

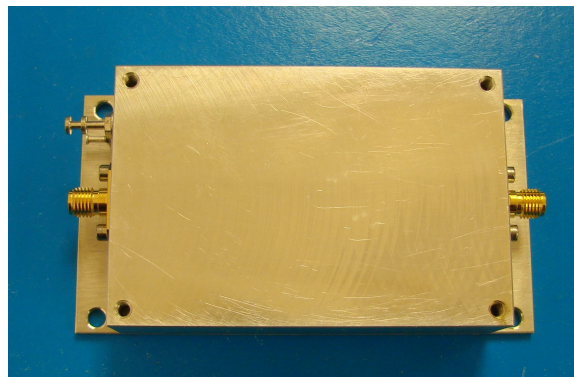
MNA Series

500-1500MHz Low Noise Amplifier

Features

- Frequency Range:500-1500MHz
- Gain: 30dB
- P_{1dB}: +30dBm
- IP3: +47dBm
- Noise Figure: 1.3dB
- DC Power: 12-18V
- Internally Voltage Regulated
- DC Voltage Reverse Protected
- SMA Connector

Picture



Measured @ 1000MHz

Description

MNA-1000 is a high dynamic range Low Noise Amplifier operating on single 12-18V DC power supply.

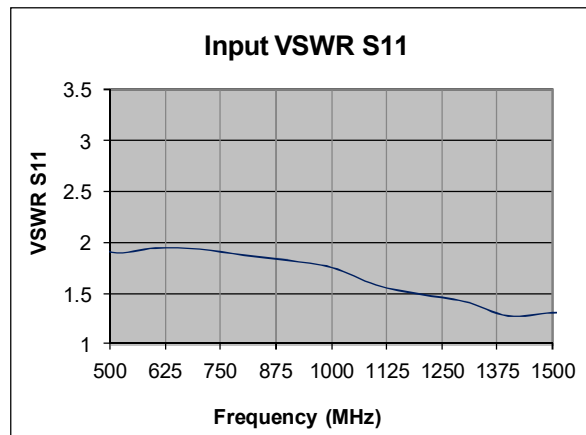
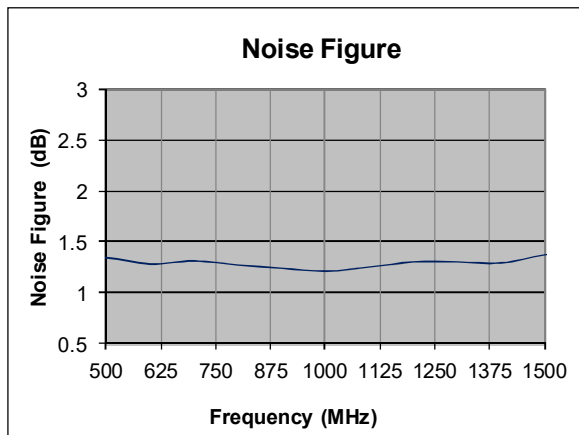
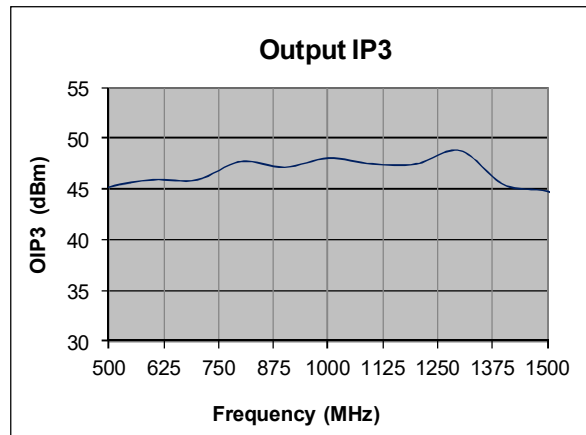
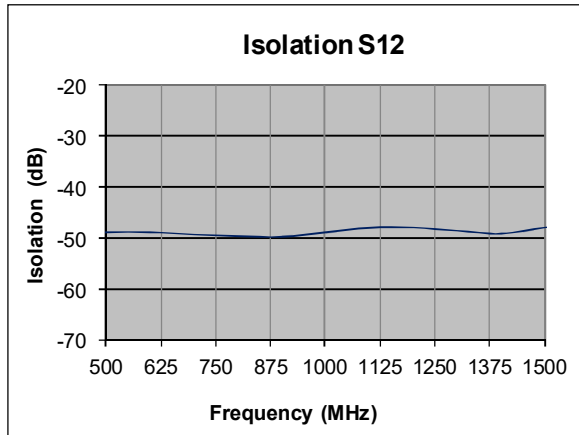
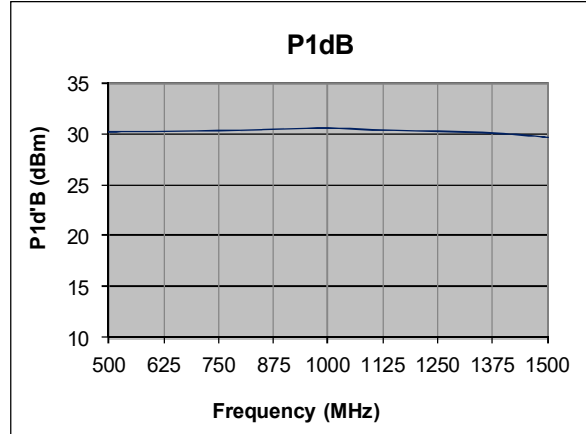
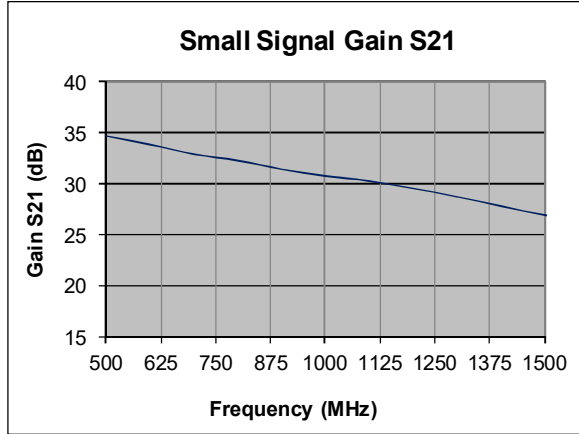
Electrical Specifications @ +25 °C, Z_{in} = Z_{out} = 50Ω, V_{supply}=+15V

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	500		1500
Gain S ₂₁ F=500MHz	dB		34.5	
F=1000MHz	dB		30.5	
F=1500Mhz	dB		27.0	
Gain Flatness	dB		±3.8	
P _{1dB}	dBm		+30	
Output IP3	dBm		+47	
Reverse Isolation S ₁₂	dB		-45	
Noise Figure	dB		1.3	
VSWR Input VSWR S ₁₁			1.8:1	
Output VSWR S ₂₂			1.1:1	
DC Power Supply	V	12	15	18
Supply Current	mA		420	450

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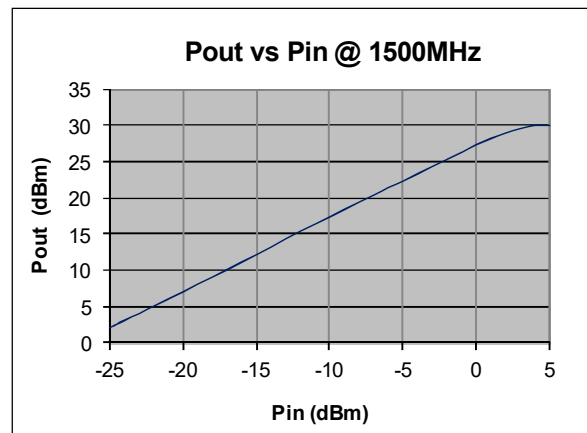
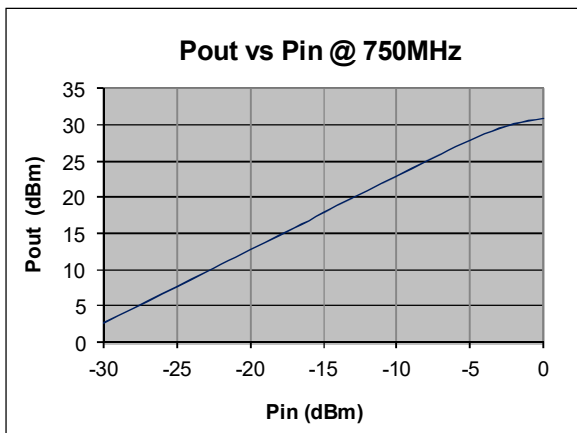
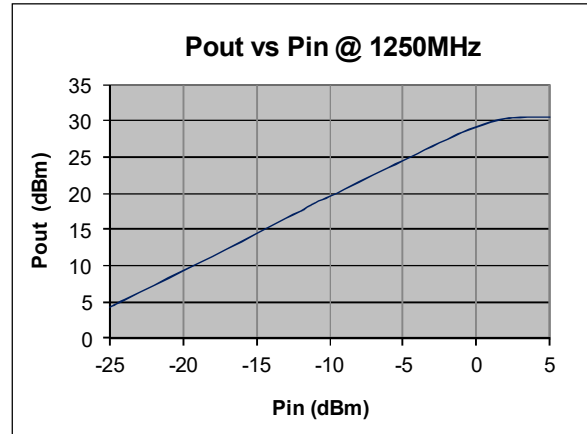
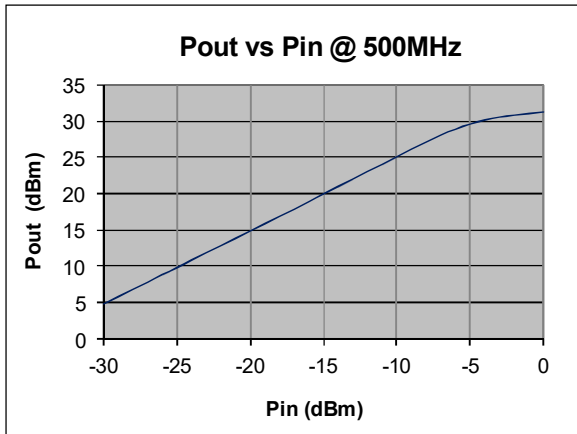
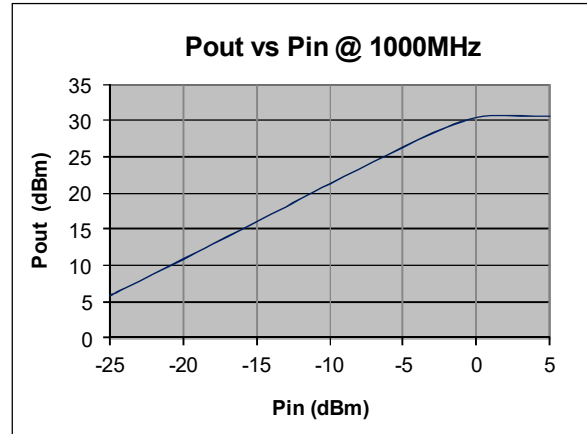
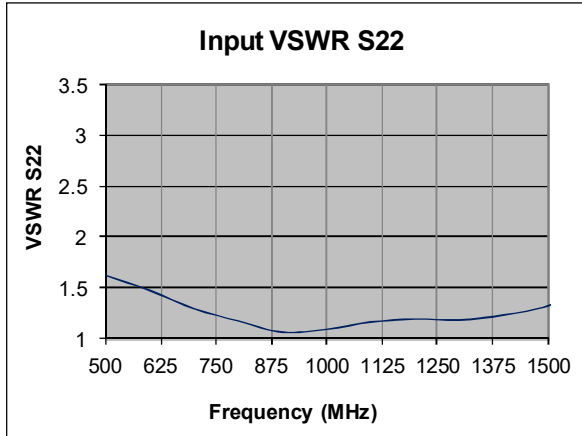
Typical Performance @ +25 °C



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Typical Performance @ +25 °C



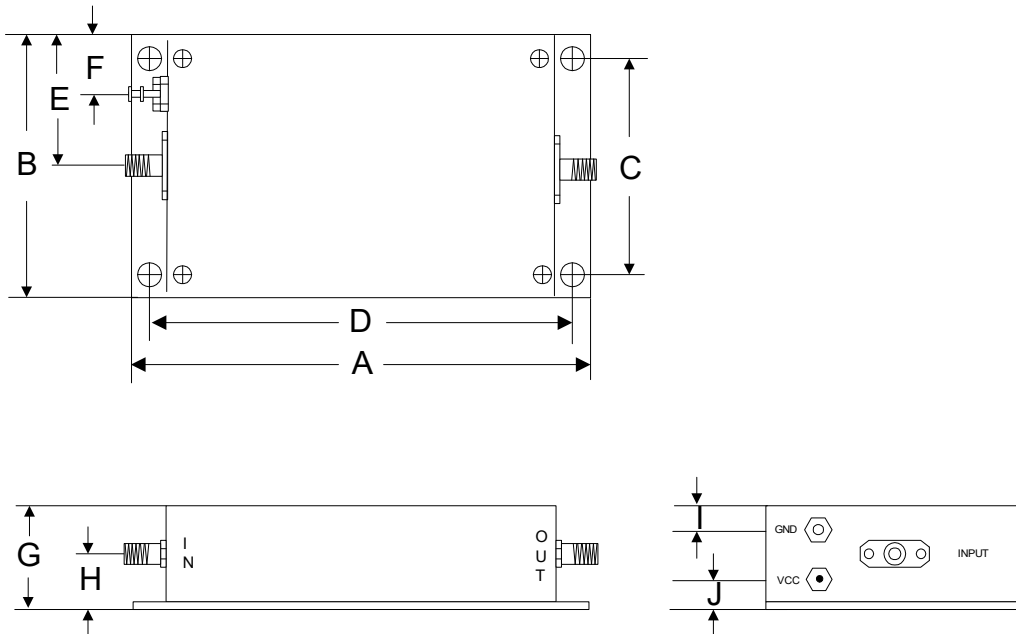
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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+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	0.813	0.375	0.300	0.238
mm	92.25	50.80	44.45	86.36	25.40	10.16	20.64	9.53	7.62	6.03