

Power Amplifier

1-2GHz/46dB Gain/46dBm Psat

Model: TLPA1G2G-46-46

TLPA1G2G-46-46 is a power amplifier with a minimum power gain of 46 dB and a minimum Psat of 46 dBm across the frequency range of 1 to 2 GHz. The DC power requirement for the amplifier is +28 VDC/6 A. The input and output port configuration offers coax adapter structure with 2.92mm female.

Features:

- Frequency range: 1-2GHz
- Gain: 46dB Min
- Output Power Psat: 46dBm 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	1		2	GHz
工作模式 Working Mode	CW/PULSE compatible			
功率增益 Power Gain	46			dB
功率增益平坦度 Power Gain Flatness		±1		dB
饱和输出功率 Output Psat	46	47		dBm
杂散 Spurious@Pout=46dBm			-60	dBc
谐波抑制 Harmonic@Pout=46dBm		-15	-10	dBc
输入驻波 Input VSWR			2	:1
直流电压 DC Voltage		28	29	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	SMA Female/SMA Female	
直流供电接口 DC Power Supply Connector	J30J-9ZKP	Pin1: Enable Pin2~5: +28V Pin6~9: GND
尺寸 Size	150*90*25	mm
重量 Weight	≤500	g

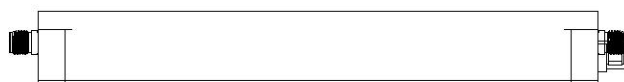
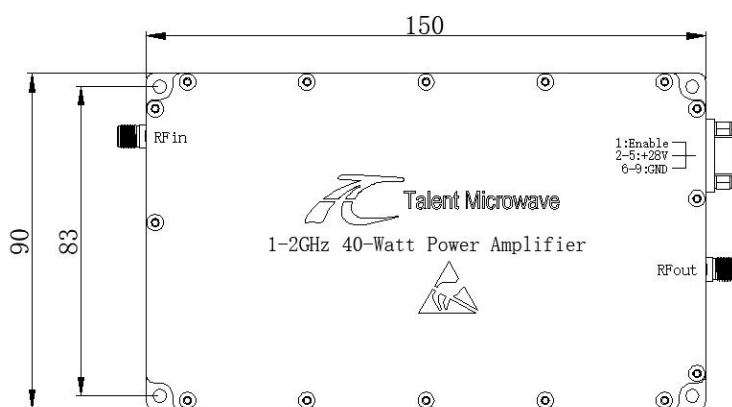
绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+29 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



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

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

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
TLPA1G2G-46-46	Power amplifier 1-2GHz, Gain:46dB,Psat:46dBm,+28V DC,Without Heatsink	Rev.1.0
TLPA1G2G-46-46-HS	Power amplifier 1-2GHz, Gain:46dB,Psat:46dBm,+28V DC,With Heatsink	Rev.1.0