

## MGA Series

## 800MHz –1000MHz 800mW RF Amplifier

### Features

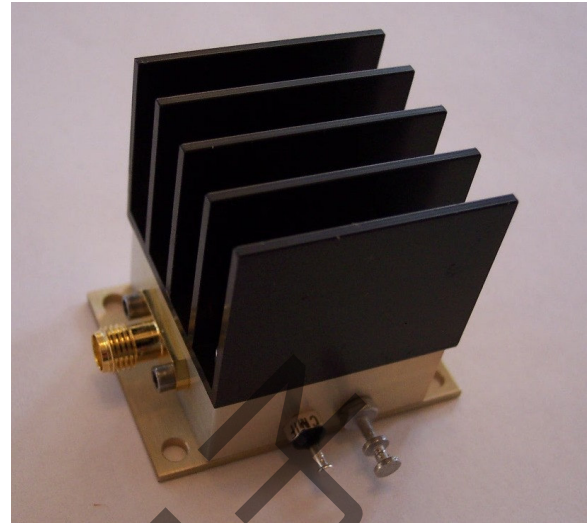
- Frequency Range: 800-1000MHz
- Gain: 15dB
- P<sub>out</sub>: +29dBm
- IP3: +47dBm
- Noise Figure: 8dB
- Input VSWR: 1.2:1
- DC Power: 5V
- SMA Connector

Performance Tested @ 900MHz

### Description

MGA-900 is +29dBm (800mW) output RF Amplifier operates with frequency range from 800MHz to 1000MHz.

### Picture



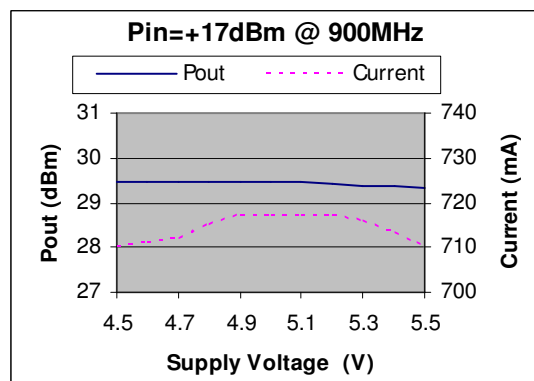
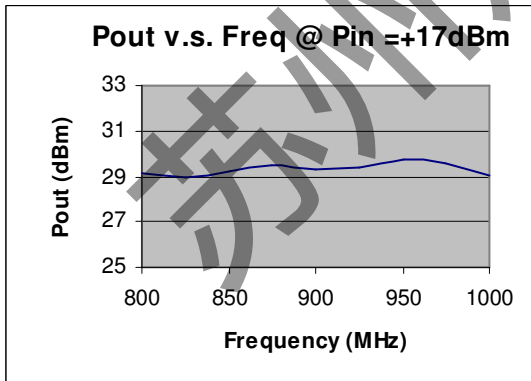
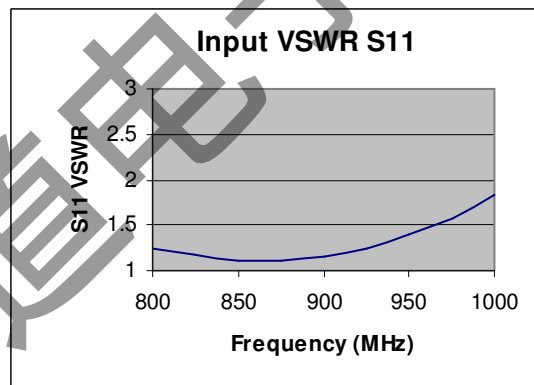
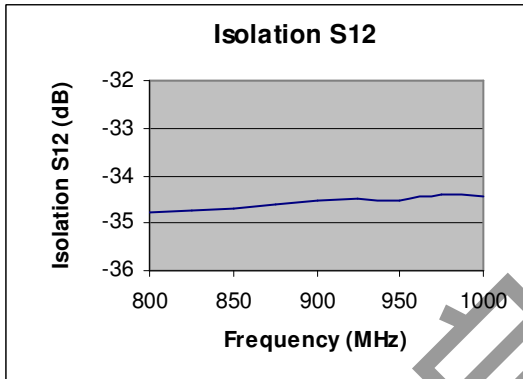
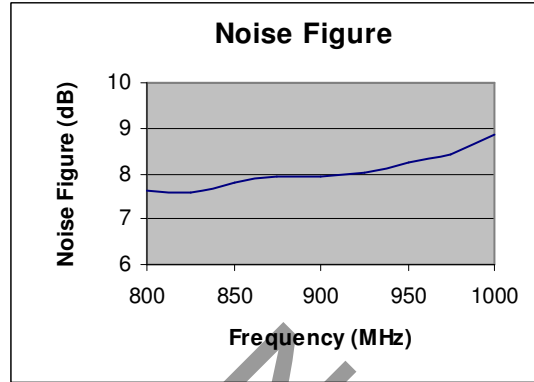
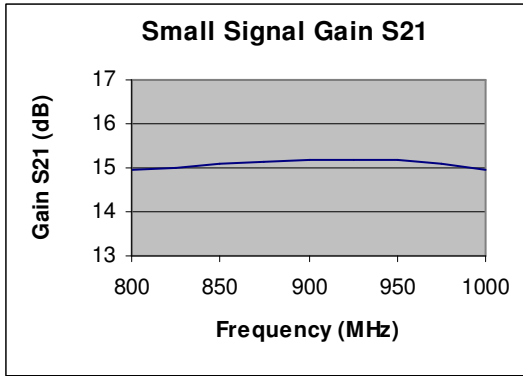
### Electrical Specifications @ +25 °C, Z<sub>S</sub> = Z<sub>L</sub> = 50 Ω, V<sub>cc</sub>=+5V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	800		1000
Small Signal Gain	f = 800MHz	dB	15.0	
	f = 850MHz	dB	15.0	
	f = 900MHz	dB	15.0	
	f = 950MHz	dB	15.0	
	f = 1000MHz	dB	15.0	
Gain Flatness	dB		± 0.2	
P <sub>out</sub> @ P <sub>in</sub> = +17dBm	dBm		+29	
OIP3	dBm		+47	
Noise Figure at 900MHz	dB		8	
Reverse Isolation	dB		-34	
VSWR Input			1.2:1	
DC Power Supply	V	4.5	5.0	5.5
Supply Current Quiescent (no RF)	mA		300	
	@ P <sub>out</sub> = +29dBm	mA	700	

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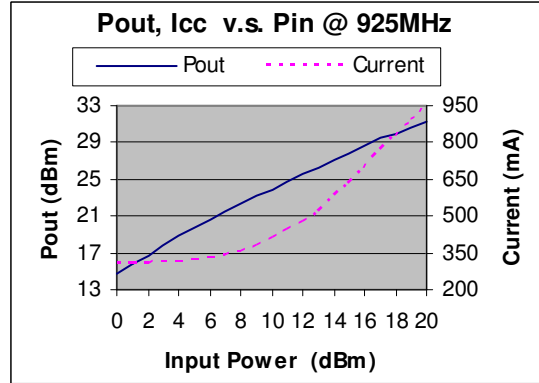
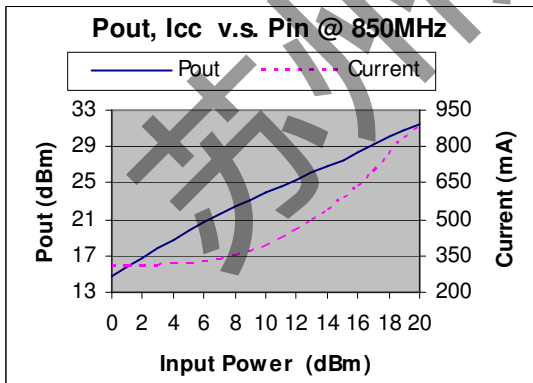
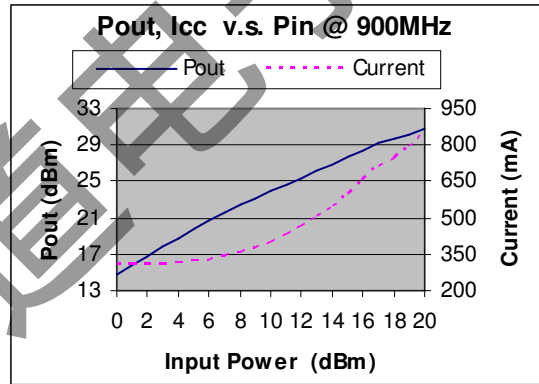
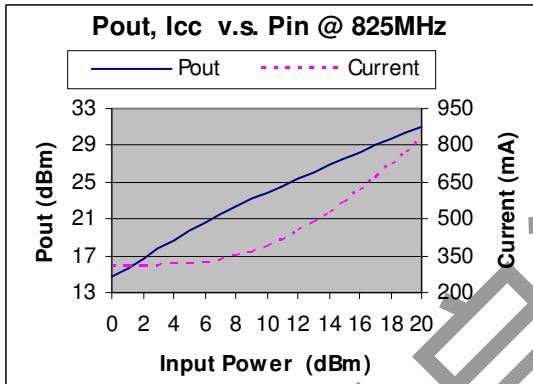
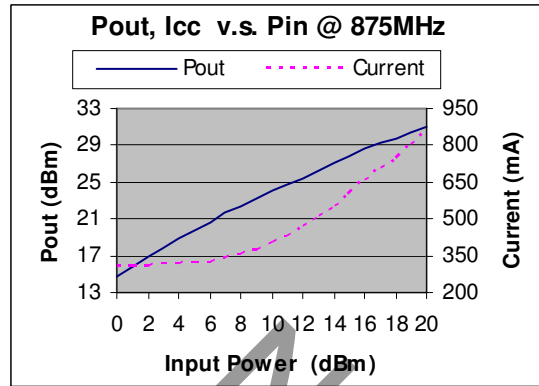
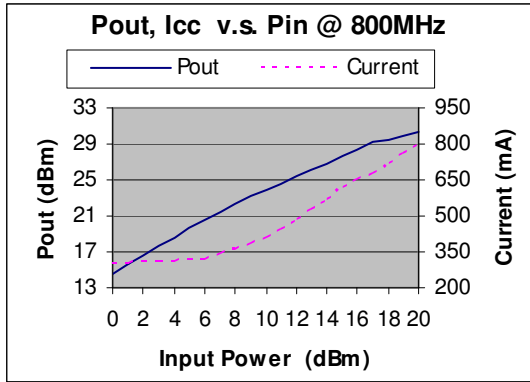
**Typical Performance @ +25 °C**



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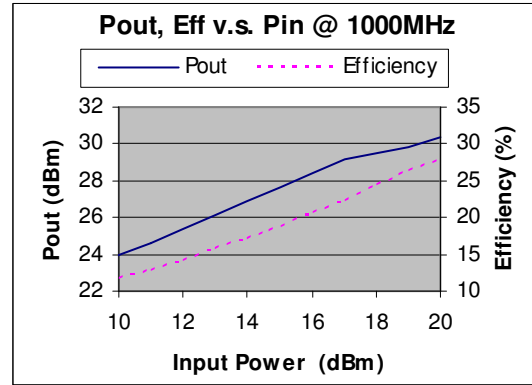
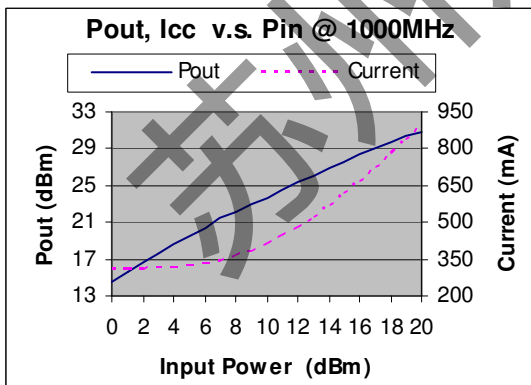
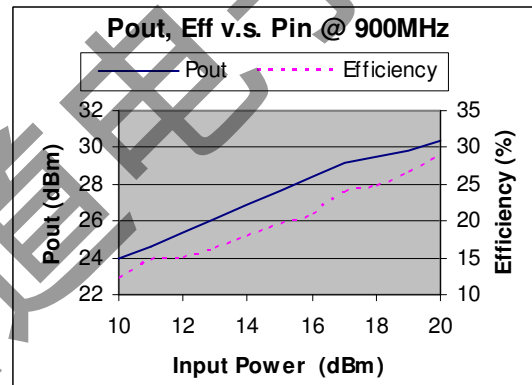
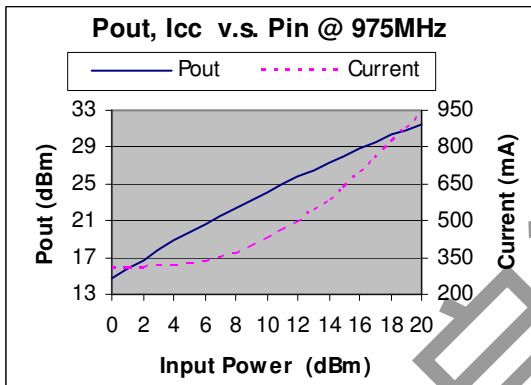
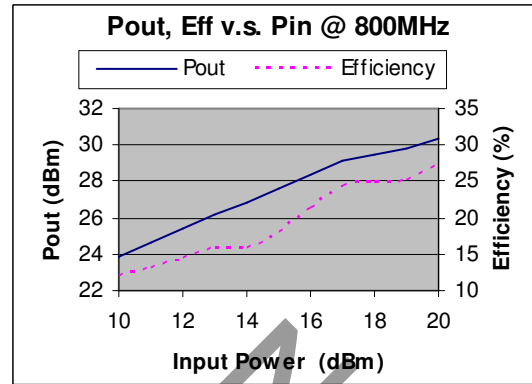
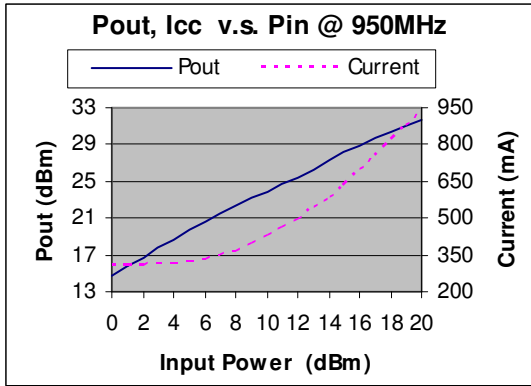
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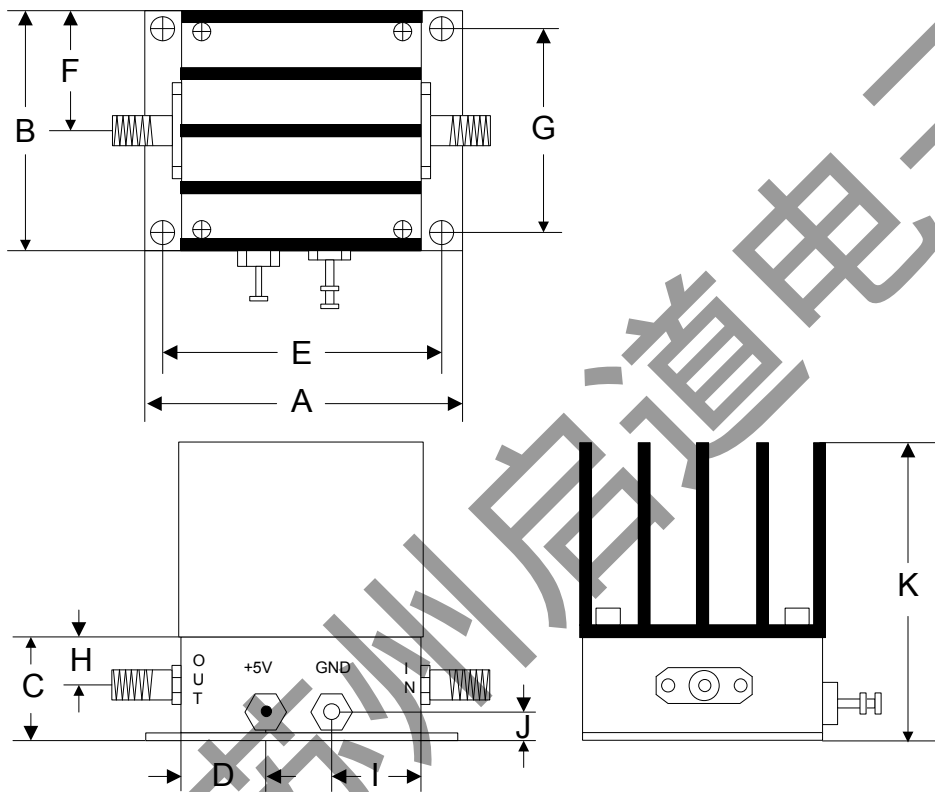
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### Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+24dBm
Supply Voltage	+6V
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