

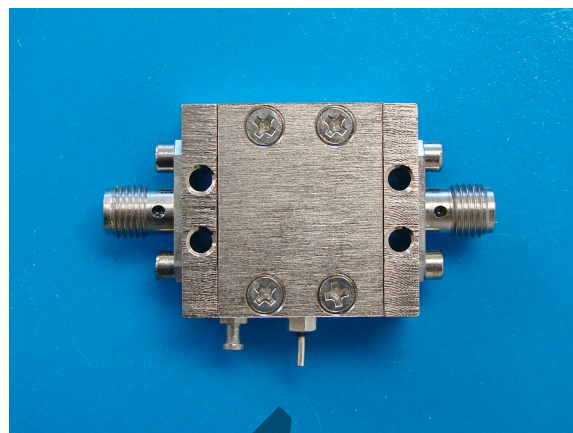
## WNA Series

## 0.01 – 8GHz Low Noise Amplifier

### Features

- Frequency Range: 10MHz-8GHz
- Gain: 40dB
- $P_{1dB}$ : +20dBm
- IP3: +30dBm
- Noise Figure: 2dB
- DC Power: +12V @ 160mA
- Internally Voltage Regulated
- RF Connector: SMA-Female

### Photo



### Description

WNA-180 is a high performance Microwave Low Noise Amplifier, with standard frequency range of 10MHz to 8GHz.

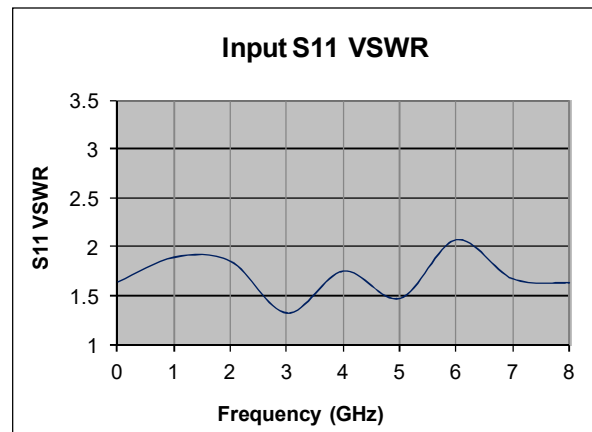
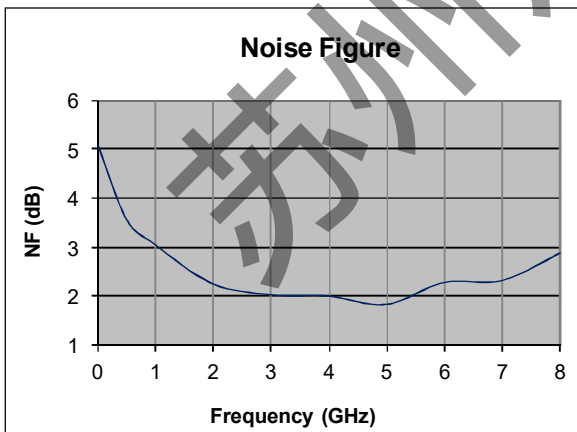
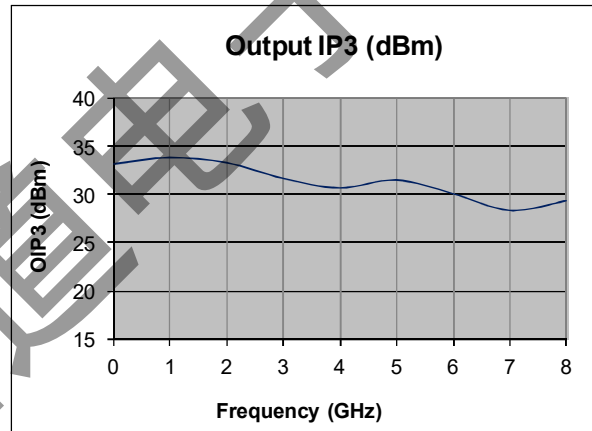
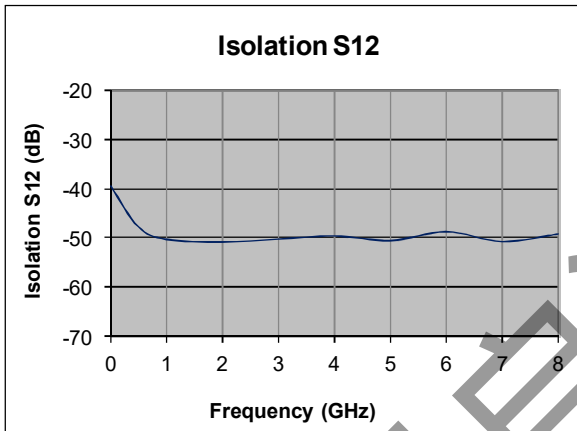
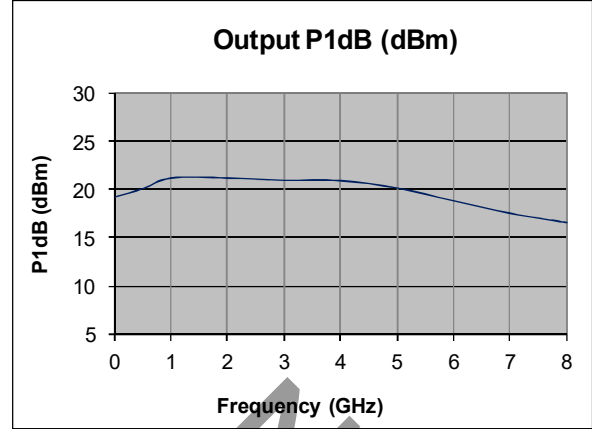
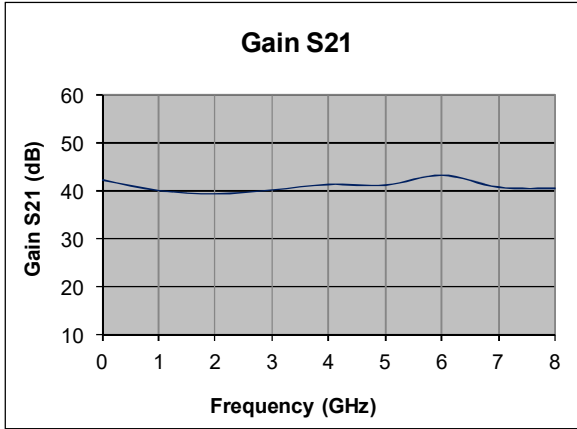
### Electrical Specifications @+25°C, $Z_{in}=Z_{out}= 50 \Omega$ , $V_{supply} = +12VDC$

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	GHz	0.01		8
Gain (S21) f = 10MHz	dB		42	
f = 4GHz	dB		41	
f = 8GHz	dB		40	
Gain Flatness	dB		± 1.5	
Output Power $P_{1dB}$	dBm		+20	
Output Third Order Intercept IP3	dBm		+30	
Noise Figure @ 4GHz	dB		2.0	2.5
Reverse Isolation (S12) @ 4GHz	dB		-50	
VSWR-Input (S11)			1.8:1	
VSWR-Output (S22)			2.5:1	
DC Power Supply - voltage	V	9	12	15
DC Power Supply - current	mA		160	
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**

**0.01 – 8GHz Low Noise Amplifier**

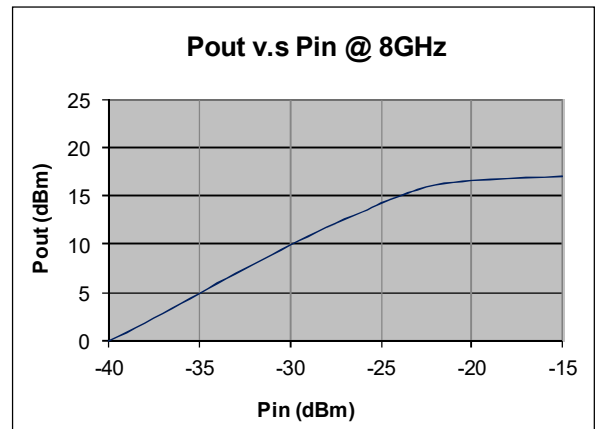
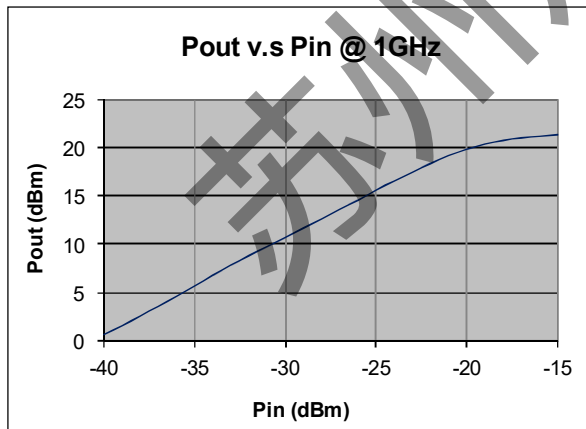
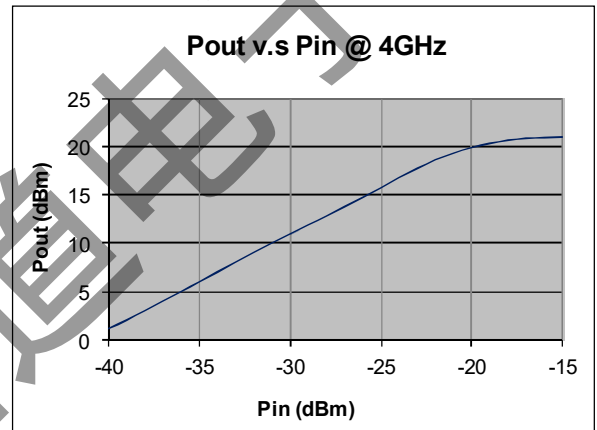
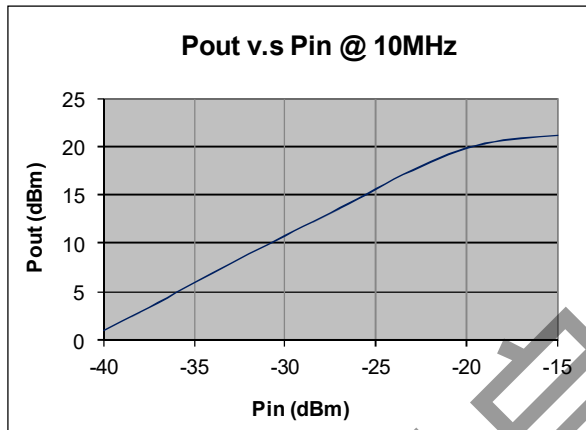
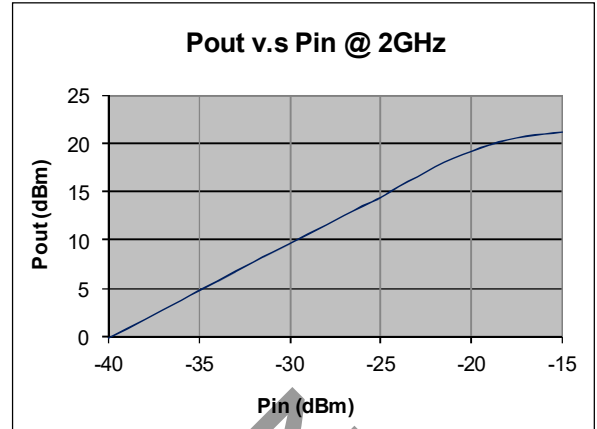
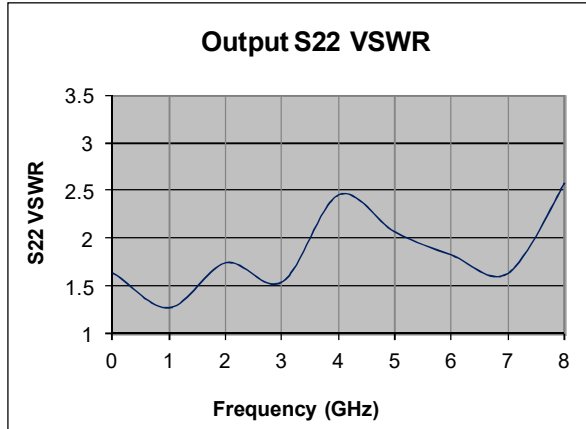
**Typical Performance @+25 °C**



**WNA Series**

**0.01 – 8GHz Low Noise Amplifier**

**Typical Performance @+25 °C**



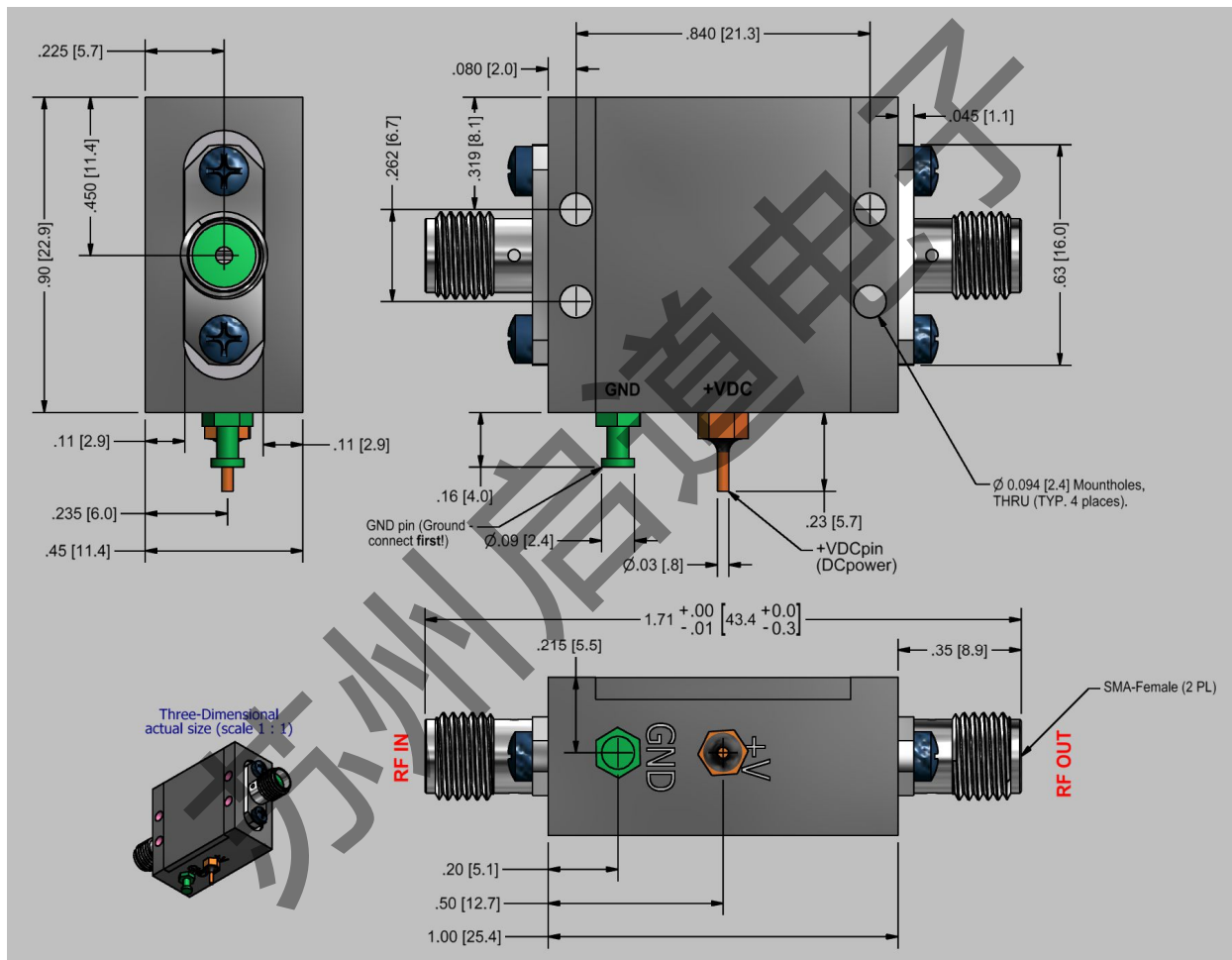
## WNA Series

## 0.01 – 8GHz Low Noise Amplifier

### Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	-7dBm
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**