

Model: TMLA-075110-2304-10-Cryo

Cryogenic Low Noise Amplifier 75-110GHz, NF:3.5 dB, Gain:23 dB

Feature:

- Ultra Wide Band: 75-110 GHz
- Gain: 33dB Typ
- Noise Figure:3.5dB Typ
- Good Power and Gain Flatness
- Using InP HEMT technology

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	75-110			GHz
Gain		23		dB
Gain Flatness		±1.5		dB
Noise Figure		3.5		dB
Output P1dB		-5		dBm
Input VSWR		2.0		:1
Output VSWR		2.0		:1
DC power	Vd=1.0V, Id=35mA Vgs=-0.3V			V DC

Mechanical Specifications:

Parameter	Value	Units
Input/Output Connector	WR-10/ UG-387/U	
Bias	Solder Pin	
Case Material	Copper	
Finish	Gold Plated	
Size	30*20*20	mm
Weight	45	g

Absolute Maximum Ratings:

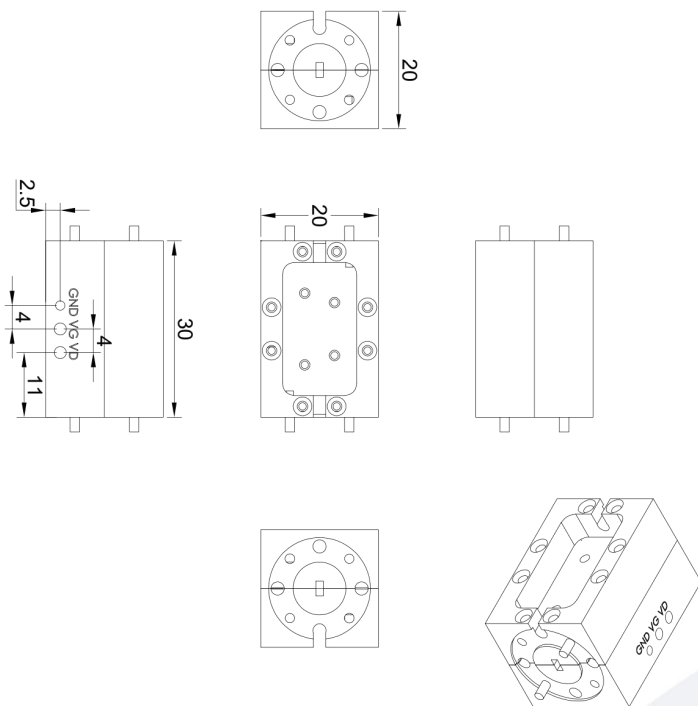
Parameter	Value
Drain voltage	2 V
Input Drain Current	100 mA
Gate voltage	0 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Available 220V System
Benchtop Amplifier

Outline Drawing:

Unit: mm



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

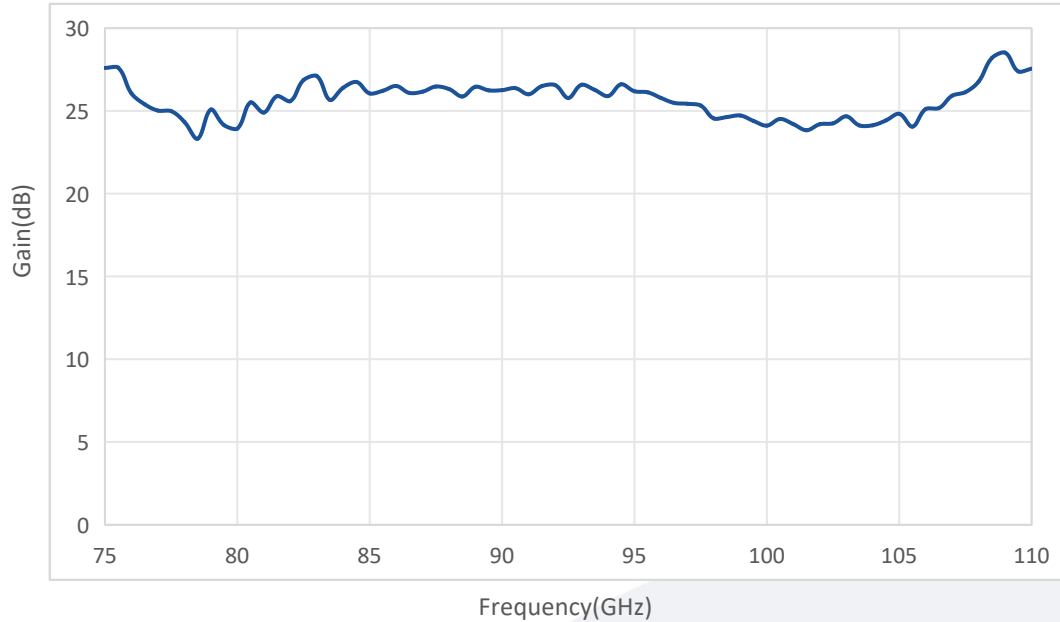
Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+85	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Part Number	Description	Revision
TMLA-075110-2304-10-Cryo	Cryogenic Low Noise Amplifier 75-110GHz, Noise Figure:3.5dB, Gain:23dB,WR-10	Rev.1.1

Typical Performance Data:

Gain vs Frequency



Noise Figure vs Frequency

