

Power Amplifier

890-925MHz/54dB Gain/54dBm Psat

Model: TLP890M925M-54-54

TLP890M925M-54-54 is a power amplifier with a typical small signal gain of 54 dB and a minimum Psat of 54 dBm across the frequency range of 890 to 925 MHz. The DC power requirement for the amplifier is +48 VDC/15 A. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 890-925MHz
- Gain: 54dB Typ
- Output Power Psat: 54dBm 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	890		925	MHz
小信号增益 Small Signal Gain	52	54		dB
增益平坦度 Gain Flatness		±1	±1.5	dB
饱和输出功率 Output Psat	54	54.5		dBm
输入驻波 Input VSWR		1.5	2.0	:1
直流电压 DC Voltage	+46	+48	+50	V DC
直流电流 DC Supply Current		15		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 Supply Connector	D-SUB-9	
尺寸 Size	170*95*22(Without heatsink) 292*200*84(With heatsink)	mm
重量 Weight	1000	g

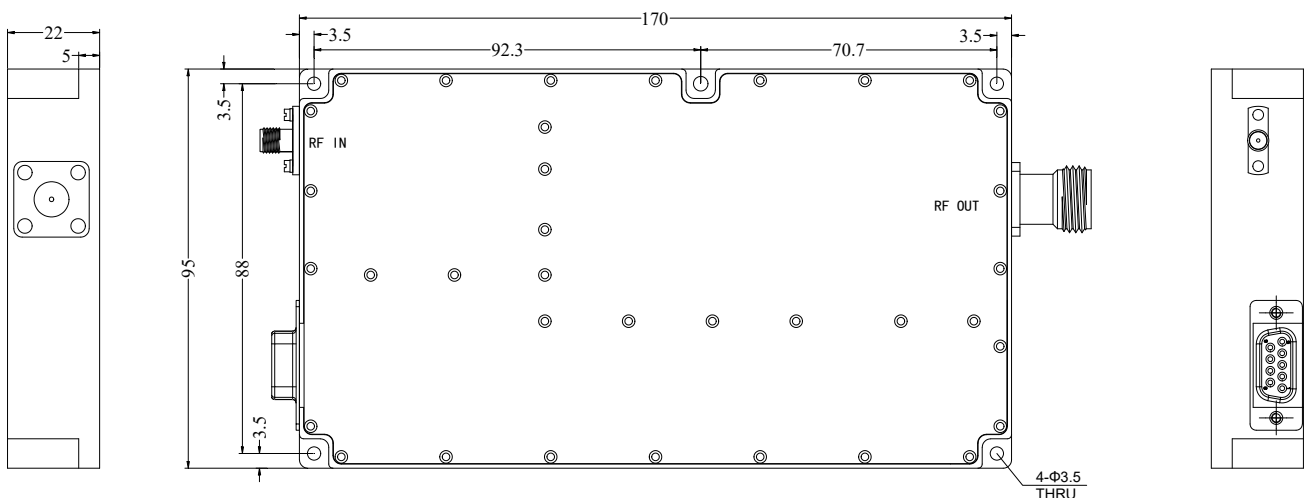
绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+30 V
输入功率 RF Input Power	+5 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V



外形图 Outline Drawing:

Unit:mm

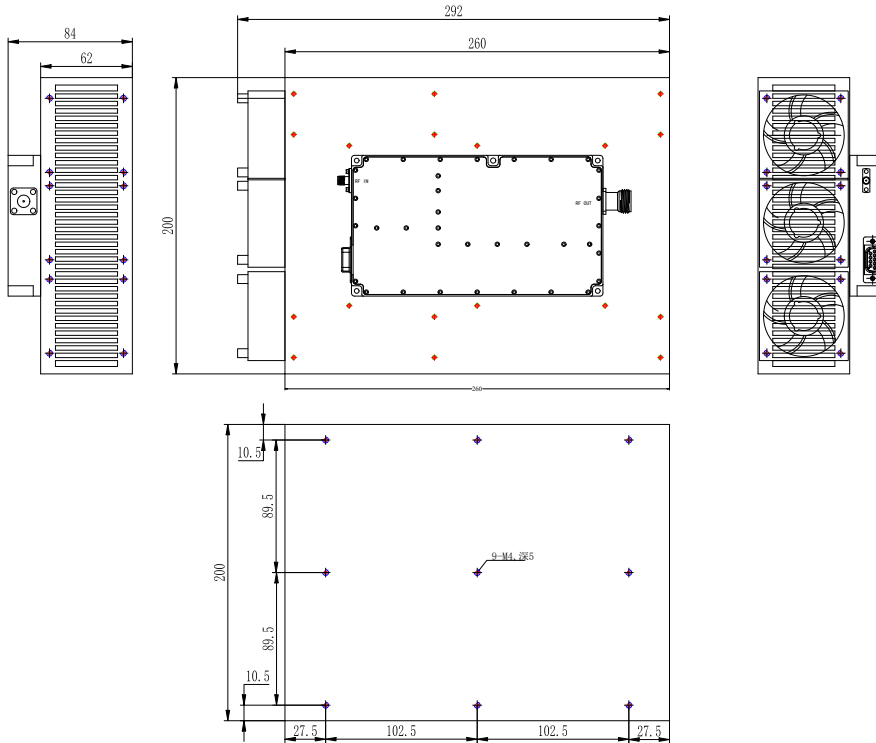


*****Heat Sink Required During Operation**



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

外形图 Outline Drawing: Unit:mm



温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature*	-20		+50	°C
存储温度 Non-operating Temperature*	-30		+60	°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			

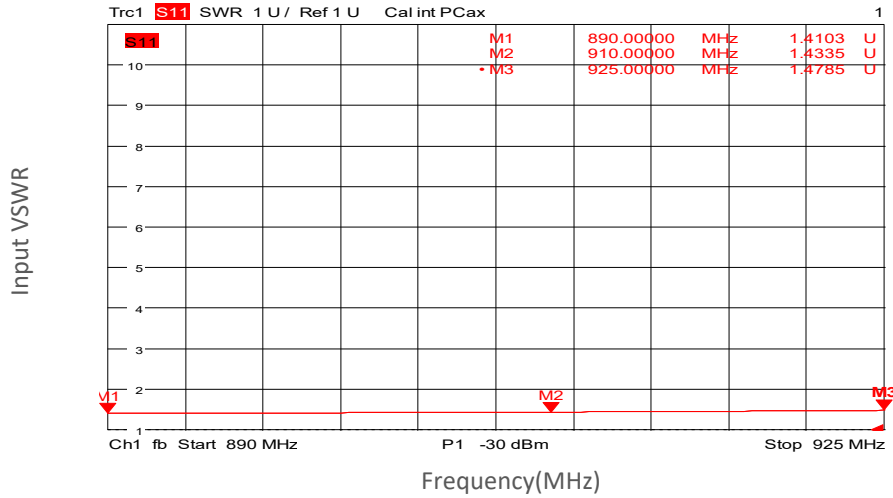
*Note: For a wider temperature range, please consult the manufacturer.

订货信息 Ordering Information:

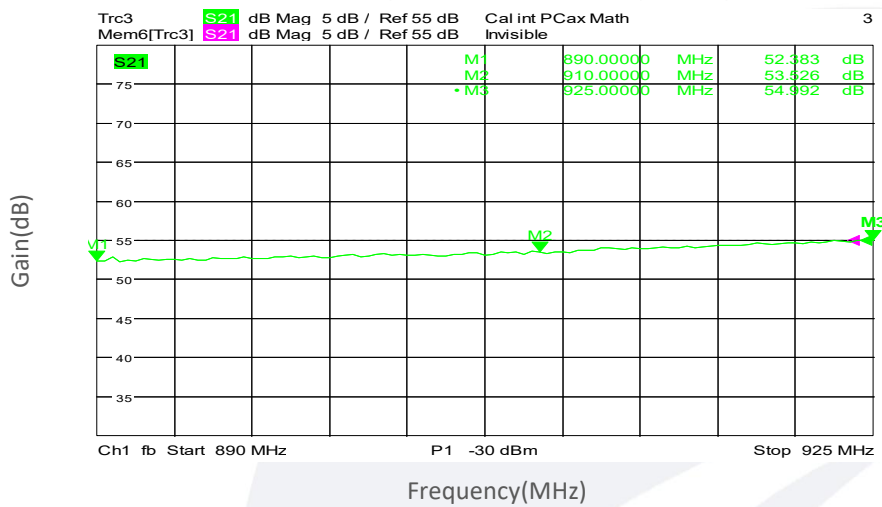
标准型号 Base Number	描述 Description	版本号 Revision
TLPA890M925M-54-54	Power amplifier 890-925MHz, Gain:54dB,Psat:54dBm,+48V DC,Without Heatsink	Rev.1.1
TLPA890M925M-54-54-HS	Power amplifier 890-925MHz, Gain:54dB,Psat:54dBm,+48V DC,With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

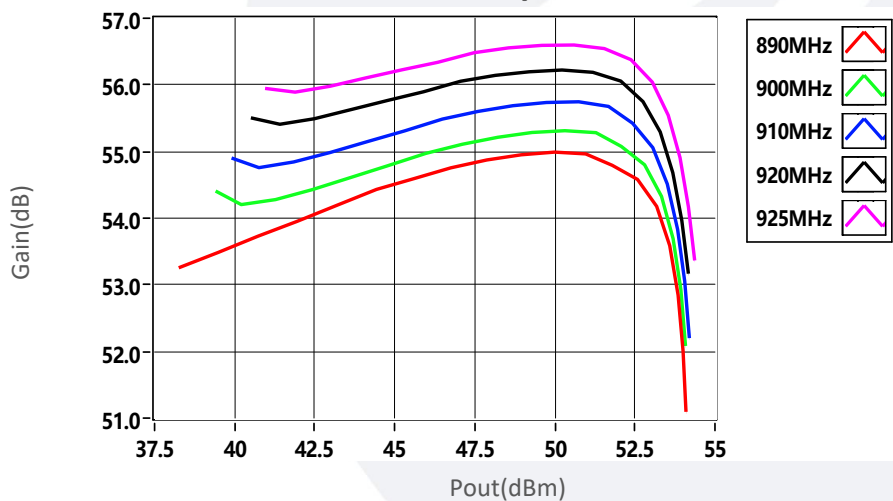
Input VSWR vs Frequency



Small Signal Gain vs Frequency



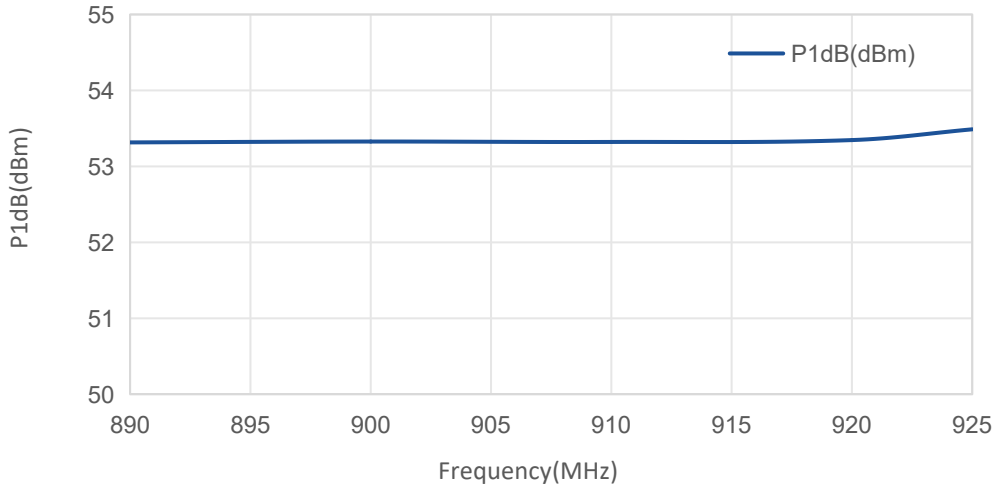
Gain vs Output Power



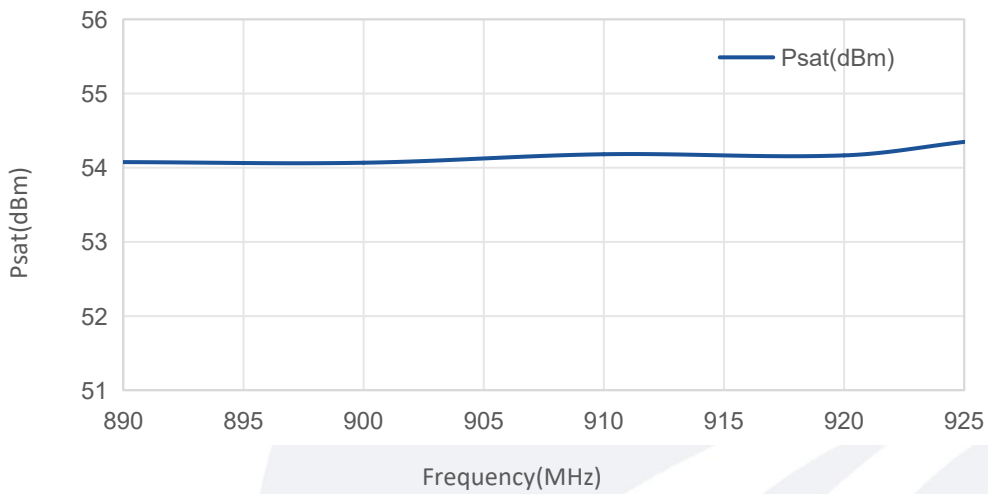
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

典型曲线 Typical Performance Data:

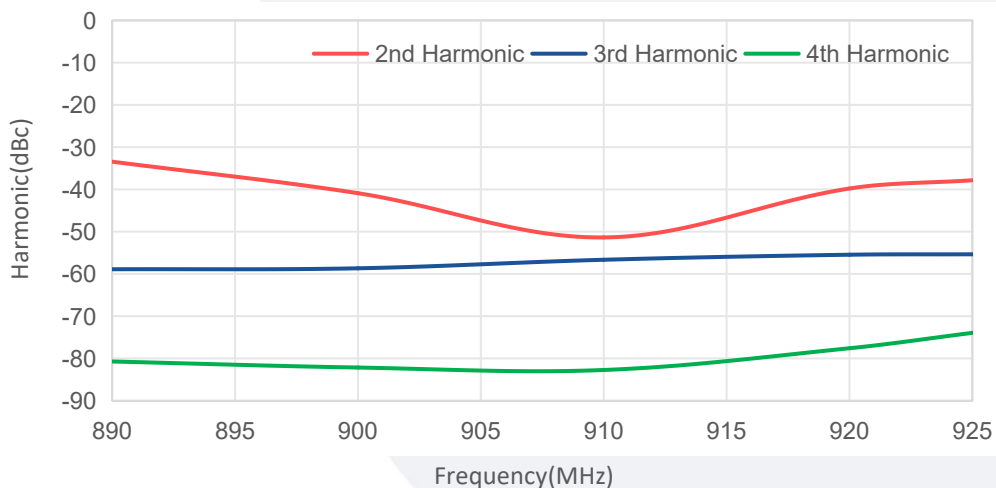
P1dB vs Frequency



Psat vs Frequency



Harmonics vs Frequency



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