

Low Noise Amplifier

1-18GHz/2.5dB NF/30dB Gain/20dBm P1dB

TLLA1G18G-27-25

TURLA1G18G-2725 is a low noise amplifier with a typical small signal gain of 30 dB and a nominal noise figure of 2.5 dB across the frequency range of 1 to 18 GHz. The DC power requirement for the amplifier is +12V DC/250 mA. The input and output port configuration offers coax adapter structure with SMA female.

- Features:
- Frequency range: 1-18GHz
 - Gain: 30dB Typ
 - Noise Figure: 2.5dB 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	1		18	GHz
小信号增益 Small Signal Gain	27	30		dB
增益平坦度 Gain Flatness		±2	±3	dB
噪声系数 Noise Figure		2.5	3.5	dB
线性输出功率 Output P1dB	15	20		dBm
输出三阶交调 Output IP3		25		dBm
输入驻波 Input VSWR		1.6	2	:1
输出驻波 Output VSWR		1.6	2	:1
直流电压 DC Voltage		12		V DC
直流电流 DC Supply Current		250		mA
阻抗 Impedance	50			Ohms

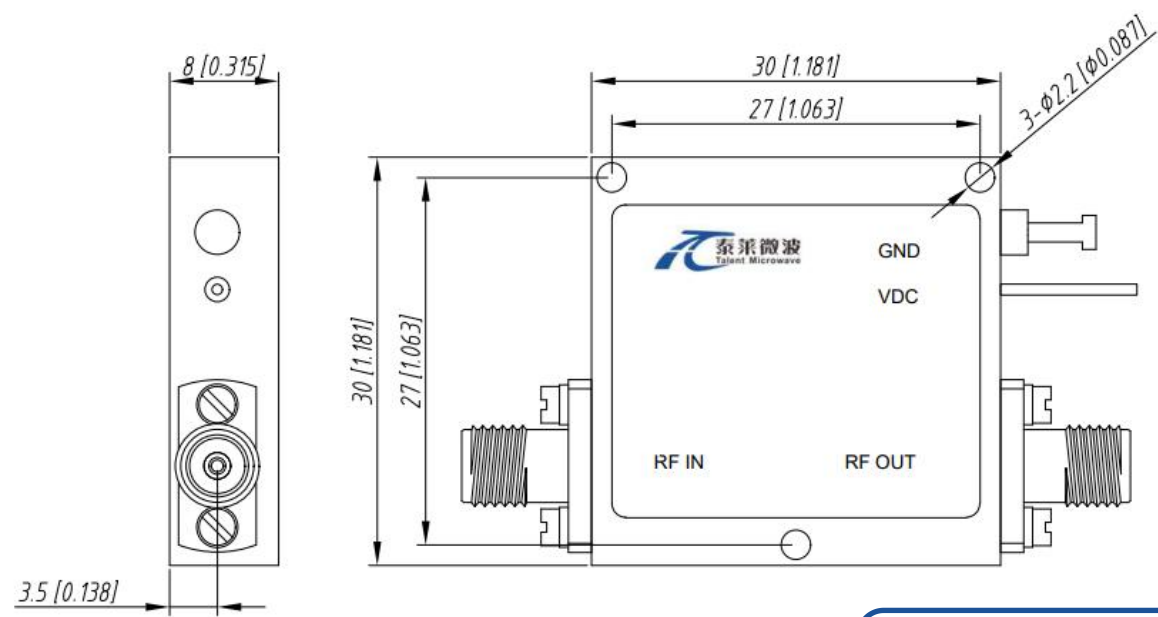
机械特性 Mechanical Specifications:

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

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	0 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形图 Outline Drawing: Unit:mm



***Heat Sink Required During Operation



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		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
TURLA1G18G-2725	Low Noise Amplifier, 1-18GHz, Noise Figure:2.5dB, Gain:30 dB,P1dB:20dBm,+12V DC,Without Heatsink	Rev.1.1
TURLA1G18G-2725 HS	Low Noise Amplifier, 1-18GHz, Noise Figure:2.5dB, Gain:30 dB,P1dB:20dBm,+12V DC,With Heatsink	Rev.1.1