

## WNA Series

## 20MHz – 10GHz Low Noise Amplifier

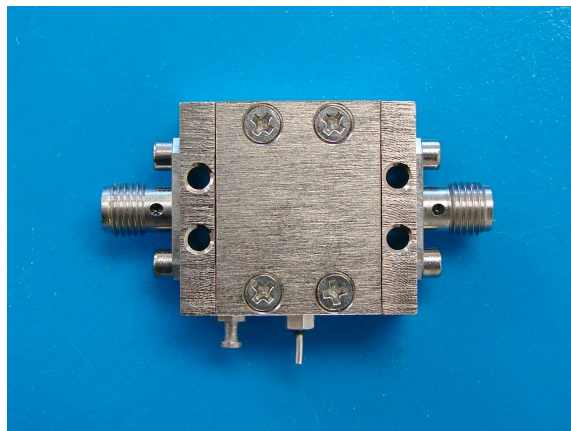
### Features

- Frequency Range: 0.02-10GHz
- Gain: 30dB
- $P_{1dB}$ : +18dBm
- IP3: +30dBm
- Noise Figure: 2.5dB @ 6GHz
- DC Power: +12V @ 150mA
- Internally Voltage Regulated
- RF Connector: SMA-Female

### Description

WNA-250 is a high performance Microwave Low Noise Amplifier, with standard frequency range of 20MHz to 10GHz.

### Photo



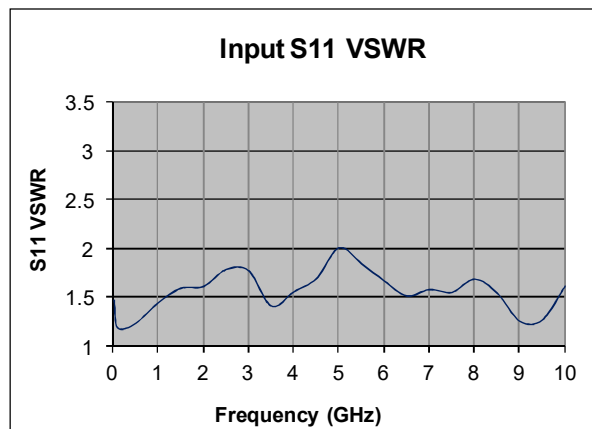
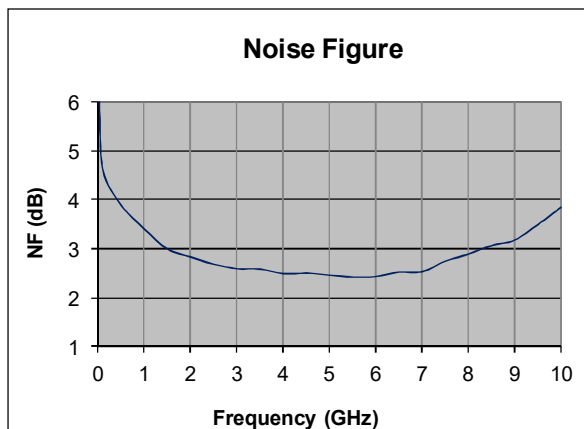
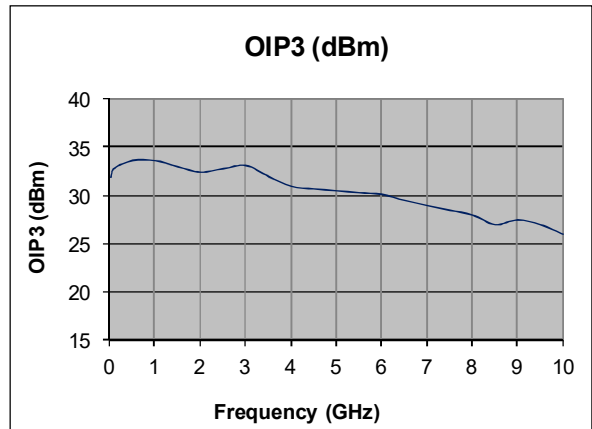
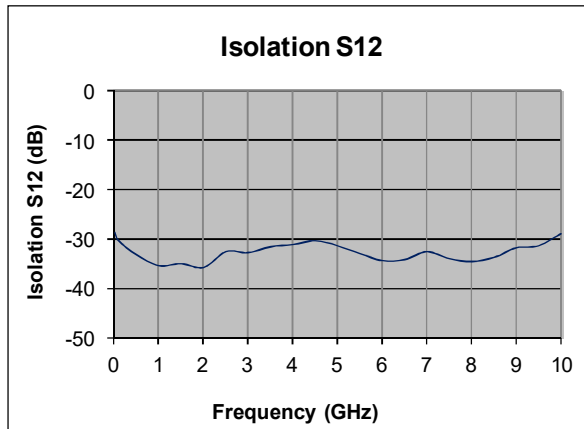
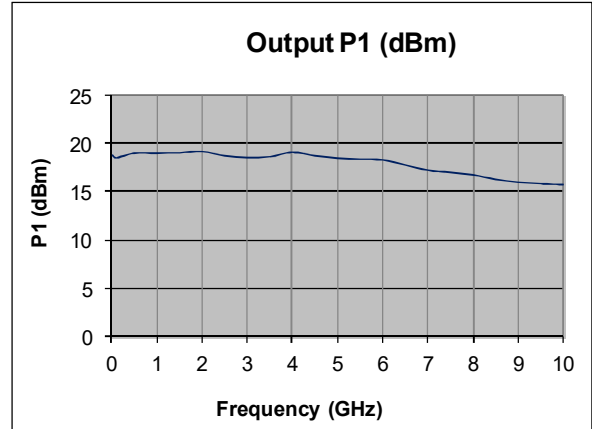
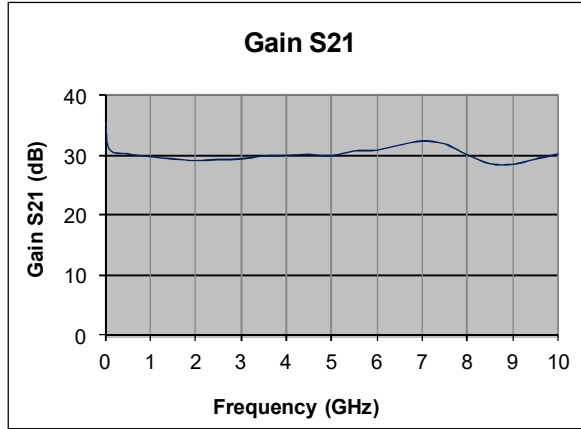
### Electrical Specifications @+25°C, $Z_{in}=Z_{out}= 50 \Omega$ , $V_{supply} = +12VDC$

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	0.02		10
Gain (S21) f = 20MHz	dB		35.0	
f = 3GHz	dB		29.5	
f = 6GHz	dB		30.5	
f = 10GHz	dB		30.0	
Gain Flatness	dB		± 2.5	
Output Power $P_{1dB}$	dBm		+18	
Output Third Order Intercept IP3	dBm		+30	
Noise Figure @ 6GHz	dB		2.5	
Reverse Isolation (S12) @ 6GHz	dB		-33	
VSWR-Input (S11) @ 6GHz			1.7:1	
VSWR-Output (S22) @ 6GHz			1.5:1	
DC Power Supply - voltage	V	9	12	15
DC Power Supply - current	mA		150	
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)		

## WNA Series

## 20MHz – 10GHz Low Noise Amplifier

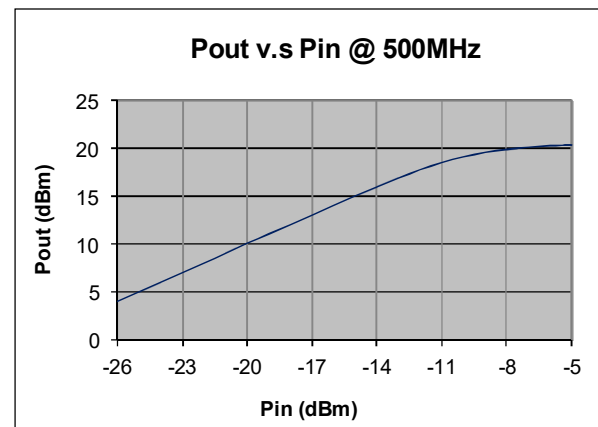
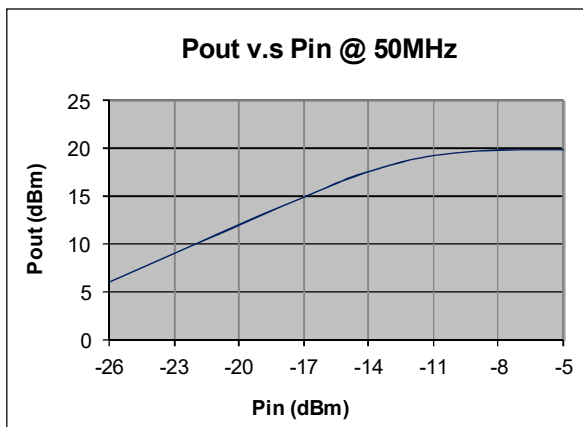
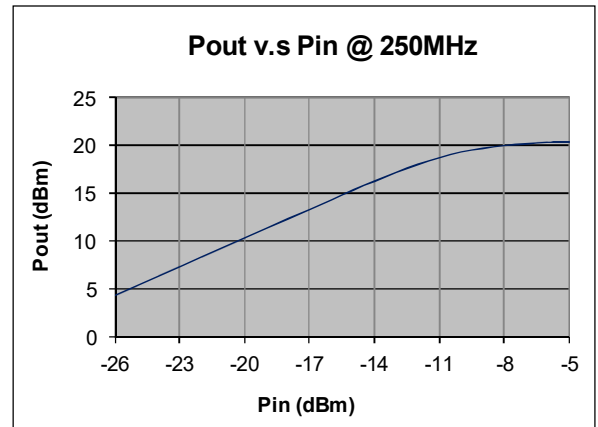
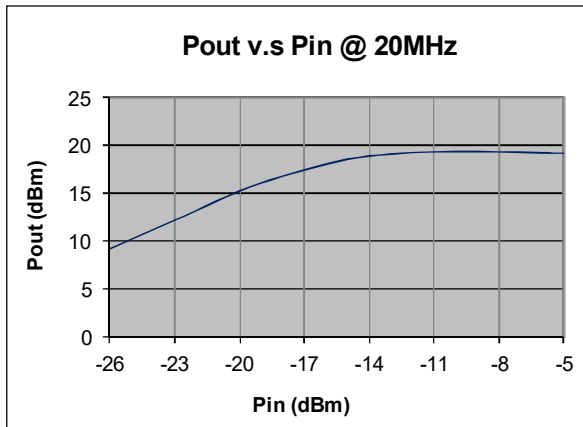
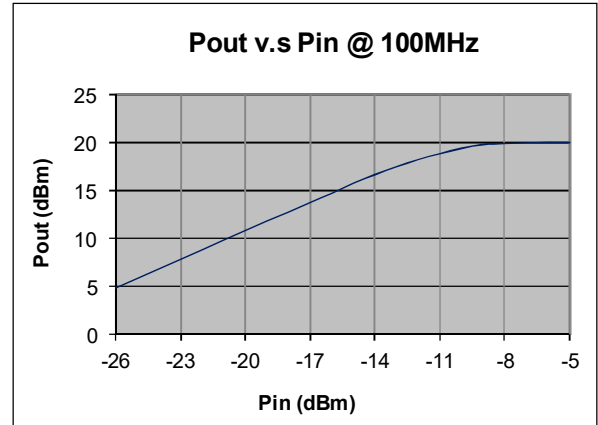
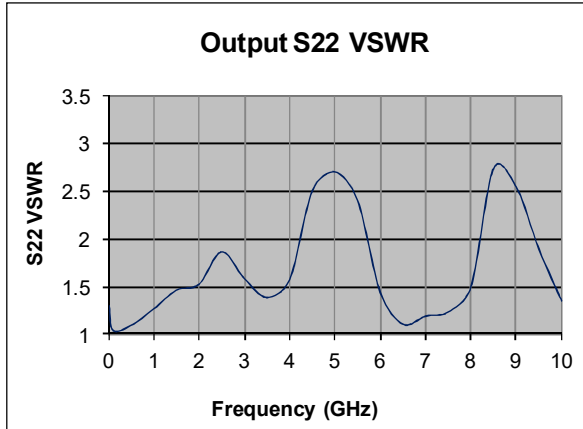
### Typical Performance @+25 °C



## WNA Series

## 20MHz – 10GHz Low Noise Amplifier

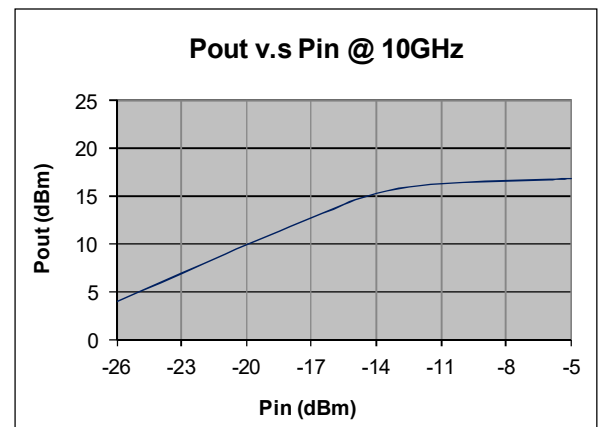
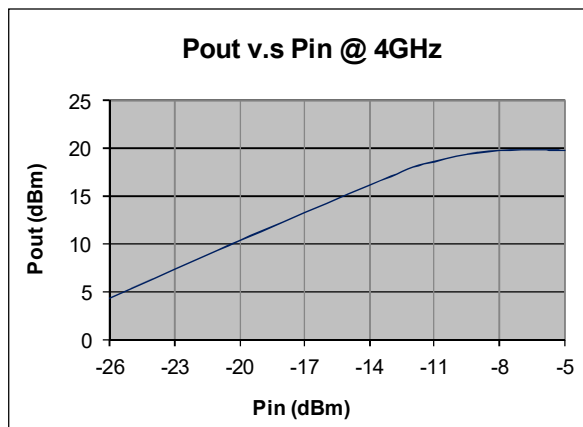
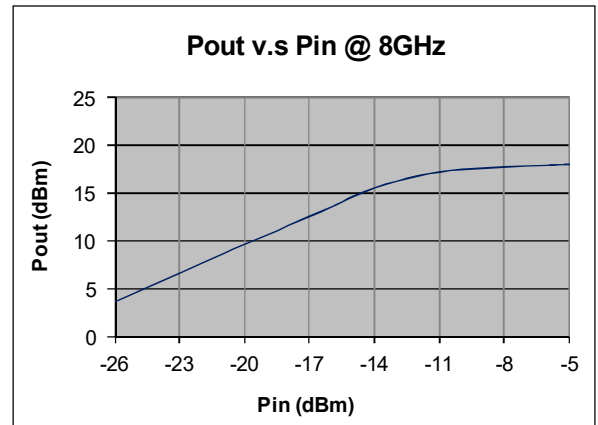
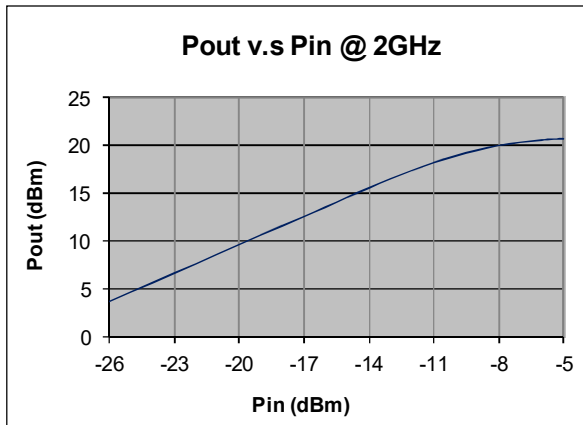
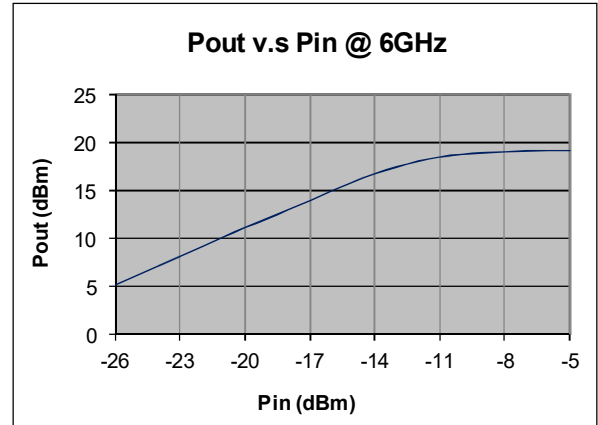
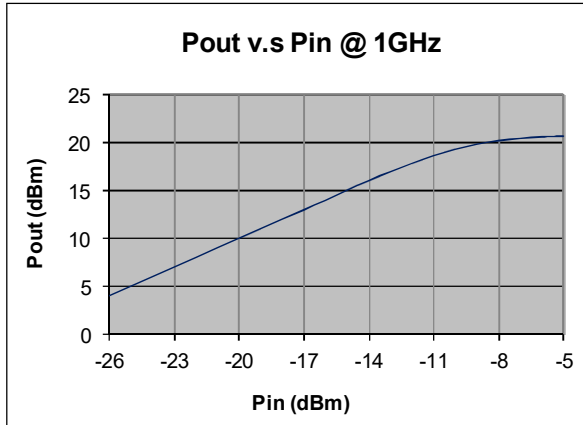
### Typical Performance @+25 °C



## WNA Series

## 20MHz – 10GHz Low Noise Amplifier

### Typical Performance @+25 °C



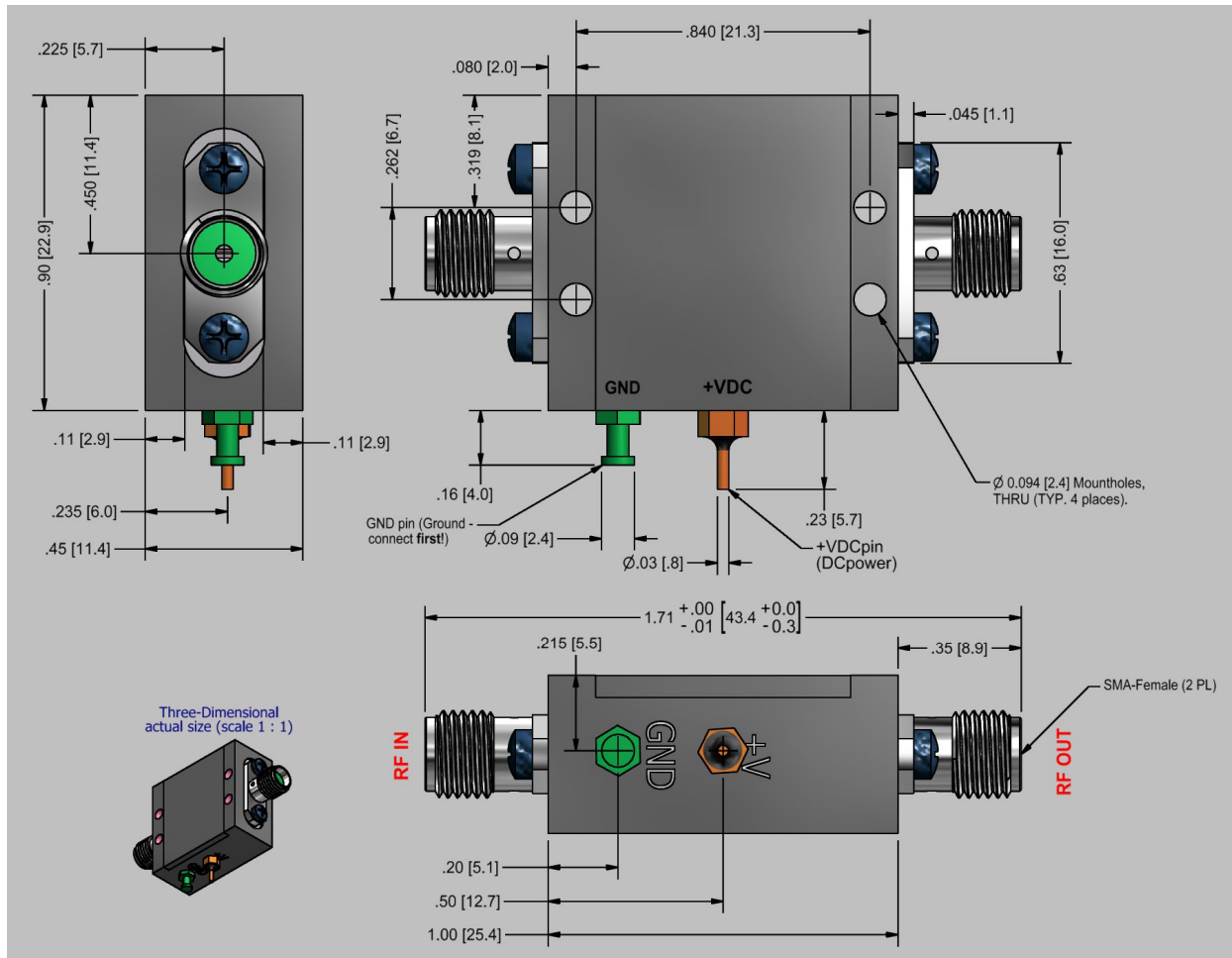
## WNA Series

## 20MHz – 10GHz Low Noise Amplifier

### Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+3dBm
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**