

MGA Series

4.85GHz –5.45GHz 0.5W RF Amplifier

Features

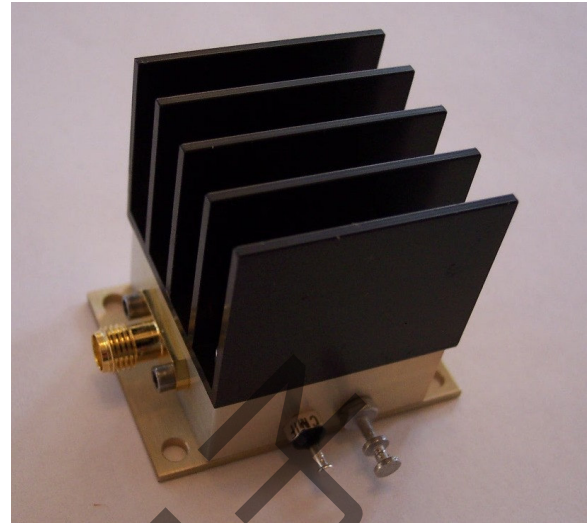
- Frequency Range: 4.85–5.45GHz
- Gain: 20dB
- P_{out} : +27dBm
- IP3: +39dBm
- Noise Figure: 6dB
- Input VSWR: 1.6:1
- DC Power: 5V
- SMA Connector

Performance Tested @ 5.15GHz

Description

MGA-5150 is +27dBm (0.5W) output RF Amplifier operates with frequency range from 4.85GHz to 5.45GHz.

Picture



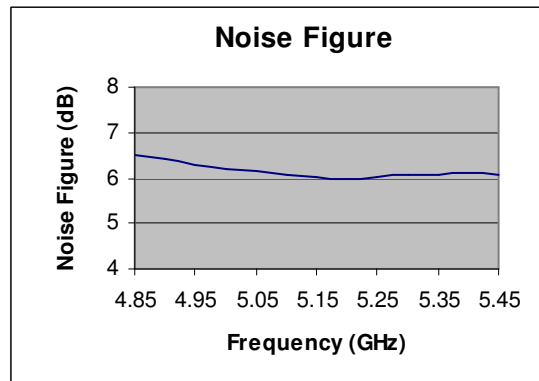
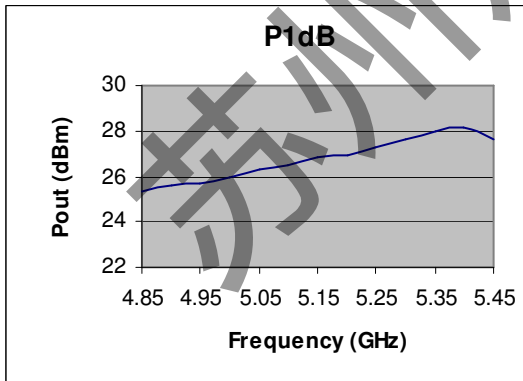
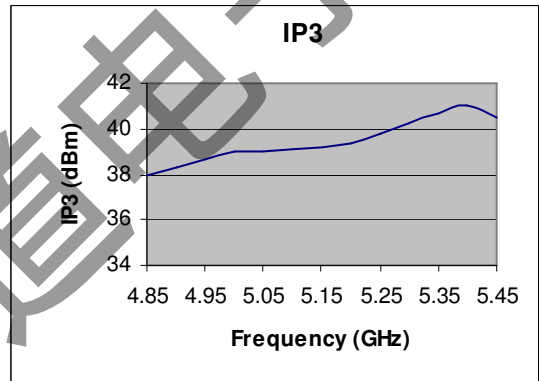
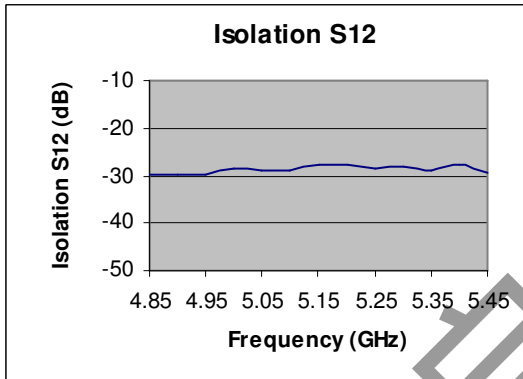
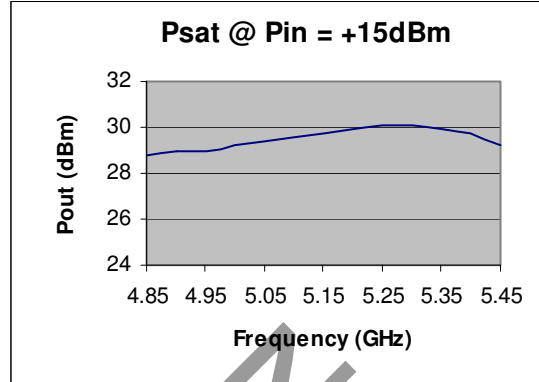
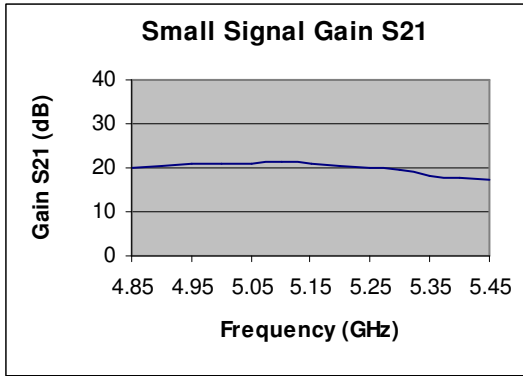
Electrical Specifications @ +25 °C, $Z_S = Z_L = 50 \Omega$, $V_{cc}=+5V$

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	4.85		5.45
Small Signal Gain	f = 4.85GHz	dB	20.0	
	f = 5.15GHz	dB	21.0	
	f = 5.25GHz	dB	19.5	
	f = 5.45GHz	dB	17.3	
P_{1dB}	dBm		+27	
P_{sat} @ $P_{in} = +15dBm$	dBm		+29.5	
OIP3	dBm		+39	
Noise Figure at 5.15GHz	dB		6.0	
Reverse Isolation	dB		-28	
VSWR Input			1.6:1	
DC Power Supply	V	4.5	5.0	5.5
Supply Current Quiescent (no RF)			570	
	@ $P_{sat} = +29.5dBm$		900	

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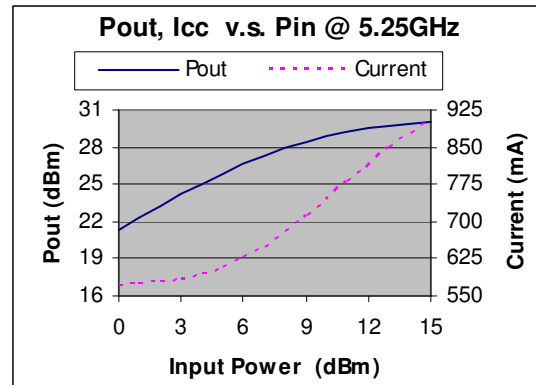
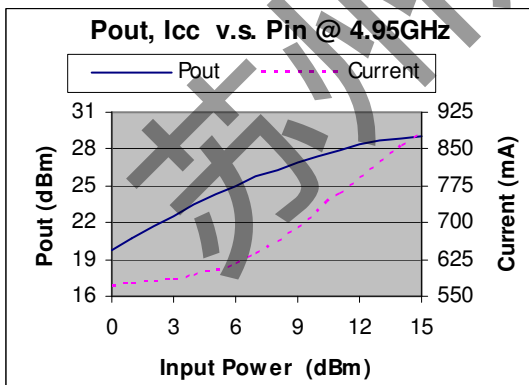
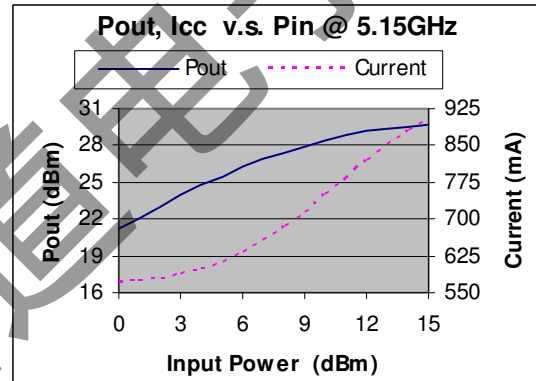
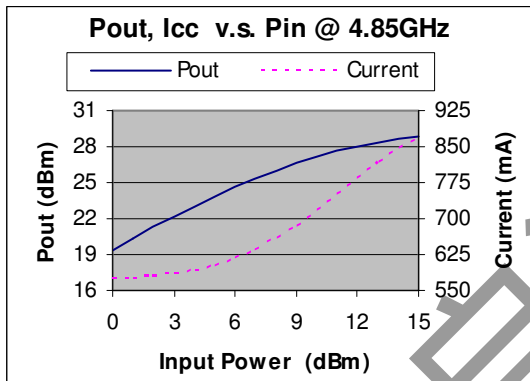
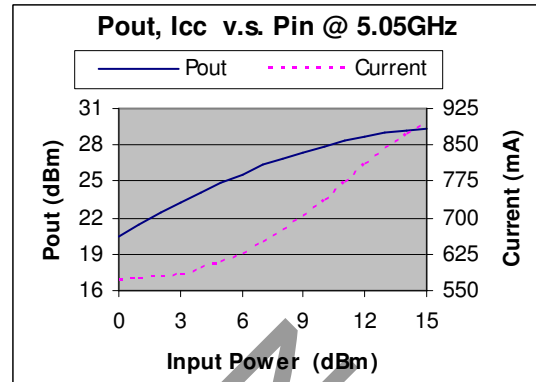
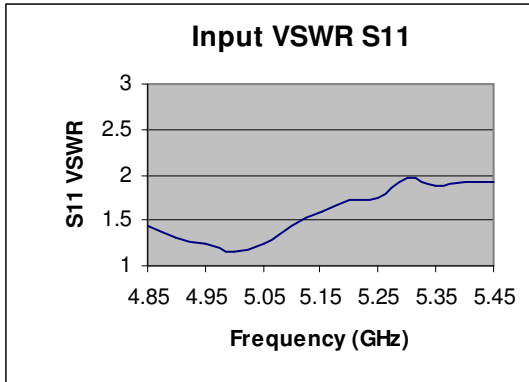
Typical Performance @ +25 °C



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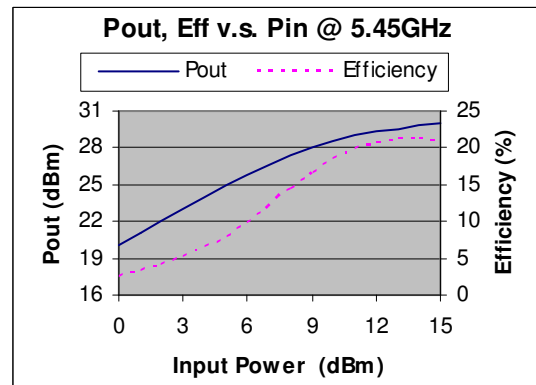
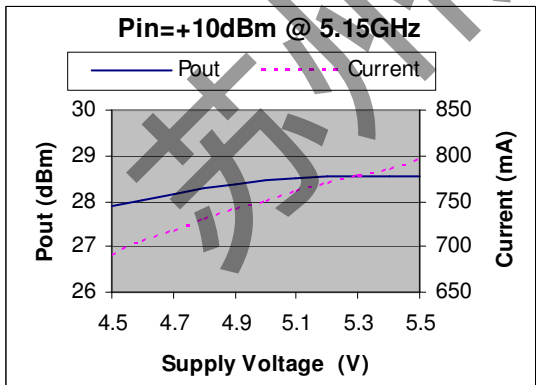
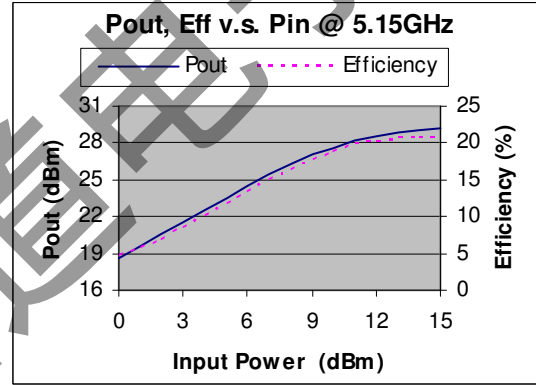
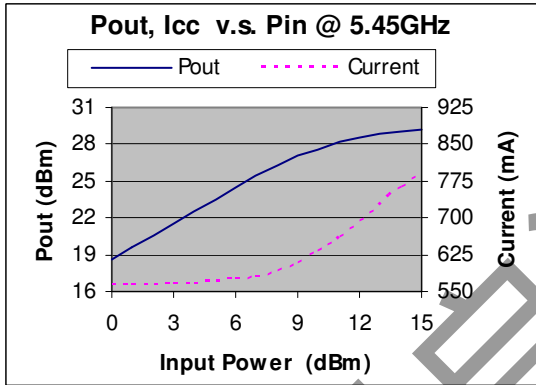
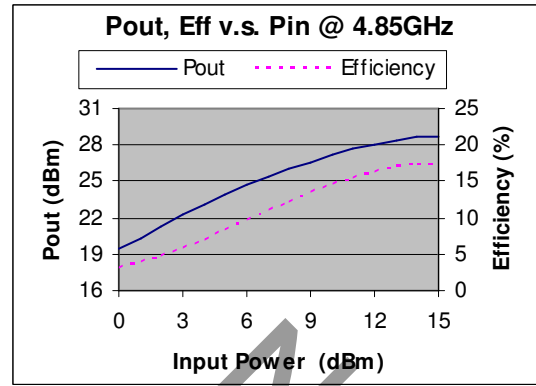
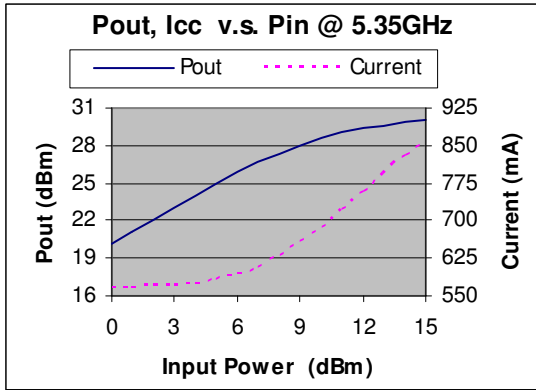
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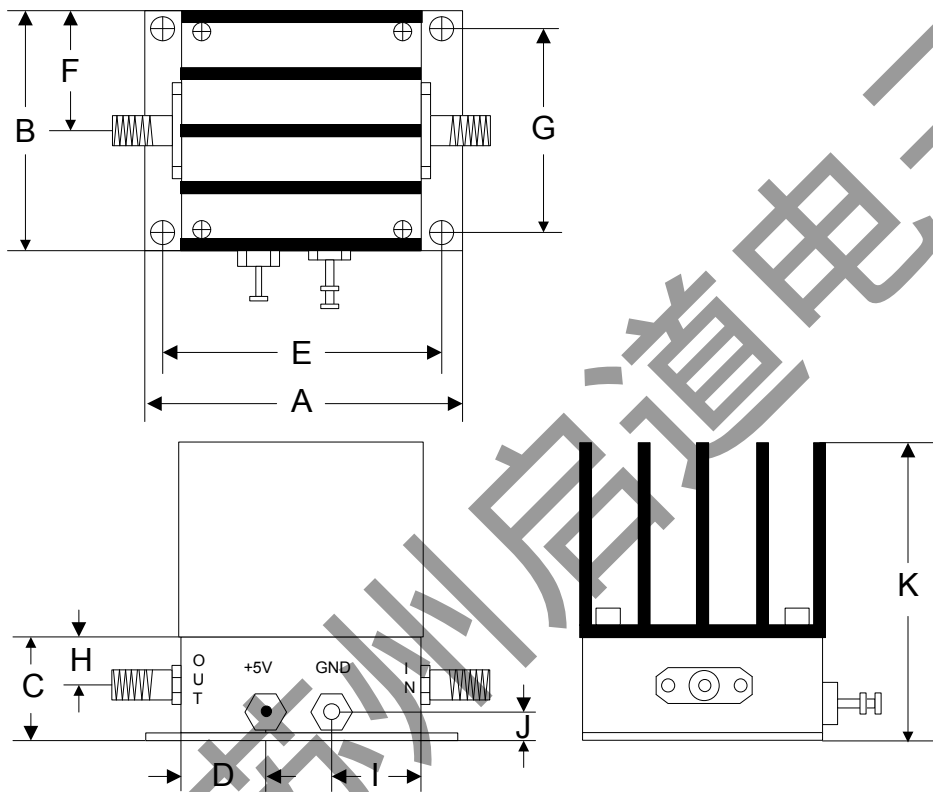
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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+20dBm
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