

Model: TLLA50K50G-33-60

Low Noise Amplifier

50KHz-50GHz, NF:6dB, Gain:32dB, P1dB:19dBm

Feature:

- Ultra Wide Band: 50KHz-50GHz
- Gain: 32dB Typ
- Noise Figure: 6dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	50KHz-50GHz			GHz
Gain		32		dB
Gain Flatness		±3.5		dB
Noise Figure		6		dB
P1dB		19		dBm
Input VSWR		1.9		:1
Output VSWR		1.9		:1
DC Voltage		12		V DC
DC Supply Current		400		mA
Impedance	50			Ohms

Mechanical Specifications:

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

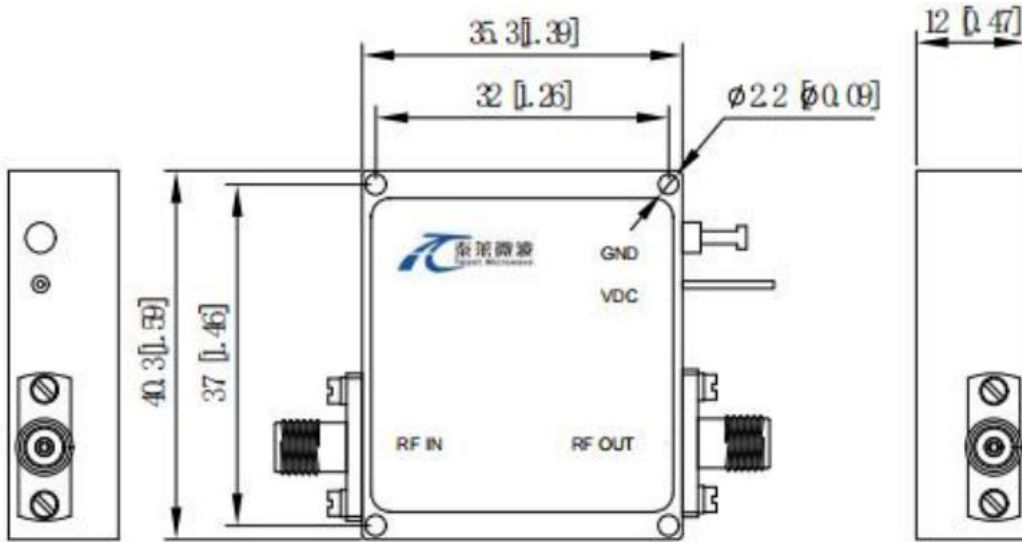
Absolute Maximum Ratings:

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



Outline Drawing:

Unit: mm(inches)



*****Heat Sink Required During Operation**



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

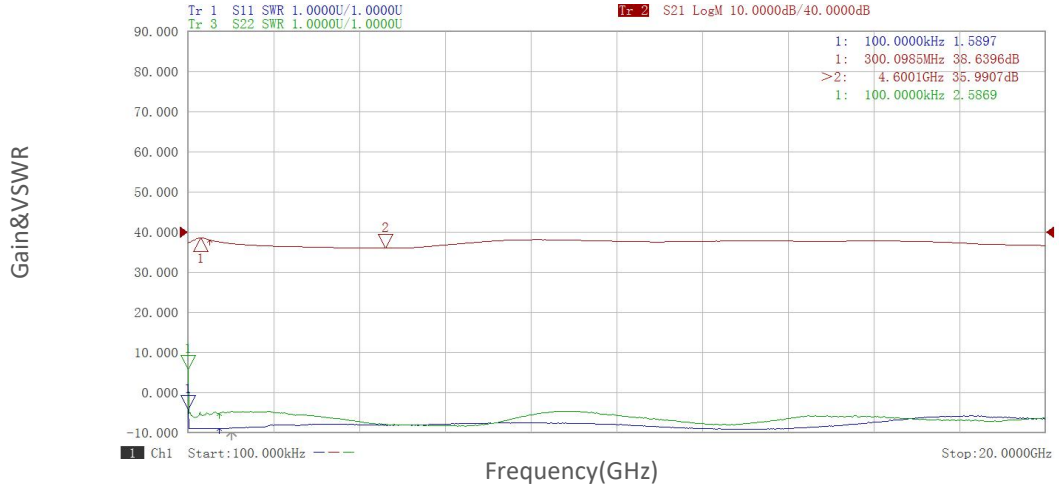
Parameter	Min	Typ	Max	Units
Operating Temperature	-40		+75	°C
Non-operating Temperature	-55		+85	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

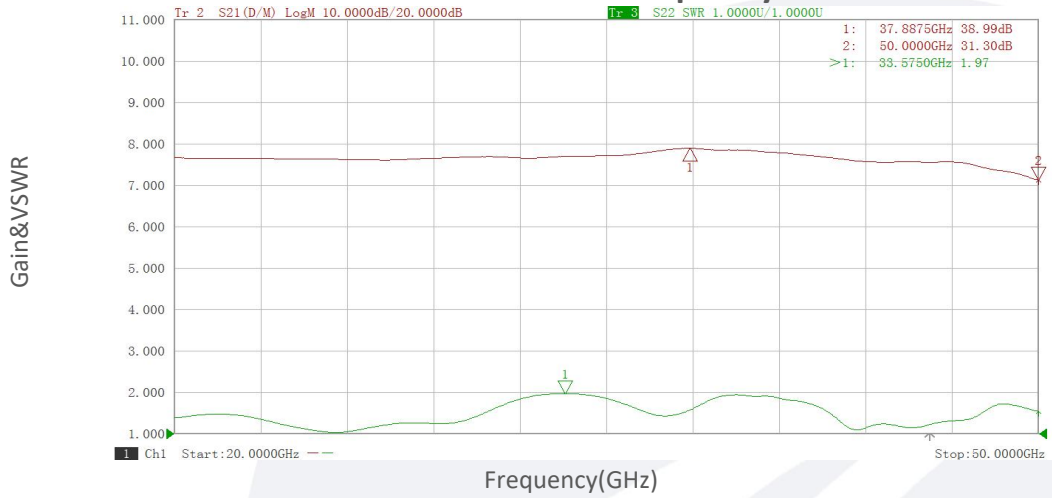
Part Number	Description	Revision
TLLA50K50G-33-60	Low Noise Amplifier, 50KHz-50GHz, Noise Figure:6dB, Gain:32 dB,P1dB:19dBm,12V DC,Without Heatsink	Rev.1.1
TLLA50K50G-33-60-HS	Low Noise Amplifier, 50KHz-50GHz, Noise Figure:6dB, Gain:32 dB,P1dB:19dBm,12V DC,With Heatsink	Rev.1.1

Typical Performance Data:

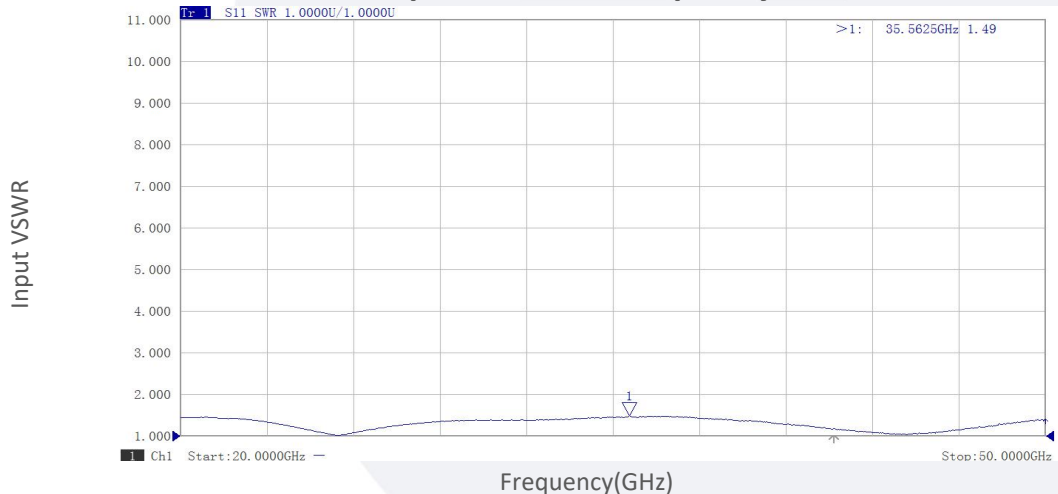
Gain&VSWR vs Frequency



Gain&VSWR vs Frequency



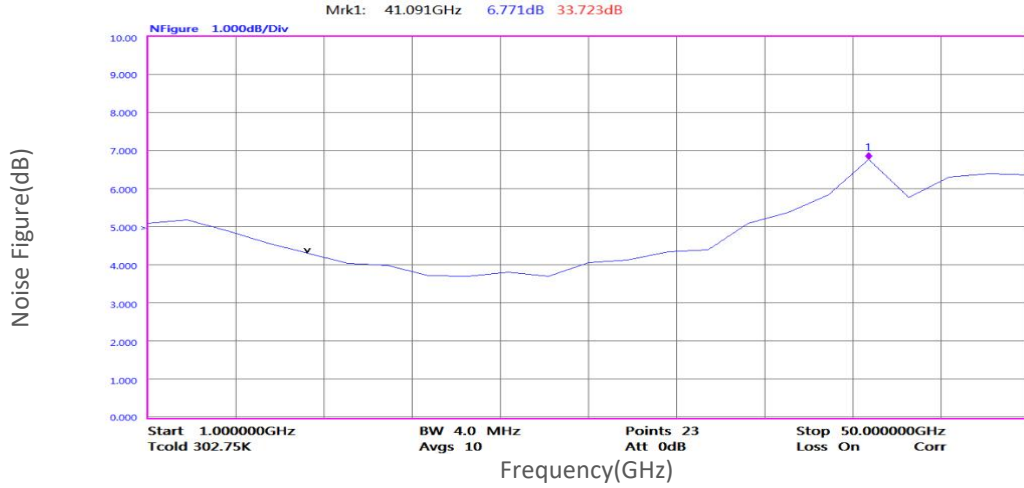
Input VSWR vs Frequency



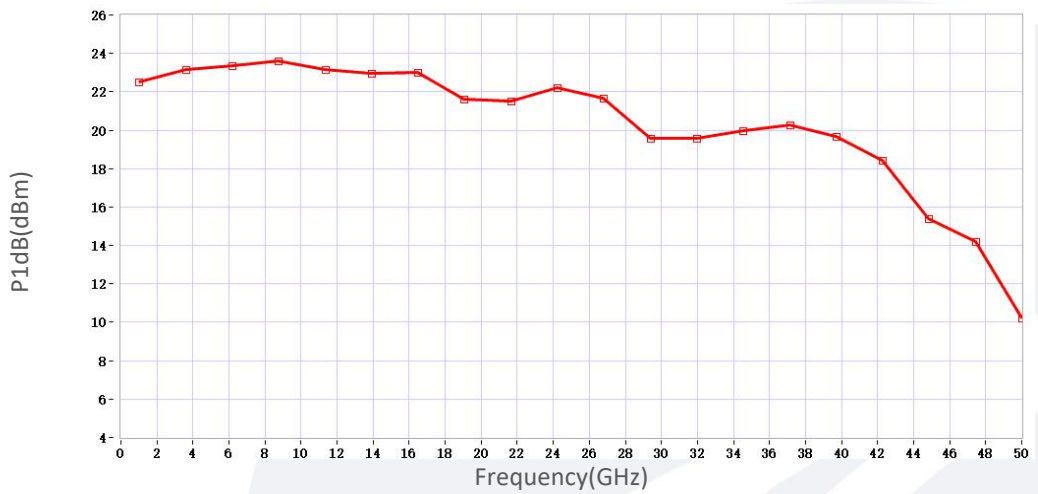
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

Noise Figure vs Frequency



P1dB vs Frequency



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