

**Model:TLLA0.5G18G-31-40**
**Low Noise Amplifier**  
**0.5-18GHz, NF:4.0dB, Gain:31dB,P1dB:15dBm**
**Feature:**

- Ultra Wide Band: 0.5-18GHz
- Gain: 31dB Typ
- Noise Figure: 4.0dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

**电气特性 Electrical:**

参数Parameter	Min.	Typ.	Max.	单位Units
频率范围 Frequency range	0.5-18			GHz
增益 Gain	26	31		dB
增益平坦度 Gain Flatness		±1.0	±2.0	dB
噪声系数 Noise Figure		4.0	5.5	dB
线性输出功率P1dB	13	15		dBm
三阶交调 IP3		26		dBm
输入驻波 Input VSWR		1.8	2.0	:1
输出驻波 Output VSWR		1.8	2.0	:1
直流电压 DC Voltage		+12		V DC
直流电流 DC Supply Current		140		mA
阻抗 Impedance	50			Ohms

**机械特性 Mechanical :**

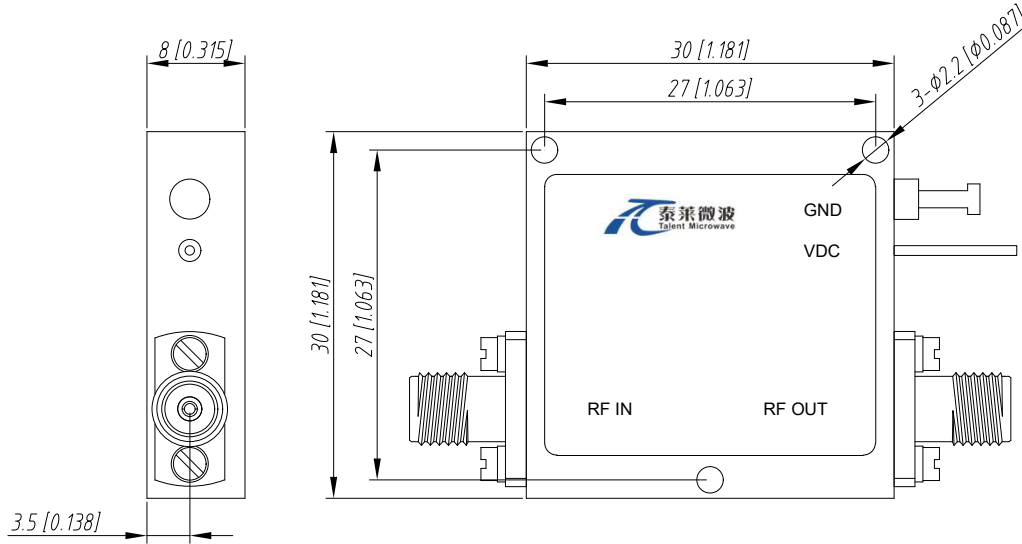
参数Parameter	指标 Value	单位Units
输入输出接口 Input /Output Connector	SMA Female	
直流偏置 Bias	Solder Pin	
尺寸 Size	30*30*10.2	mm
重量 Weight	/	g


**绝对最大值 Absolute Maximum Ratings:**

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

**外形尺寸 Outline Drawing:**

Unit: mm(inches)



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



OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES

**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			
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
TLLA0.5G18G-31-40	Low Noise Amplifier, 0.5-18GHz, Noise Figure:4.0 dB, Gain:31 dB,P1dB:15dBm,12V DC,Without Heatsink	Rev.1.1
TLLA0.5G18G-31-40-HS	Low Noise Amplifier, 0.5-18GHz, Noise Figure:4.0 dB, Gain:31 dB,P1dB:15dBm,12V DC,With Heatsink	Rev.1.1