泰莱微波
Talent Microwave

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

Model:TLLA50K50G-38-50

Low Noise Amplifier , 50KHz-50GHz, NF:5.5dB, Gain:38dB,P1dB:14dBm

Feature:

- Ultra Wide Band: 50KHz-50GHz
- Gain: 38dB Typ
- Noise Figure: 5.5dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter		Min	Typ	Max	Units
Frequency range		50KHz-50GHz			
Gain		36	38		dB
Gain Flatness			±2.5		dB
Noise Figure			5.5		dB
Output P1dB	@10MHz-40GHz		14		dBm
	@40-50GHz		9		dBm
Input VSWR			1.8		:1
Output VSWR			1.8		:1
DC Voltage			6	12	V DC
DC Supply Current			180		mA
Impedance		50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.4mm Female/2.4mm Female	
DC Bias	Solder Pin	
Size	35*40*12	mm
Weight	/	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	TBD
RF Input Power	5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

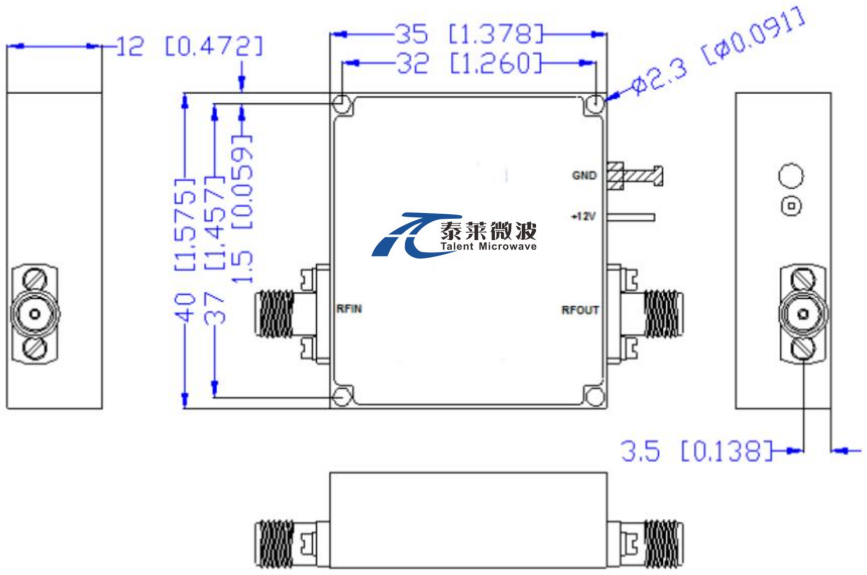
Available 220V System Benchtop Amplifier

泰莱微波
Talent Microwave

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

Outline Drawing:

Unit: mm



***Heat Sink Required During Operation

OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	℃
Non-operating Temperature	-55		+125	℃
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
TLLA50K50G-38-50	Low Noise Amplifier,50KHz-50GHz, Noise Figure:5.5dB, Gain:38 dB,P1dB:14dBm,+6V DC,Without Heatsink	Rev.1.1
TLLA50K50G-38-50-HS	Low Noise Amplifier, 50KHz-50GHz, Noise Figure:5.5dB, Gain:38 dB,P1dB:14dBm,+6V DC,With Heatsink	Rev.1.1

泰莱微波
Talent Microwave

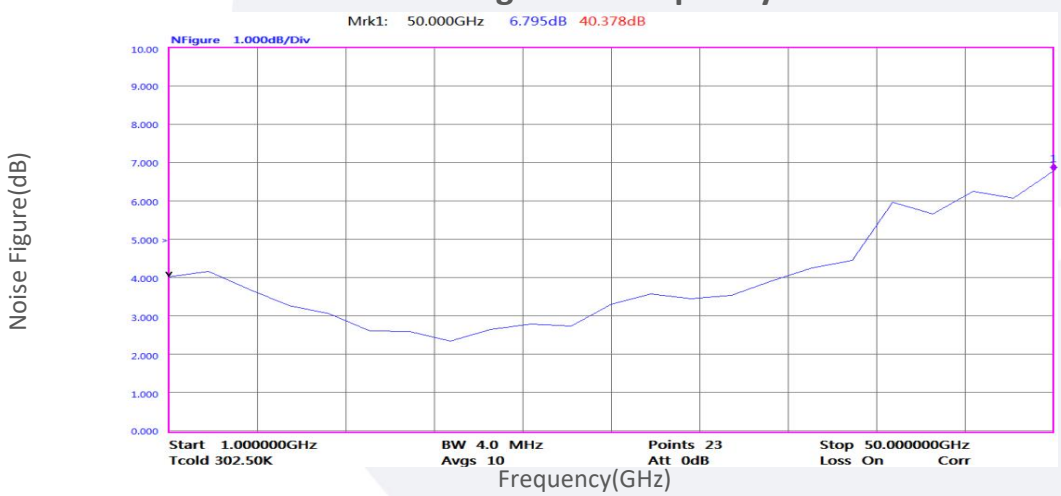
Suzhou Talent Microwave,Inc
+86-0512-62657975
sales@talentmw.com
www.talentmw.com

Typical Performance Data:

Gain&VSWR vs Frequency

Gain&VSWR vs Frequency

Noise Figure vs Frequency

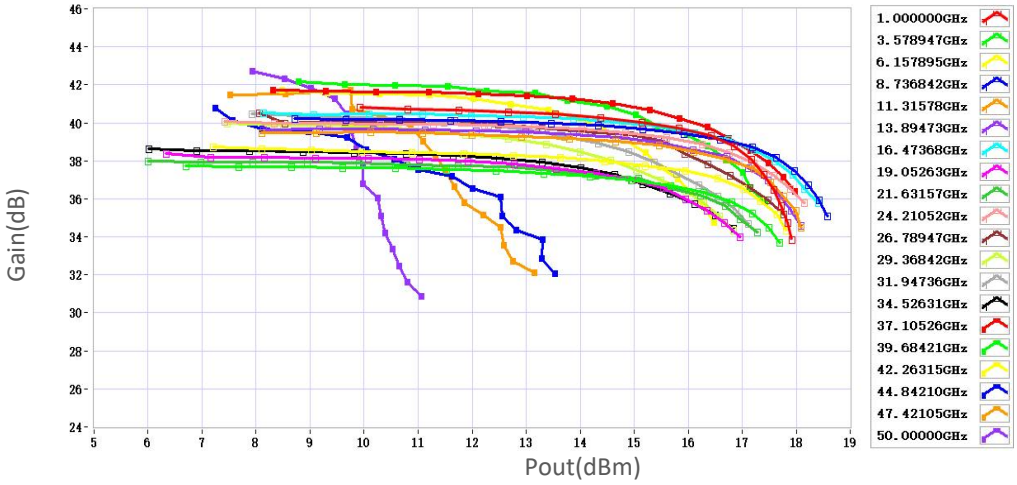


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

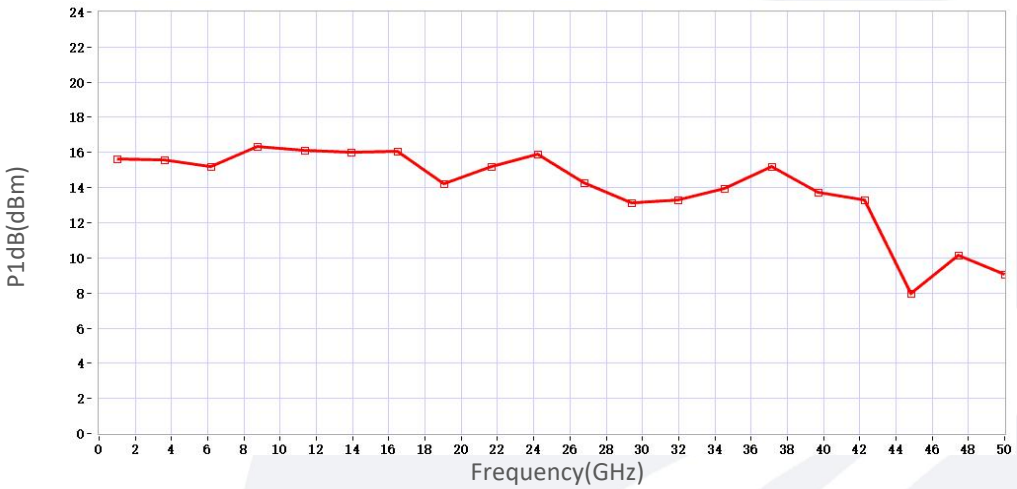
Suzhou Talent Microwave,Inc
+86-0512-62657975
sales@talentmw.com
www.talentmw.com

Typical Performance Data:

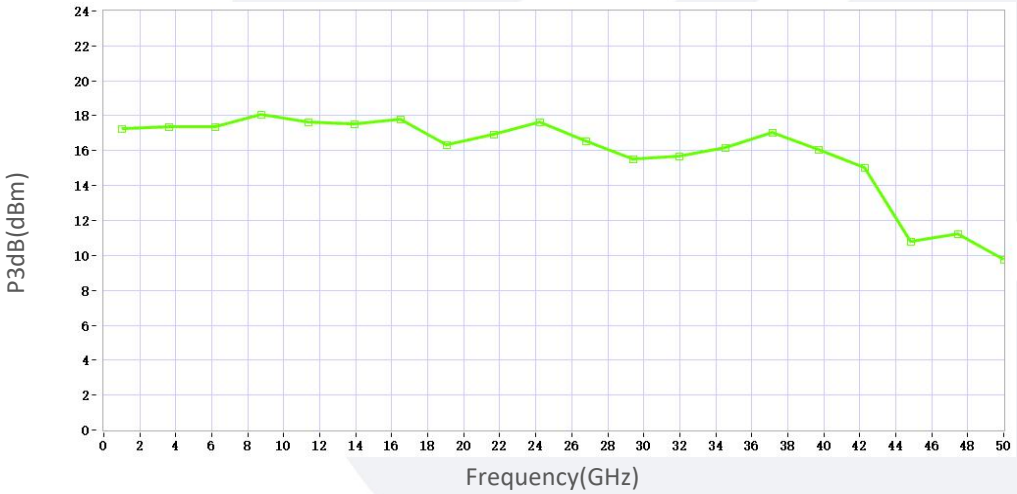
Gain vs Output Power



P1dB vs Frequency



P3dB vs Frequency



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.