

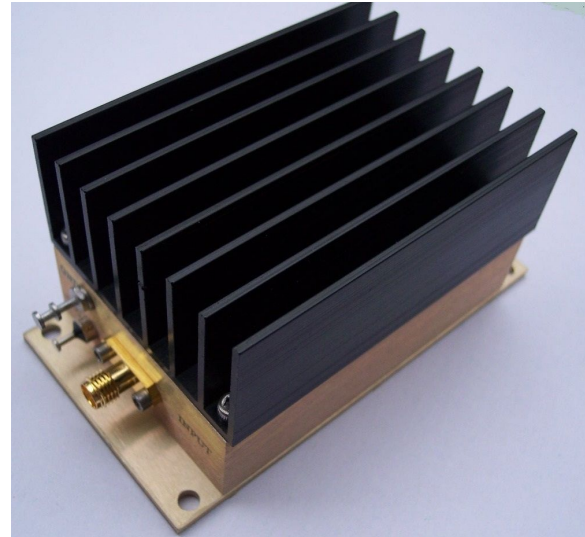
## MPA Series

## 2100-2300MHz 2W RF Power Amplifier

### Features

- Frequency Range: 2100-2300MHz
- Gain: 33dB
- P<sub>out</sub>: +33dBm
- IP3: +45dBm
- Noise Figure: 8.5dB
- DC Power: 9V
- Internal Voltage Regulated
- SMA Connector

### Picture



### Description

MPA-2200 is a 2Watt (+33dBm) output RF Power Amplifier operating from single 9V DC power supply with frequency from 2100MHz to 2300MHz.

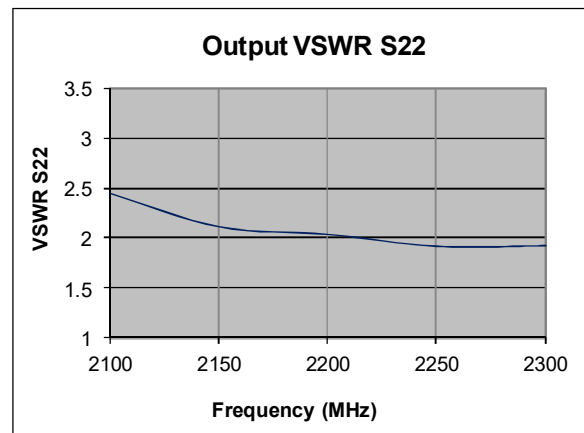
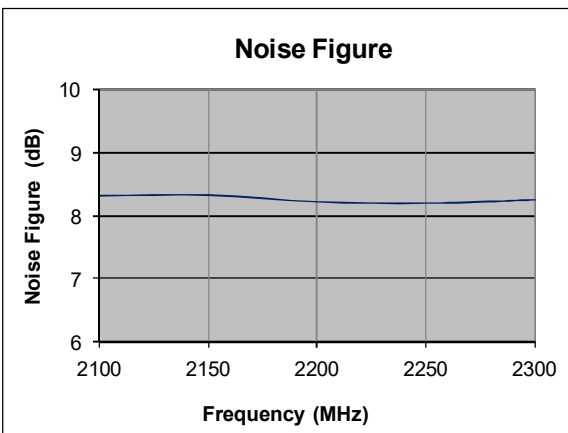
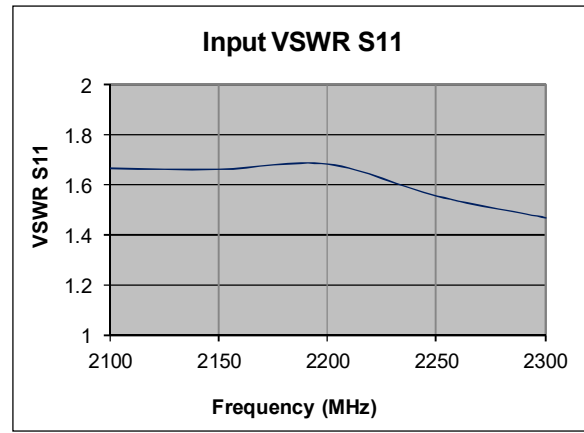
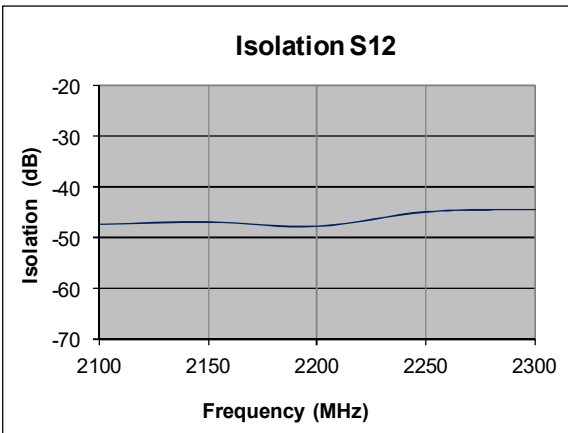
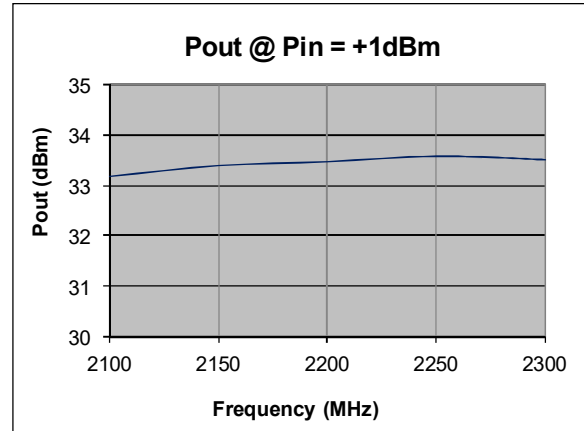
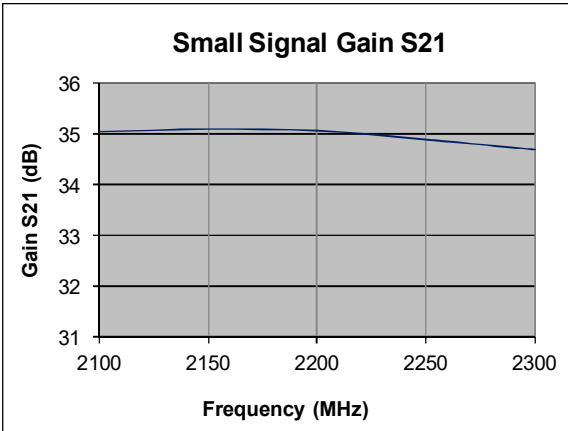
### Electrical Specifications @ +25 °C, Z<sub>IN</sub> = Z<sub>OUT</sub> = 50 Ω, V<sub>SUPPLY</sub> = +9V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	2100		2300
Small Signal Gain S <sub>21</sub>	dB	33	34	
Gain Flatness	dB		± 0.2	
Output Power P <sub>out</sub> @ P <sub>in</sub> = +1dBm	dBm		+33	
IP3	dBm		+45	
Reverse Isolation S <sub>12</sub>	dB		-45	
Noise Figure	dB		8.5	
Efficiency at P <sub>out</sub> = +33dBm	%		18.6	
VSWR Input VSWR S <sub>11</sub>			1.7:1	
Output VSWR S <sub>22</sub>			2.0:1	
DC Power Supply	V		9	
Quiescent Current with No Input	mA		1000	
Supply Current at P <sub>out</sub> = +33dBm	mA		1350	
Size (Excluding SMA Connector)	inch	3.750" x 2.000" x 1.813"		
Weight	Oz.	8		

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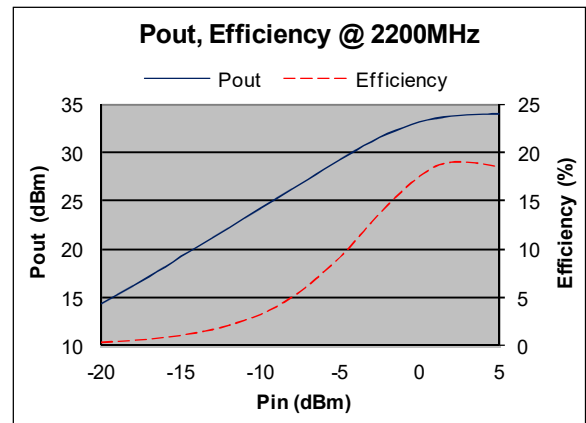
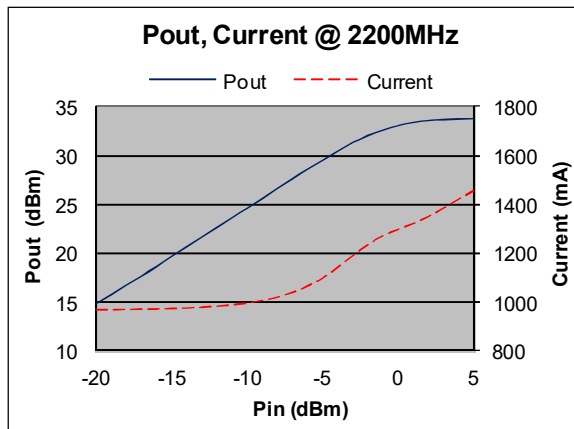
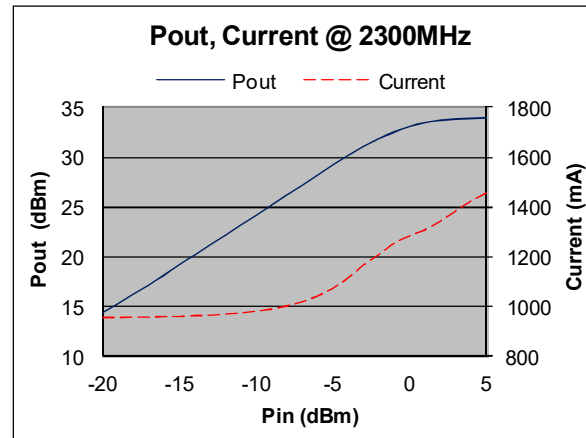
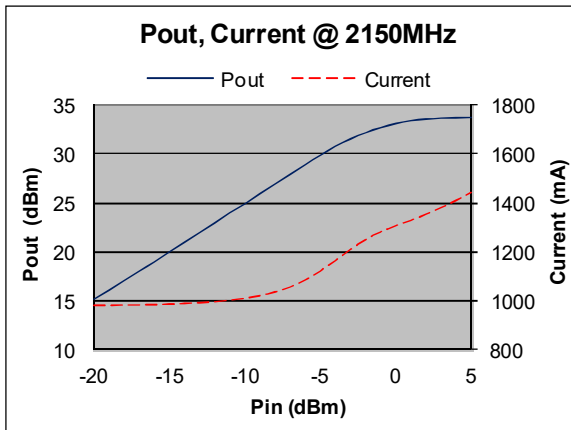
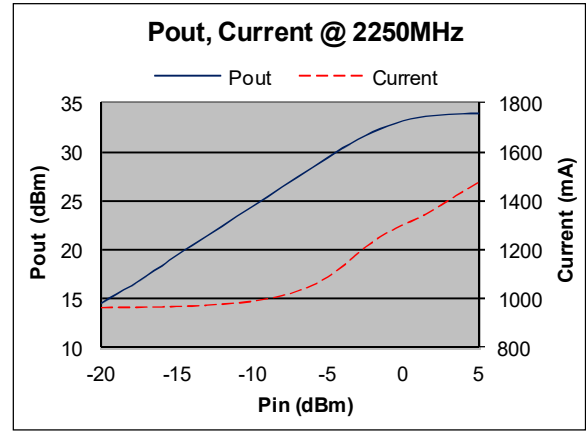
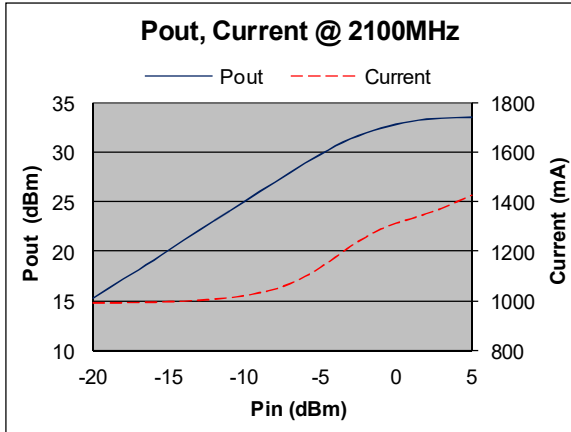
### Typical Performance @ +25 °C



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### Typical Performance @ +25 °C



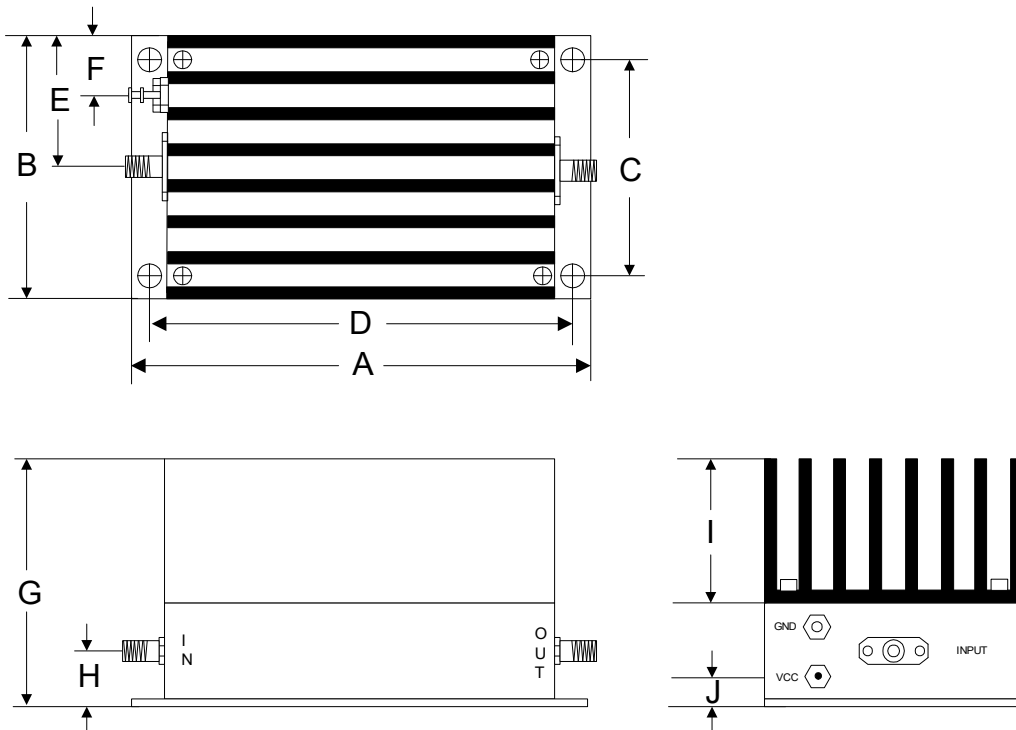
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### Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+26dBm
Supply Voltage	+16V
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
<b>Inch</b>	3.750	2.000	1.750	3.400	1.000	0.400	1.813	0.375	1.000	0.238
<b>mm</b>	92.25	50.80	44.45	86.36	25.40	10.16	46.05	9.53	25.40	6.03

MPA-2200 is internally voltage regulated to 6V, use 9V DC power supply is best for heat consideration. Use 12V to 15V is OK if additional fan can be used to cool the heatsink.