

Model: TLLA20G40G-21-00-Cryo
**Ka-band Cryogenic Low Noise Amplifier
 20-40GHz, Noise Figure: 0.9dB , Gain: 20 dB**
Feature:

- Ultra Wide Band: 20-40 GHz
- Gain: 20 dB Typ
- Noise Figure: 1.7 dB Typ
- Technology: InP
- 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		20-40		GHz
增益 Gain		20		dB
增益平坦度 Gain Flatness		±2.0		dB
噪声系数 Noise Figure@296K		1.7		dB
输出P1dB Output P1dB		-5		dBm
输入回波损耗 Input Return Loss		-8		dB
输出回波损耗 Output Return Loss		-8		dB
漏极电压范围 Drain voltage range	0.6		1.5	V
漏极电流范围 Drain current range		25		mA
栅极电压范围 Gate voltage range	-2		+2	V
功耗 Power Consumption		30		mw
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	2.92mm Female	
直流偏置 Bias	Nano D connector	
尺寸 Size	19.6*22.5*8.16	mm

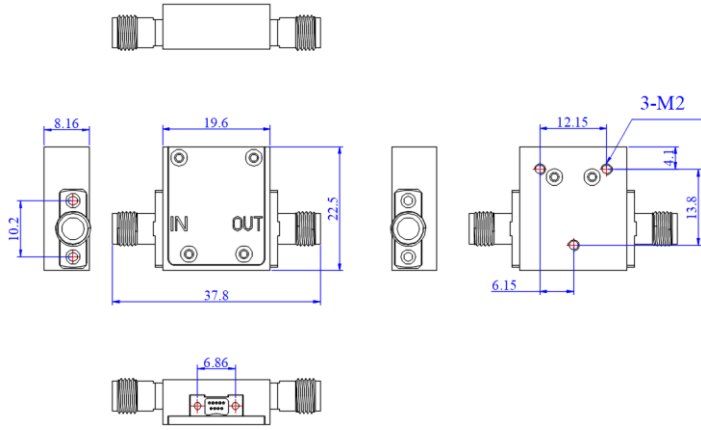

 Available 220V System
 Benchtop Amplifier

绝对最大值 Absolute Maximum Ratings:

参数Parameter	指标 Value
漏极电压 Drain voltage	+1.5V
栅极电压 Gate voltage	+2 V
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形尺寸 Outline Drawing:

Unit: mm



Nano D connector Define	
引脚 Pin #	功能 Function
1,2	NC
3	GND
4	VD
5	VG
4-9	NC



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

温度环境 Environmental Conditions:

参数 Parameter	Min.	Typ.	Max.	单位 Units
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
TLLA20G40G-21-00-Cryo	Ka-band Cryogenic Low Noise Amplifier 20-40GHz, Gain:20 dB	Rev.1.1