

Model:TLLA2G14G-30-00-Cryo

Cryogenic Low Noise Amplifier 2-14GHz, NF:5K@Temperature≤4K, Gain:30dB

Feature:

- Ultra Wide Band: 2-14GHz
- Gain: 30 Typ
- Noise Figure: 5K @Temperature≤4K
- Technology:InP HEMT
- 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	2-14			GHz
增益 Gain		30		dB
增益平坦度 Gain Flatness		±1.4		dB
噪声温度 Noise Temperature		6	7.1	K @Temperature≤15K
噪声温度 Noise Temperature		5	6	K @Temperature≤4K
输入回波损耗 Input Return Loss			-1.5	dB
输出回波损耗 Output Return Loss			-15	dB
漏极电压 Drain voltage range	0.7		4	V DC
漏极电流 Drain current range		20		mA DC
触发电压Gate voltage range	-2		+2	V DC
功耗 Power Consumption			36	mW
阻抗 Impedance	50			Ohms

机械特性 Mechanical :

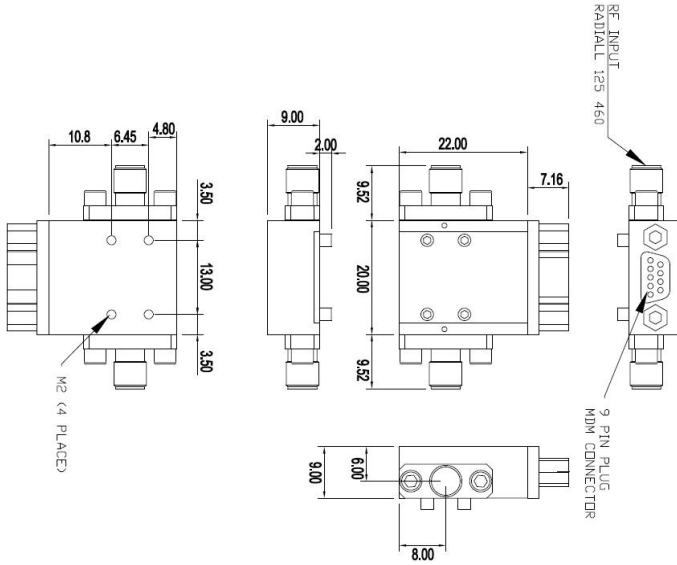
参数Parameter	指标 Value	单位Units
输入输出接口Input /Output Connector	2.92mm Female	
直流偏置 Bias	Micro MDM 9-P	
尺寸 Size	46*32.5*9	mm
重量 Weight	65	g

绝对最大值 Absolute Maximum Ratings:

参数Parameter	指标 Value
漏极电压 Drain voltage range	+4V
触发电压Gate voltage range	±2V
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形尺寸Outline Drawing:

Unit: mm



MICRO-D9 Female Define

引脚 Pin #	功能Function
1	GND
2	VD1 (0.7 to 4V)
3	VG1 (-2 to +2V)
4	VD2 (0.7 to 4V)
5	VG2 (-2 to +2V)
6	VD2 (0.7 to 4V)
7	VG2 (-2 to +2V)
8-9	NC



Note: Cryogenic low noise amplifiers made with InP FETs have been found very sensitive to ESD and leakage from the power supplies.

订货信息 Ordering Information:

标准型号 Part Number	描述 Description	版本号Revision
TLLA2G14G-30-00-Cryoo	Cryogenic Low Noise Amplifier 2-14GHz, NF:5K@Temperature≤4K, Gain:30dB	Rev.1.1

典型曲线 Typical Performance Data:

