

TURLA0.5G6G-5018

TURLA0.5G6G-5018 is a low noise amplifier with a minimum small signal gain of 50 dB and a nominal noise figure of 1.8 dB across the frequency range of 0.5 to 6 GHz. The DC power requirement for the amplifier is +8 V DC/250 mA. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 0.5-6GHz
- Gain: 50dB Min
- Noise Figure: 1.8dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Communication systems

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	0.5		6	GHz
小信号增益 Small Signal Gain	50			dB
增益平坦度 Gain Flatness		±2.8		dB
噪声系数 Noise Figure		1.8	2	dB
线性输出功率 Output P1dB	10			dBm
输入驻波 Input VSWR		2.2	2.5	:1
输出驻波 Output VSWR		2.2	2.5	:1
直流电压 DC Voltage		+8		V DC
直流电流 DC Supply Current		250		mA
阻抗 Impedance		50		Ohms

机械特性 Mechanical Specifications:

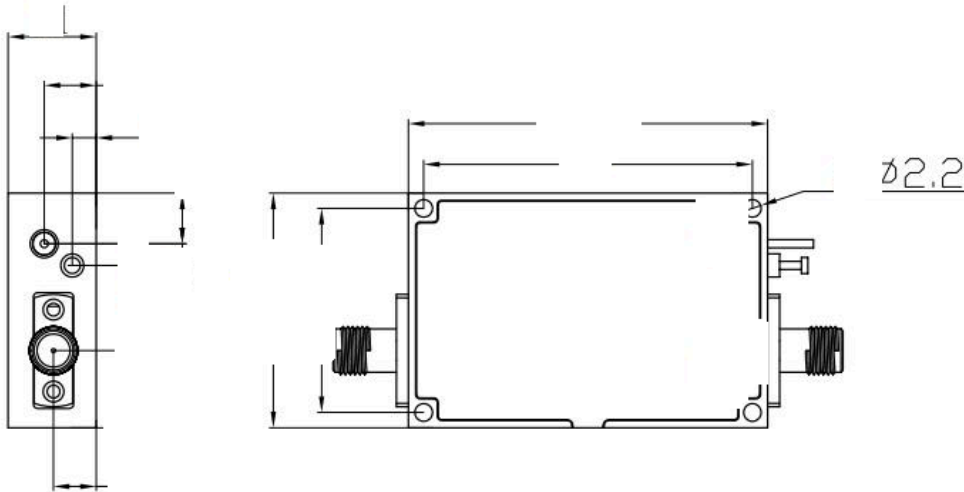
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	SMA Female/SMA Female	
直流偏置 DC Bias	Solder Pin	

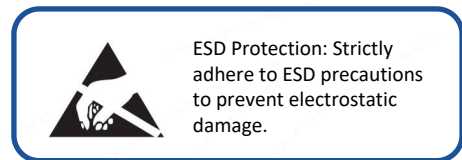
绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+12
输入功率 RF Input Power	10 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形图 Outline Drawing:

Unit:mm





温度环境 Environmental Conditions:

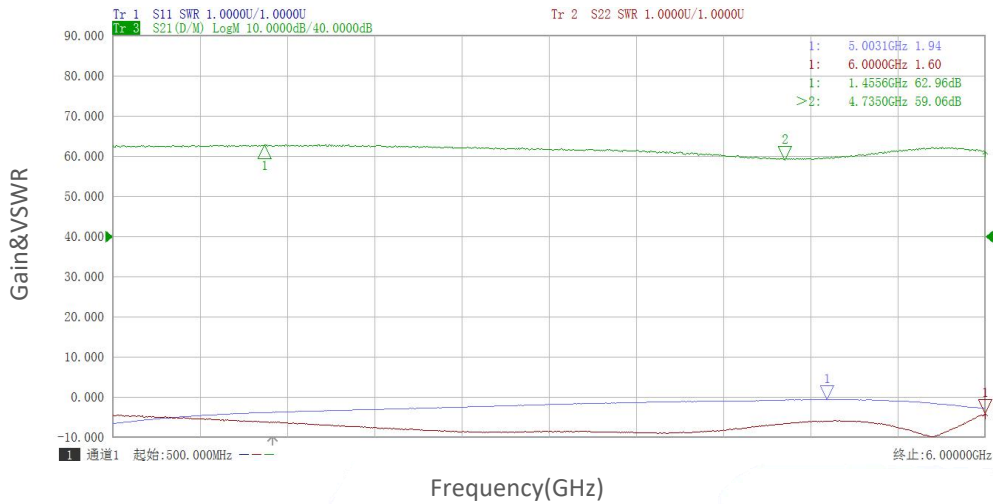
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude		50,000		feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			

订货信息 Ordering Information:

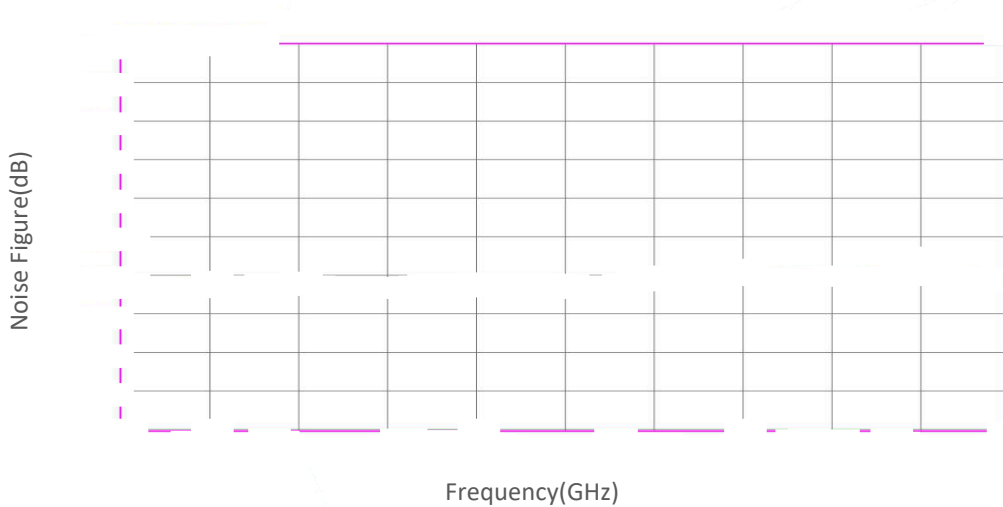
标准型号 Base Number	描述 Description	版本号 Revision
TURLA0.5G6G-5018	Low Noise Amplifier, 0.5-6GHz, Noise Figure:1.8dB, Gain: 50dB,P1dB:10dBm,+8V DC,Without Heatsink	Rev.1.1
TURLA0.5G6G-5018 HS	Low Noise Amplifier, 0.5-6GHz, Noise Figure:1.8dB, Gain: 50dB,P1dB:10dBm,+8V DC,With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

Gain&VSWR vs Frequency

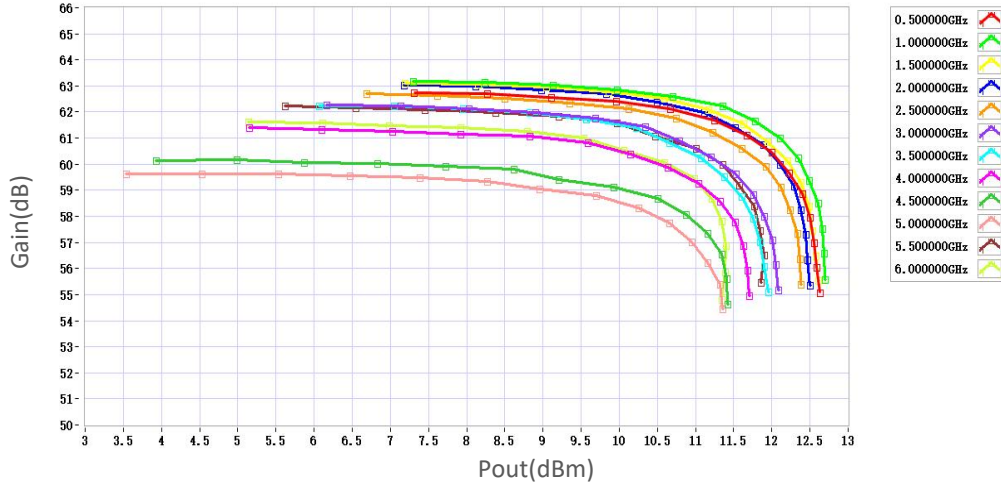


Noise Figure vs Frequency

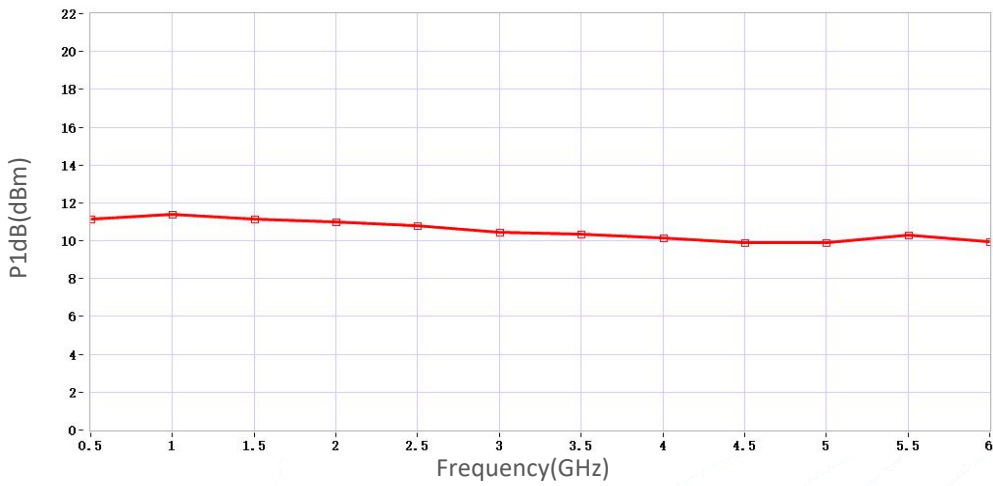


典型曲线 Typical Performance Data:

Gain vs Output Power



P1dB vs Frequency



P3dB vs Frequency

