

## 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

### 电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	2		6	GHz
小信号增益 Small Signal Gain	38	40		dB
增益平坦度 Gain Flatness		±2	±3	dB
线性输出功率 Output P1dB	36	37		dBm
饱和输出功率 Output Psat	40	40.5		dBm
输入驻波 Input VSWR		1.5	2.0	:1
直流电压 DC Voltage		28	30	V DC
静态电流 Static Current		1		A
饱和电流 Saturation current		2.5	3	A
阻抗 Impedance		50		Ohms

## 机械特性 Mechanical Specifications:

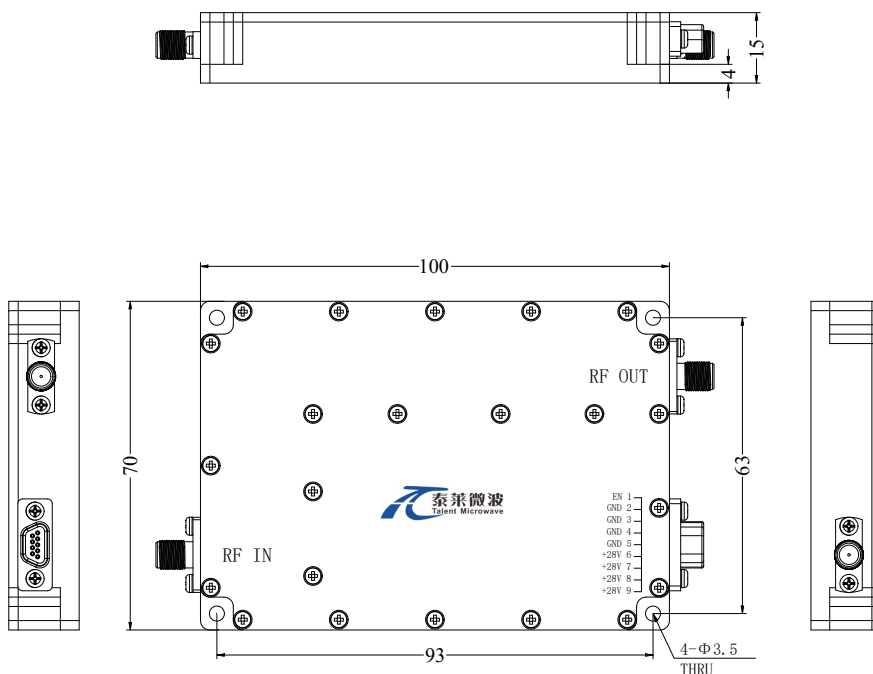
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	SMA Female/SMA Female	
直流偏置 DC Bias	J30J-9Pin	
尺寸 Size	100*70*15(Without heatsink) 171.63*90*56(With heatsink)	mm
重量 Weight	300	g

## 绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+30 V
输入功率 RF Input Power	5dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

## 外形图 Outline Drawing:

Unit:mm



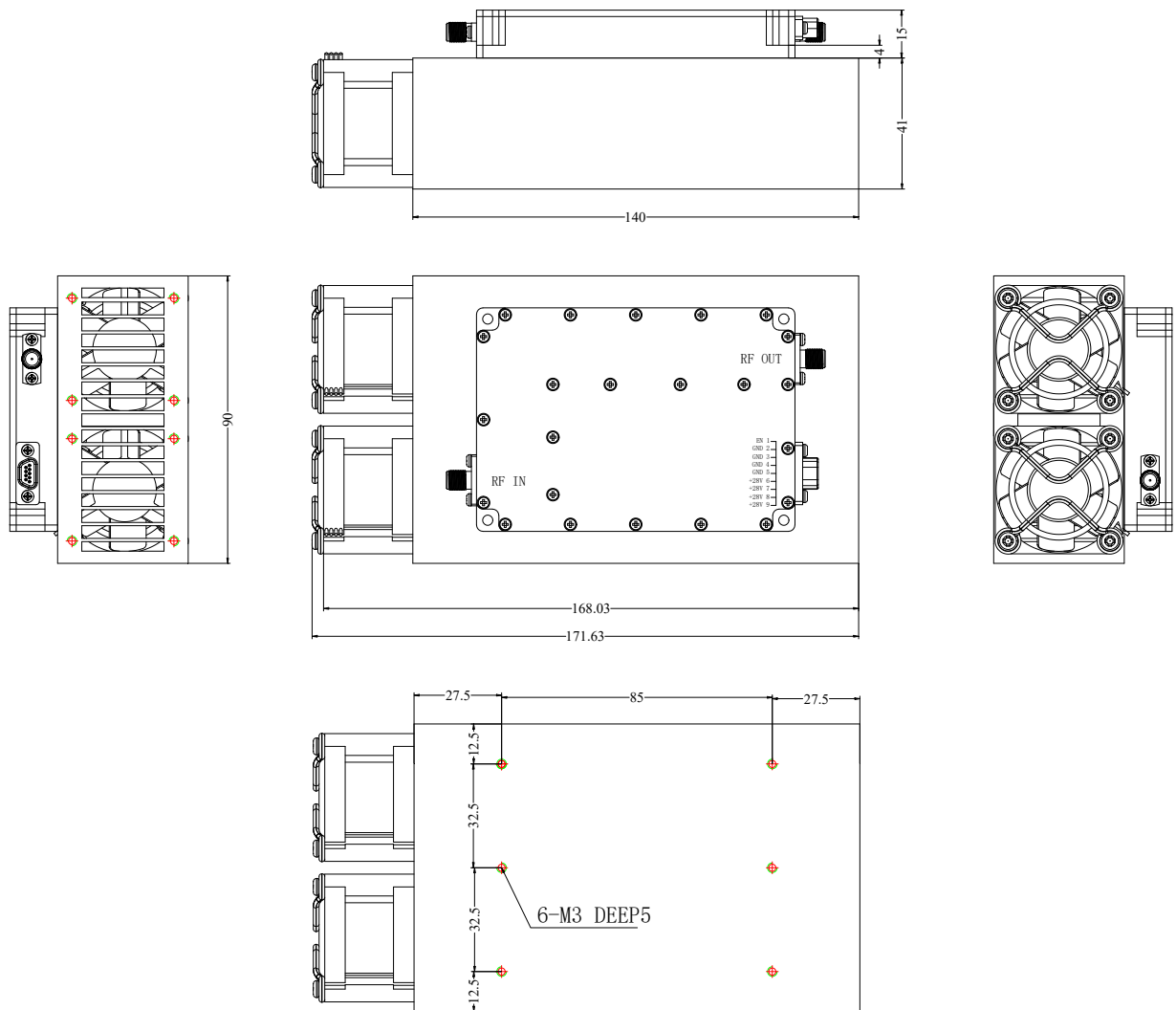
**\*\*\*Heat Sink Required During Operation**



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

外形图 Outline Drawing:

Unit:mm



直流供电接口 DC Supply Connector (J30J-9 Female):

引脚 Pin	名称 Name	功能 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

## 温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature*	-40		+60	°C
存储温度 Non-operating Temperature*	-50		+70	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

\*Note: For a wider temperature range, please consult the manufacturer.

## 订货信息 Ordering Information:

标准型号 Base Number	描述 Description	版本号 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