

Power Amplifier

40-67GHz /51dB Gain/24 dBm Psat

Model: TLPA40G67G-51-24

TLPA40G67G-51-24 is a power amplifier with a typical small signal gain of 51 dB and a nominal Psat of 24 dBm across the frequency range of 40 to 67 GHz. The DC power requirement for the amplifier is +18 VDC/0.5 A. The input and output port configuration offers coax adapter structure with 1.85mm female.

Features:

- Ultra Wide Band: 40-67GHz
- Gain: 51dB Typ
- Output Power Psat: 24dBm Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	40-67			GHz
Small Signal Gain		51		dB
Gain Flatness		±5		dB
Output Psat		24		dBm
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage		18		V DC
DC Supply Current		0.5		A
Impedance	50			Ohms

Mechanical Specifications:

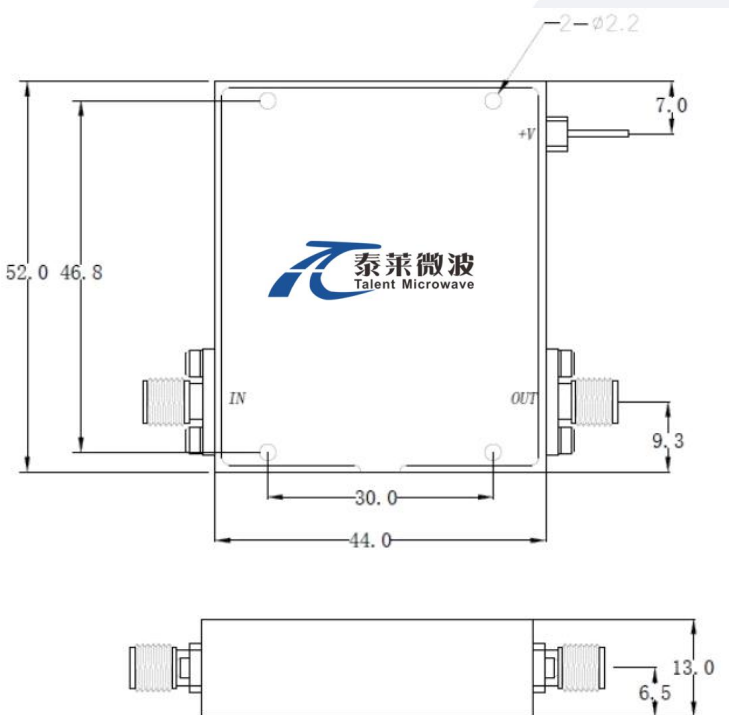
Parameter	Value	Units
Input /Output Connector	1.85mm Female/1.85mm Female	
DC Bias	Solder Pin	
Size	52*44*13(Without Heatsink) 111*50*63(With Heatsink)	mm
Weight	/	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+18 V
RF Input Power	-10 dBm
ESD sensitivity (HBM)	Class 0, passed 150V

Outline Drawing:

Unit:mm



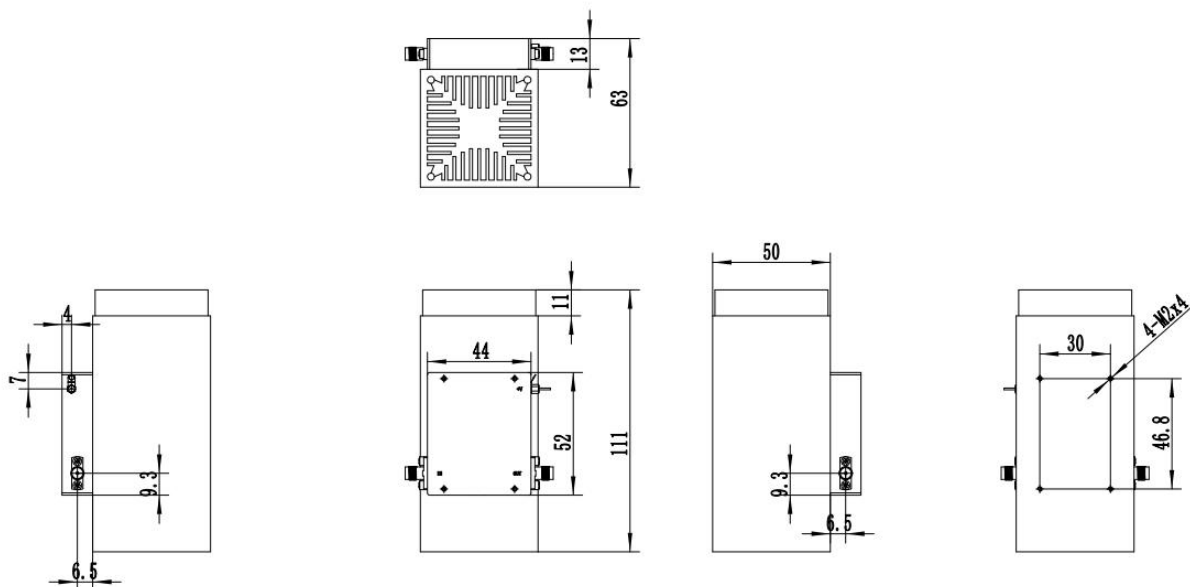
*****Heat Sink Required During Operation**



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Outline Drawing:

Unit:mm



Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+60	°C
Non-operating Temperature*	-50		+70	°C
Relative humidity		95		%
Altitude	10,000			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			

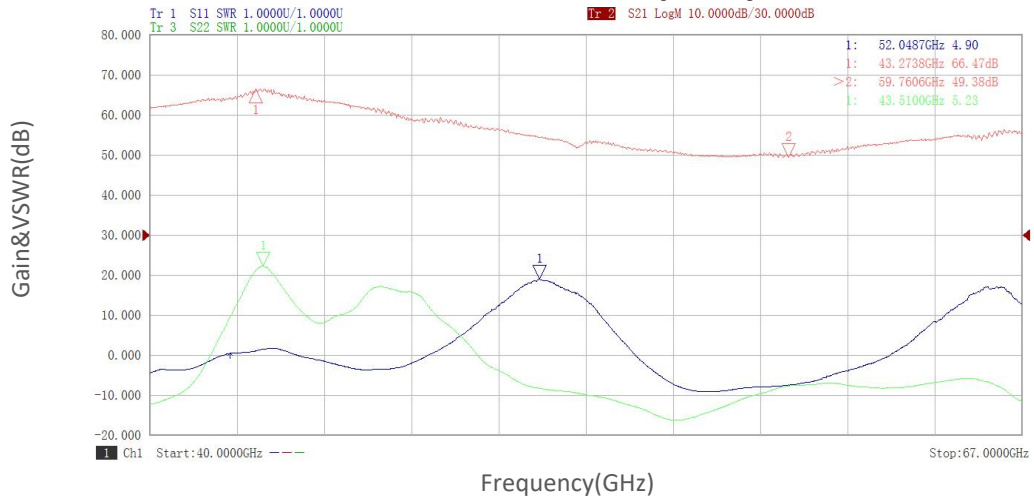
*Note: For a wider temperature range, please consult the manufacturer.

Ordering Information:

Base Number	Description	Revision
TLPA40G67G-51-24	Power amplifier 40-67GHz,Gain:51dB,Psat:24dBm, +18V DC,Without Heatsink	Rev.1.1
TLPA40G67G-51-24-HS	Power amplifier 40-67GHz,Gain:51dB,Psat:24dBm, +18V DC,With Heatsink	Rev.1.1

Typical Performance Data:

Gain&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.