

Power Amplifier

0.5-6GHz/45dB Gain/45dBm Psat

TLPA0.5G6G-45-45

TURPA0.5G6G-4545 is a power amplifier with a minimum power gain of 45 dB and a minimum Psat of 45 dBm across the frequency range of 0.5 to 6 GHz. The DC power requirement for the amplifier is +36 VDC/6 A. The input and output port configuration offers coax adapter structure with SMA female.

- Features:**
- Frequency range: 0.5-6GHz
 - Gain: 45dB Min
 - Output Power Psat: 45dBm 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	0.5-6			GHz
功率增益 Power Gain	45			dB
增益平坦度 Gain Flatness		±3.5		dB
线性输出功率 Output P1dB		37		dBm
饱和输出功率 Output Psat	45			dBm
杂散 Spurious@Pout=45dBm			-60	dBc
谐波抑制 Harmonic@Pout=45dBm		-10		dBc
输入驻波 Input VSWR		1.5	2	:1
直流电压 DC Voltage		36		V DC
直流电流 DC Supply Current		6		A
阻抗 Impedance	50			Ohms

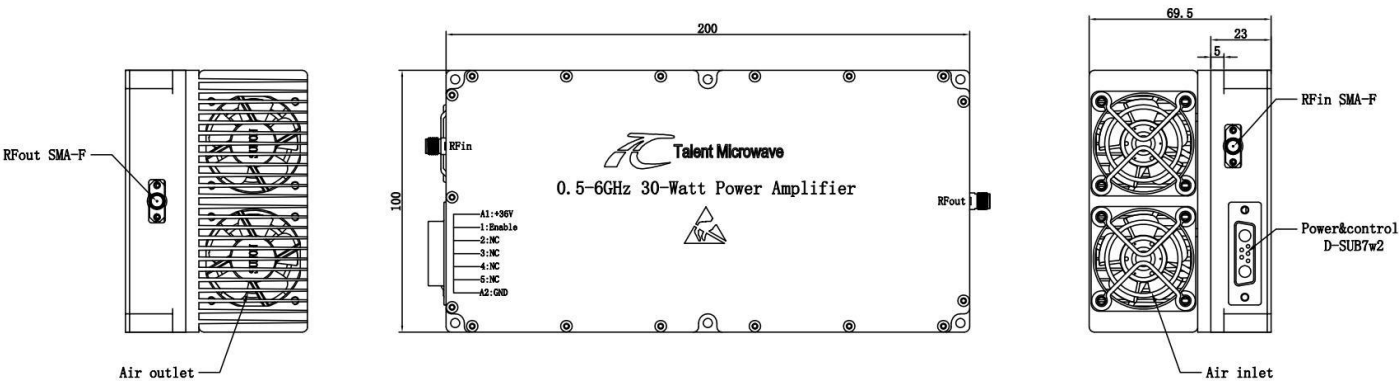
机械特性 Mechanical Specifications:

参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	WR-19/UG-387/U	
直流供电接口 DC Supply Connector	DSUB-7W2	
尺寸 Size	200*100*23(Without heatsink) 200*100*69.5(With heatsink)	mm
重量 Weight	1	Kg

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+39 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



***Heat Sink Required During Operation



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



温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature*	-40		+50	℃
存储温度 Non-operating Temperature*	-50		+60	℃
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
TURPA0.5G6G-4545	Power amplifier 0.5-6GHz, Gain:45dB,Psat:45dBm,+36V DC,Without Heatsink	Rev.1.1
TURPA0.5G6G-4545 HS	Power amplifier 0.5-6GHz, Gain:45dB,Psat:45dBm,+36V DC,With Heatsink	Rev.1.1