

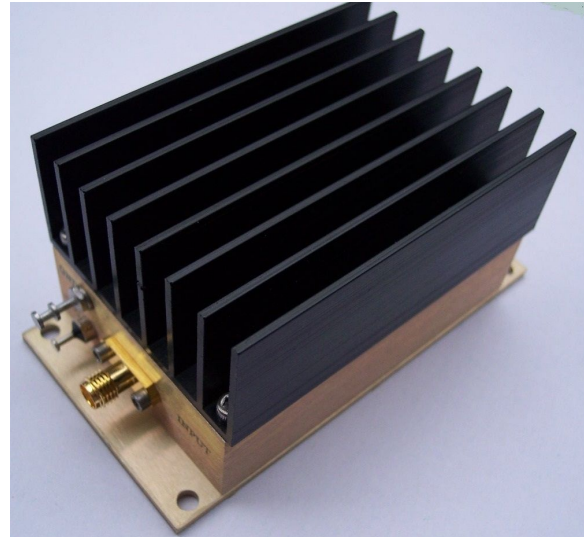
## MPA Series

## 2-1000MHz 1W RF Power Amplifier

### Features

- Frequency Range: 2-1000MHz
- Gain: 40dB
- P<sub>out</sub>: +30dBm (1Watt)
- IP3: +45dBm
- Noise Figure: 4.2dB
- DC Power: 12 ~ 18V
- DC Reverse Protected
- Internal Voltage Regulated
- SMA Connector

### Picture



### Description

MPA-11-40 is a 1Watt (+30dBm) output RF Power Amplifier operating from single 12 ~ 18V DC power supply with frequency from 2MHz to 1000MHz.

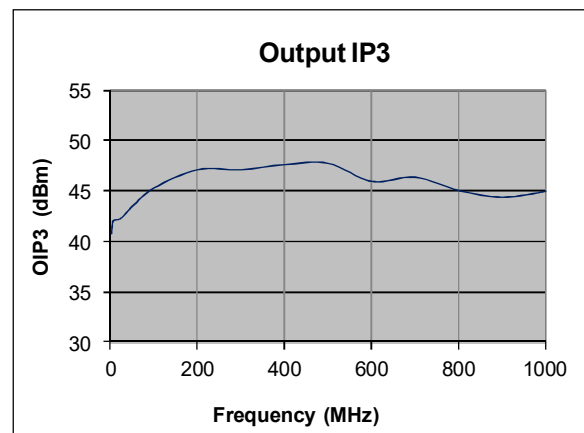
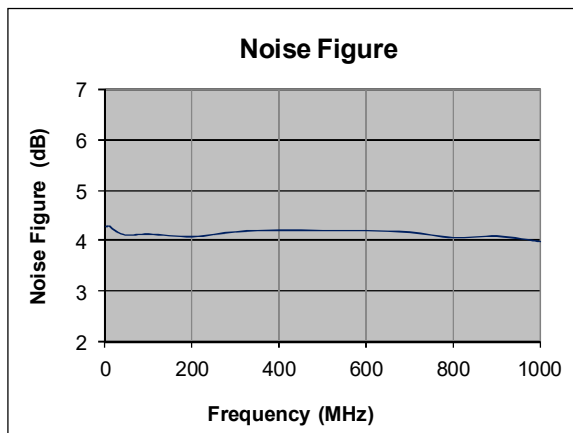
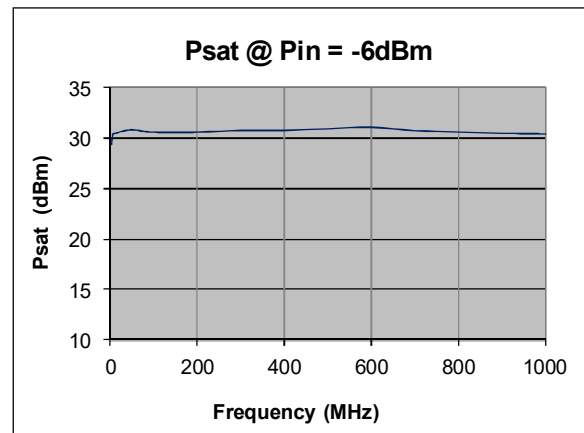
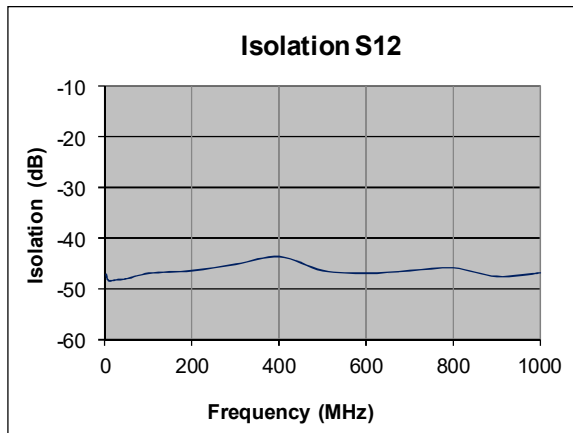
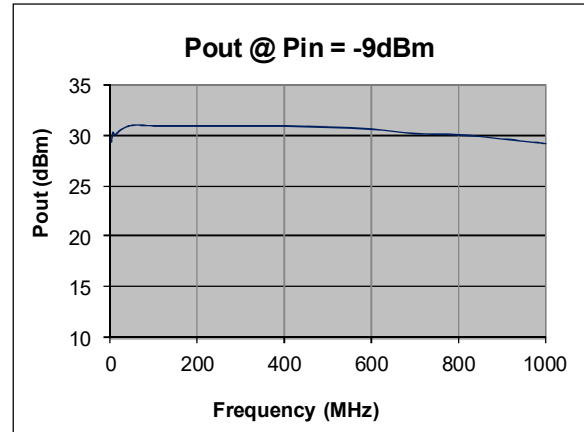
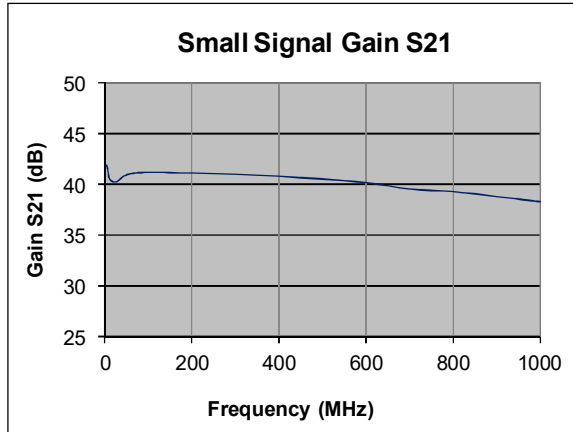
### Electrical Specifications @ +25 °C, Z<sub>IN</sub> = Z<sub>OUT</sub> = 50 Ω, V<sub>SUPPLY</sub> = +15V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	2		1000
Small Signal Gain S <sub>21</sub>	dB		40	
Gain Flatness	dB		± 1.8	
Output Power P <sub>out</sub> @ P <sub>in</sub> = -9dBm	dBm		+30	
Output IP3	dBm		+45	
Reverse Isolation S <sub>12</sub>	dB		-45	
Noise Figure	dB		4.2	
VSWR Input VSWR S <sub>11</sub>			1.5:1	2.0:1
Output VSWR S <sub>22</sub>			1.2:1	2.0:1
DC Power Supply	V	12	15	18
Quiescent Current with No Input	mA		420	450
Size (Excluding SMA Connector)	inch	3.750" x 2.000" x 1.813"		
Weight	Oz.	8		

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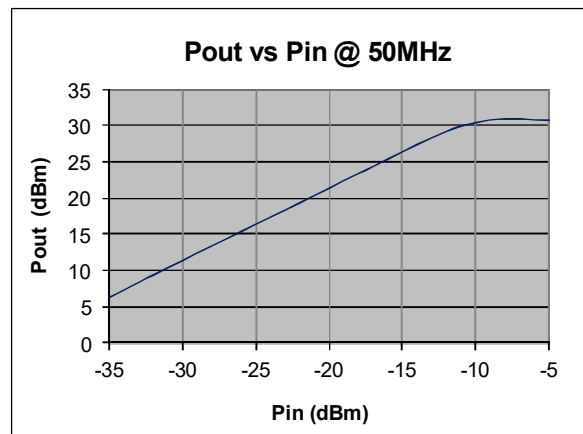
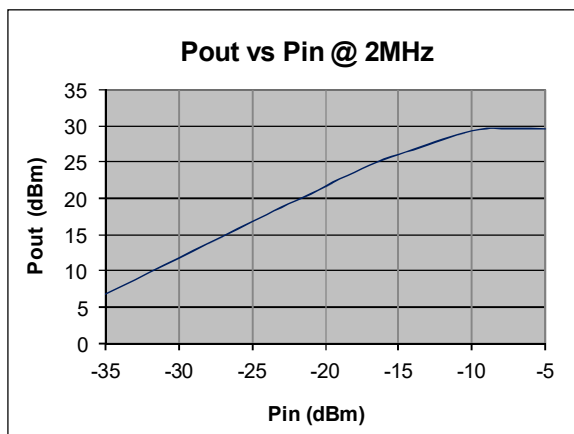
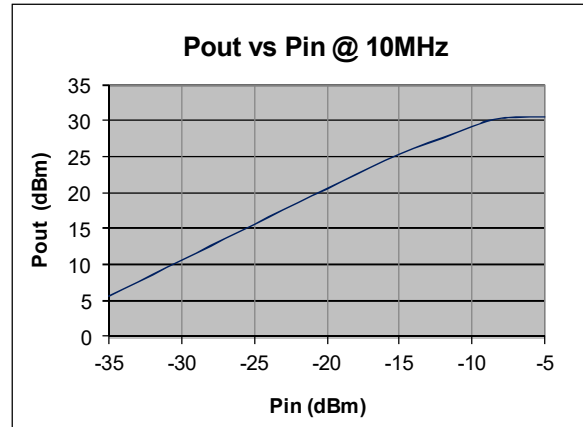
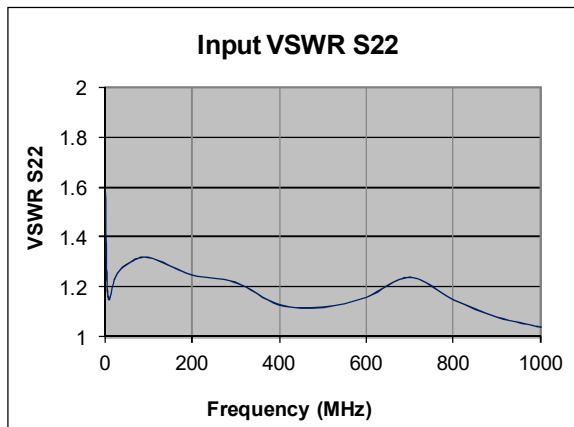
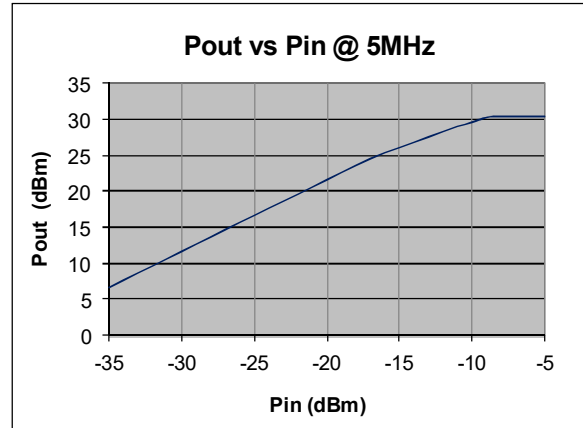
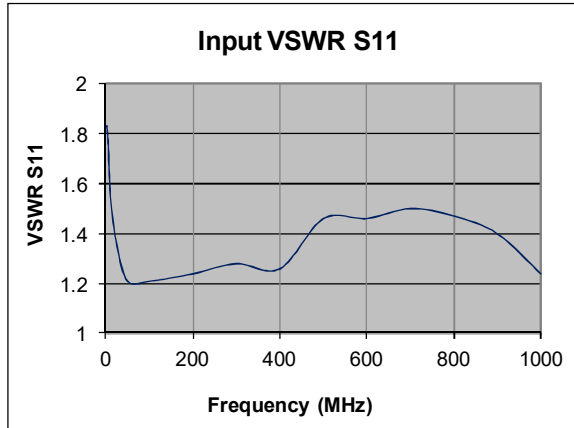
### Typical Performance @ +25 °C



## MPA Series

## 2-1000MHz 1W RF Power Amplifier

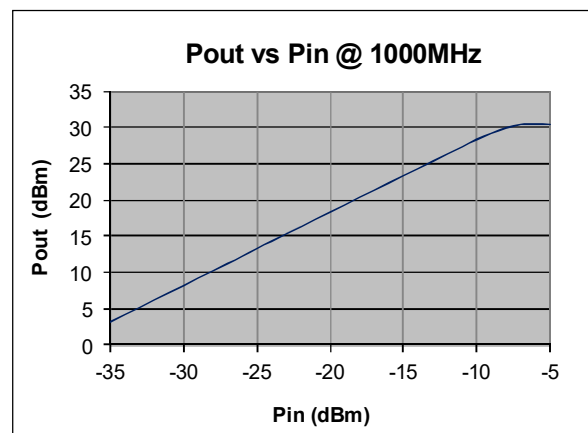
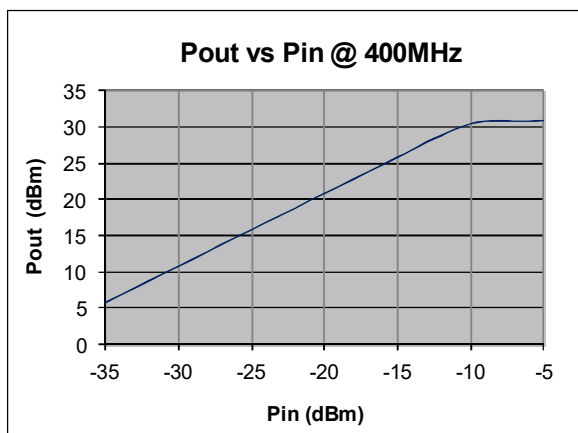
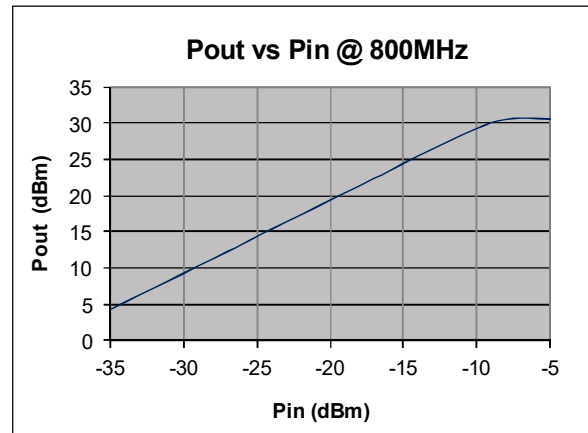
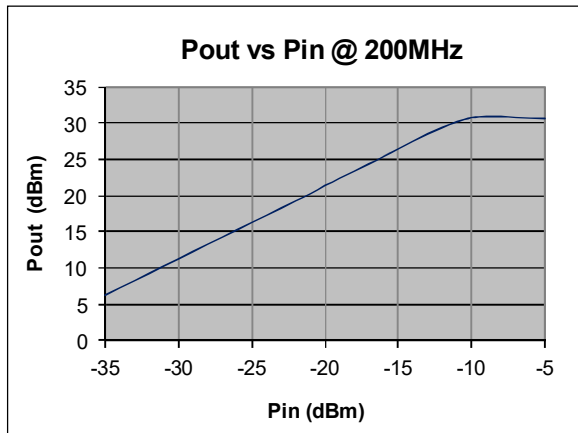
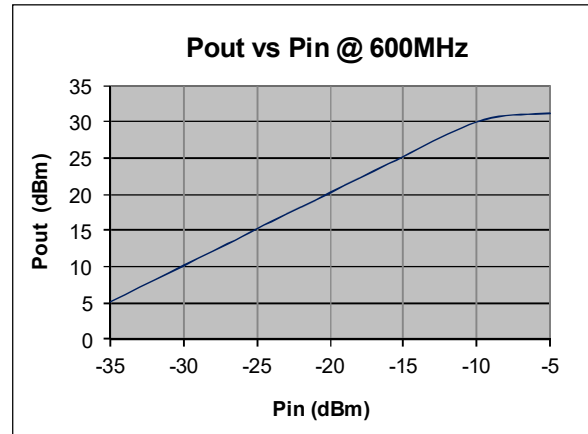
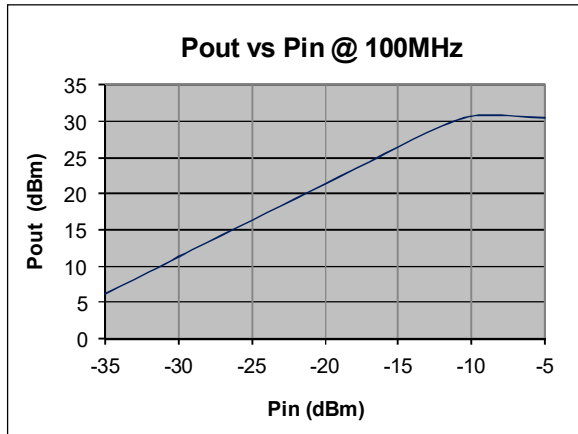
### Typical Performance @ +25 °C



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### Typical Performance @ +25 °C



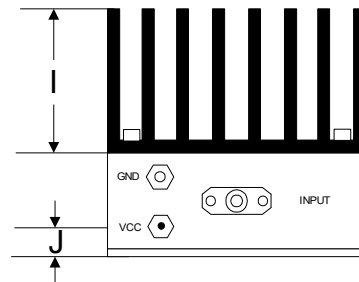
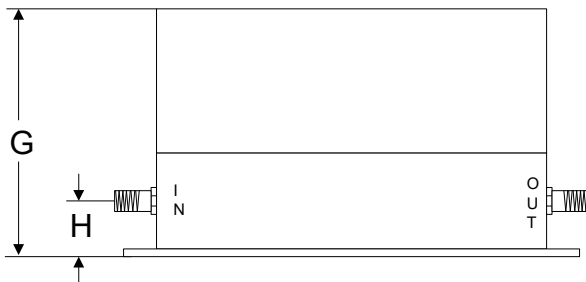
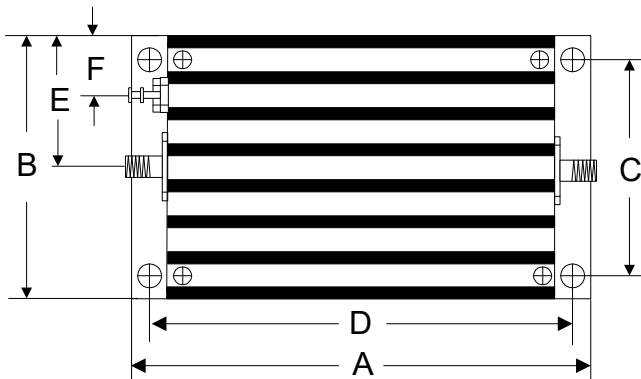
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### Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+17dBm
Supply Voltage	+20V
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
Inch	3.750	2.000	1.750	3.400	1.000	0.400	1.813	0.375	1.000	0.238
mm	92.25	50.80	44.45	86.36	25.40	10.16	46.05	9.53	25.40	6.03