

Power Amplifier

50-65GHz/33dB Gain/25dBm Psat

Model: TLPA50G65G-33-25

TLPA50G65G-33-25 is a power amplifier with a minimum small signal gain of 33 dB and a nominal Psat of 25 dBm across the frequency range of 50 to 65 GHz. The DC power requirement for the amplifier is +4 VDC/1.7 A. The input and output port configuration offers coax adapter structure with 1.85mm female.

Features:

- Frequency range: 50-65GHz
- Gain: 33dB Min
- Output Power Psat: 25dBm 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	50		65	GHz
Small Signal Gain	33	36		dB
Gain Flatness		±3		dB
Output P1dB	22	23		dBm
Output Psat		25		dBm
Input VSWR			2	:1
Output VSWR			2	:1
DC Voltage		+4		V DC
DC Supply Current		1.7		A
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	1.85mm Female/1.85mm Female	
DC Supply Connector	Solder Pin	
Size	80*80*15	mm

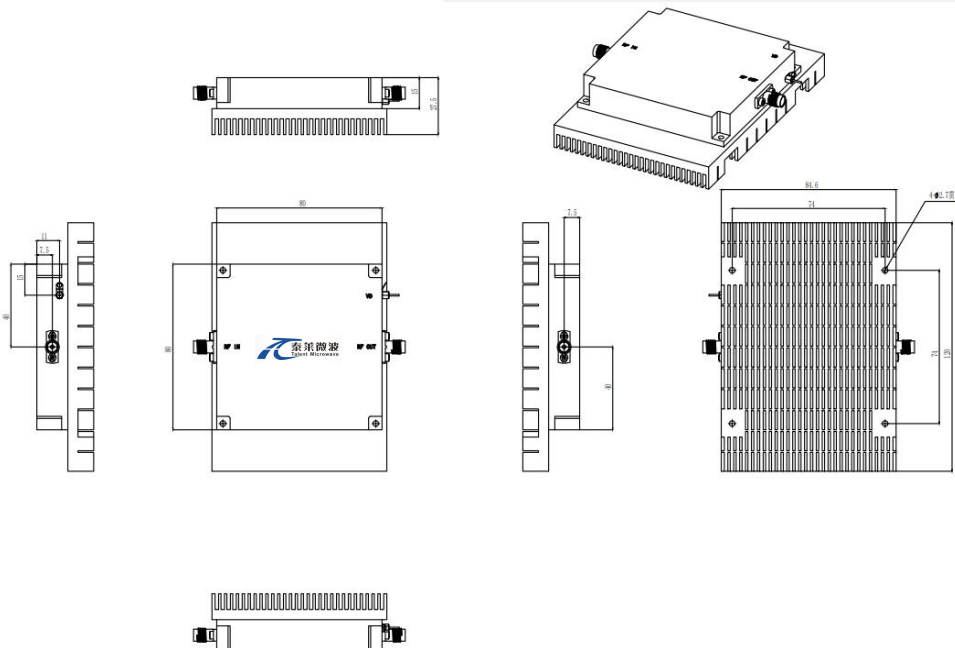
Absolute Maximum Ratings:

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



Outline Drawing:

Unit:mm



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)	20g,11ms,saw-tooth			
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
TLPA50G65G-33-25	Power amplifier 50-65GHz, Gain:33dB,Psat:25dBm,+4V DC,Without Heatsink	Rev.1.1
TLPA50G65G-33-25-HS	Power amplifier 50-65GHz, Gain:33dB,Psat:25dBm,+4V DC,With Heatsink	Rev.1.1