

Power Amplifier

18-52GHz/33dB Gain/28dBm Psat

Model: TLPA18G52G-34-28

TLPA18G52G-34-28 is a power amplifier with a typical small signal gain of 33 dB and a nominal Psat of 28 dBm across the frequency range of 18 to 52 GHz. The DC power requirement for the amplifier is +12 VDC/1.3 A. The input and output port configuration offers coax adapter structure with 2.4mm female.

Features:

- Frequency range: 18-52GHz
- Gain: 33dB Typ
- Output Power Psat: 28dBm 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	18		52	GHz
Small Signal Gain	30	33		dB
Output P1dB	25	26		dBm
Output Psat	26	28		dBm
Return Loss		-10		dB
DC Voltage	10	12	15	V DC
Static Current		0.85		A
Saturation current		1.3	1.5	A
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.4mm Female/2.4mm Female	
DC Bias	Solder Pin	
Size	65*50*14(Without heatsink) 50*100*64(With heatsink)	mm

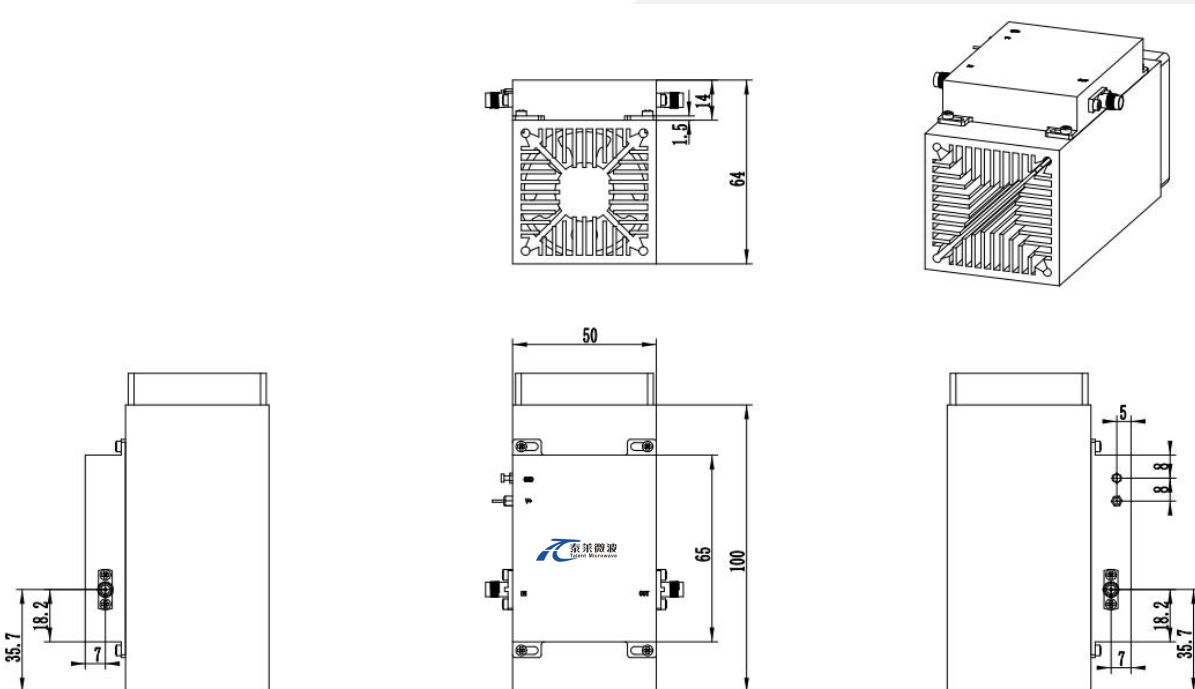
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm; Tolerance:±0.1mm



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
TLPA18G52G-34-28	Power amplifier 18-52GHz, Gain:33dB,Psat:28dBm,+12V DC,Without Heatsink	Rev.1.0
TLPA18G52G-34-28-HS	Power amplifier 18-52GHz, Gain:33dB,Psat:28dBm,+12V DC,With Heatsink	Rev.1.0