

Power Amplifier

3-6GHz/40dB Gain/41 dBm Psat

Model: TLPA3G6G-40-41

TLPA3G6G-40-41 is a power amplifier with a minimum gain of 40 dB and a minimum Psat of 41 dBm across the frequency range of 3 to 6 GHz. The DC power requirement for the amplifier is +28 VDC/0.5 A. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 3-6GHz
- Gain: 40dB Min
- Output Power Psat: 41dBm 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	3		6	GHz
增益 Gain	40	42		dB
增益平坦度 Gain Flatness		±2	±3	dB
线性输出功率 Outout P1dB	40	40.5		dBm
饱和输出功率 Output Psat	41	41.5		dBm
谐波抑制 Harmonic@Pout=40dBm		-15		dBc
输入驻波 Input VSWR		1.5	2.0	:1
直流电压 DC Voltage	+26	+28	+30	V DC
直流电流 DC Supply Current		0.5	2	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	
直流供电接口 DC Supply Connector	J30J-9ZKSP	
尺寸 Size	100*70*15	mm
重量 Weight	250	g

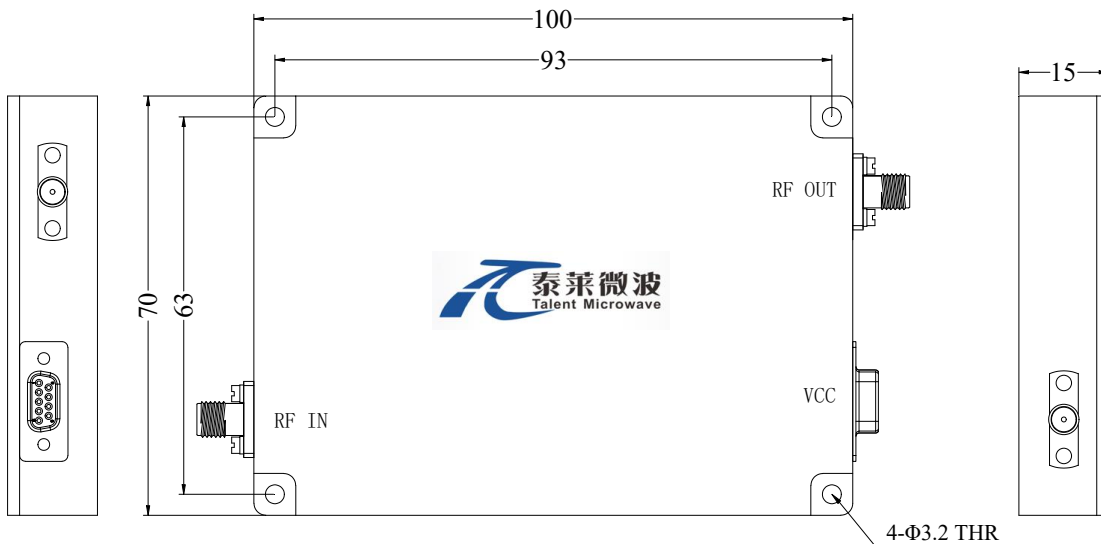
绝对最大值 Absolute Maximum Ratings:

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



外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



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



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

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

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	GND	Power supply negative
3	GND	Power supply negative
4	GND	Power supply negative
5	GND	Power supply negative
6	+28V	Power supply positive,+26.0-30.0VDC
7	+28V	Power supply positive,+26.0-30.0VDC
8	+28V	Power supply positive,+26.0-30.0VDC
9	+28V	Power supply positive,+26.0-30.0VDC

*Note: TTL is 5V.

温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature*	-40		+50	°C
存储温度 Non-operating Temperature*	-50		+60	°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
TLPA3G6G-40-41	Power amplifier 3-6GHz, Gain:40dB,Psat:41dBm,+28V DC,Without Heatsink	Rev.1.1
TLPA3G6G-40-41-HS	Power amplifier 3-6GHz, Gain:40dB,Psat:41dBm,+28V DC,With Heatsink	Rev.1.1