

Power Amplifier

37-42GHz/36dB Gain/24dBm Psat

Model: TLPA37G42G-35-23

TLPA37G42G-35-23 is a power amplifier with a typical gain of 36 dB and a nominal Psat of 24 dBm across the frequency range of 37 to 42 GHz. The DC power requirement for the amplifier is +12 VDC/1 A. The input and output port configuration offers coax adapter structure with 2.4mm female.

Features:

- Frequency range: 37-42GHz
- Gain: 36dB Typ
- Output Power Psat: 24dBm 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	37		42	GHz
增益 Gain		36		dB
增益平坦度 Gain Flatness			±2	dB
线性输出功率 Output P1dB		23		dBm
饱和输出功率 Output Psat		24		dBm
输入驻波 Input VSWR		1.8	2.5	:1
输出驻波 Output VSWR		1.8	2.5	:1
直流电压 DC Voltage		+12		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	Solder Pin	
尺寸 Size	60*50*12	mm

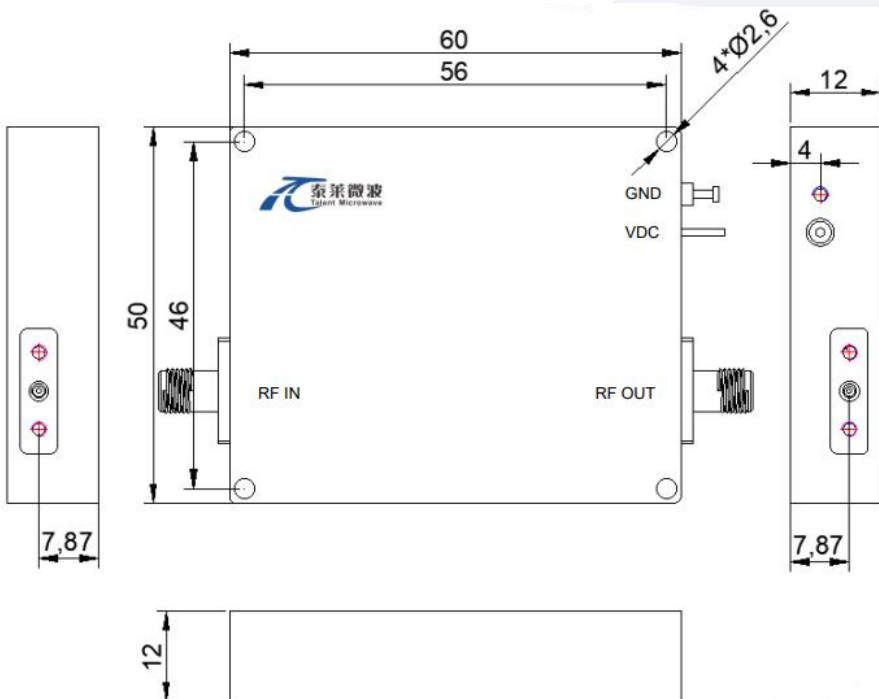
绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	TBD
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		50,000	feet
震动 Shock / Vibration(MIL-STD-810F)	Airborne			
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
TLPA37G42G-35-23	Power amplifier 37-42GHz, Gain:36dB,Psat:24dBm,+12V DC,Without Heatsink	Rev.1.1
TLPA37G42G-35-23-HS	Power amplifier 37-42GHz, Gain:36dB,Psat:24dBm,+12V DC,With Heatsink	Rev.1.1