

MGA Series

1.6GHz –2.4GHz 0.5W RF Amplifier

Features

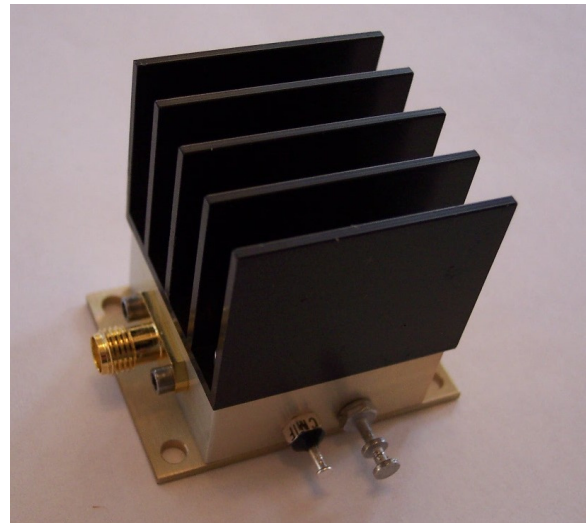
- Frequency Range:1.6 – 2.4GHz
- Gain: 26dB
- P_{1dB}: +27dBm
- IP3: +42dBm
- Noise Figure: 7.2dB
- Input/Output VSWR: 1.5:1/1.7:1
- DC Power: 5V
- SMA Connector

Performance Tested @ 2.0GHz

Description

MGA-2000 is +27dBm (0.5W) output RF Amplifier operates with frequency range from 1.6GHz to 2.4GHz.

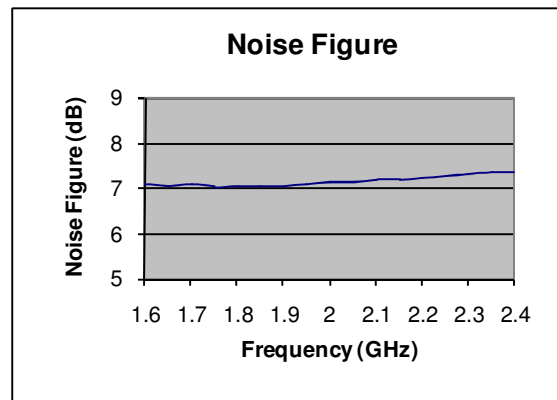
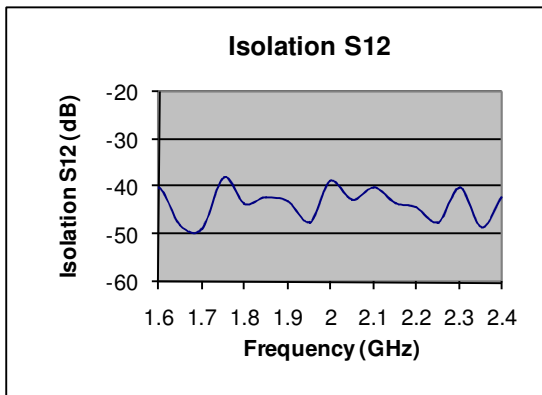
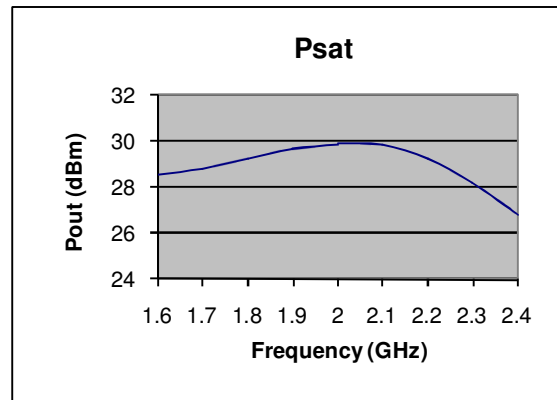
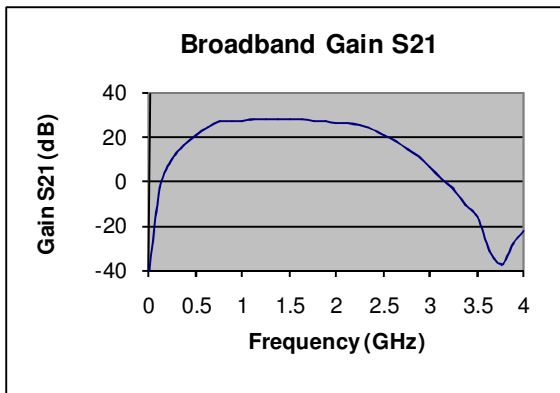
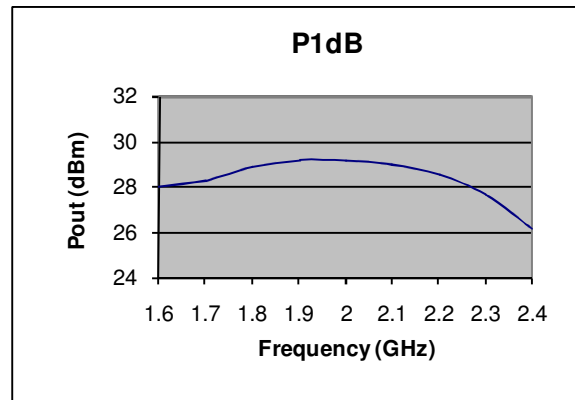
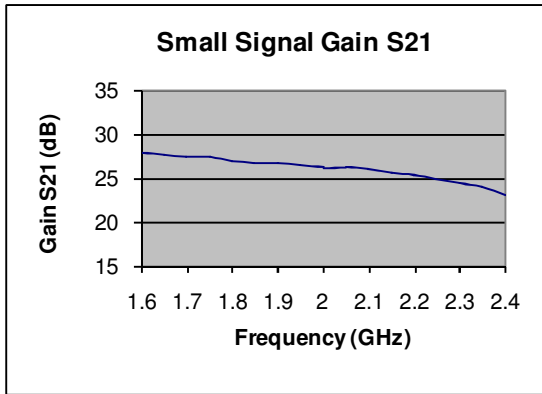
Picture



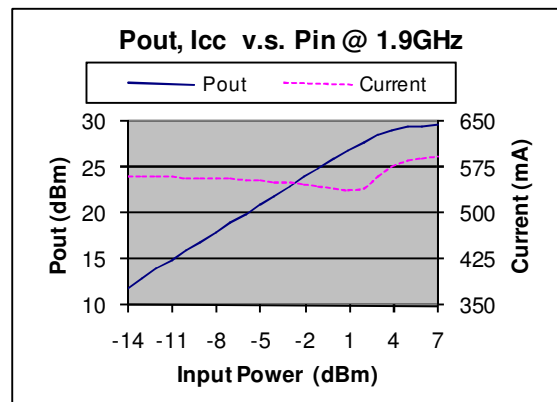
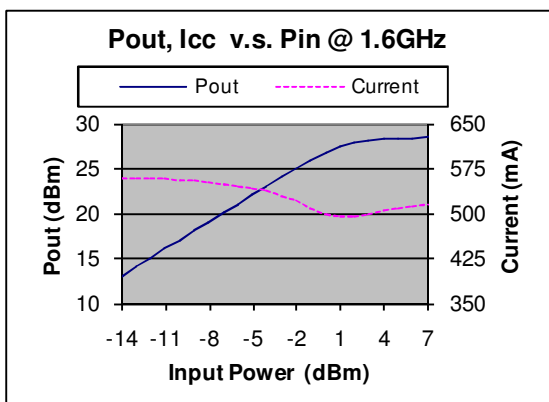
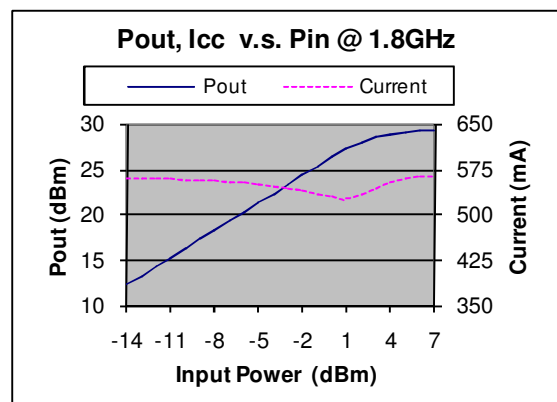
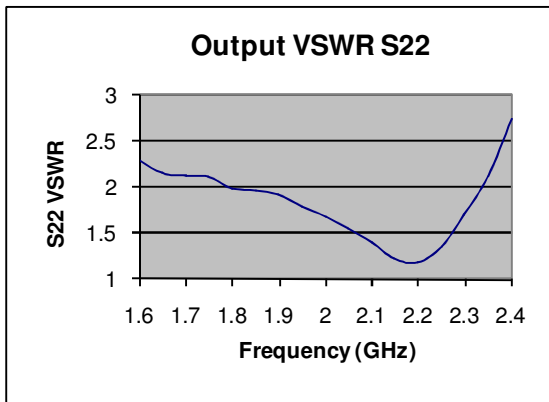
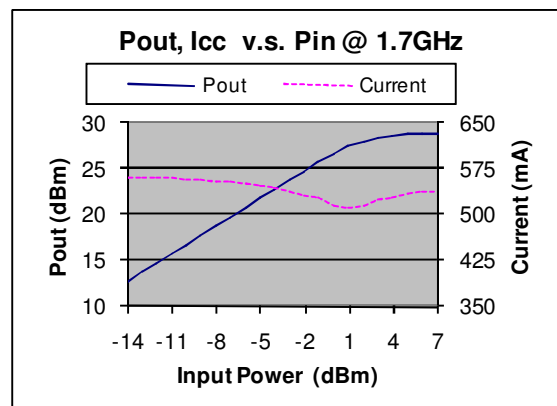
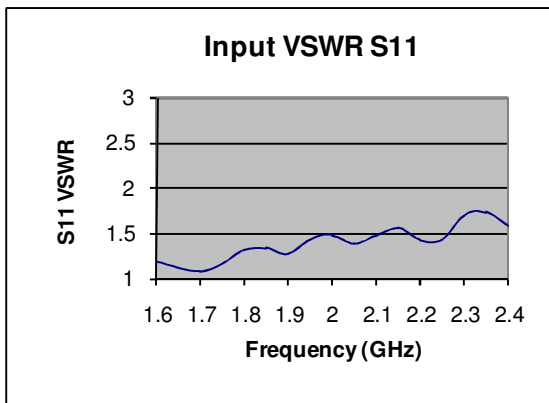
Electrical Specifications @ +25 °C, Z_S = Z_L = 50 Ω, V_{cc}=+5V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	1.6		2.4
Small Signal Gain	f = 1.6GHz		27.8	
	f = 2.0GHz		26.0	
	f = 2.4GHz		23.0	
P _{1dB}	f = 1.6GHz		+28	
	f = 2.0GHz	+27	+29	
	f = 2.4GHz		+26	
OIP3	dBm		+42	
Noise Figure at 2.0GHz	dB		7.2	
Reverse Isolation	dB		-38	
VSWR f = 2.0GHz	Input		1.5:1	
	Output		1.7:1	
DC Power Supply	V	4.5	5.0	5.5
Supply Current	mA		550	

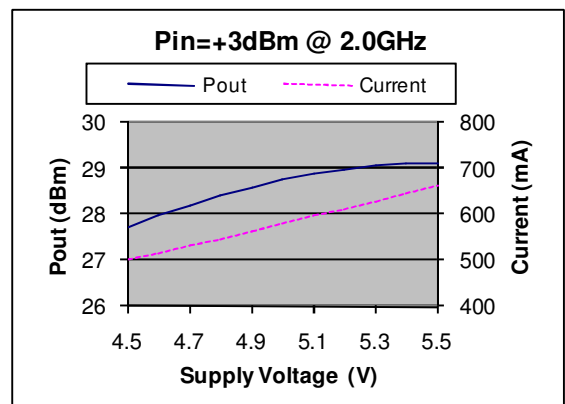
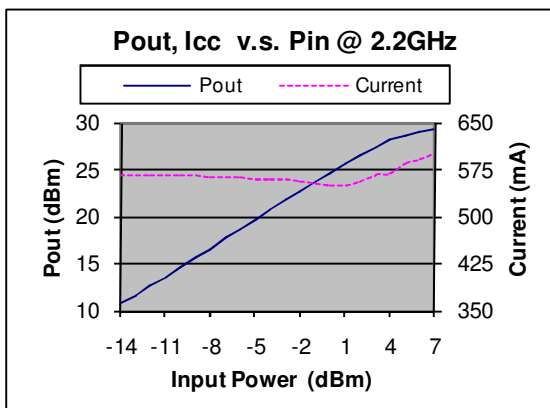
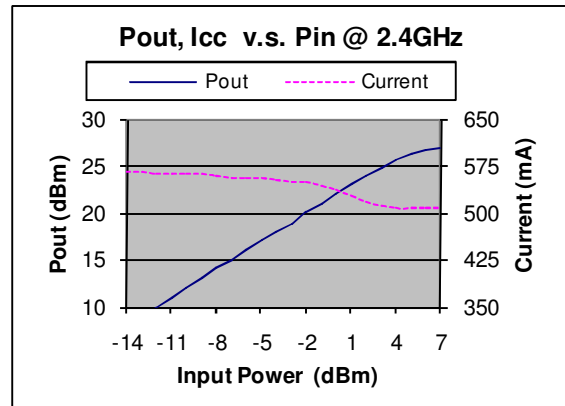
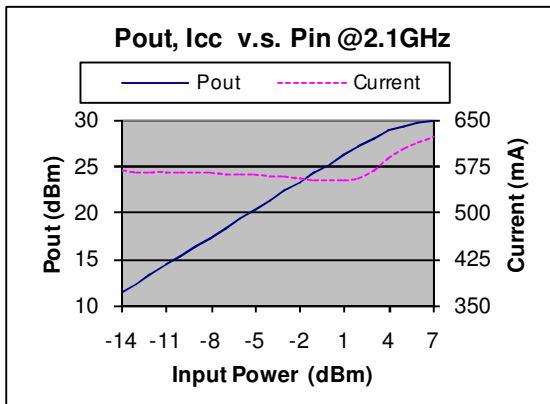
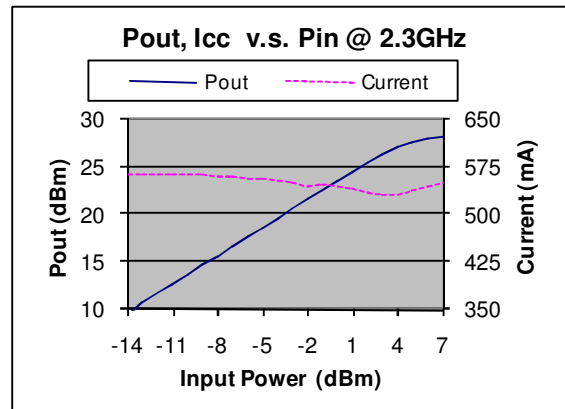
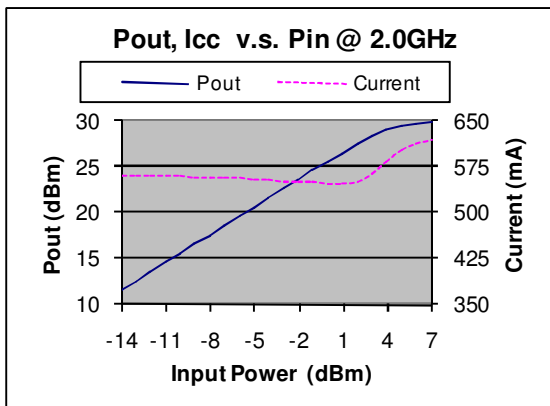
Typical Performance @ +25 °C



Typical Performance @ +25 °C



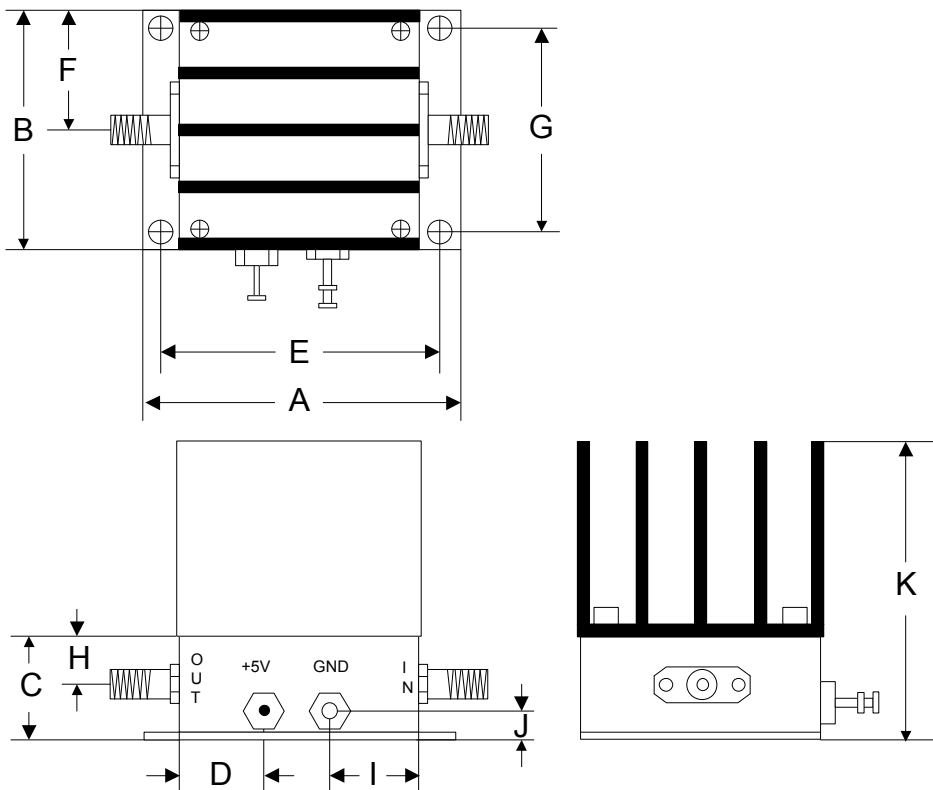
Typical Performance @ +25 °C



Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+12dBm
Supply Voltage	+5.5V
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