

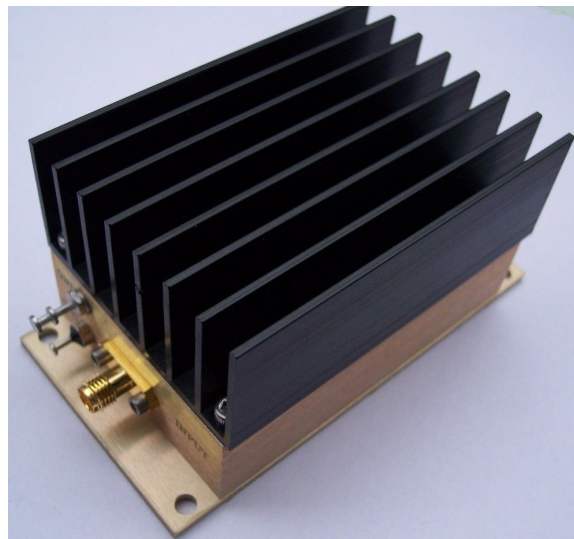
MPA Series

3200-4000MHz 1.5W RF Power Amplifier

Features

- Frequency Range: 3200-4000MHz
- Gain: 35dB
- P_{out}: +32dBm
- IP3: +42dBm
- Noise Figure: 6dB
- Efficiency: 28%
- DC Power: 5V
- SMA Connector

Picture



Performance tested at 3600MHz

Description

MPA-36-35 is a 1.5Watt (+32dBm) output RF Power Amplifier operating from single 5V DC power supply with frequency from 3200MHz to 4000MHz.

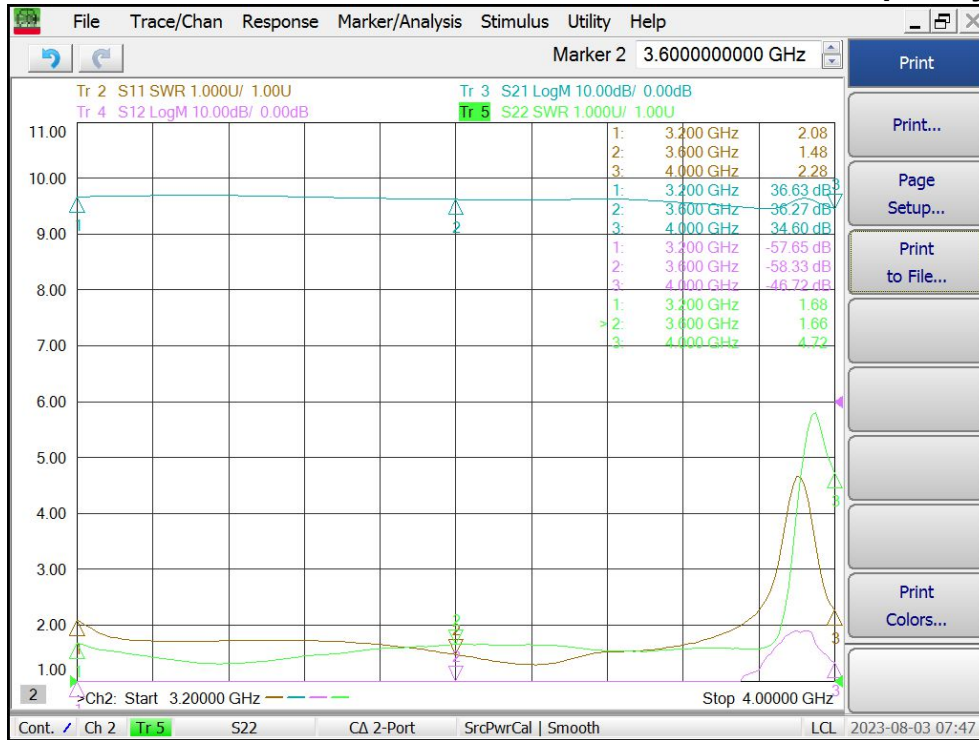
Electrical Specifications@+25°C, Z_{IN}=Z_{OUT}=50Ω, F=3600MHz, DC = +5V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	3200		4000
Small Signal Gain	dB	33	35	
Output Power P _{1dB}	dBm	+30	+32	
Channel Output Power P _{out} (OFDM QAM-64, 54Mb/s, EVM<2.5%)	dBm	+23	+25	
Output IP3	dBm	+40	+42	
Reverse Isolation	dB	-50	-55	
Noise Figure	dB		6.0	8.0
Efficiency at P _{out} = +32dBm	%		28	
VSWR Input/Output			1.5:1/1.5:1	
DC Power Supply	V		5.0	6.0
Quiescent Current with No Input	mA		730	900
Supply Current at P _{out} = +32dBm	mA		1300	1700
Size (Excluding SMA Connector)	inch	3.750" x 2.000" x 1.813"		
Weight	Oz.	8		

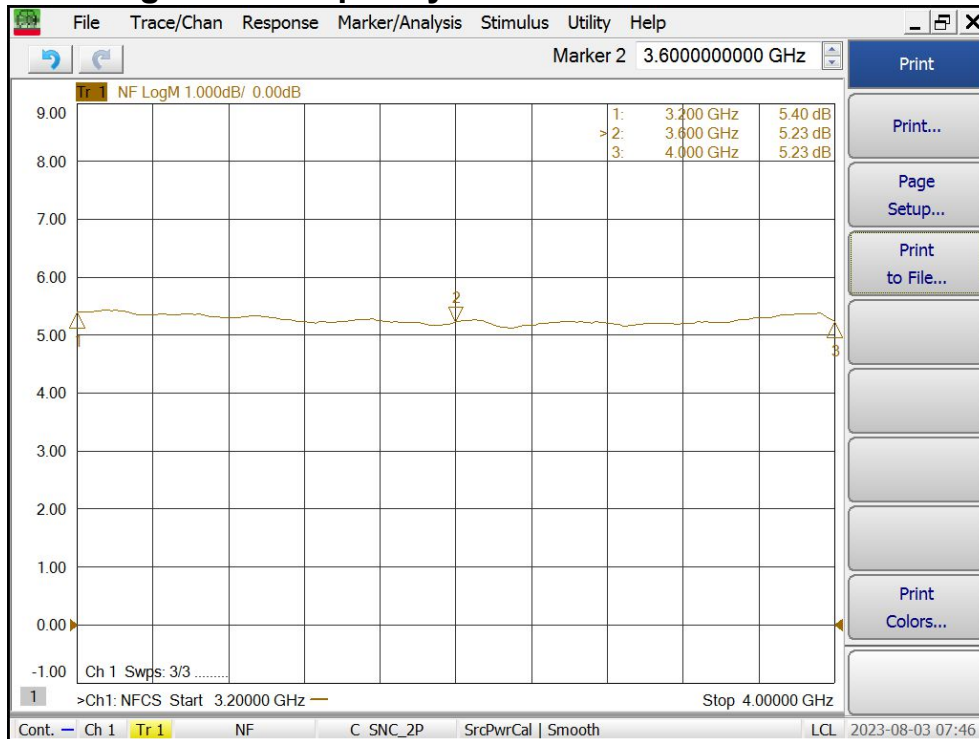
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Gain S21, Isolation S12, Return Loss S11, S22 vs Frequency



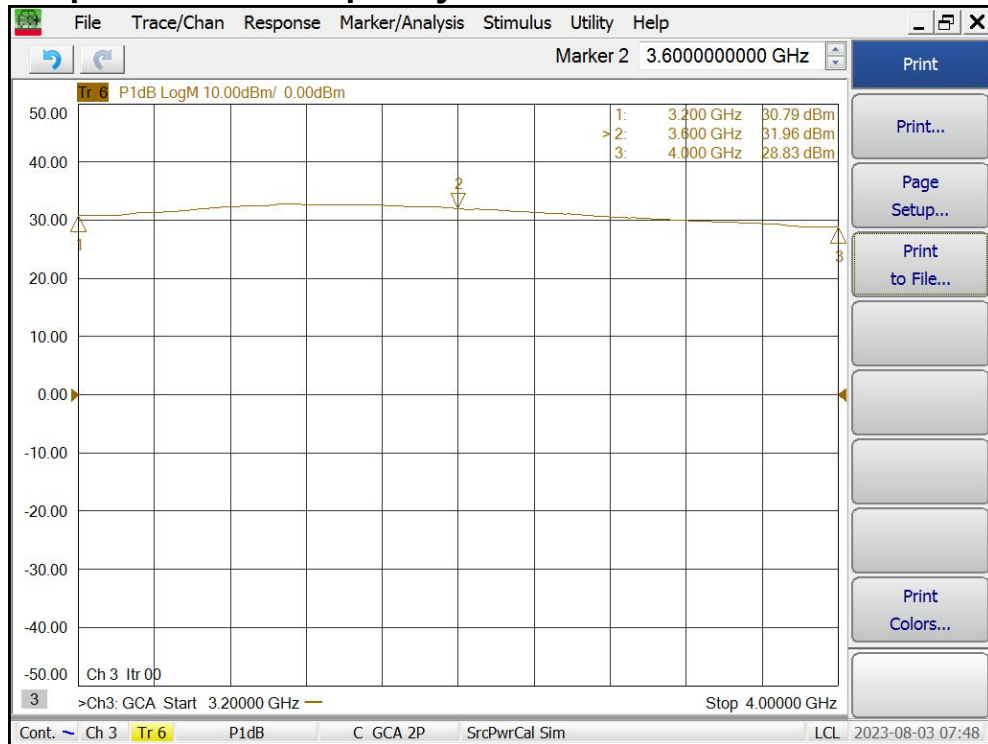
Noise Figure vs Frequency



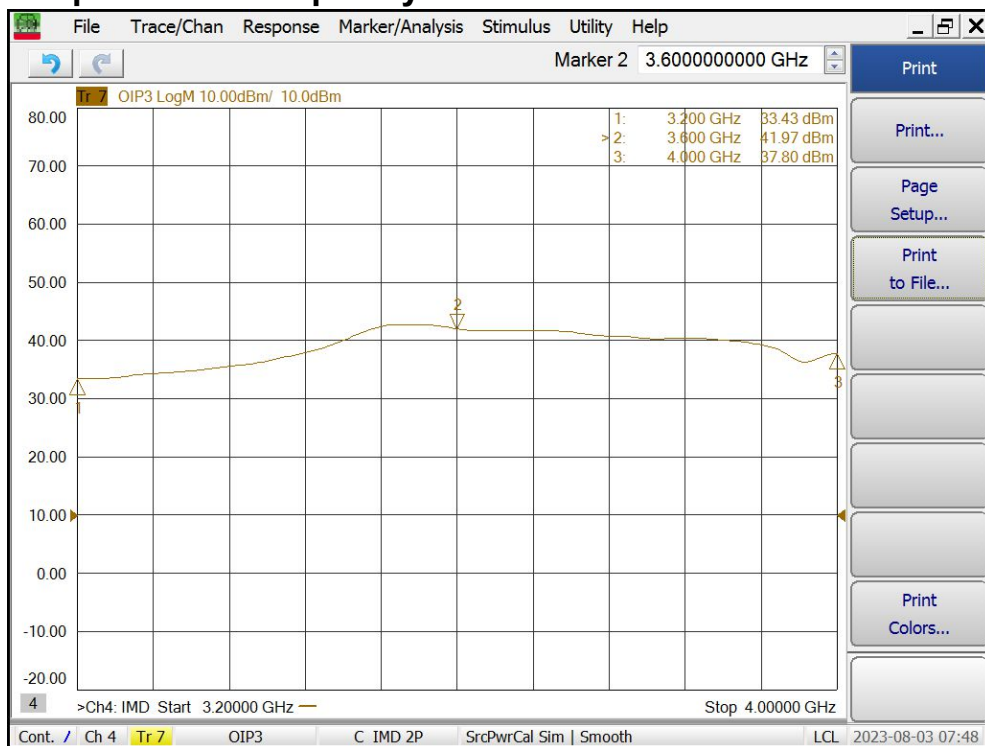
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Output P1dB vs Frequency



Output IP3 vs Frequency



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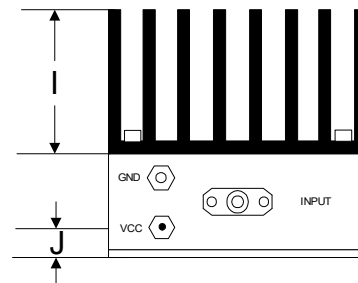
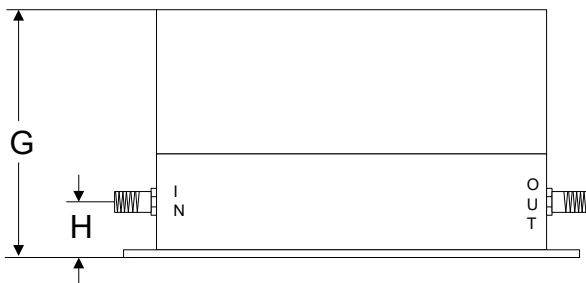
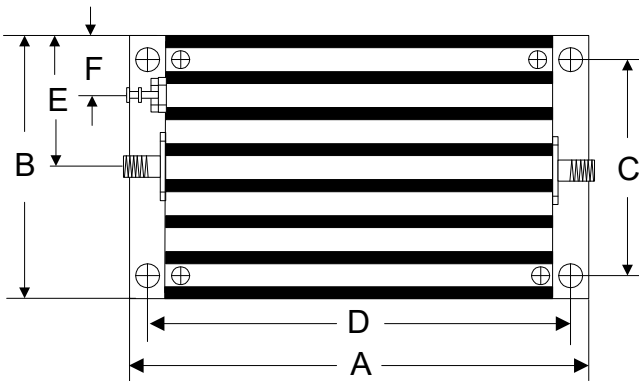
Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+7dBm
DC Supply Voltage	+7V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

ESD Sensitive Material



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