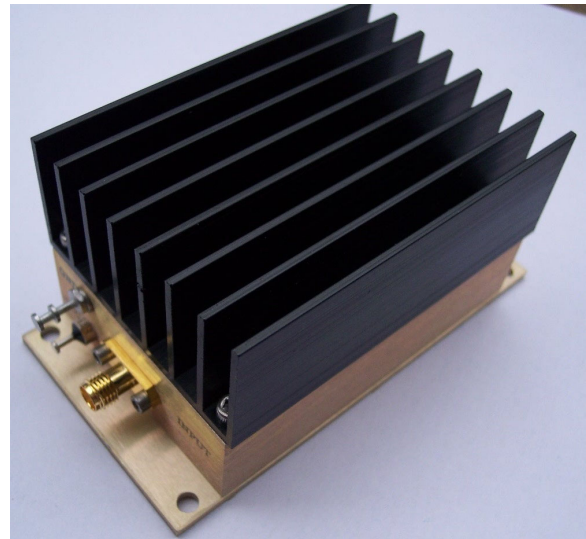
Features

- Frequency Range: 1-1000MHz
- Gain: 40dB
- P_{1dB} : +30dBm
- IP3: +40dBm
- Noise Figure: 3.3dB
- DC Power: 12V
- SMA Connector

Performance measured @ 500MHz

Description

HD25116 is a 40dB gain, +30dBm (1 Watt) output Medium Power RF Amplifier, operating frequency range from 1 - 1000MHz with single 12V DC power supply.



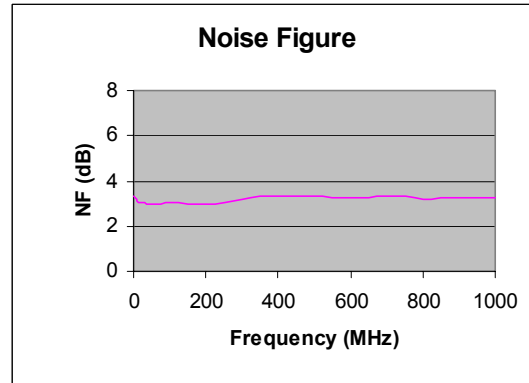
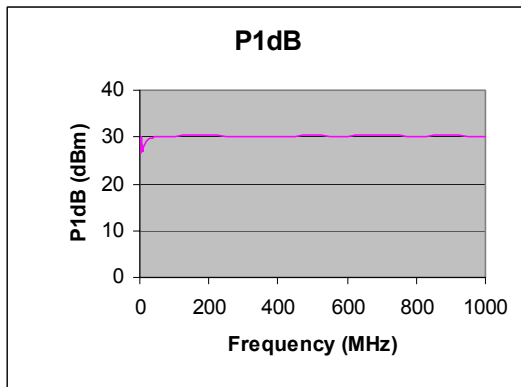
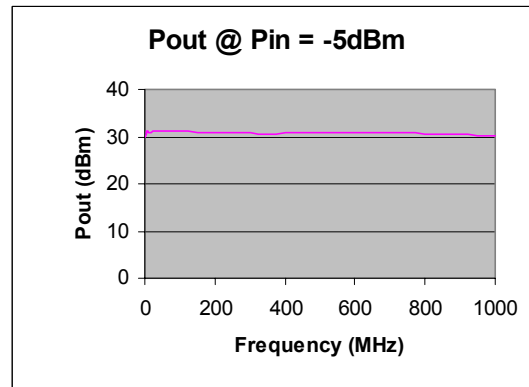
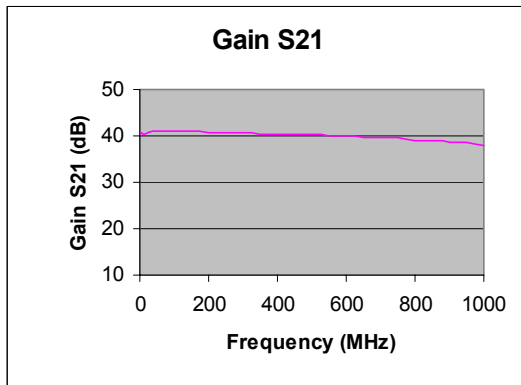
Electrical Specifications @ +25 °C, $Z_S = Z_L = 50$ Ohms

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	1		1000
Gain S_{21} f = 1MHz	dB		40	
f = 10MHz	dB		40	
f = 500MHz	dB		40	
f = 800MHz	dB		39	
f = 1000MHz	dB		38	
P_{1dB}	dBm		+30	
IP3	dBm		+40	
Reverse Isolation S_{12}	dB		-23	
Noise Figure	dB		3.3	
VSWR Input VSWR S_{11}			1:1.3	
Output VSWR S_{22}			1:1.2	
DC Power Supply	V	11	12	13
Supply Current	mA		360	

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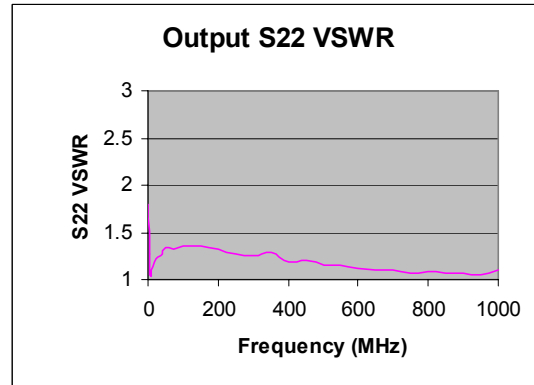
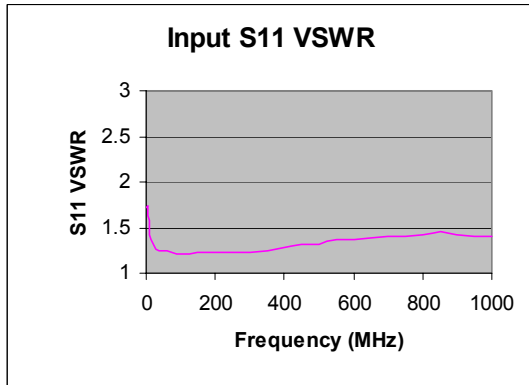
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Typical Performance @ +25 °C



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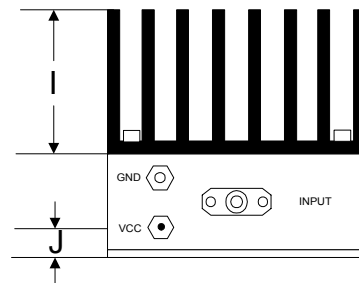
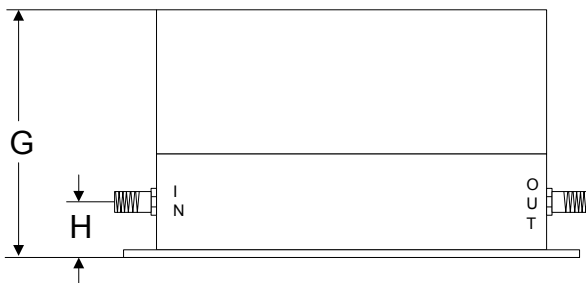
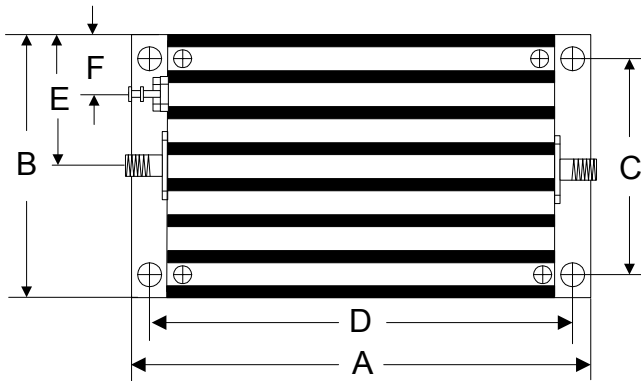
Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+17dBm
Supply Voltage	+13V
Operating Temperature	-40 °C to +70 °C
Storage Temperature	-55 °C to +100 °C

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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