

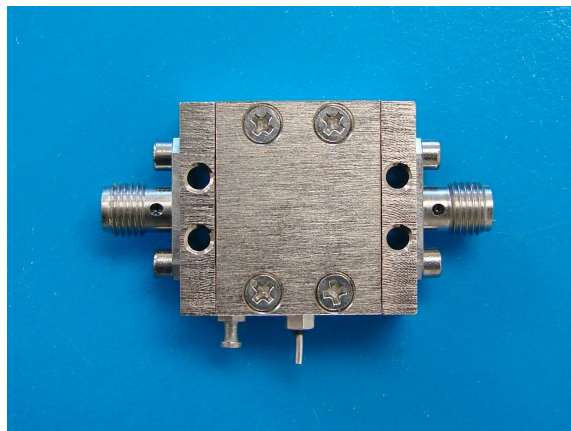
WNA Series

10MHz – 10GHz Low Noise Amplifier

Features

- Frequency Range: 10MHz-10GHz
- Gain: 25dB
- P_{1dB}: +16dBm
- IP3: +27dBm
- Noise Figure: 3.2dB
- DC Power: +5V @ 125mA
- Internally Voltage Regulated
- RF Connector: SMA-Female

Photo



Description

WNA-220 is a high performance Microwave Low Noise Amplifier, with standard frequency range of 10MHz to 10GHz.

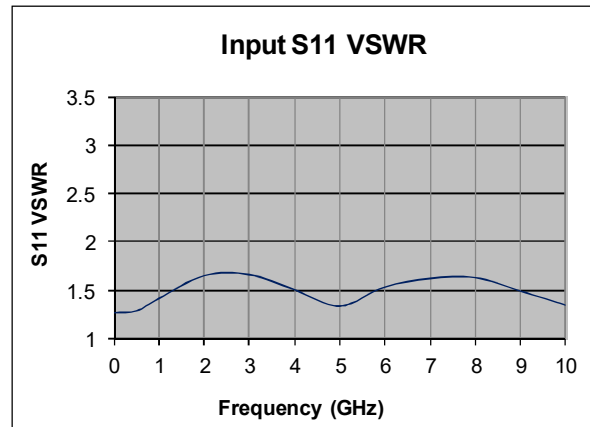
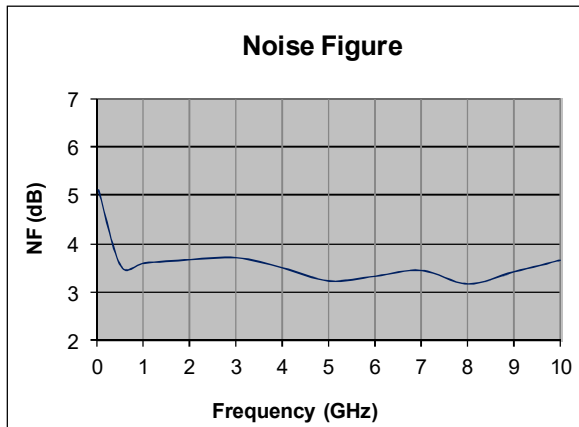
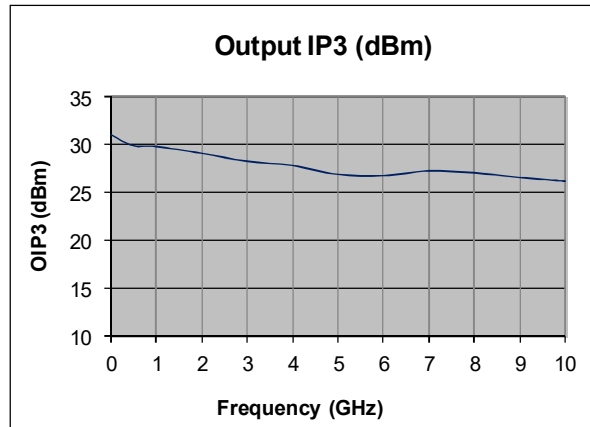
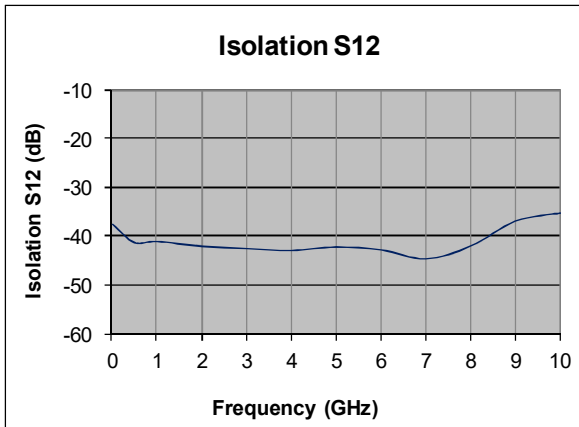
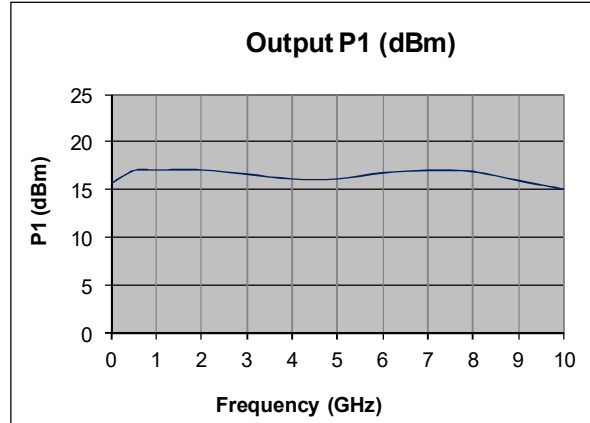
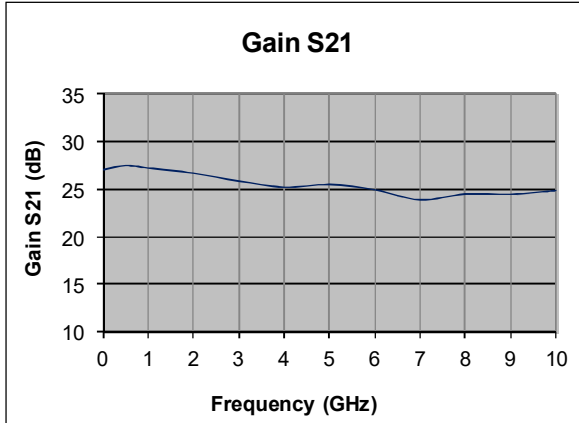
Electrical Specifications @+25°C, Z_{in}=Z_{out}= 50 Ω, V_{supply} = +5VDC

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	0.01		10
Gain (S ₂₁) f = 10MHz	dB		27.0	
f = 3GHz	dB		25.9	
f = 6GHz	dB		25.0	
f = 10GHz	dB		24.8	
Gain Flatness	dB		± 1.8	
Output Power P _{1dB}	dBm		+16	
Output Third Order Intercept IP3	dBm		+27	
Noise Figure @ 5GHz	dB		3.2	
Reverse Isolation (S ₁₂)	dB		-40	
VSWR-Input (S ₁₁)			1.5:1	
VSWR-Output (S ₂₂)			1.8:1	
DC Power Supply - voltage	V		5	15
DC Power Supply - current	mA		125	
Operating Temperature	°C	-40		+85
Size (RF/DC feedthru's excluded)	Inch	1.00 (L) x 0.90 (W) x 0.45 (H)		
Weight	Oz	0.6 (17 grams)		

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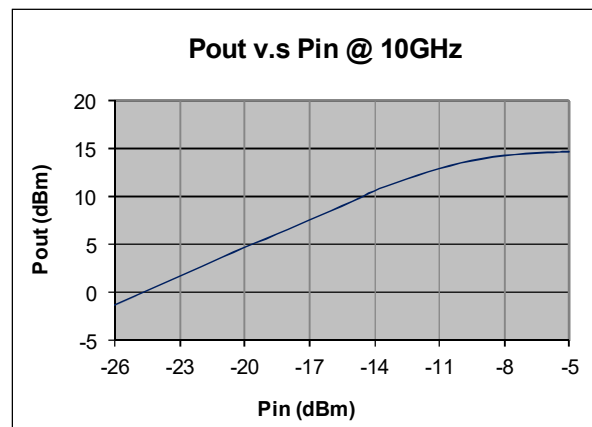
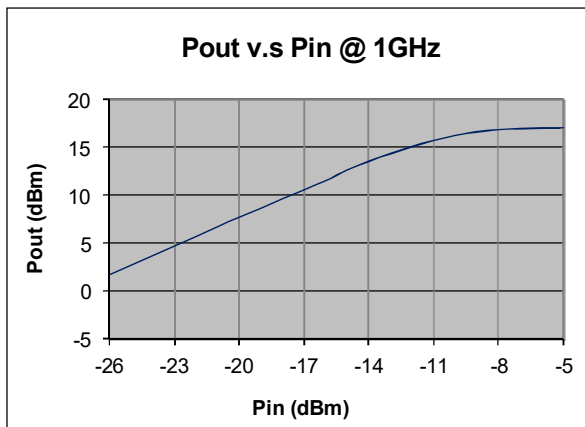
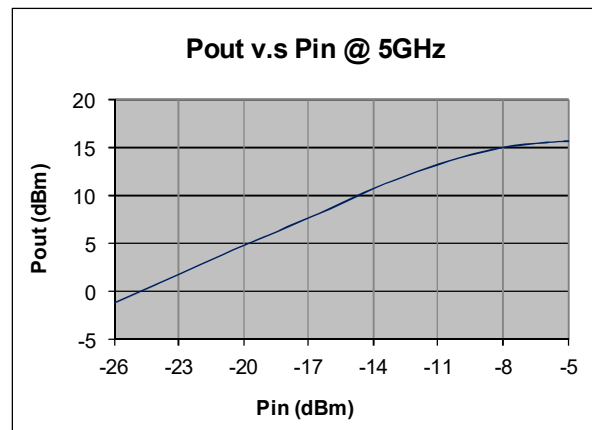
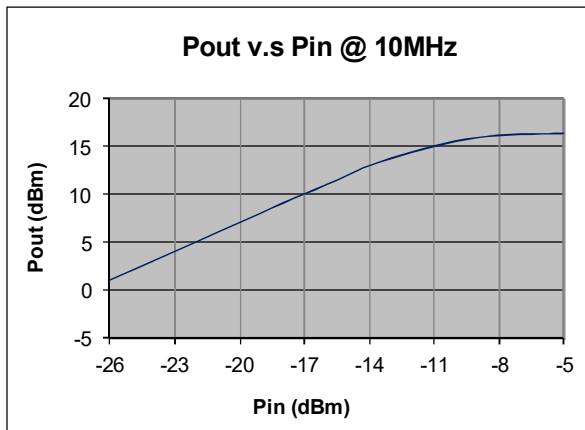
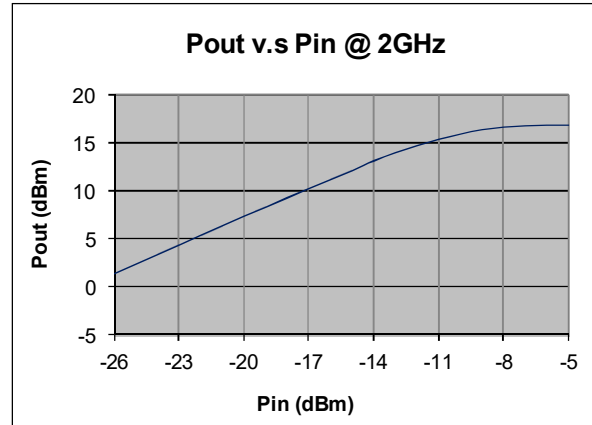
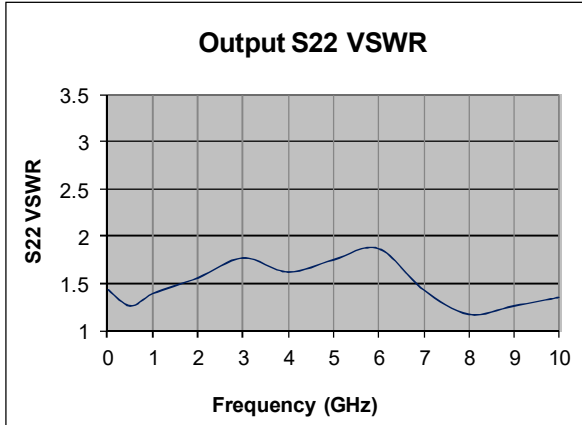
Typical Performance @+25 °C



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Typical Performance @+25 °C



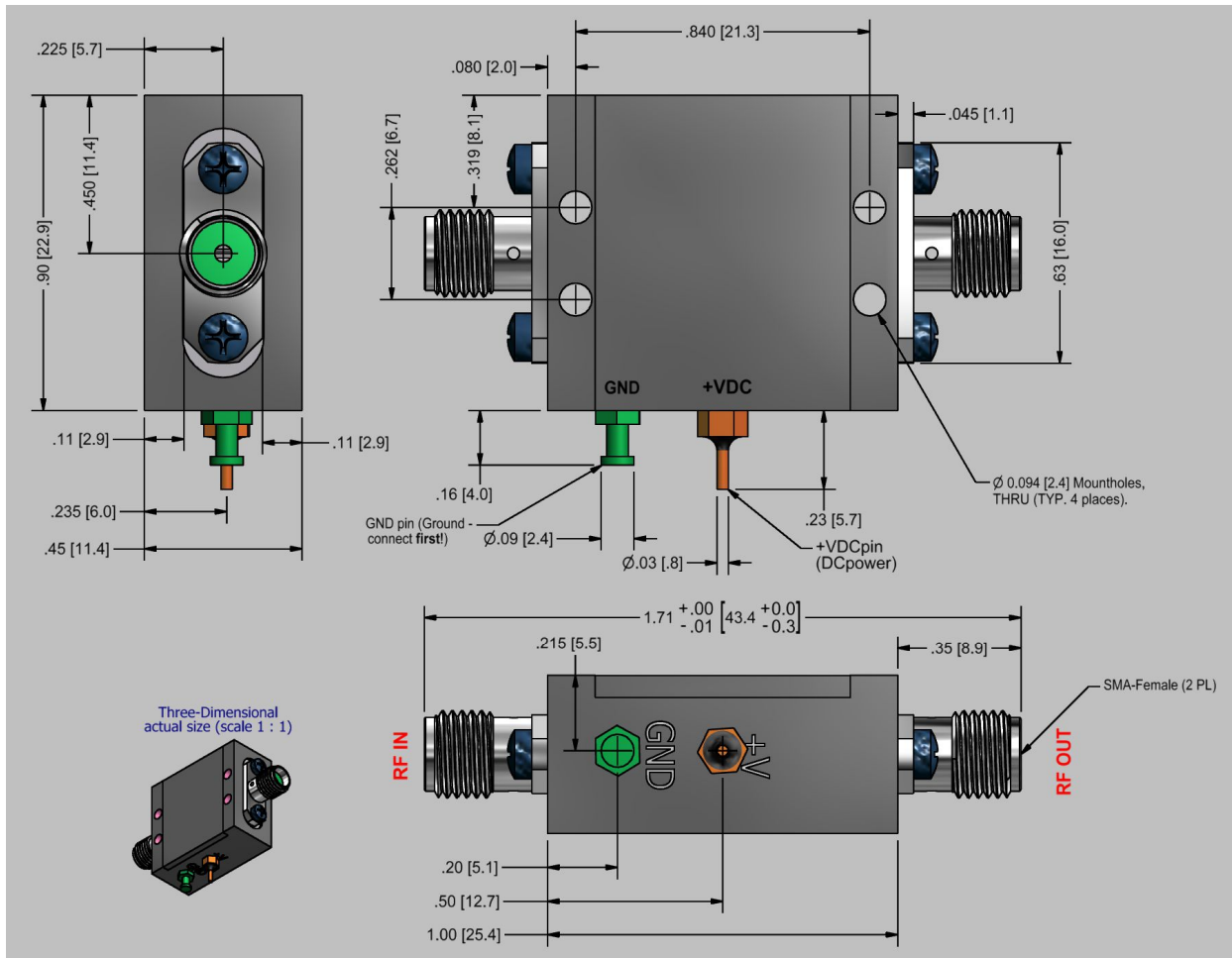
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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+0dBm
Supply Voltage	+16V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

Outline



WARNING: MUST USE HEAT SINK IF CASE TEMPERATURE EXCEEDS 50 °C