Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

Power Amplifier

2-4GHz/46dB Gain/46dBm Psat

Model: TLPA2G4G-46-46

TLPA2G4G-46-46 is a power amplifier with a minimum small signal gain of 46 dB and a minimum Psat of 46 dBm across the frequency range of 2 to 4 GHz. The DC power requirement for the amplifier is +28 VDC/6 A. The input and output ports configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 2-4GHz
- Gain: 46dB Min
- Output Power Psat: 46dBm 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	2		4	GHz
Gain	46	48		dB
Gain Flatness		±2	±3	dB
Output P1dB		42		dBm
Output Psat	46	46.5		dBm
Input VSWR		1.5	2	:1
DC Voltage		28	30	V DC
Static Current		2		A
Saturation Current		6	7	A
Impedance		50		Ohms

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Power Supply Connector	D-SUB9 Pin	
Size	138*97*20(Without heatsink) 232*140*82(With heatsink)	mm
Weight	500	g

Absolute Maximum Ratings:

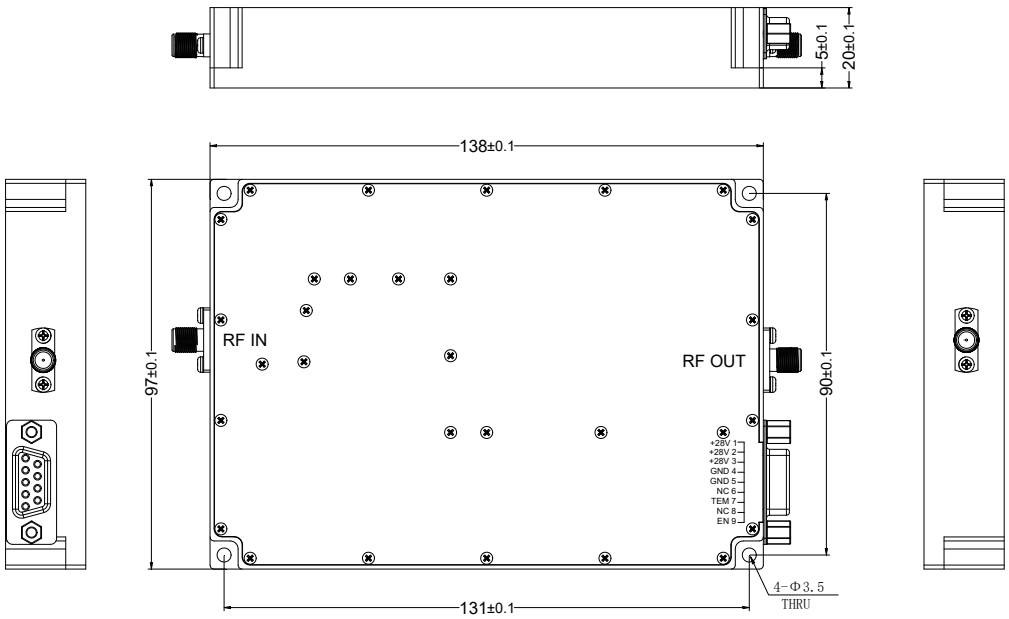
Parameter	Value
Supply Bias Voltage	+30 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Simple 220V System
Available SAC option

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



***Heat Sink Required During Operation

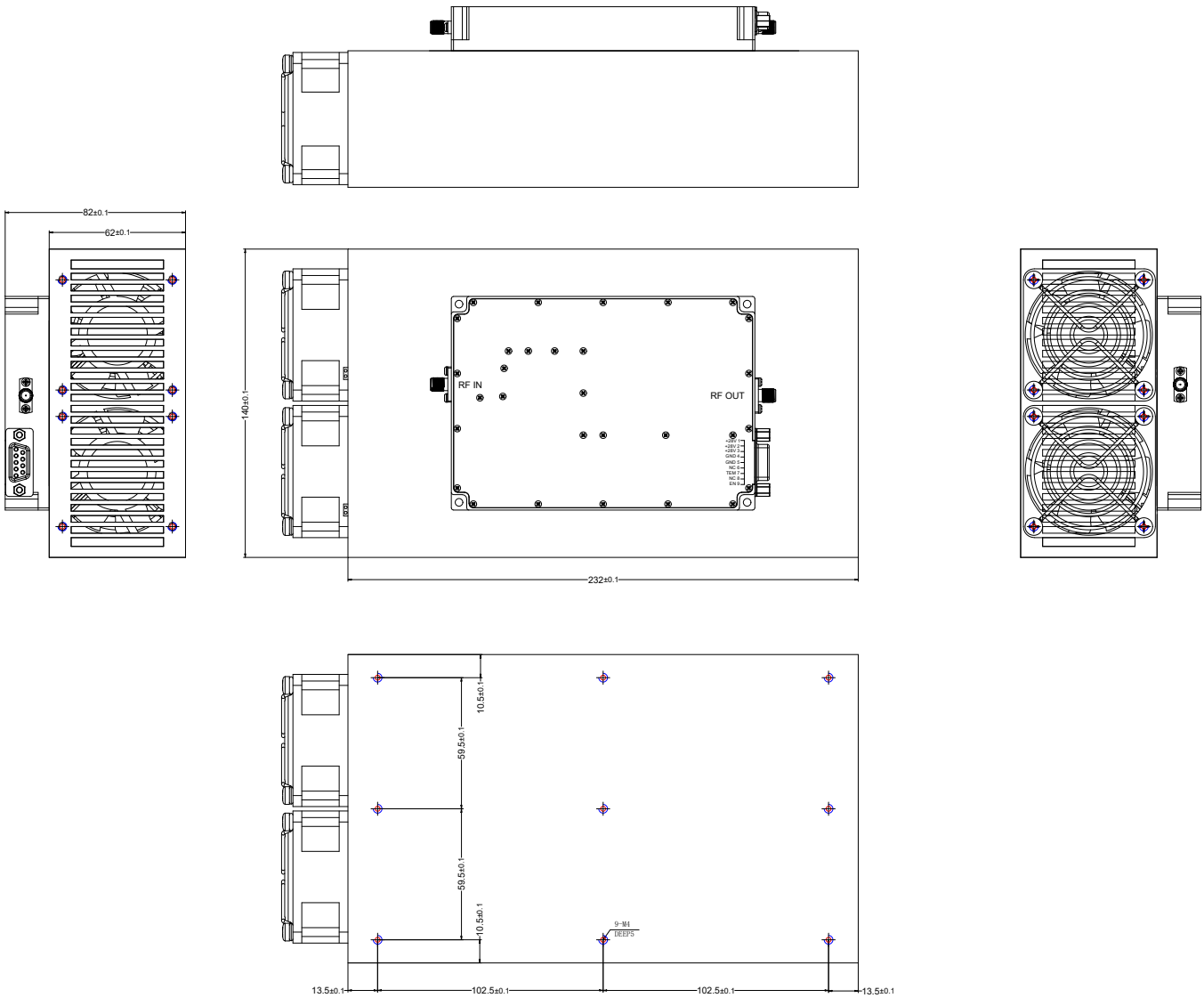


ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



Fan power supply	
Red line	Power supply positive,+24.0-28.0VDC DC current: 0.3A
Black line	Ground

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

DC Supply Connector(DSUB-9 Female):

Pin	Name	Function
1	+28V	Power supply positive,+26.0-30.0VDC.
2	+28V	Power supply positive,+26.0-30.0VDC.
3	+28V	Power supply positive,+26.0-30.0VDC.
4	GND	Ground
5	GND	Ground
6	NC	Not Connected
7	Over TEM	When the temperature of the case exceeds 75 ℃, the power amplifier will turn off and this pin will be pulled high. If the temperature of case drops to 70 ℃, the power amplifier will return to normal operation, and this pin will be pulled low.
8	NC	Not Connected
9	EN	Amplifier Enable: TTL High (5V) (Internally Pulled-High) Amplifier Disable: Short to ground.

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+50	℃
Non-operating Temperature*	-50		+60	℃
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
TLPA2G4G-46-46	Power amplifier 2-4GHz, Gain:46dB,Psat:46dBm,+28V DC,Without Heatsink	Rev.1.0
TLPA2G4G-46-46-HS	Power amplifier 2-4GHz, Gain:46dB,Psat:46dBm,+28V DC,With Heatsink	Rev.1.0