

Power Amplifier

40-46GHz/33dB Gain/33dBm Psat

Model: TLPA40G46G-33-33

TLPA40G46G-33-33 is a power amplifier with a minimum small signal gain of 33 dB and a nominal Psat of 33 dBm across the frequency range of 40 to 46 GHz. The DC power requirement for the amplifier is +24 VDC/1 A. The input and output port configuration offers coax adapter structure with 2.4mm female.

Features:

- Frequency range: 40-46GHz
- Gain: 33dB Min
- Output Power Psat: 33dBm Typ
- 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	40-46			GHz
小信号增益 Small Signal Gain	33			dB
增益平坦度 Gain Flatness		±3		dB
线性输出功率 Output P1dB		32		dBm
饱和输出功率 Output Psat		33		dBm
杂散 Spurious		-50		dBc
输入驻波 Input VSWR		2		:1
直流电压 DC Voltage			24	V DC
直流电流 DC Supply Current		1		A
阻抗 Impedance	50			Ohms

机械特性 Mechanical Specifications:

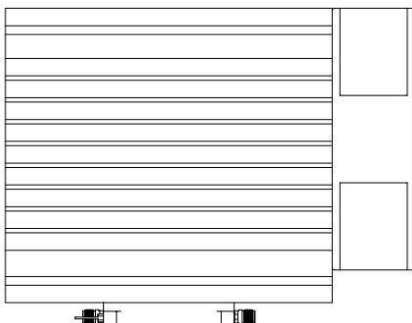
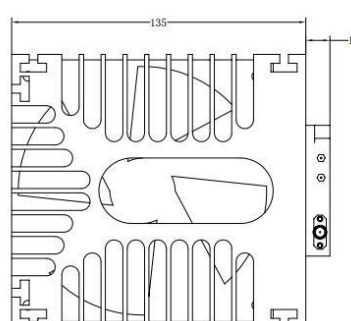
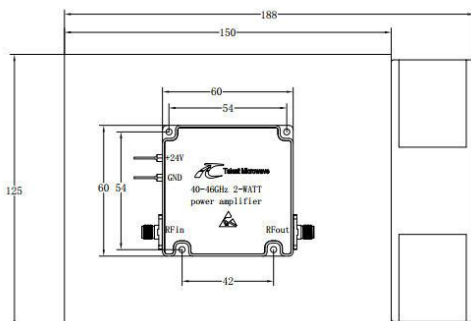
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	2.4mm Female/2.4mm Female	
直流偏置 DC Bias	Feedthru capacitors	
尺寸 Size	60*60*11(Without heatsink) 188*125*146(With heatsink)	mm
重量 Weight	≤200	g

绝对最大值 Absolute Maximum Ratings:

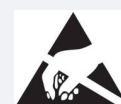
参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+28 V
输入功率 RF Input Power	+5 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

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		+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
TLPA40G46G-33-33	Power amplifier 40-46GHz, Gain:33dB,Psat:33dBm,+24V DC,Without Heatsink	Rev.1.1
TLPA40G46G-33-33-HS	Power amplifier 40-46GHz, Gain:33dB,Psat:33dBm,+24V DC,With Heatsink	Rev.1.1