

Power Amplifier

18-40GHz/35dB Gain/33dBm Psat

Model: TLPA18G40G-35-33

TLPA18G40G-35-33 is a power amplifier with a minimum gain of 35 dB and a nominal Psat of 33 dBm across the frequency range of 18 to 40 GHz. The DC power requirement for the amplifier is +24 VDC. The input and output port configuration offers coax adapter structure with 2.92mm female.

Features:

- Frequency range: 18-40GHz
- Gain: 35dB 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	18		40	GHz
增益 Gain	35			dB
线性输出功率平坦度 Output P1dB Flatness			±2	dB
线性输出功率 Output P1dB	30			dBm
饱和输出功率 OutputPsat		33		dBm
输入驻波 Input VSWR		2		:1
杂散 Spurious@Pout=30dBm			-50	dBc
直流电压 DC Voltage		+24		V DC
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	2.92mm Female/2.92mm Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	150*90*20	mm
重量 Weight	500	g

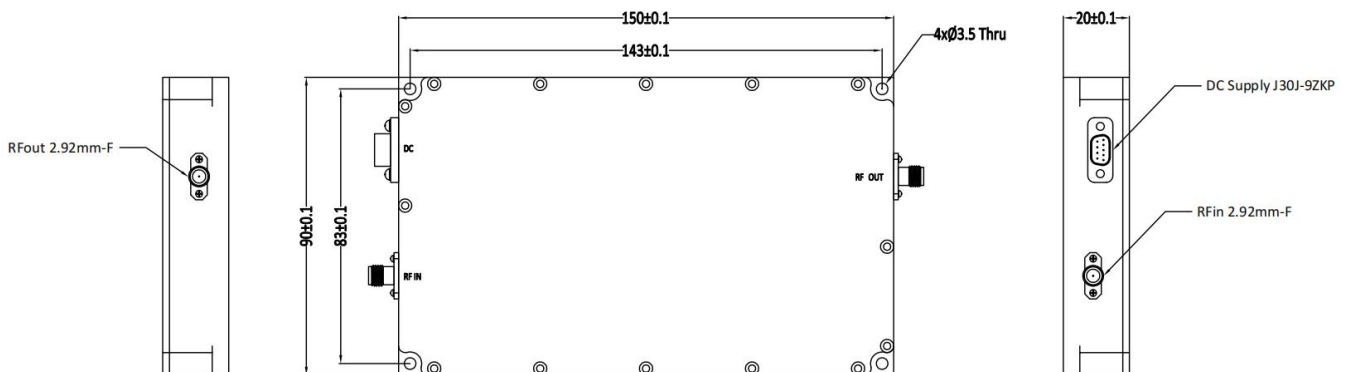
绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	1-5:+24V 6-9:GND
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

J30J-9ZKP引脚定义	
Pin	Function
1-5	+24V
6-9	GND



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	100%RH at 35°C, 95%RH at 40°C			%
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
TLPA18G40G-35-33	Power amplifier 18-40GHz, Gain:35dB,Psat:33dBm,+24V DC,Without Heatsink	Rev.1.1
TLPA18G40G-35-33-HS	Power amplifier 18-40GHz, Gain:35dB,Psat:33dBm,+24V DC,With Heatsink	Rev.1.1