

TURPA0.01G18G-3125

0.01-18GHz, Gain:31dB, Psat:25dBm

**Feature:**

- Ultra Wide Band: 0.01-18GHz
- Gain: 31 dB Typ
- Psat Output Power: 25 dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

**电气特性 Electrical Specifications:**

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	0.01-18			GHz
增益 Gain	27	31		dB
增益平坦度 Gain Flatness		±2.5		dB
线性输出功率 Output P1dB		25		dBm
饱和输出功率 Output Psat	25	27		dBm
噪声系数 Noise Figure		2.5		dB
输入驻波 Input VSWR		2.0	2.5	:1
输出驻波 Output VSWR		1.8	2.4	:1
直流电压 DC Voltage	+12			V DC
直流电流 DC Supply Current	500			mA
阻抗 Impedance	50			Ohms

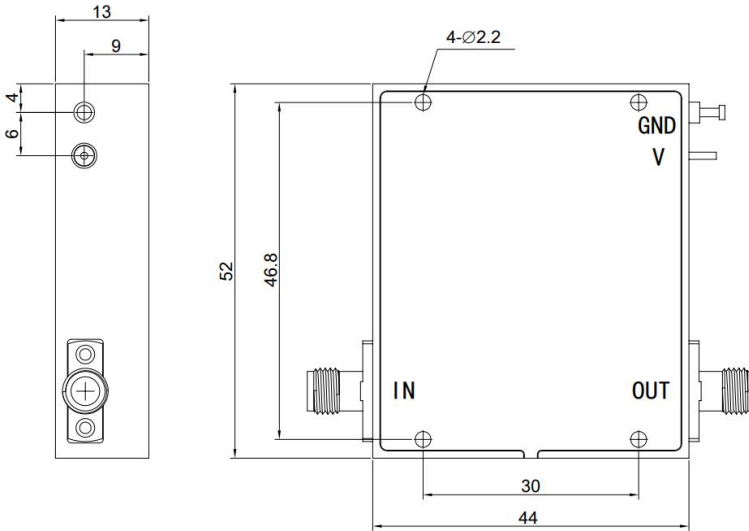
**机械特性 Mechanical Specifications:**

参数 Parameter	指标 Value	单位 Units
输入输出接口 Input /Output Connector	SMA Female/SMA Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	52*44*13	mm

**绝对最大值 Absolute Maximum Ratings:**

参数 Parameter	指标 Value
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Unit: mm



### \*\*\*Heat Sink Required During Operation



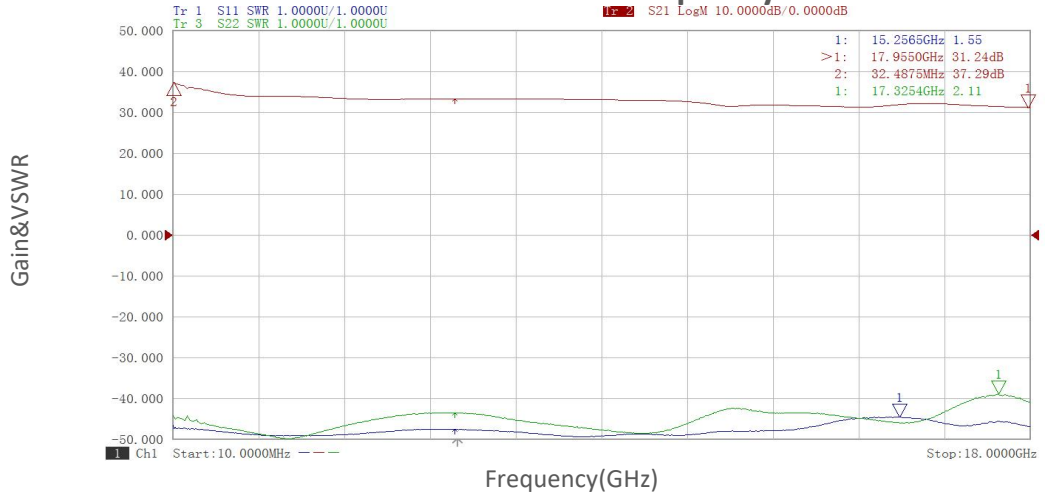
### 温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-40		+75	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

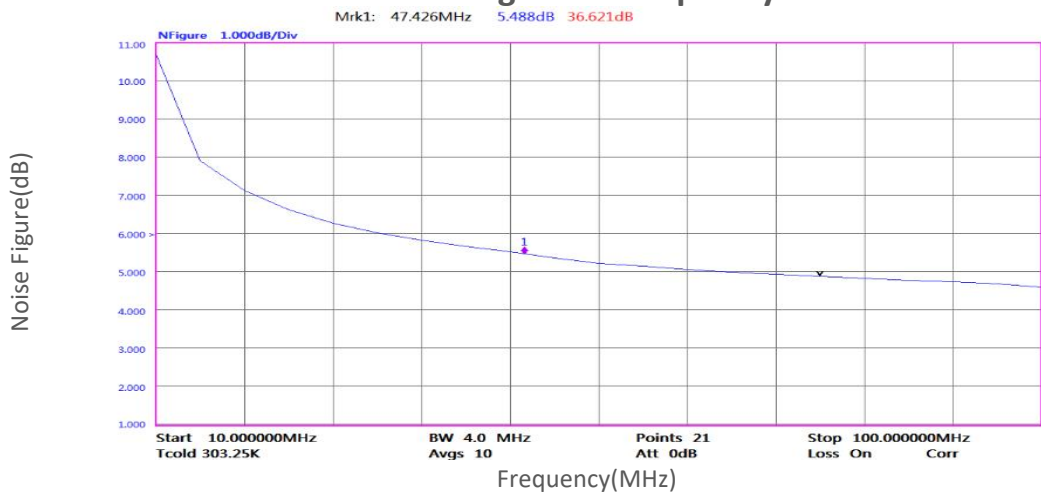
### 订货信息 Ordering Information:

标准型号 Part Number	描述 Description	版本号 Revision
TURPA0.01G18G-3125	Power amplifier 0.01-18GHz,Gain:31dB,Psat:25dBm,+12V DC,Without Heatsink	Rev.1.2

## Gain&VSWR vs Frequency



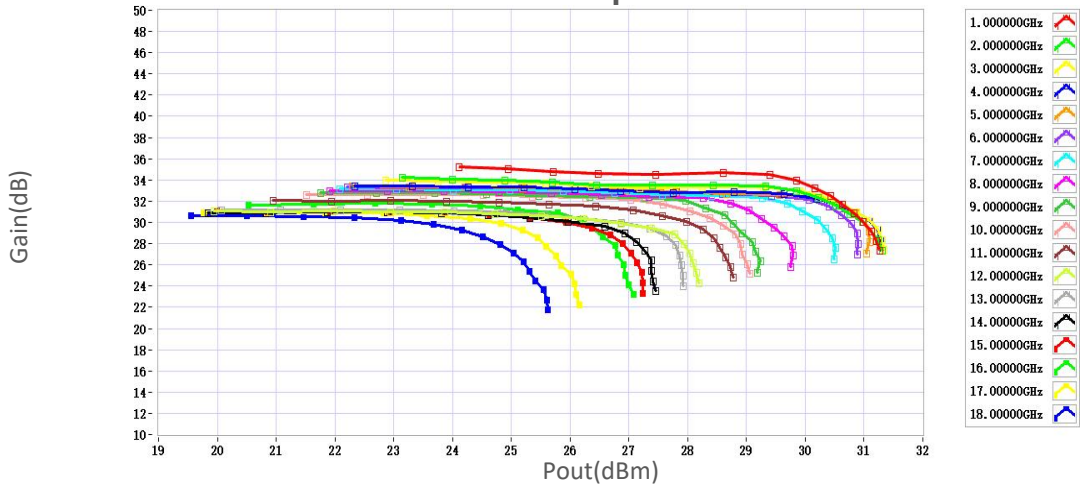
## Noise Figure vs Frequency



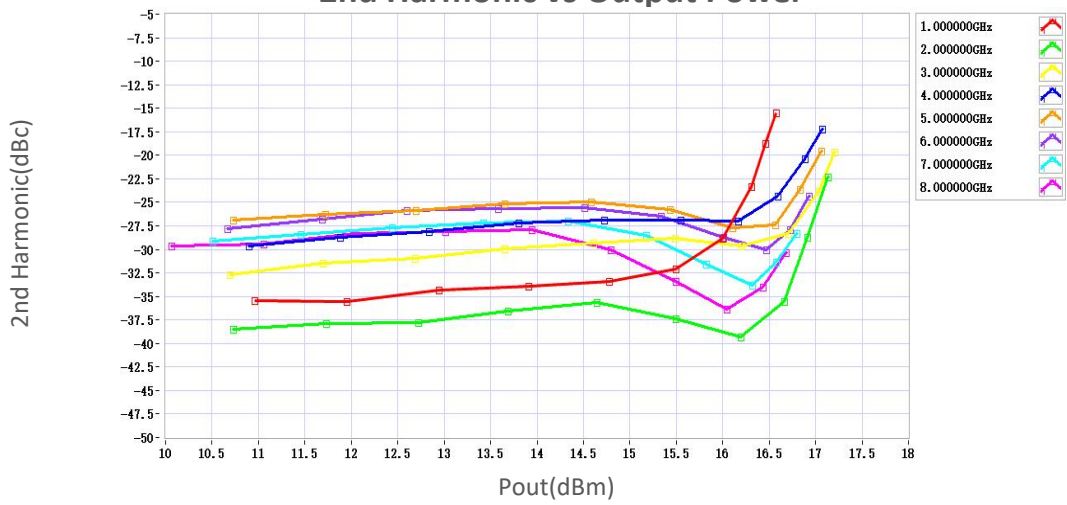
## Noise Figure vs Frequency

Noise Figure(dB)

### Gain vs Output Power



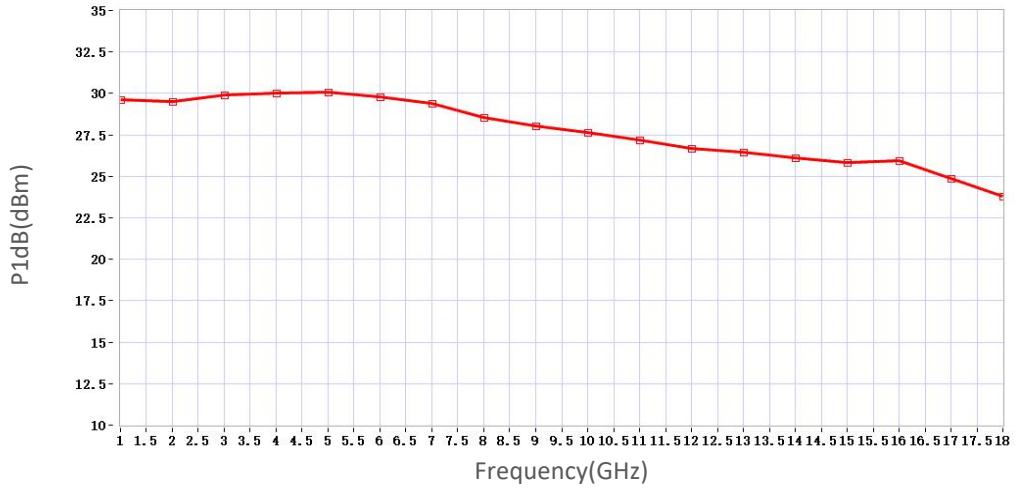
### 2nd Harmonic vs Output Power



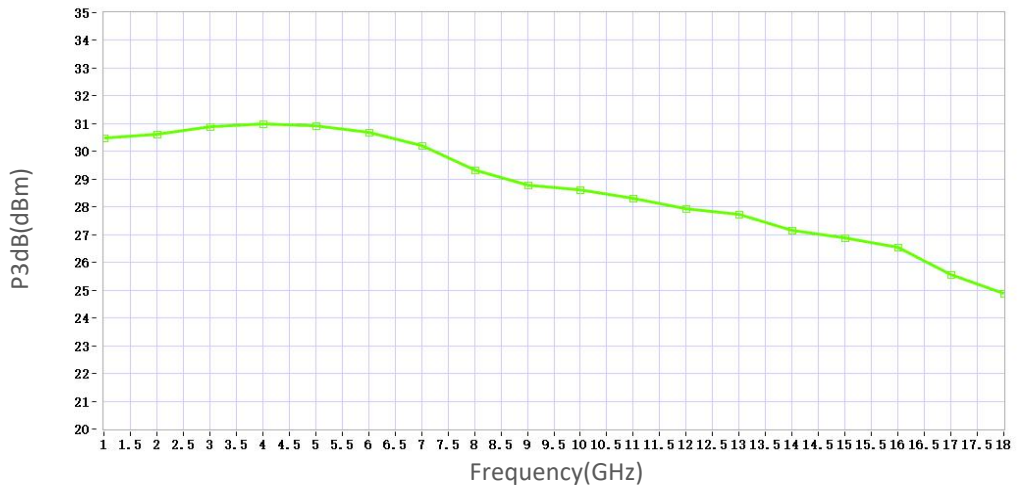
### 3rd Harmonic vs Output Power

3rd Harmonic(dBc)

**P1dB vs Frequency**



**P3dB vs Frequency**



**Psat vs Frequency**

Psat(dBm)