

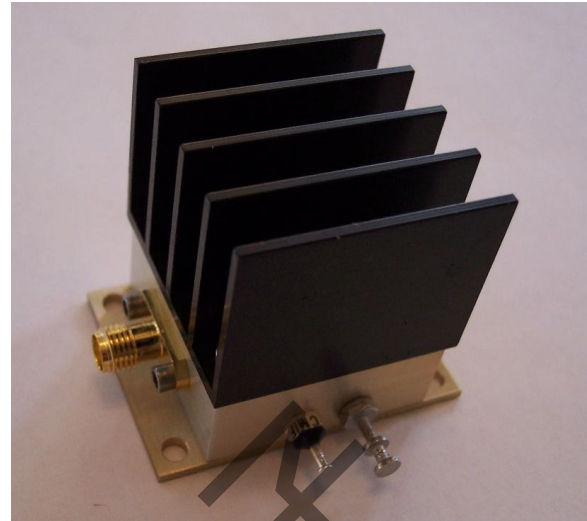
MGA Series

50 – 1500MHz RF Amplifier

Features

- Frequency Range: 50 - 1500MHz
- Gain: 40dB
- P_{1dB} : +24dBm
- IP3: +37dBm
- Noise Figure: 3.5dB
- DC Power: 12V/200mA
- Internal Voltage Regulated
- Reverse DC Protection
- SMA Connector

Picture



Description

MGA-1-40 is a 250mW output RF Power Amplifier operates with frequency range from 50MHz to 1500MHz.

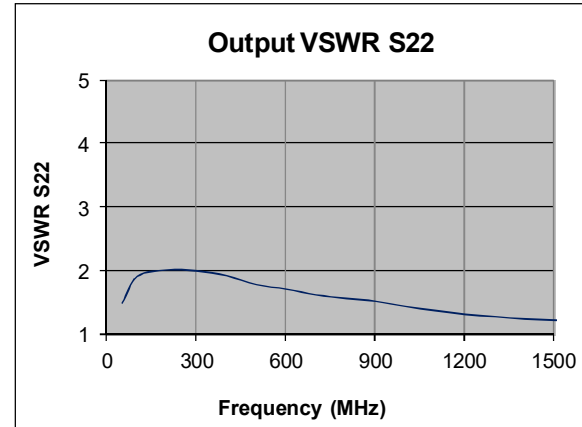
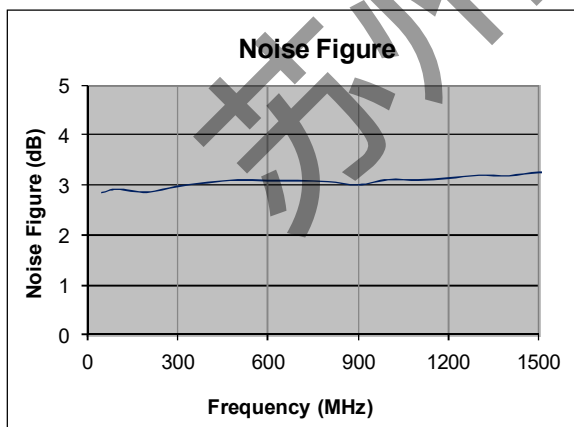
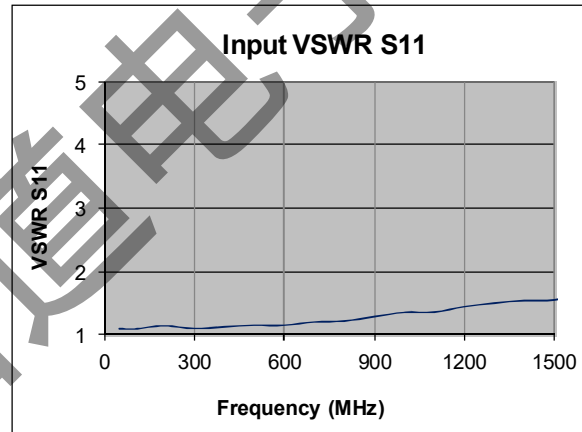
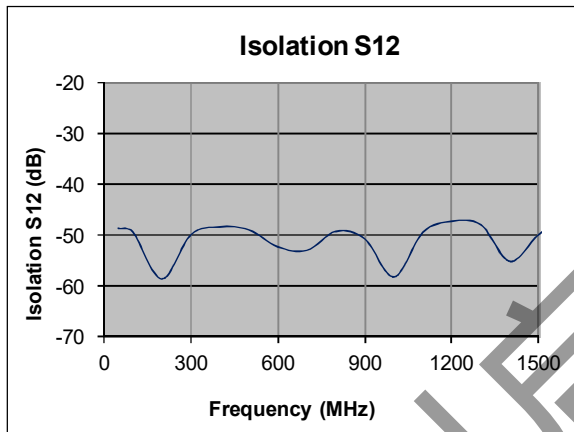
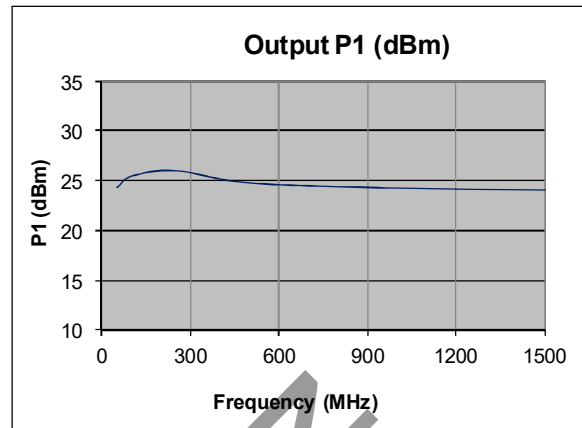
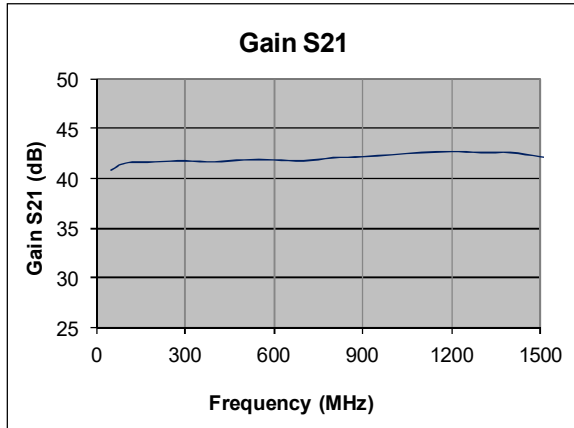
Electrical Specifications @ +25 °C, $Z_{IN} = Z_{OUT} = 50 \Omega$, $V_{SUPPLY} = +12V$

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	50		1500
Gain S21				
f = 50MHz	dB		40.5	
f = 100MHz	dB		41.5	
f = 250MHz	dB		41.5	
f = 500MHz	dB		41.5	
f = 1000MHz	dB		42.0	
f = 1500MHz	dB		42.0	
Gain Flatness	dB		±1.0	
P_{1dB}	dBm		+24	
IP3	dBm		+37	
Noise Figure	dB		3.5	
Reverse Isolation S12	dB		-47	
VSWR				
Input VSWR S11			1.2:1	
Output VSWR S22			1.6:1	
DC Power Supply	V		12	15
Supply Current	mA		200	

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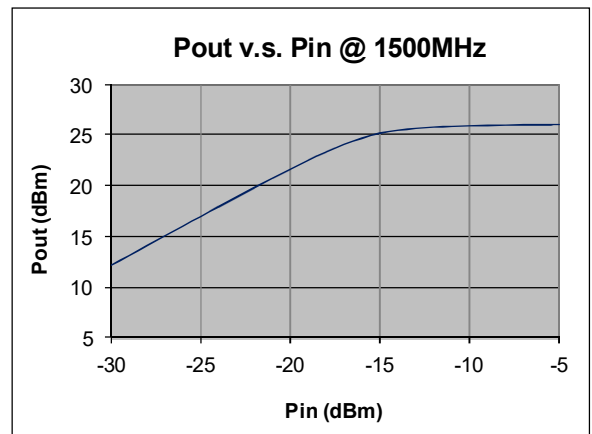
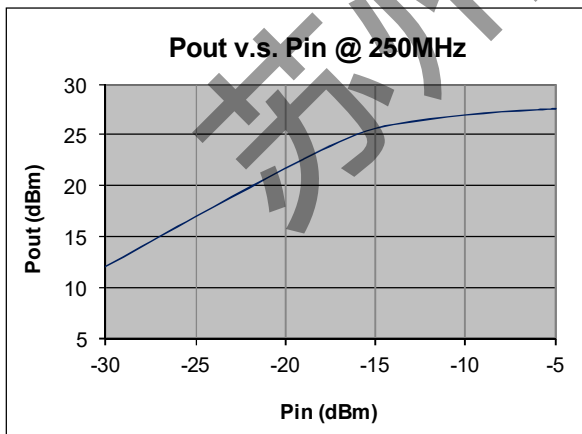
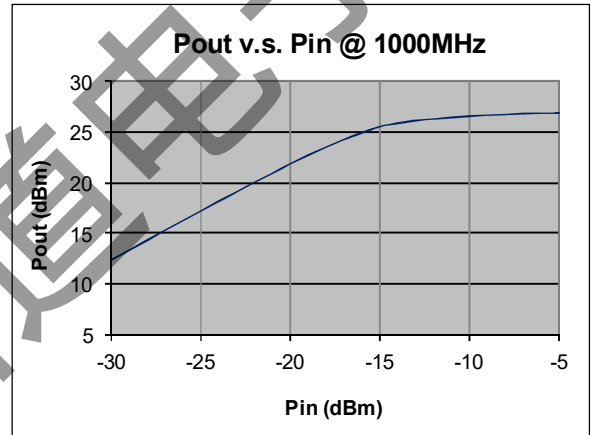
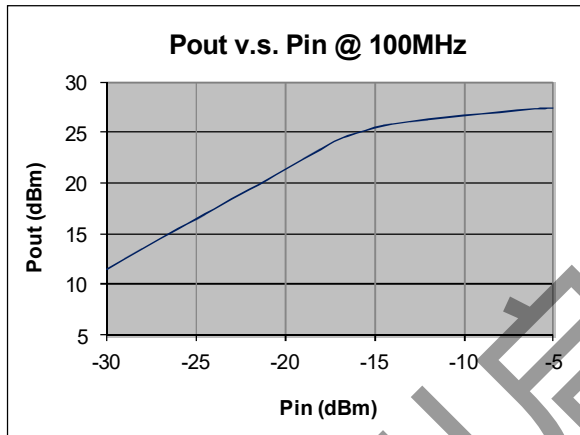
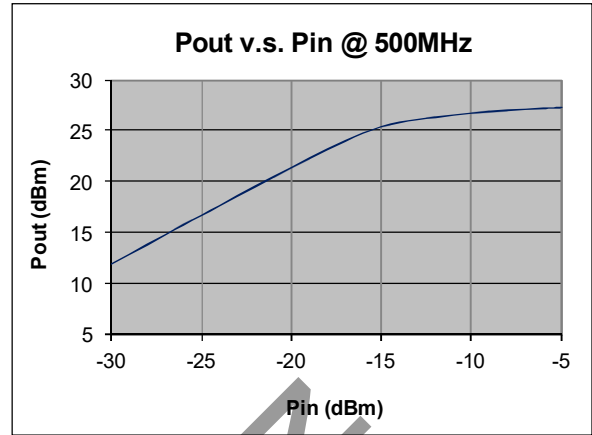
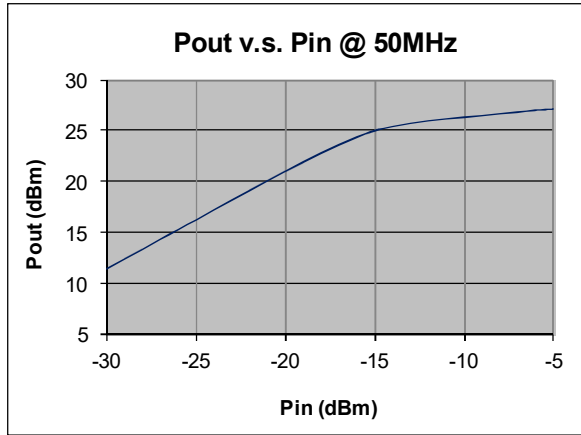
Typical Performance @ +25 °C



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Typical Performance @ +25 °C



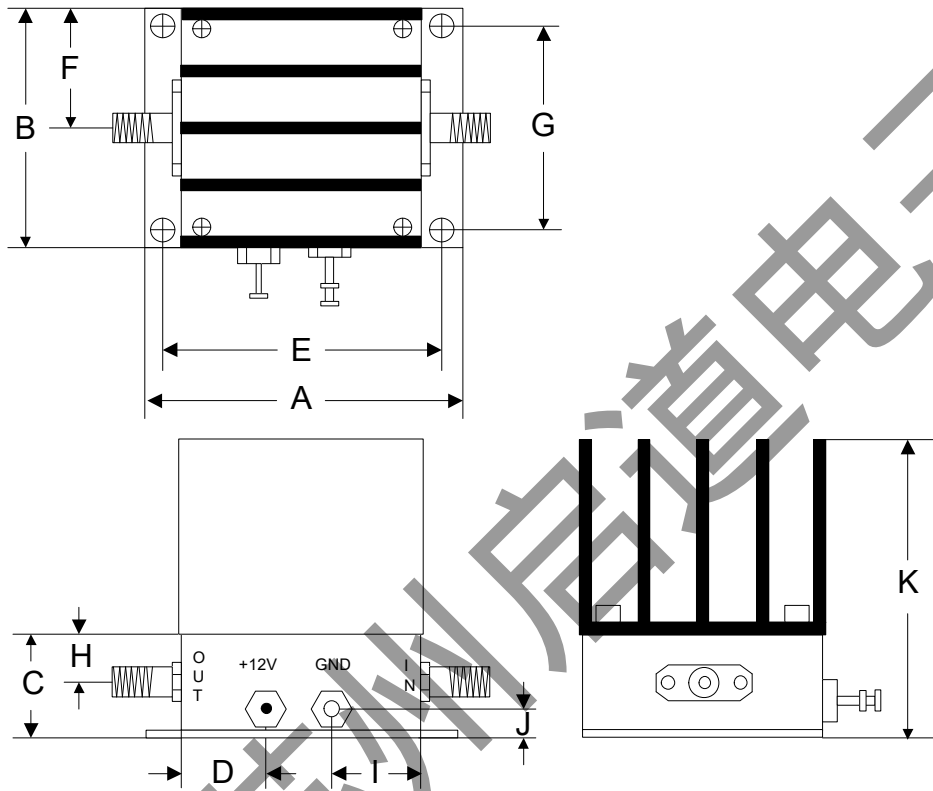
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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+13dBm
Supply Voltage	+25V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +100 °C

Outline



	A	B	C	D	E	F	G	H	I	J	K
Inch	1.250	1.250	0.563	0.450	1.000	0.625	1.000	0.250	0.500	0.187	1.563
mm	31.75	31.75	14.29	11.43	25.40	15.88	25.40	6.35	12.70	4.76	39.70