

MPA Series

1300-1500MHz 1.5W RF Power Amplifier

Features

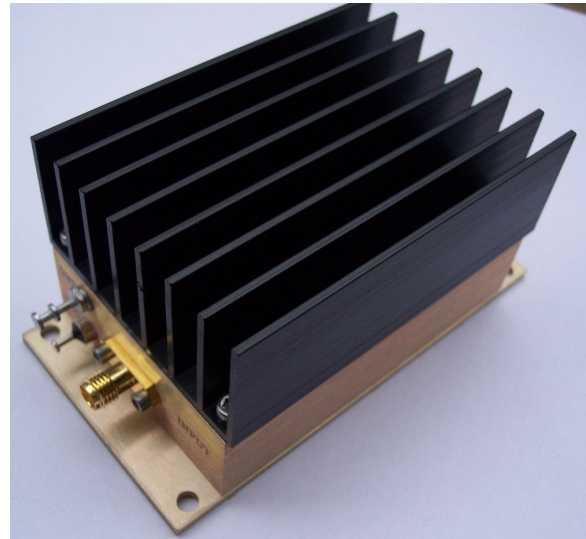
- Frequency Range: 1300-1500MHz
- Gain: 32dB
- P_{out}: +31.7dBm
- IP3: +41dBm
- Noise Figure: 5.5dB
- DC Power: 10V-15V
- SMA Connector

Performance tested at 1400MHz

Description

MPA-1400 is a 1.5Watt (+31.7dBm) output RF Power Amplifier with operating frequency from 1300MHz to 1500MHz.

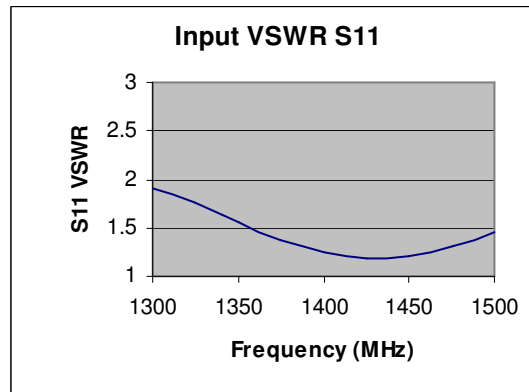
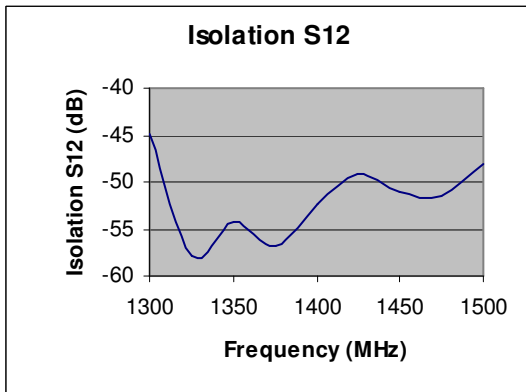
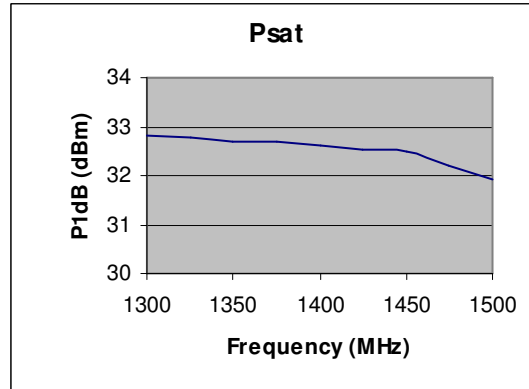
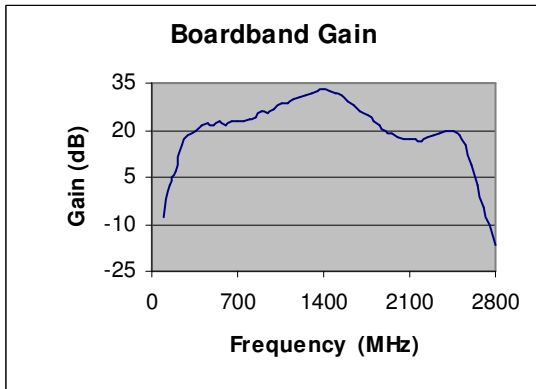
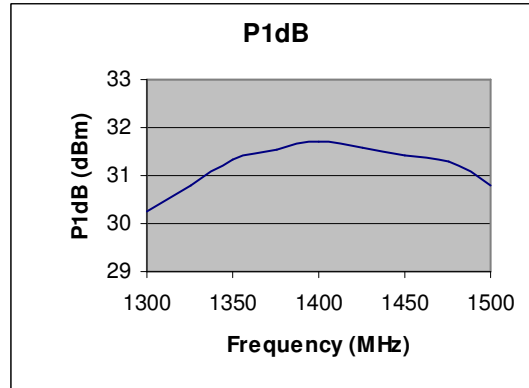
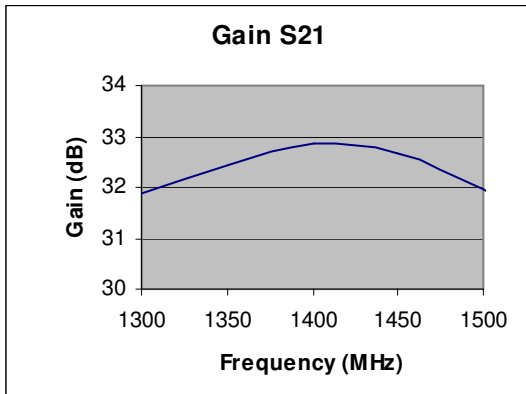
Picture



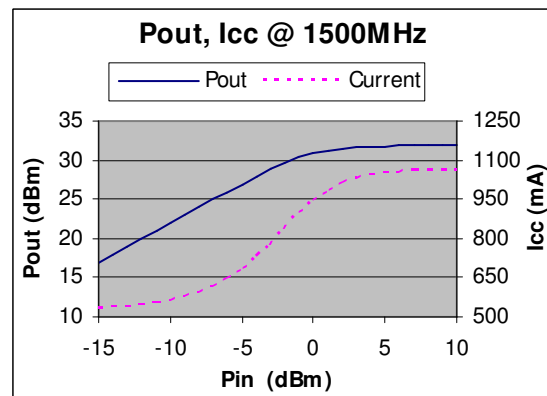
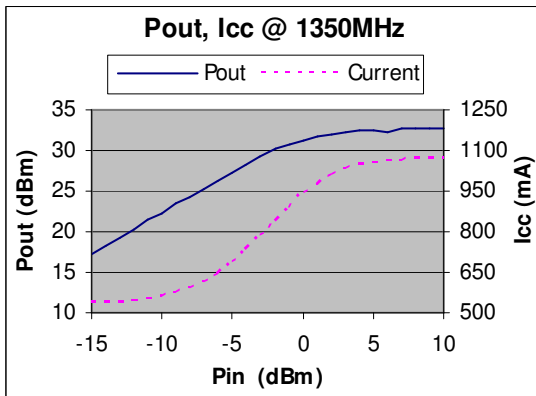
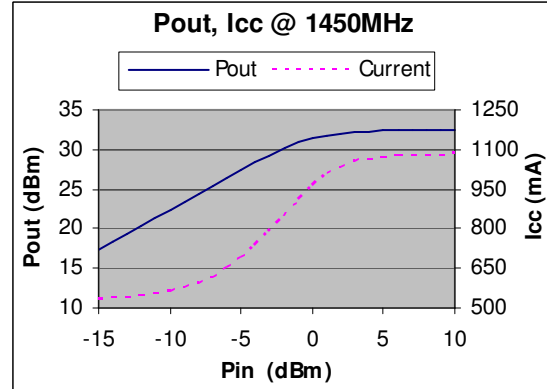
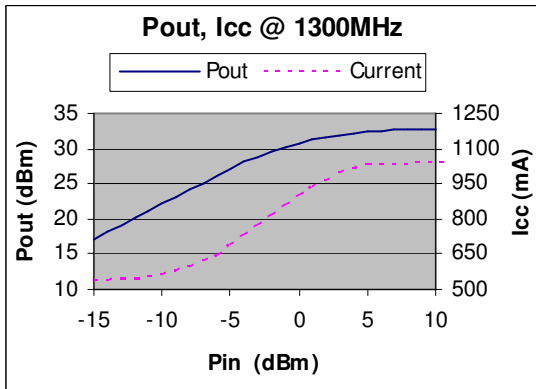
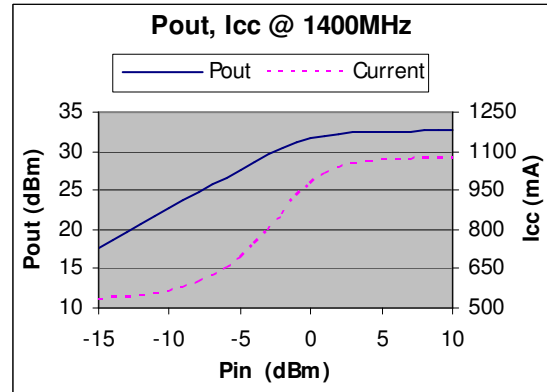
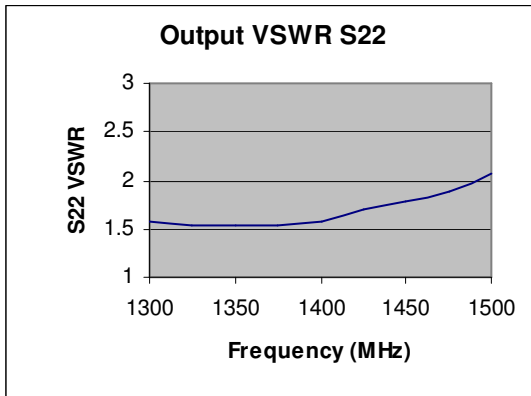
Electrical Specifications @ +25 °C, Z_S = Z_L = 50 Ω, V_{cc} = +12V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	1300		1500
Small Signal Gain	f = 1300MHz f = 1400MHz f = 1500MHz		31 32 31	
Output Power P _{1dB}	dBm		+31.7	
Psat	dBm		+32.6	
IP3	dBm		+41	
Reverse Isolation	dB		-50	
Noise Figure	dB		5.5	
VSWR	Input Output		1.3:1 1.6:1	
DC Power Supply	V	10	12	15
Quiescent Current with No Input	mA		540	
Supply Current at P _{out} = +31.7dBm	mA		1000	
Size (Excluding SMA Connector)	inch	3.750" x 2.000" x 1.813"		
Weight	Oz.	8		

Typical Performance @ +25 °C



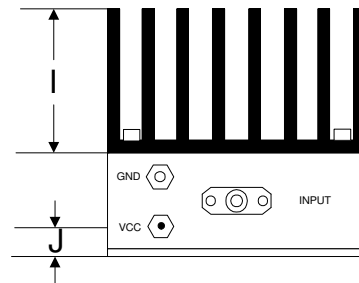
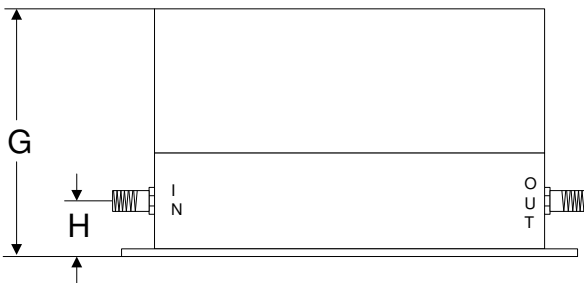
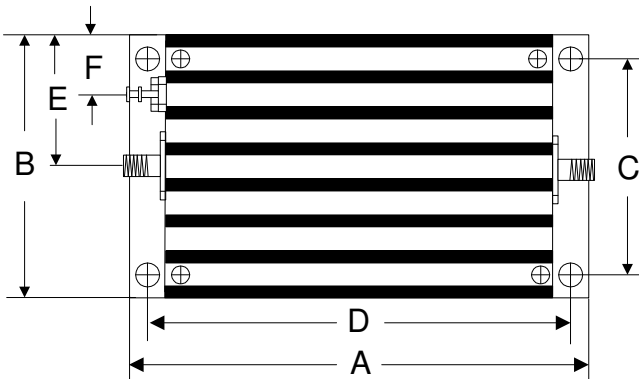
Typical Performance @ +25 °C



Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+17dBm
Supply Voltage	+20V
Operating Temperature	-30 °C to +65 °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