

TURLA0.1G1.5G-3010

TURLA0.1G1.5G-3010 is a low noise amplifier with a minimum small signal gain of 28 dB and a maximum noise figure of 1.0 dB across the frequency range of 0.1 to 1.5 GHz. The DC power requirement for the amplifier is +12 V DC/70 mA. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 0.1-1.5GHz
- Gain: 28dB Min
- Noise Figure: 1.0dB Max
- 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	0.1		1.5	GHz
小信号增益 Small Signal Gain	28			dB
噪声系数 Noise Figure		0.8	1.0	dB
线性输出功率 Output P1dB	14	17		dBm
饱和输出功率 Output Psat		18		dBm
输入驻波 Input VSWR		1.8		:1
输出驻波 Output VSWR		1.4		:1
直流电压 DC Voltage	+8	+12	+15	V DC
直流电流 DC Supply Current		70		mA
阻抗 Impedance		50		Ohms

机械特性 Mechanical Specifications:

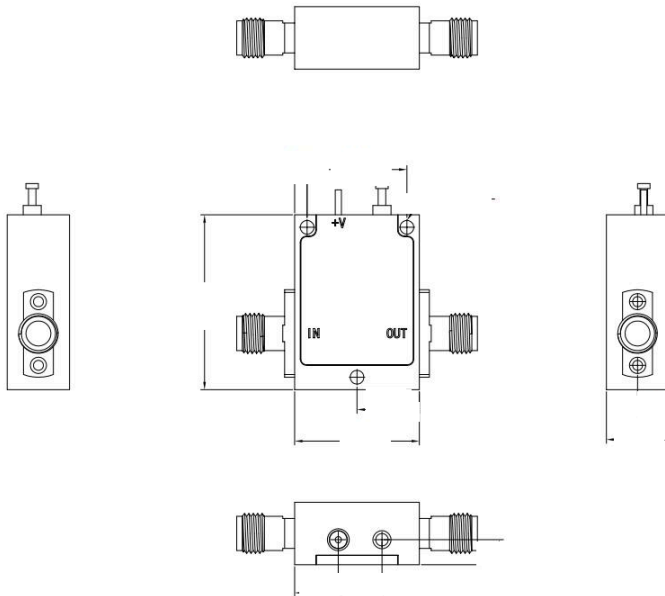
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	SMA Female/SMA Female	

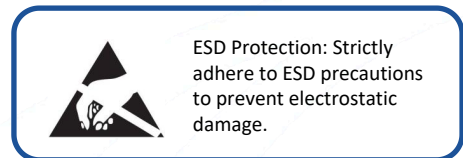
绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+15 V
输入功率 RF Input Power	15 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:

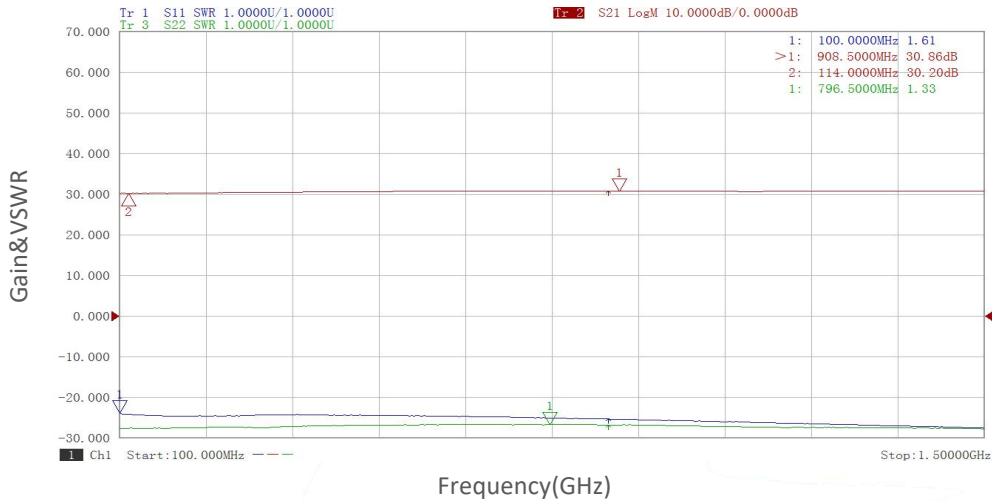
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-40		+60	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude		10,000		feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			

订货信息 Ordering Information:

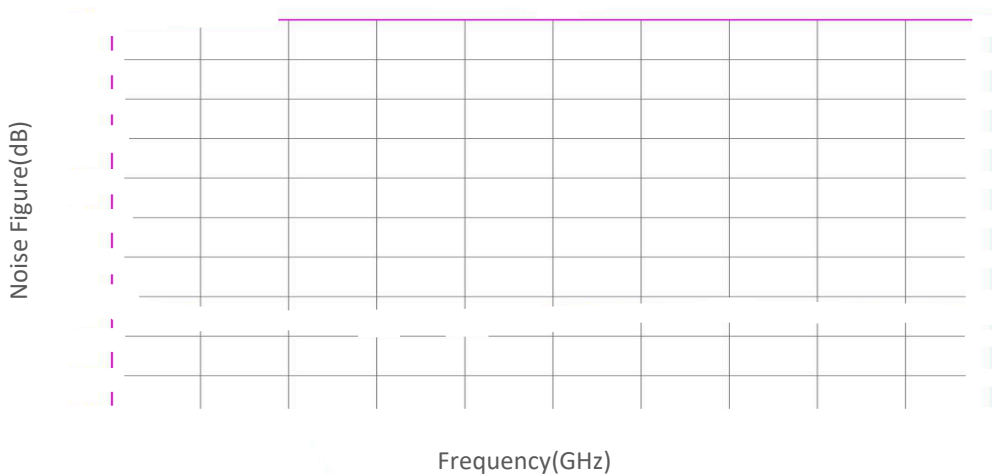
标准型号 Base Number	描述 Description	版本号 Revision
TURLA0.1G1.5G-3010	Low Noise Amplifier, 0.1-1.5GHz, Noise Figure:1.0dB, Gain:28 dB,P1dB:17dBm,+12V DC,Without Heatsink	Rev.1.1
TURLA0.1G1.5G-3010 HS	Low Noise Amplifier, 0.1-1.5GHz, Noise Figure:1.0dB, Gain:28 dB,P1dB:17dBm,+12V DC,With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

Gain&VSWR vs Frequency

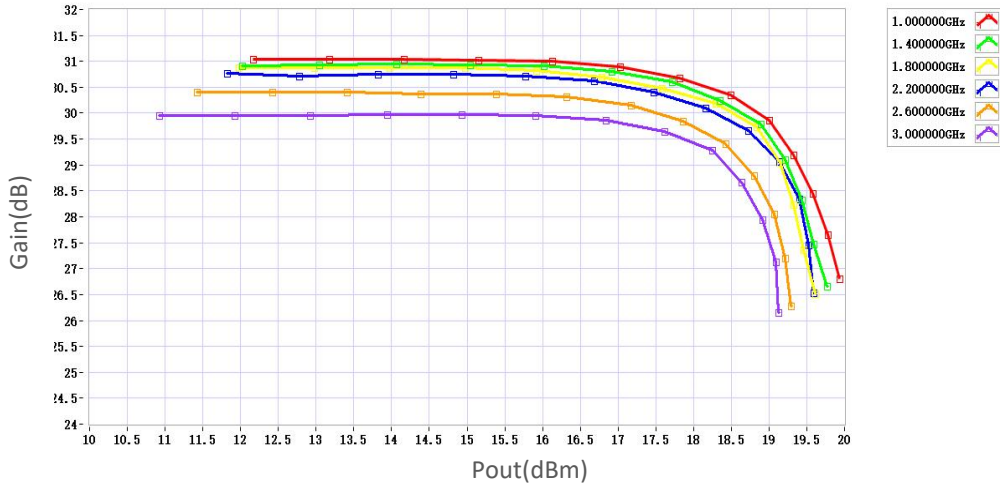


Noise Figure vs Frequency

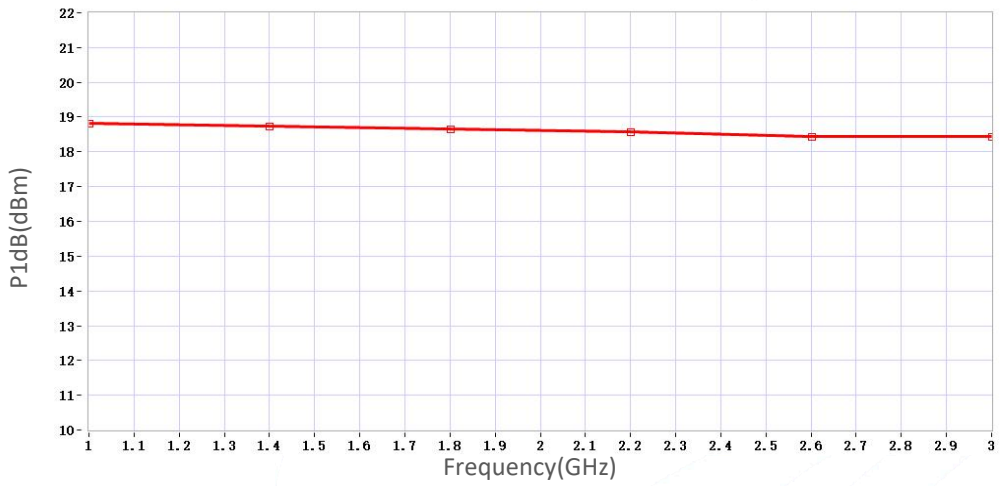


典型曲线 Typical Performance Data:

Gain vs Output Power



P1dB vs Frequency



P3dB vs Frequency

