

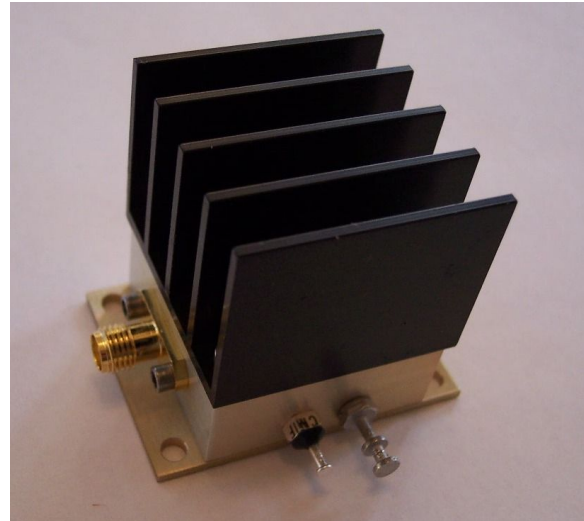
MGA Series

10 – 1000MHz RF Amplifier

Features

- Frequency Range: 10 - 1000MHz
- Gain: 27dB
- P_{1dB}: +26dBm
- Noise Figure: 5.8dB
- DC Power: 9 to 15V
- Internal Voltage Regulated
- Reverse DC Protection
- SMA Connector

Picture



Description

MGA-500 is a 27dB gain RF Power Amplifier operates with frequency range from 10MHz to 1000MHz.

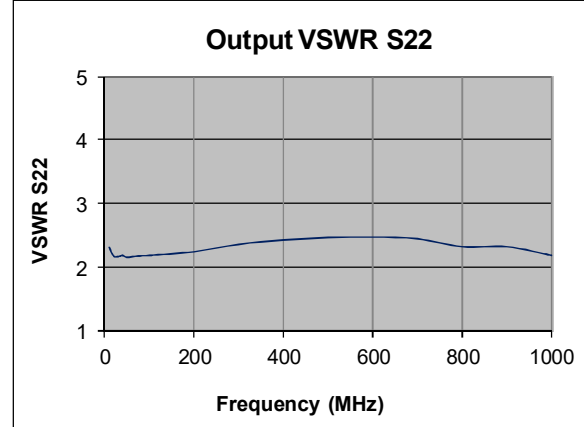
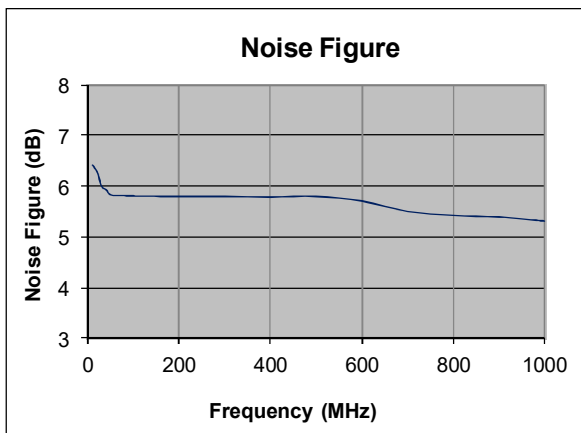
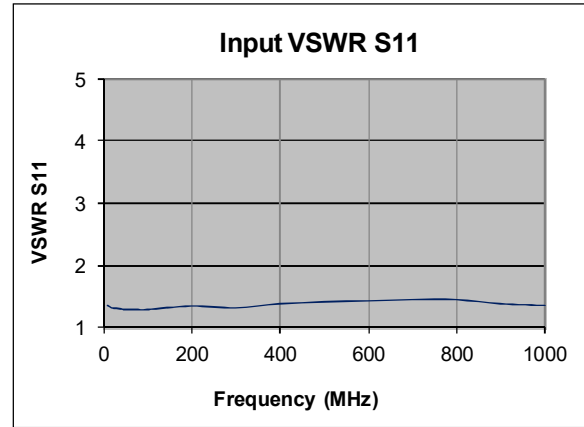
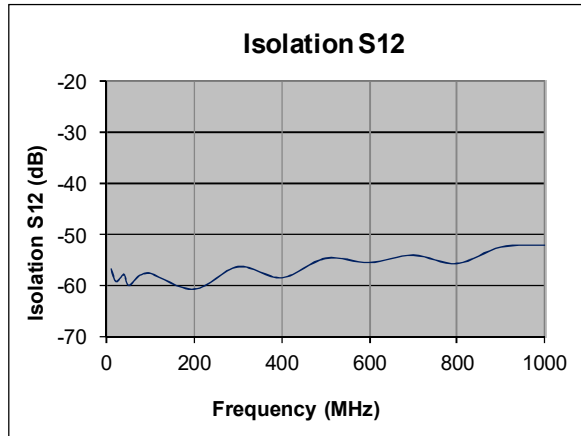
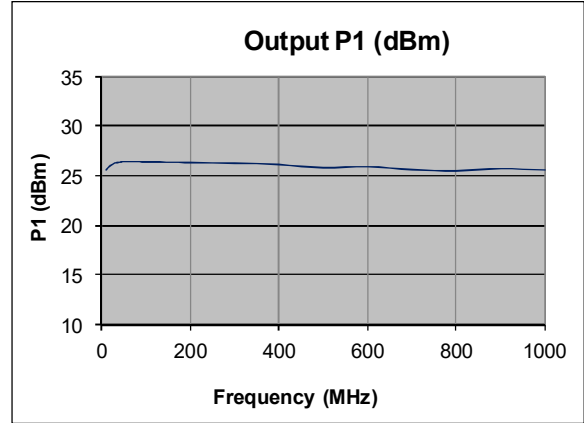
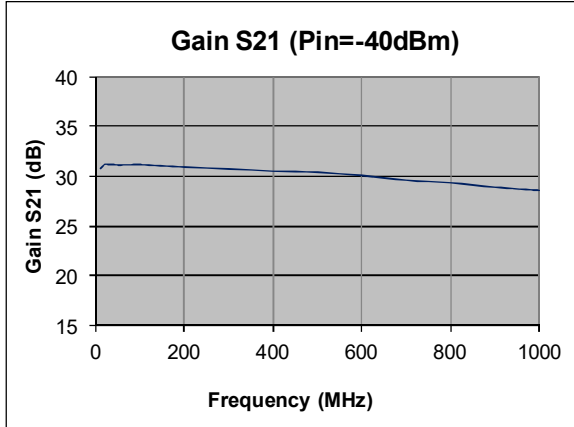
Electrical Specifications @ +25 °C, Z_{IN} = Z_{OUT} = 50 Ω, V_{SUPPLY}= +12V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	10		1000
Gain S ₂₁				
f = 10MHz	dB		30.5	
f = 50MHz	dB		31.0	
f = 200MHz	dB		30.5	
f = 500MHz	dB	27.0	30.0	
f = 800MHz	dB		29.0	
f = 1000MHz	dB		28.5	
Gain Flatness	dB		±1.2	±1.5
P _{1dB}	dBm		+26	
P _{SAT}	dBm		+27.5	
Noise Figure	dB		5.8	6.5
Reverse Isolation S ₁₂	dB		-55	
VSWR				
Input VSWR S ₁₁			1.5:1	
Output VSWR S ₂₂			2.5:1	
DC Power Supply	V	9	12	15
Supply Current: @ Low RF Input	mA		230	
@ P _{SAT} = +27.5dBm	mA		460	500

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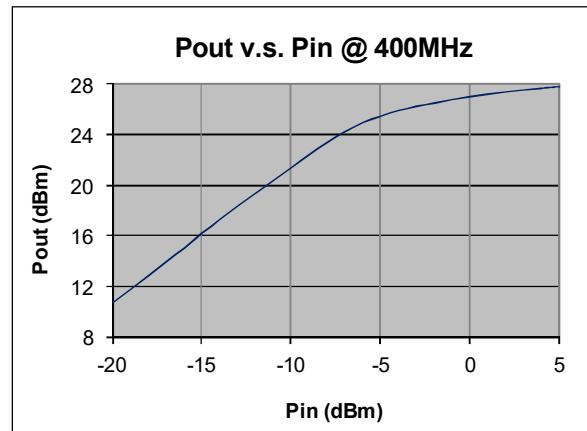
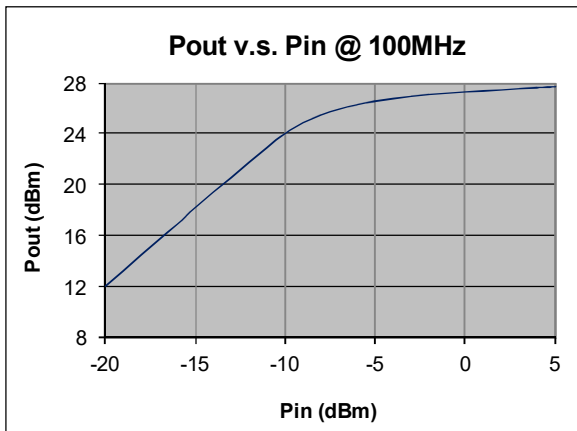
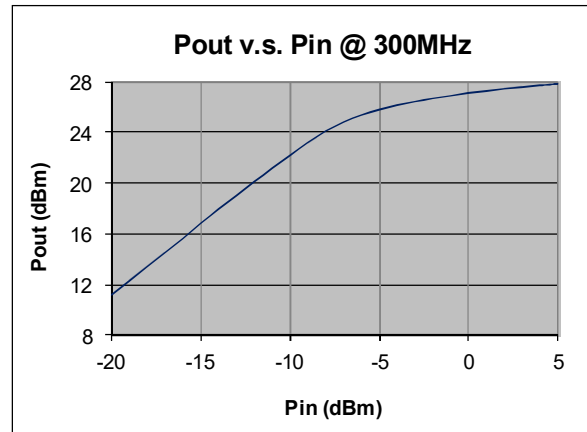
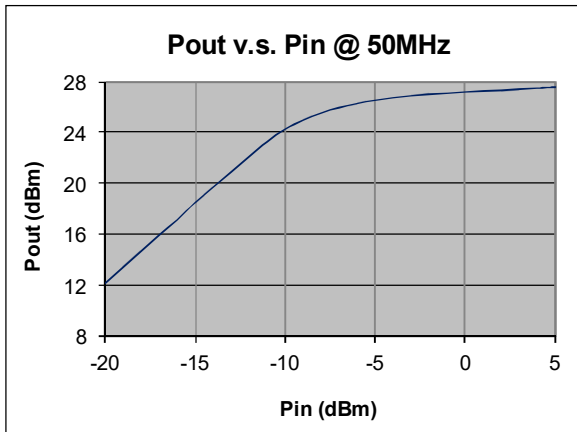
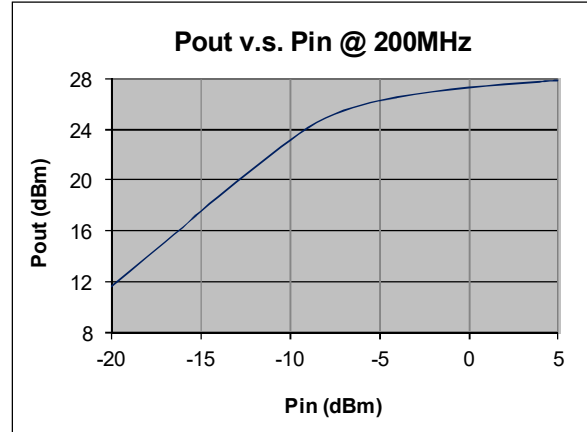
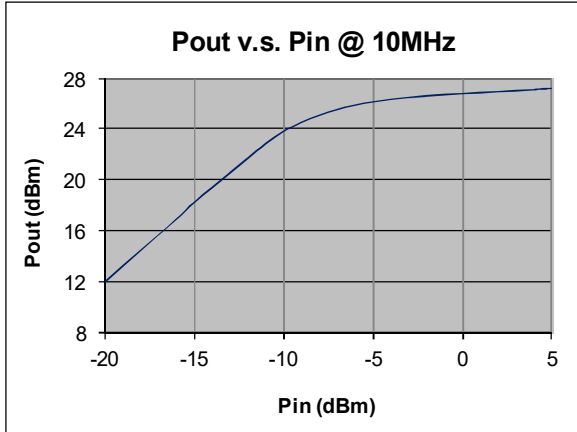
Typical Performance @ +25 °C



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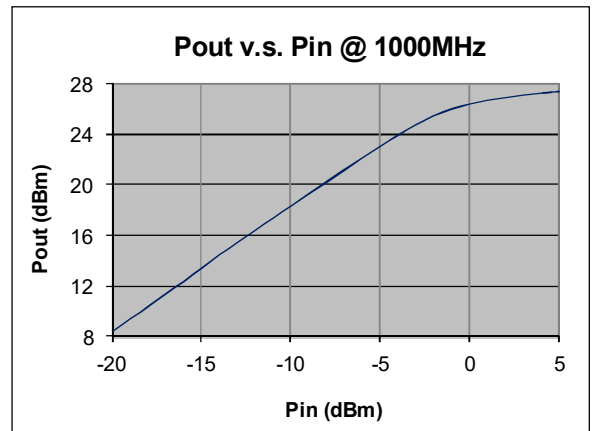
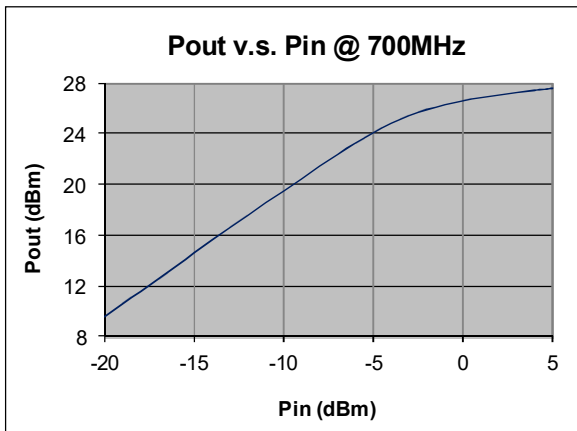
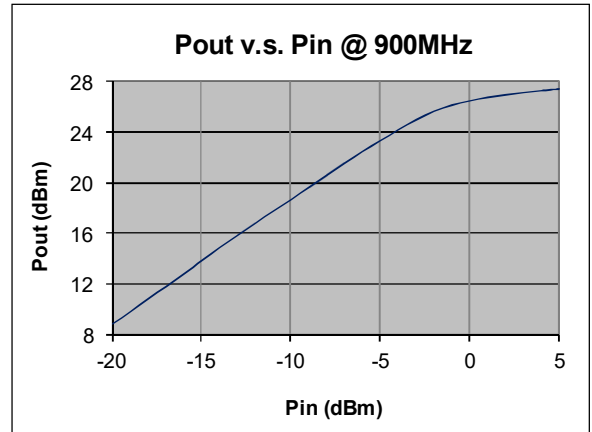
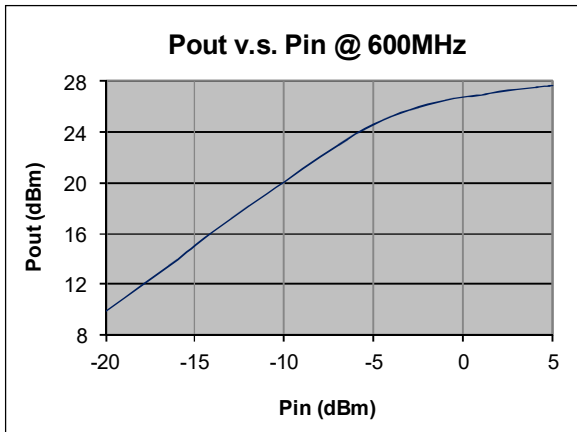
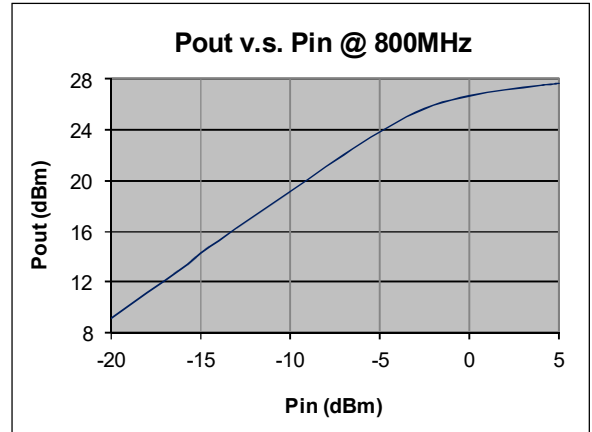
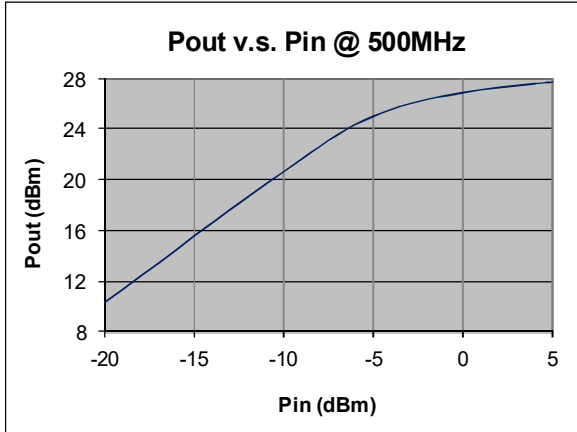
Typical Performance @ +25 °C



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Typical Performance @ +25 °C



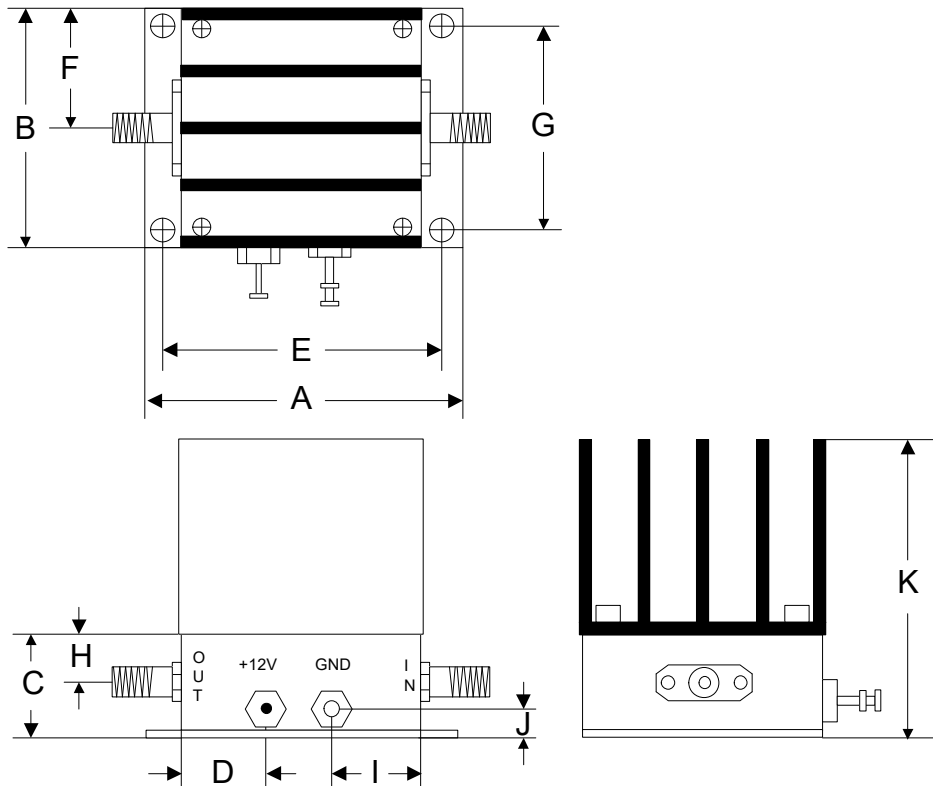
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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+17dBm
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