

## MGA Series

## 50MHz –4.5GHz RF Amplifier

### Features

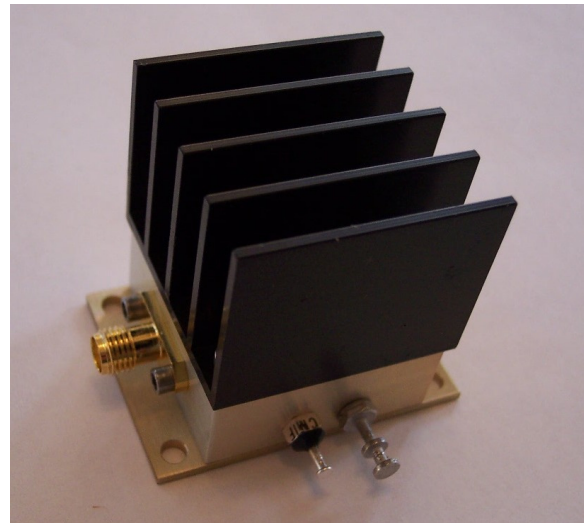
- Frequency Range:0.05–4.5GHz
- Gain: 33dB
- P<sub>1dB</sub>: +21dBm
- IP3: +35dBm
- Noise Figure: 4.5dB
- Input/Output VSWR: 1.6/1.9
- DC Power: 12V
- SMA Connector

Performance Tested @ 2.25GHz

### Description

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

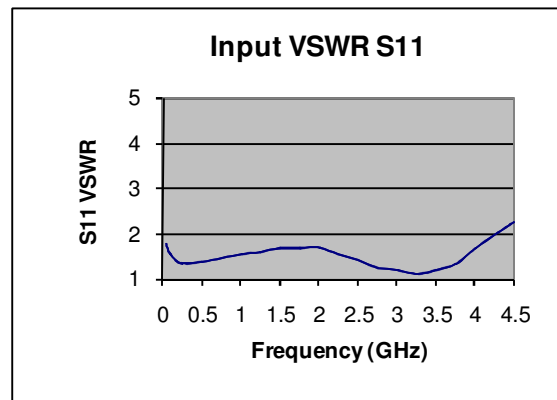
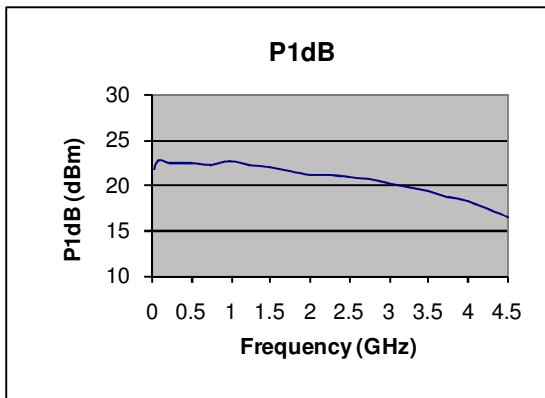
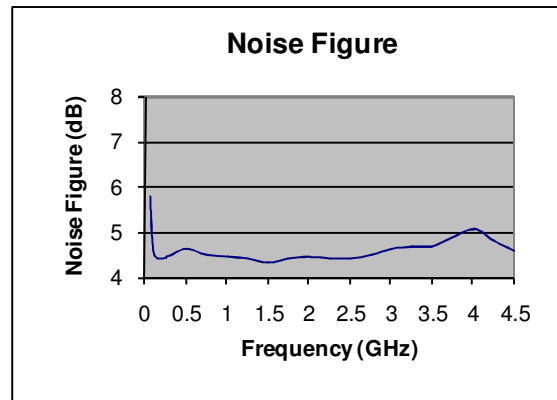
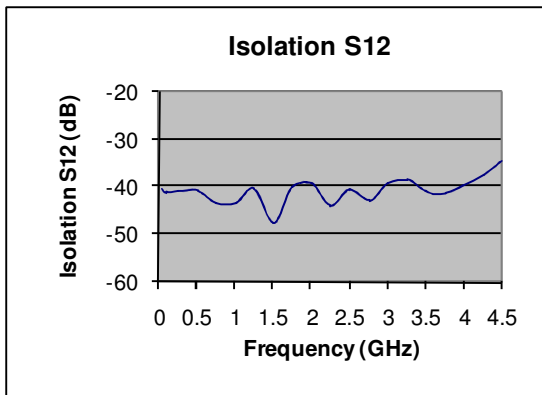
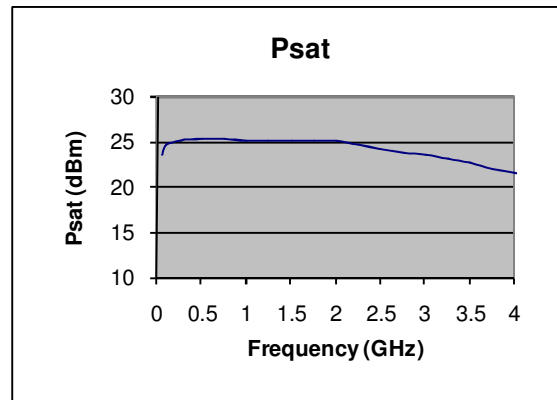
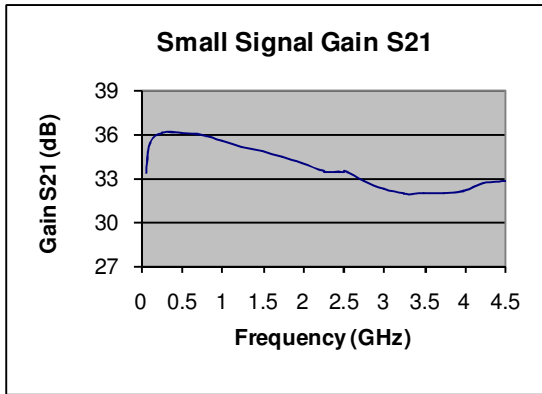
### Picture



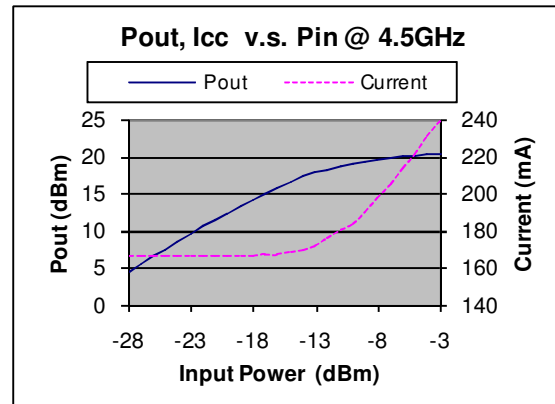
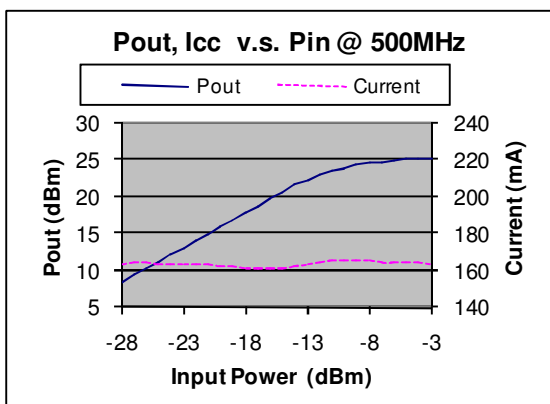
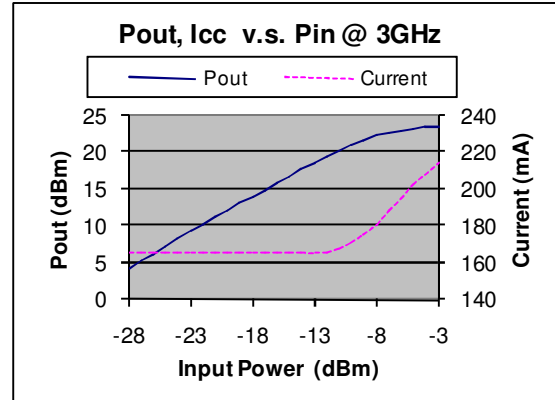
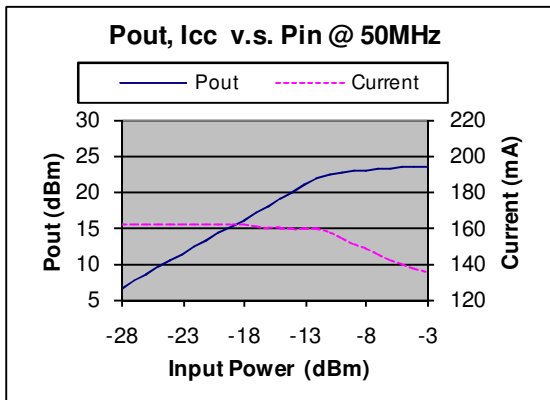
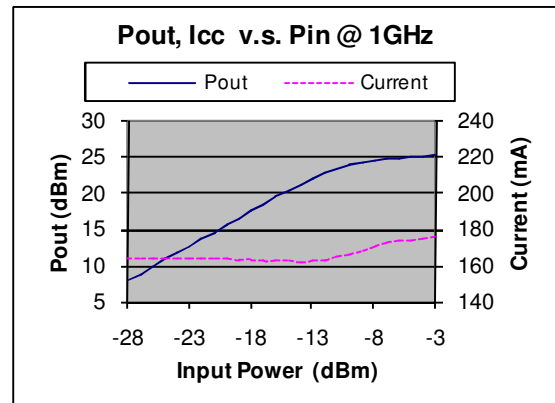
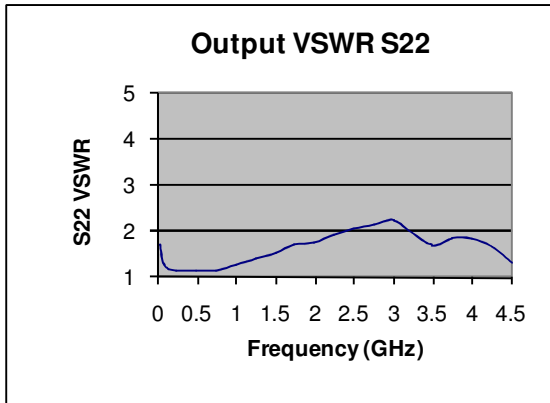
### Electrical Specifications @ +25 °C, Z<sub>S</sub> = Z<sub>L</sub> = 50 Ω, V<sub>CC</sub>=+12V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	0.05		4.5
Small Signal Gain	f = 50MHz		33	
	f = 100MHz		36	
	f = 500MHz		36	
	f = 2.25GHz		33	
	f = 4.5GHz		33	
Gain Flatness	dB		± 2.0	
P <sub>1dB</sub> 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	

### Typical Performance @ +25 °C



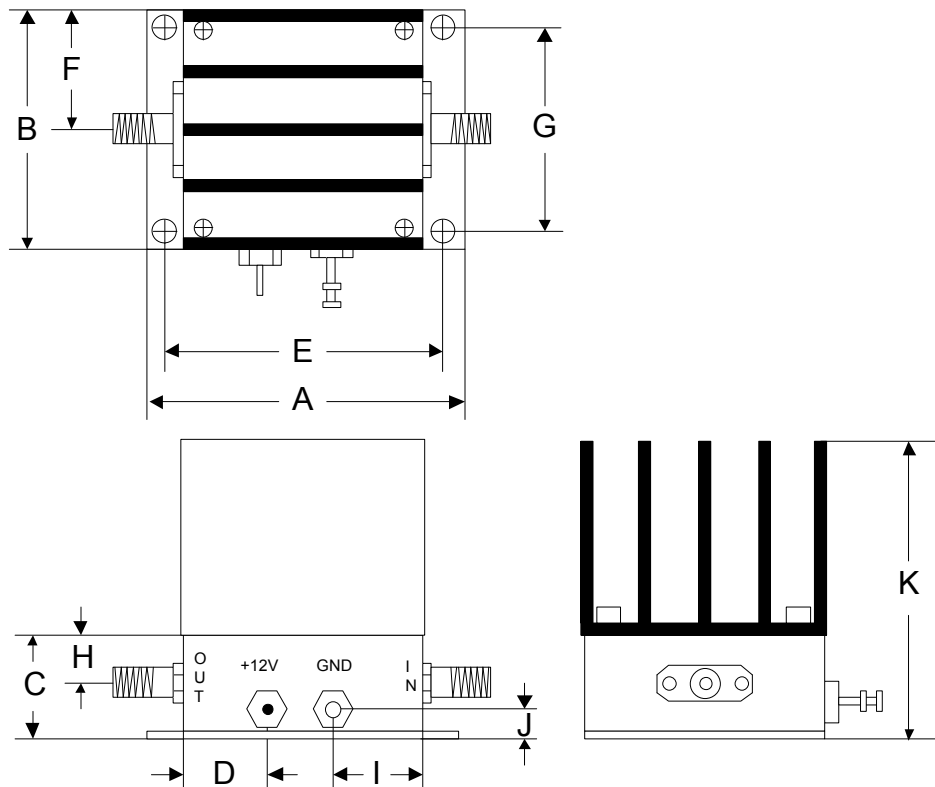
### Typical Performance @ +25 °C



### 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