泰莱微波
Talent Microwave

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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

Electrical:

Parameter	Min.	Typ.	Max.	Units
Frequency range		2-14		GHz
Gain		30		dB
Gain Flatness		±1.4		dB
Noise Temperature		6	7.1	K @Temperature≤15K
Noise Temperature		5	6	K @Temperature≤4K
Input Return Loss			-1.5	dB
Output Return Loss			-15	dB
Drain voltage range	0.7		4	V DC
Drain current range		20		mA DC
Gate voltage range	-2		+2	V DC
Power Consumption			36	mW
Impedance		50		Ohms

Mechanical :

Parameter	Value	Units
Input /Output Connector	2.92mm Female	
Bias	Micro MDM 9-P	
Size	46*32.5*9	mm
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

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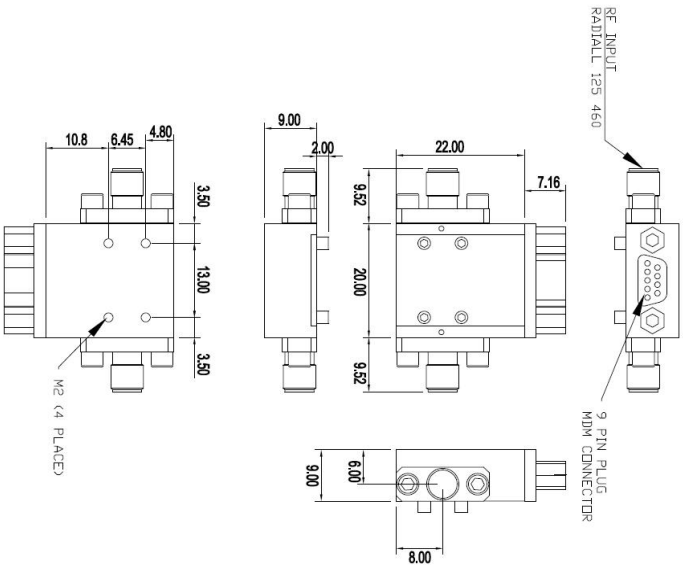
Outline Drawing:

Unit: mm



MICRO-D9 Female Define	
Pin #	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.

Ordering Information:

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

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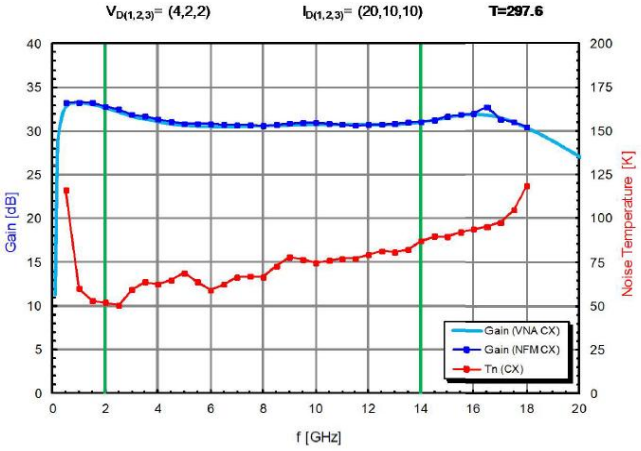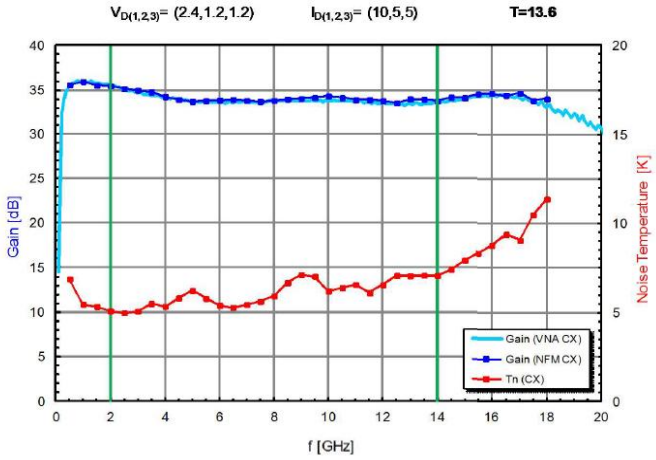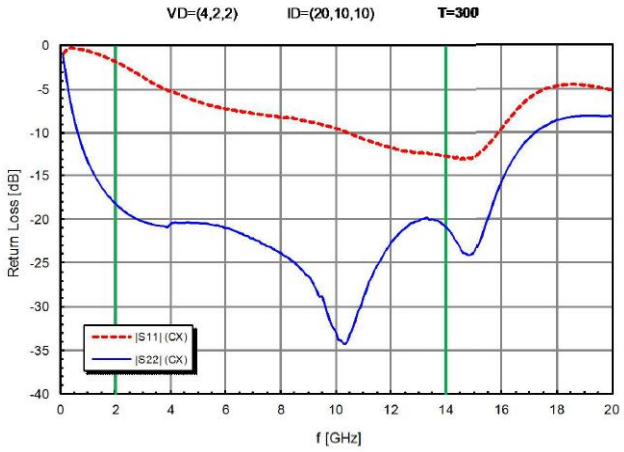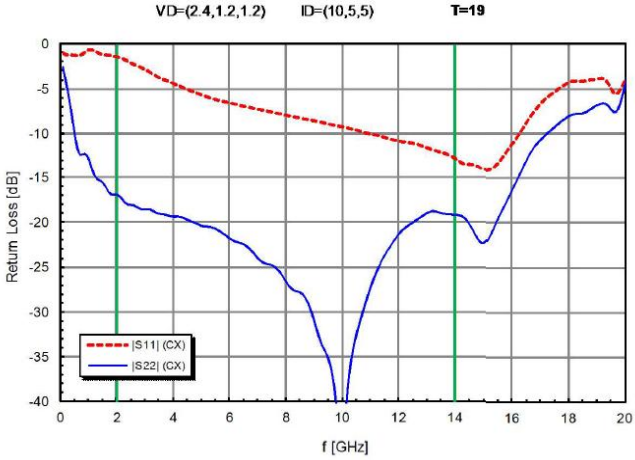
Typical Performance Data: