

Power Amplifier

0.7-6GHz/40dB Gain/41dBm Psat

Model: TLPA0.7G6G-40-41

TLPA0.7G6G-40-41 is a power amplifier with a minimum gain of 40 dB and anominal Psat of 41 dBm across the frequency range of 0.7 to 6 GHz. The DC power requirement for the amplifier is +28 VDC/1.5 A. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 0.7-6GHz
- Gain: 40dB Min
- Output Power Psat: 41dBm 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	0.7		6	GHz
增益 Gain	40	43		dB
增益平坦度 Gain Flatness		±3		dB
线性输出功率 Output P1dB	40	40.5		dBm
饱和输出功率 Output Psat		41		dBm
谐波 Harmonics		-15	-13	dBc
输入驻波 Input VSWR		1.5	2.5	:1
直流电压 DC Voltage		+28		V DC
直流电流 DC Supply Current		1.5		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	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	90*65*12	mm

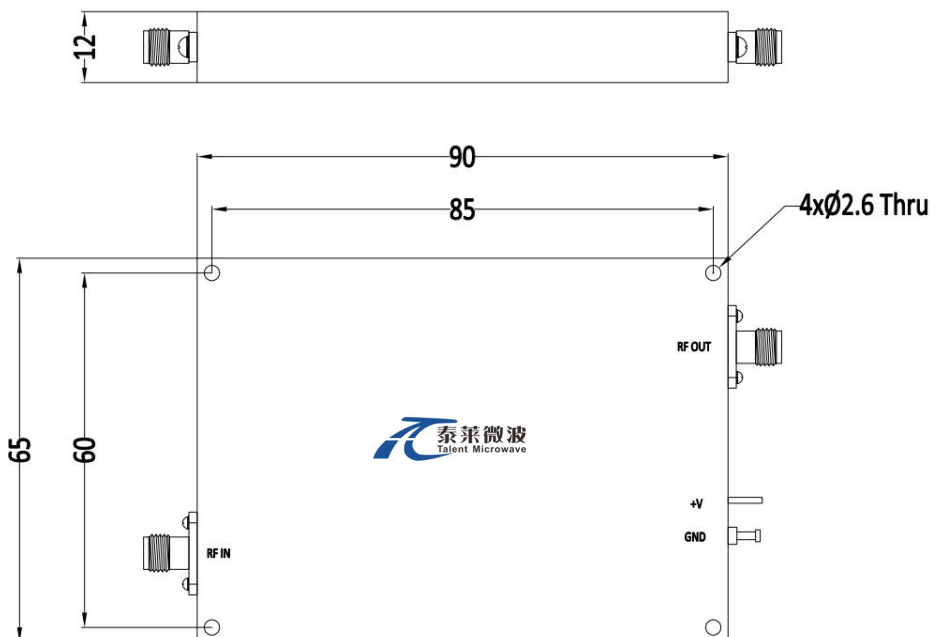
绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+28 V
输入功率 RF Input Power	0 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	°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)	20g,11ms,saw-tooth			
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
TLPA30G36G-46-46	Power amplifier 0.7-6GHz, Gain:40dB,Psat:41dBm,+28V DC,Without Heatsink	Rev.1.1
TLPA30G36G-46-46-HS	Power amplifier 0.7-6GHz, Gain:40dB,Psat:41dBm,+28V DC,With Heatsink	Rev.1.1