

MGA Series

50MHz –4.5GHz RF Amplifier

Features

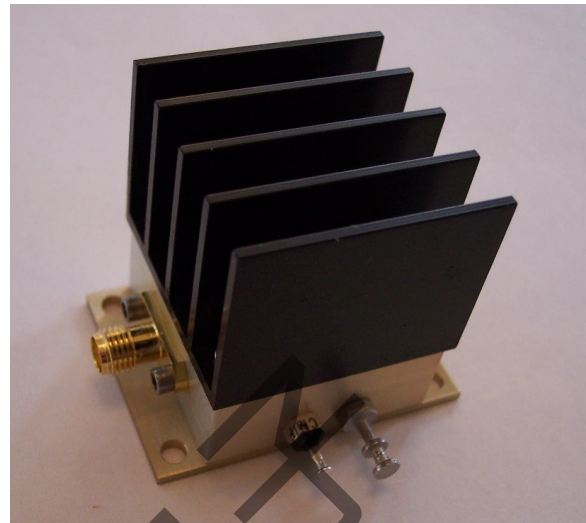
- Frequency Range:0.05–4.5GHz
- Gain: 33dB
- P_{1dB}: +21dBm
- IP3: +35dBm
- Noise Figure: 4.5dB
- Input/Output VSWR: 1.6/1.9
- DC Power: 12V
- SMA Connector

Performance Tested @ 2.25GHz

Description

MGA-4-33 is 33dB Gain RF Amplifier operates with frequency range from 50MHz to 4.5GHz.

Picture



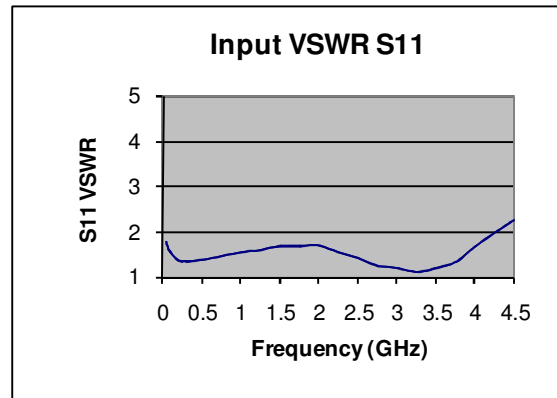
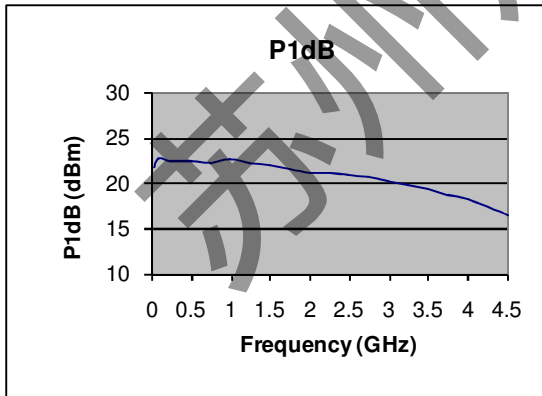
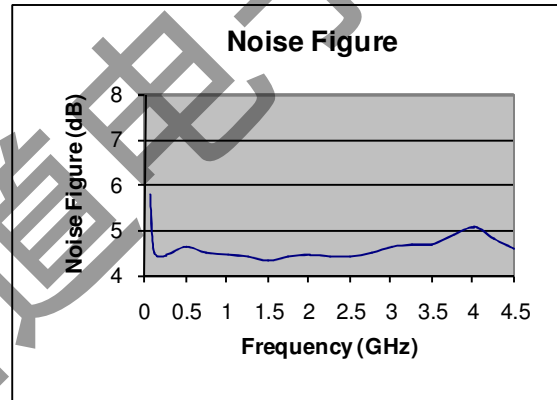
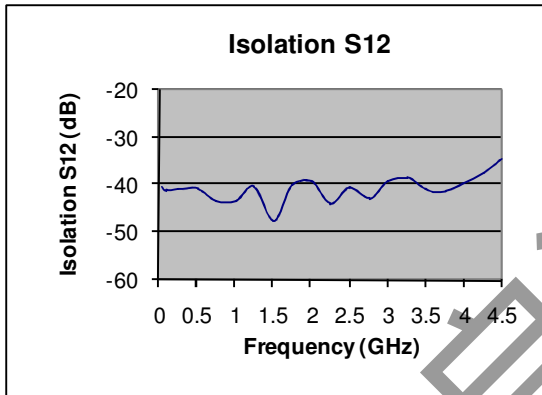
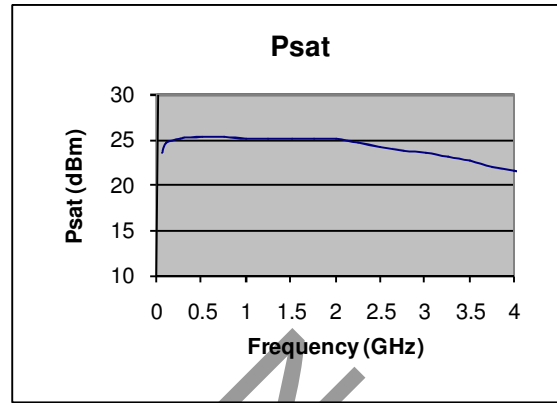
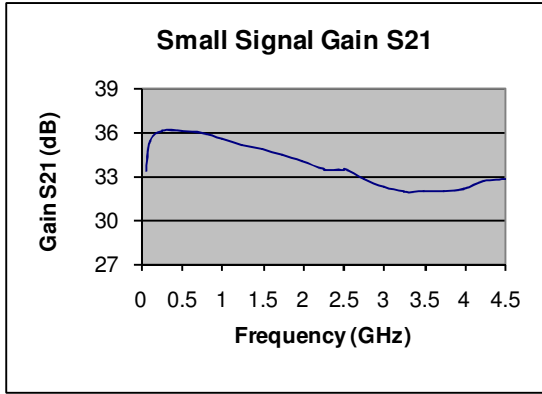
Electrical Specifications @ +25 °C, Z_S = Z_L = 50 Ω, V_{CC}=+12V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	0.05		4.5
Small Signal Gain				
f = 50MHz	dB		33	
f = 100MHz	dB		36	
f = 500MHz	dB		36	
f = 2.25GHz			33	
f = 4.5GHz			33	
Gain Flatness	dB		± 2.0	
P _{1dB} at 2.25GHz	dBm		+21	
OIP3 at 2.25GHz	dBm		+35	
Noise Figure at 2.25GHz	dB		4.5	
Reverse Isolation	dB		-37	
VSWR f = 2.25GHz				
Input			1.6:1	
Output			1.9:1	
DC Power Supply	V	11	12	15
Supply Current Quiescent (no RF)	mA		160	

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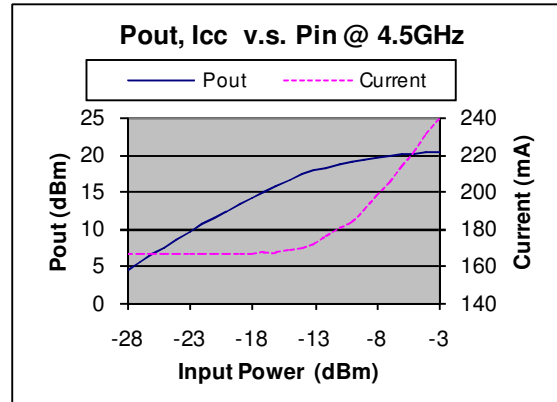
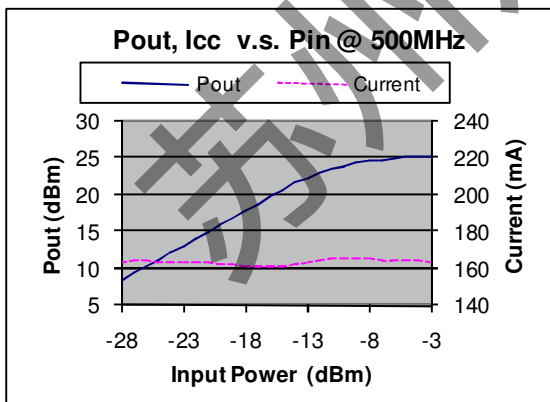
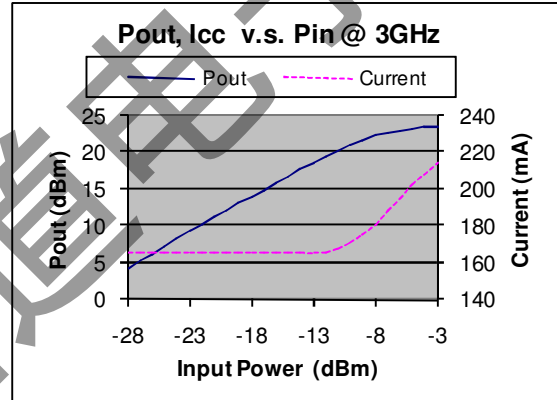
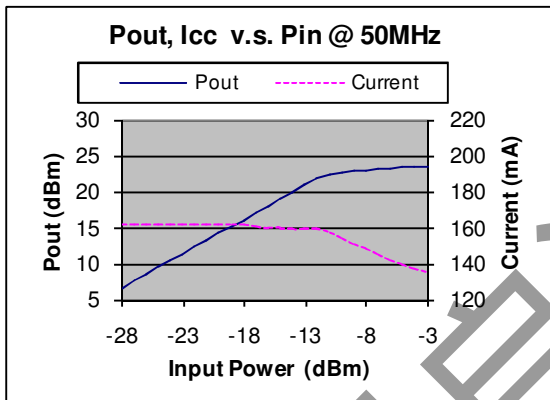
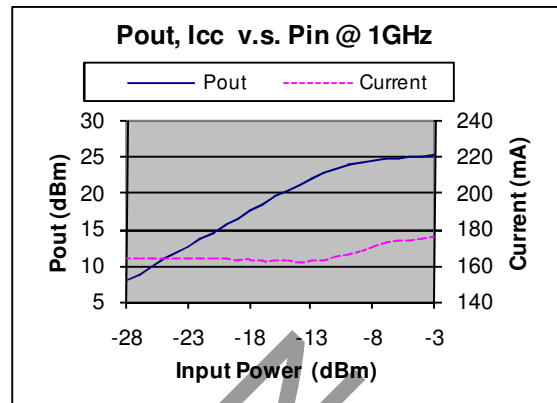
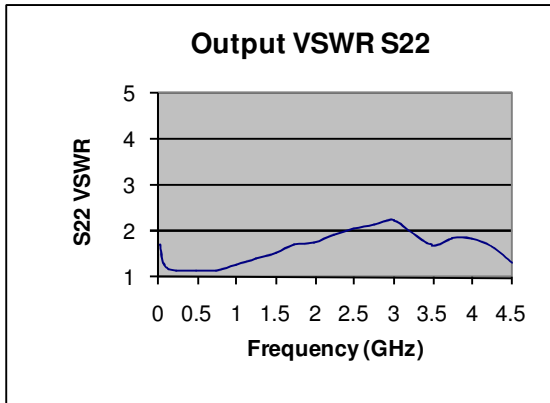
Typical Performance @ +25 °C



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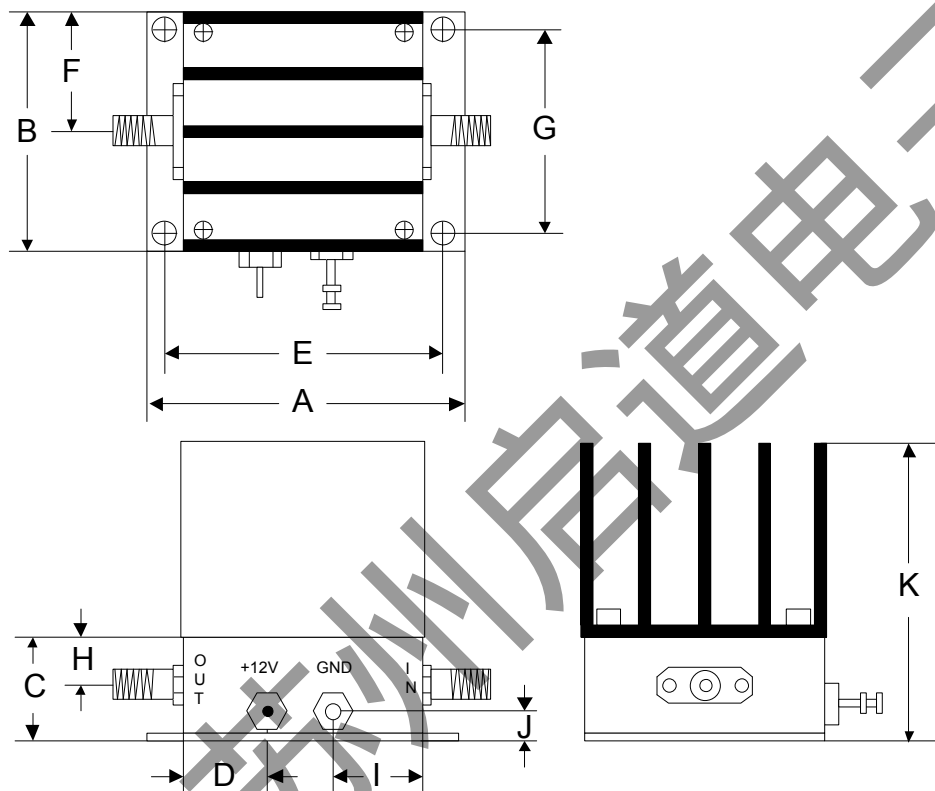
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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+10dBm
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