Suzhou Talent Microwave,Inc
sales@talentmw.com
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Power Amplifier

5.7-5.9GHz/50dB Gain/50dBm Psat

Model: TLPA5.7G5.9G-50-50

TLPA5.7G5.9G-50-50 is a power amplifier with a minimum small signal gain of 50 dB and a nominal Psat of 50 dBm across the frequency range of 5.7 to 5.9GHz. The DC power requirement for the amplifier is +28 VDC/9 A. The input and output port configuration offers coax adapter structure with SMA female and N female .

Features:

- Frequency range: 5.7-5.9GHz
- Gain: 50dB Min
- Output Power Psat: 50dBm 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		5700-5900		MHz
Small Signal Gain	50	53		dB
Gain Flatness		±1	±2	dB
Output P1dB		46		dBm
Output Psat	49.5	50		dBm
Input VSWR		1.5	2.0	:1
DC Voltage	26	28	30	V DC
Static Current		2		A
Saturation Current		9	12	A
Impedance		50		Ohms

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Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/N Female	
DC Bias	D-SUB-9	
Size	168*75*23.5	mm
Weight	500	g

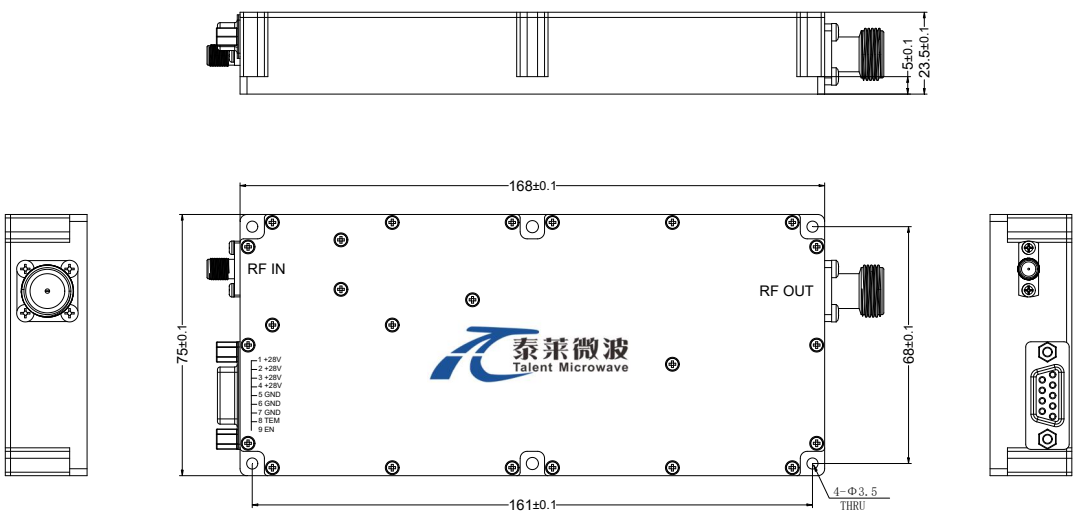
Absolute Maximum Ratings:

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

Outline Drawing:

Unit:mm

Regulatory Compliance:



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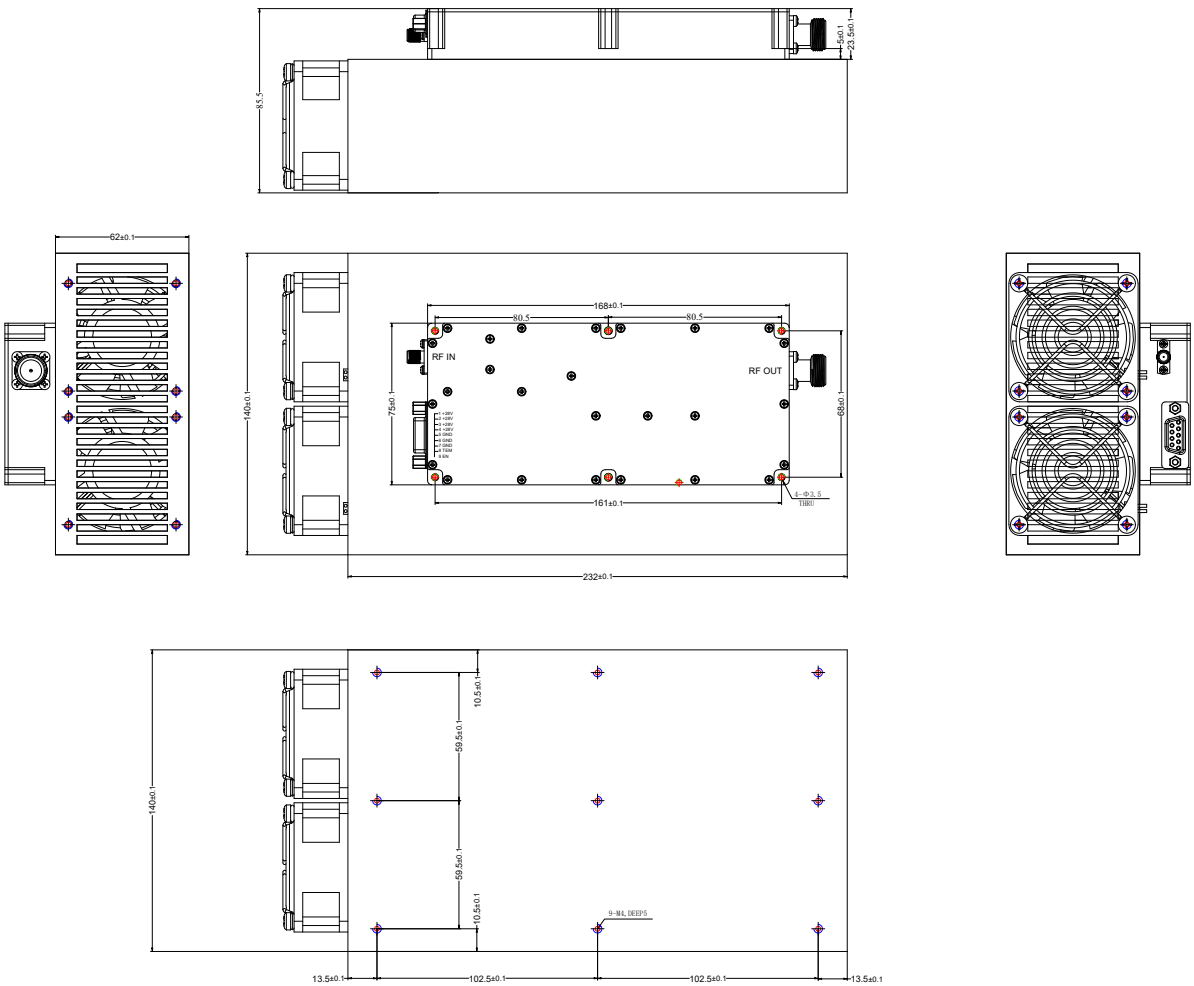
Outline Drawing:

Unit:mm



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DC Supply Connector（DSUB-9 Female):

Pin	Name	Function
1	Vcc	Power supply positive,+26.0-30.0VDC
2	Vcc	Power supply positive,+26.0-30.0VDC
3	Vcc	Power supply positive,+26.0-30.0VDC
4	Vcc	Power supply positive,+26.0-30.0VDC
5	GND	Ground
6	GND	Ground
7	GND	Ground
8	Over TEM	When the temperature of the case exceeds 85 ℃, 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.
9	EN	Amplifier Enable: TTL High (5V) (Internally Pulled-High) Amplifier Disable: Short to ground

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-20		+50	℃
Non-operating Temperature*	-30		+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	Desciption	Revision
TLPA5.7G5.9G-50-50	Power amplifier 5.7-5.9GHz, Gain:50dB,Psat:50dBm,+28V DC,Without Heatsink	Rev.1.0
TLPA5.7G5.9G-50-50-HS	Power amplifier 5.7-5.9GHz, Gain:50dB,Psat:50dBm,+28V DC,With Heatsink	Rev.1.0