泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
+86-0512-62657975
sales@talentmw.com
www.talentmw.com

Model:TLLA4G8G-36-00-Cryo-LP

C-band Cryogenic Low Noise Amplifier
4-8GHz, NF:2.5K@Temperature≤4K, Gain:40 dB

Feature:

- Ultra Wide Band: 4-8GHz
- Gain: 40dB
- Noise Figure: 2.5K Max@Temperature≤4K
- Technology: InP HEMT
- 50 Ohm Matched Input / Output

Electrical:

Parameter	Min.	Typ.	Max.	单位Units
Frequency range		4-8		GHz
Gain		40		dB
Gain Flatness		±1.0		dB
Noise Temperature		3.5		K @Temperature≤15K
Noise Temperature		2.0	2.5	K @Temperature≤4K
Input Return Loss			-6	dB
Output Return Loss			-13	dB
Drain voltage range		0.6		V DC
Drain current range		20		mA DC
Gate voltage range	-2		+2	V DC
Power Consumption		3.5		mW
Impedance		50		Ohms

Mechanical :

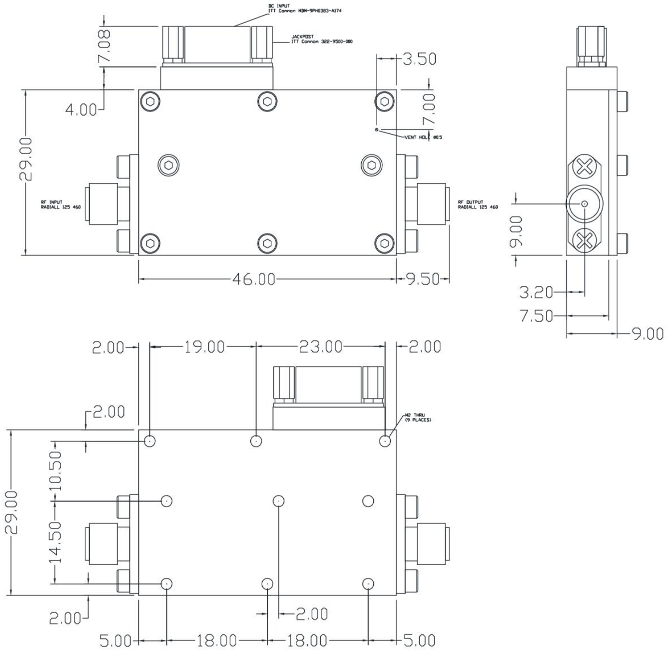
Parameter	Value	Units
Input /Output Connector	SMA Female	
Bias	Nano D connector	
Size	46*32.5*9	mm
Weight	65	g

Absolute Maximum Ratings:

Parameter	Value
Drain voltage range	+1.2V
Gate voltage range	±2V
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit: mm



Nano D Female Define	
Pin #	**Function**
1	GND
2	VD1 （0.5 to 1.2V）
3	VG1 （-2 to +2V）
4-9	NC

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

Ordering Information:

Part Number	Description	Revision
TLLA4G8G-36-00-Cryo-LP	C-band Cryogenic Low Noise Amplifier 4-8GHz, NF:2.0K@Temperature≤4K, Gain:40 dB, low power	Rev.1.3

泰莱微波
Talent Microwave
Suzhou Talent Microwave,Inc
+86-0512-62657975
sales@talentmw.com
www.talentmw.com

Typical Performance Data: