

## Power Amplifier

1.6-1.7GHz/38dB Gain/38dBm Psat

Model: TLPA1.6G1.7G-38-38

TLPA1.6G1.7G-38-38 is a power amplifier with a minimum gain of 38 dB and a minimum Psat of 38 dBm across the frequency range of 1.6 to 1.7 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: 1.6-1.7GHz
- Gain: 38dB Min
- Output Power Psat: 38dBm 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	1.6		1.7	GHz
增益 Gain	38	40		dB
增益平坦度 Gain Flatness		±1		dB
线性输出功率 Output P1dB		35		dBm
饱和输出功率 Output Psat	38	39		dBm
效率 PAE@Psat	40			%
输入驻波 Input VSWR		1.5	2.0	: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*48*15	mm
重量 Weight	150	g

## 绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+30 V
输入功率 RF Input Power	+3 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
TLPA1.6G1.7G-38-38	Power amplifier 1.6-1.7GHz, Gain:38dB,Psat:38dBm,+28V DC,Without Heatsink	Rev.1.1
TLPA1.6G1.7G-38-38-HS	Power amplifier 1.6-1.7GHz, Gain:38dB,Psat:38dBm,+28V DC,With Heatsink	Rev.1.1