

TURLA12G30G-3020

TURLA12G30G-3020 is a low noise amplifier with a typical small signal gain of 30 dB and a nominal noise figure of 2 dB across the frequency range of 12 to 30 GHz. The DC power requirement for the amplifier is +12 V DC/550 mA. The input and output port configuration offers coax adapter structure with 2.92mm female.

Features:

- Frequency range: 12-30GHz
- Gain: 30dB Typ
- Noise Figure: 2dB 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	12		30	GHz
小信号增益 Small Signal Gain	28.5	30		dB
增益平坦度 Gain Flatness		±1.5		dB
噪声系数 Noise Figure		2	3	dB
线性输出功率 Output P1dB	23.5	24		dBm
饱和输出功率 Output Psat		25		dBm
输入驻波 Input VSWR		1.6		:1
输出驻波 Output VSWR		1.8		:1
直流电压 DC Voltage		+12		V DC
直流电流 DC Supply Current		550		mA
阻抗 Impedance	50			Ohms

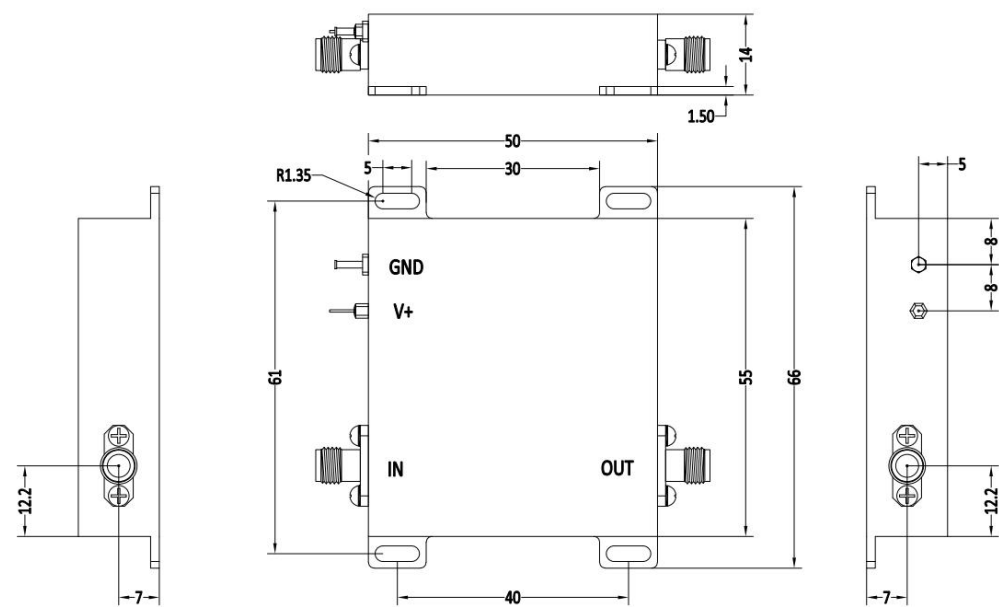
机械特性 Mechanical Specifications:

参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	2.92mm Female/2.92mm Female	

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	TBD
输入功率 RF Input Power	+5 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形图 Outline Drawing: Unit:mm





ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-45		+85	℃
存储温度 Non-operating Temperature	-55		+125	℃
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
TURLA12G30G-3020	Low Noise Amplifier, 12-30GHz, Noise Figure:2dB, Gain:30 dB,P1dB:24dBm,+12V DC,Without Heatsink	Rev.1.1
TURLA12G30G-3020 HS	Low Noise Amplifier, 12-30GHz, Noise Figure:2dB, Gain:30 dB,P1dB:24dBm,+12V DC,With Heatsink	Rev.1.1