

Power Amplifier

100-1000MHz/35dB Gain/45dBm Psat

Model: TLPA100M1000M-35-45

TLPA100M1000M-35-45 is a power amplifier with a minimum gain of 35 dB and a minimum Psat of 45 dBm across the frequency range of 100 to 1000 MHz. The DC power requirement for the amplifier is +28 VDC/1 A. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 100-1000MHz
- Gain: 35dB Min
- Output Power Psat: 45dBm 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	100		1000	MHz
增益 Gain	35	38		dB
增益平坦度 Gain Flatness		±1.5	±2	dB
线性输出功率 Outout P1dB	42	43		dBm
饱和输出功率 Output Psat	45	46		dBm
输入驻波 Input VSWR		1.5	2.0	:1
输出驻波 Output VSWR		1.5	2.0	:1
直流电压 DC Voltage		+28		V DC
直流电流 DC Supply Current		1	12	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	
直流供电接口 DC Power Supply Connector	DSUB-9	
尺寸 Size	170*80*20	mm
重量 Weight	200	g

绝对最大值 Absolute Maximum Ratings:

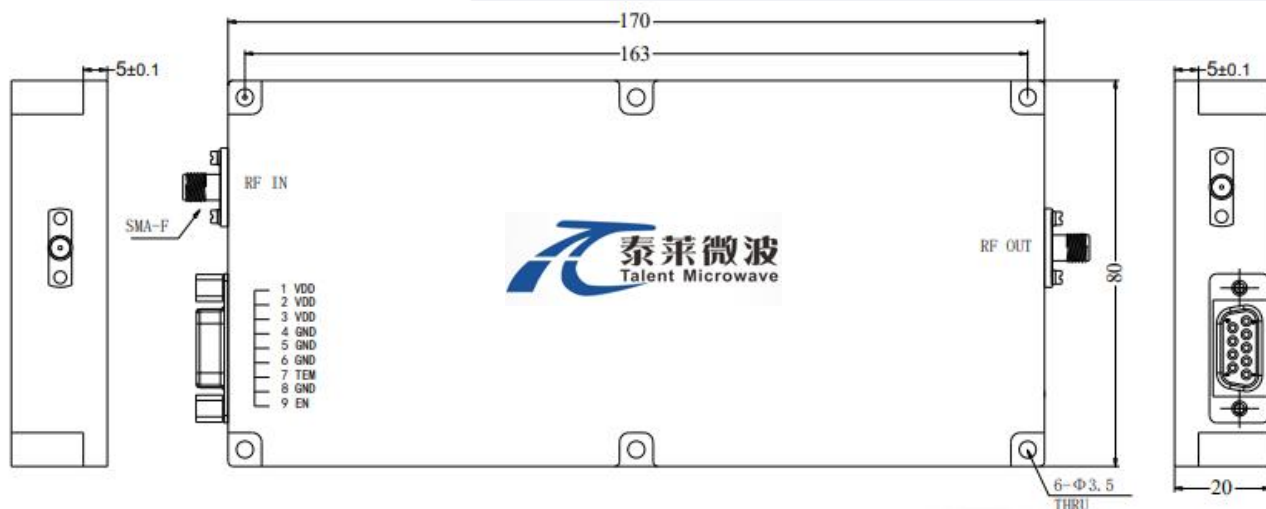
参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+30 V
输入功率 RF Input Power	+16 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V



Simple 220V System
Available SAC option

外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



*****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
TLPA100M1000M-35-45	Power amplifier, 100-1000MHz, Gain:35dB,Psat:45dBm,+28V DC,Without Heatsink	Rev.1.1
TLPA100M1000M-35-45-HS	Power amplifier, 100-1000MHz, Gain:35dB,Psat:45dBm,+28V DC,With Heatsink	Rev.1.1