

Power Amplifier

2-6GHz/40dB Gain/40dBm Psat

Model: TLPA2G6G-40-40

TLPA2G6G-40-40 is a power amplifier with a typical small signal gain of 40 dB and a minimum Psat of 40 dBm across the frequency range of 2 to 6 GHz. The DC power requirement for the amplifier is +28 VDC/1 A. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 2-6GHz
- Gain: 40dB Typ
- Output Power : 40dBm 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		6	GHz
Small Signal Gain	38	40		dB
Gain Flatness		±2	±3	dB
Output P1dB	36	37		dBm
Output Psat	40	40.5		dBm
Input VSWR		1.5	2.0	:1
DC Voltage		28	30	V DC
Static Current		1		A
Saturation current		2.5	3	A
Impedance		50		Ohms

Mechanical Specifications:

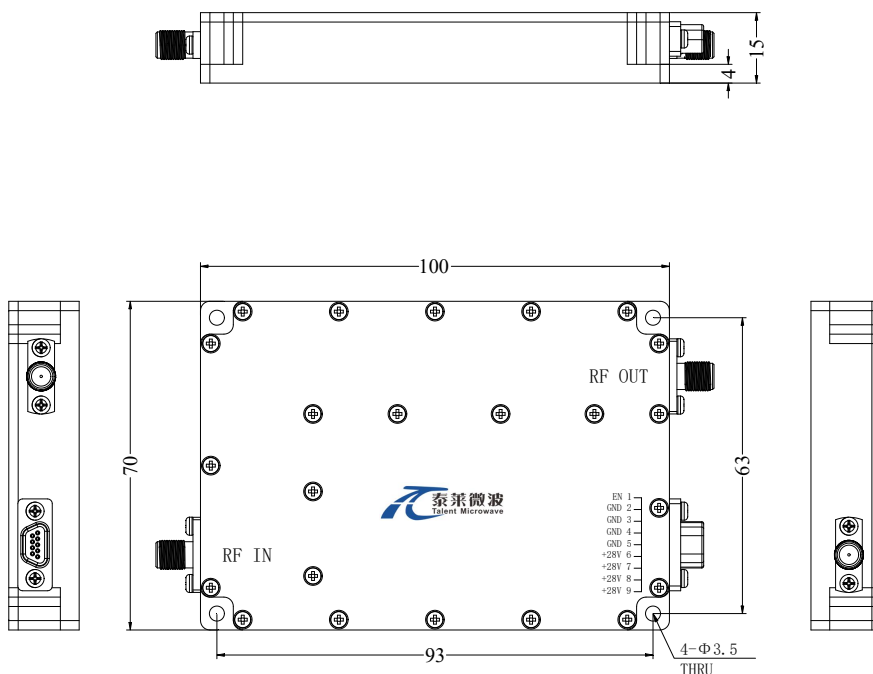
Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	J30J-9Pin	
Size	100*70*15(Without heatsink) 171.63*90*56(With heatsink)	mm
Weight	300	g

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



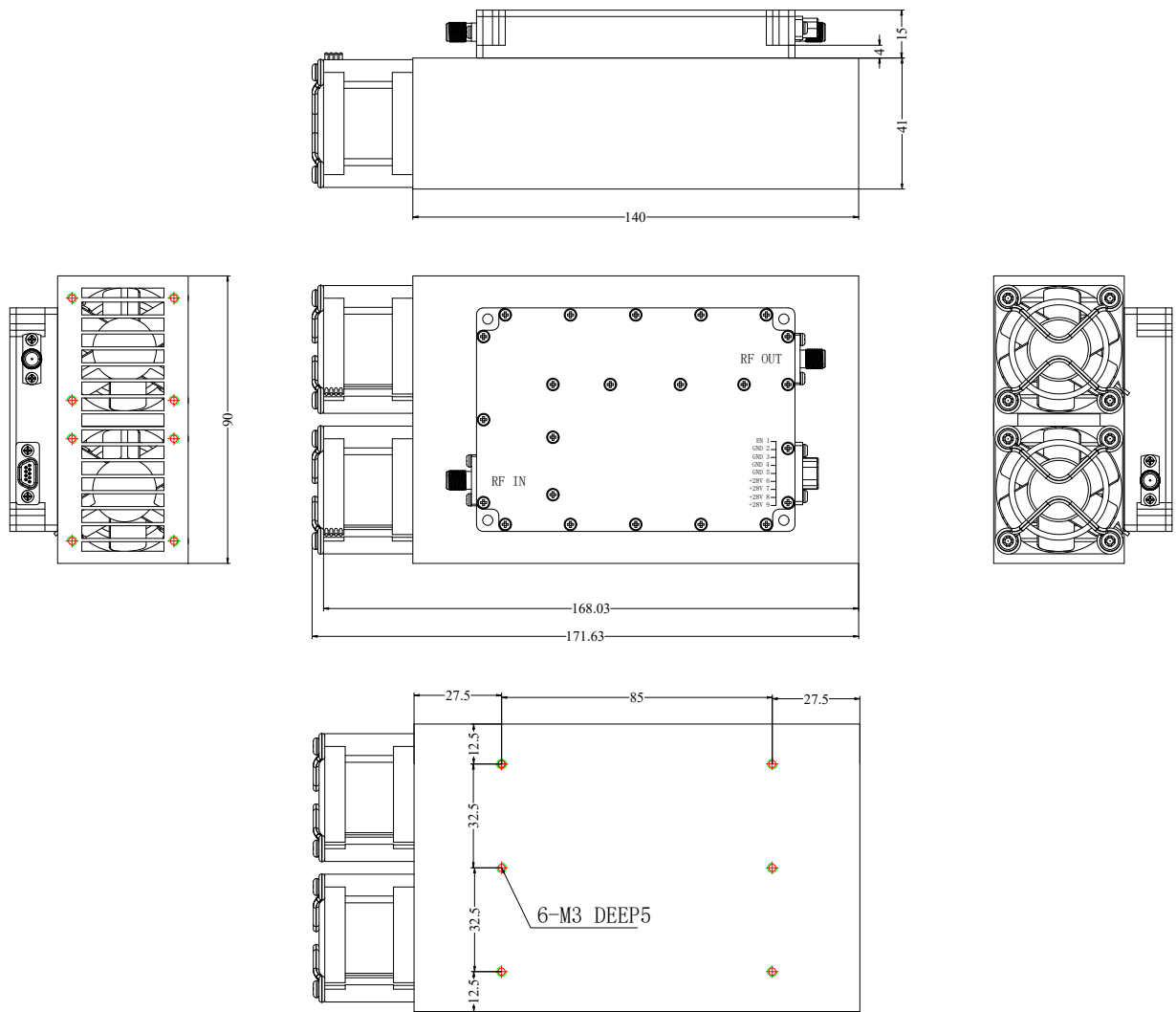
*****Heat Sink Required During Operation**



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

Outline Drawing:

Unit:mm



DC Supply Connector (J30J-9 Female):

Pin	Name	Function
1	EN	Amplifier Enable: TTL High (5V) (Internally Pulled-High) Amplifier Disable: Short to ground
2~5	GND	Ground
6~9	VCC	Power supply positive, +26.0-30.0VDC

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
TLPA2G6G-40-40	Power amplifier 2-6GHz, Gain:40dB,Psat:40dBm,+28V DC,Without Heatsink	Rev.1.0
TLPA2G6G-40-40-HS	Power amplifier 2-6GHz, Gain:40dB,Psat:40dBm,+28V DC,With Heatsink	Rev.1.0