

Power Amplifier

49-51GHz/36dB Gain/36dBm Psat

Model: TLPA49G51G-36-36

TLPA49G51G-36-36 is a power amplifier with a minimum power gain of 36 dB and a minimum Psat of 36 dBm across the frequency range of 49 to 51 GHz. The DC power requirement for the amplifier is +18 VDC/2.5 A. The input and output port configuration offers coax adapter structure with 2.4mm female.

Features:

- Frequency range: 49-51GHz
- Gain: 36dB Min
- Output Power Psat: 36dBm Min
- 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	49-51			GHz
Power Gain	36			dB
Output Psat	36			dBm
Spurious@Pout=36dBm			-50	dBc
Input VSWR		2.5		:1
DC Voltage		18	19	V DC
DC Supply Current		2.5		A
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.4mm Female/2.4mm Female	
DC Bias	Feedthru capacitors	
Size	60*60*11(Without heatsink) 188*125*146(With heatsink)	mm
Weight	≤200	g

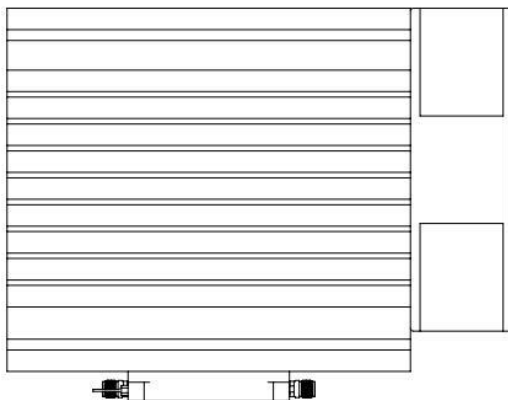
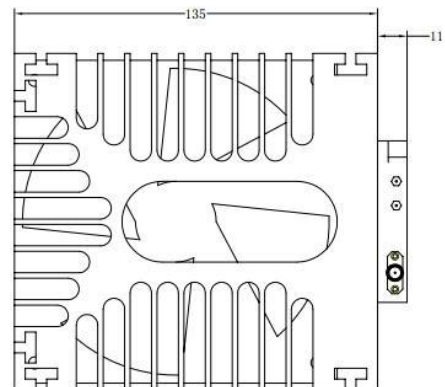
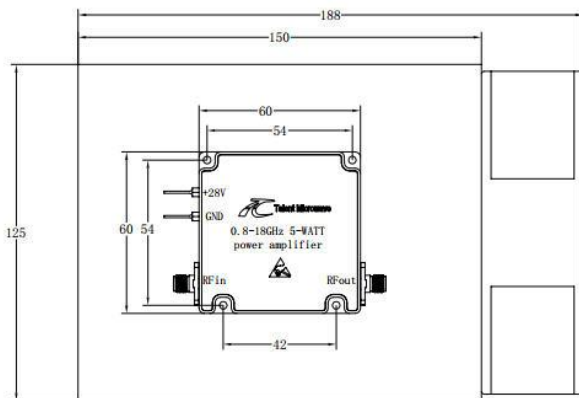
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+19 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm

Regulatory Compliance:



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

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
TLPA49G51G-36-36	Power amplifier 49-51GHz, Gain:36dB,Psat:36dBm,+18V DC,With Heatsink	Rev.1.1