

Model: TLA5M700M-24-15
Low Noise Amplifier
5-700MHz, NF:1.5dB, Gain:24dB, P1dB:23dBm
Feature:

- Ultra Wide Band: 5-700MHz
- Gain: 24dB Min
- Noise Figure: 1.5dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

电气特性 Electrical Specifications:

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	5-700			MHz
增益 Gain	24	@5MHz	26.7	dB
		@25MHz	26.8	
		@100MHz	26.9	
		@300MHz	27	
		@500MHz	27	
		@700MHz	26.9	
增益平坦度 Gain Flatness		±0.25	±0.5	dB
噪声系数 Noise Figure		1.5	1.8	dB
线性输出功率 Output P1dB@350MHz	21	23		dBm
输出三阶交调 Output IP3@350MHz	30	38		dBm
输入驻波 Input VSWR			1.2	:1
输出驻波 Output VSWR			1.4	:1
直流电压 DC Voltage	11	12-15	30	V DC
直流电流 DC Supply Current		150	180	mA
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	31.75*31.75*14.29	mm
重量 Weight	/	g

绝对最大值 Absolute Maximum Ratings:

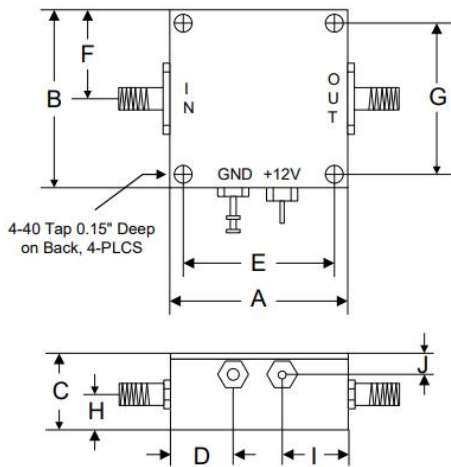
参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+35V
输入功率 RF Input Power	15 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V



Available 220V System
Benchtop Amplifier

外形尺寸 Outline Drawing:

Unit: mm



A	31.75mm
B	31.75mm
C	14.29mm
D	11.43mm
E	25.4mm
F	15.88mm
G	25.4mm
H	6.35mm
I	12.7mm
J	4.76mm

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



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

温度环境 Environmental Conditions:

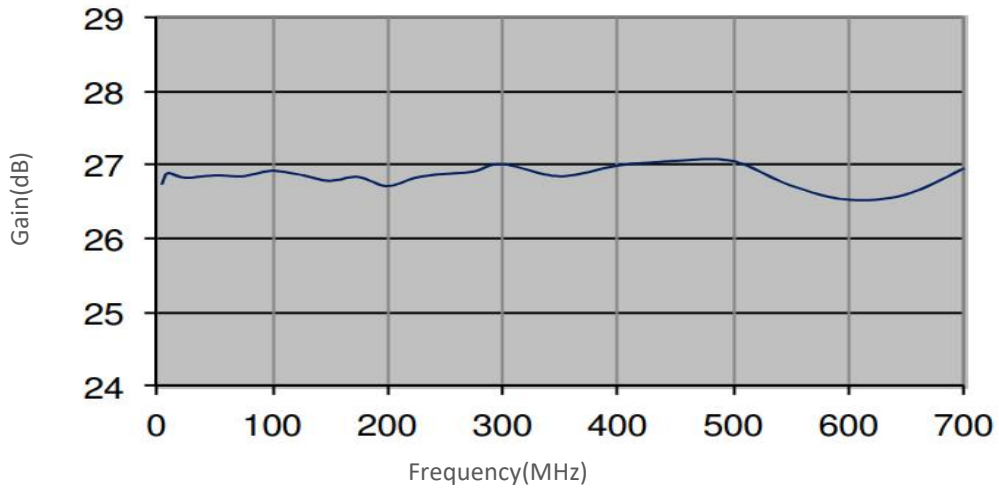
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-40		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude		50,000		feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

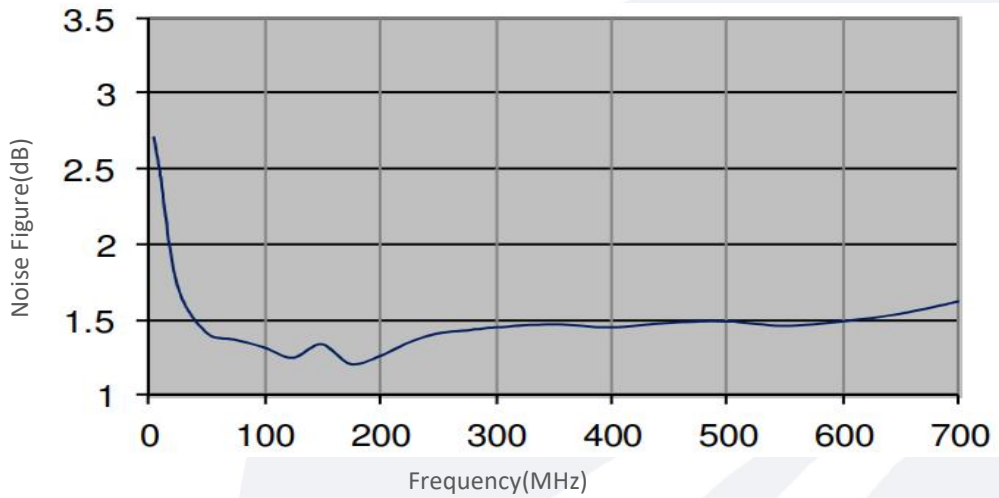
标准型号 Part Number	描述 Description	版本号 Revision
TLLA5M700M-24-15	Low Noise Amplifier, 5-700MHz, Noise Figure:1.5dB, Gain:24 dB,P1dB:15dBm,+12V DC,Without Heatsink	Rev.1.1
TLLA5M700M-24-15-HS	Low Noise Amplifier, 5-700MHz, Noise Figure:1.5dB, Gain:24 dB,P1dB:15dBm,+12V DC,With Heatsink	Rev.1.1

典型曲线 Typical Performance Data:

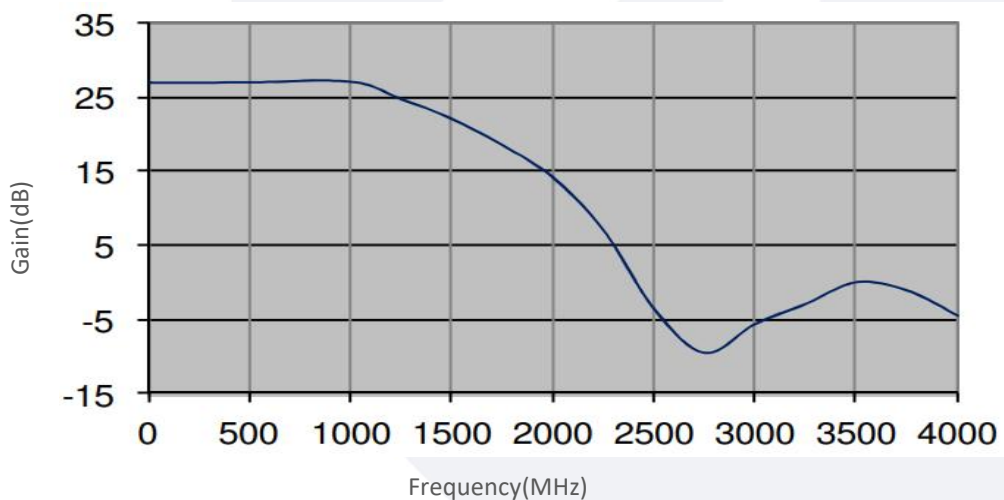
Gain vs Frequency



Noise Figure vs Frequency

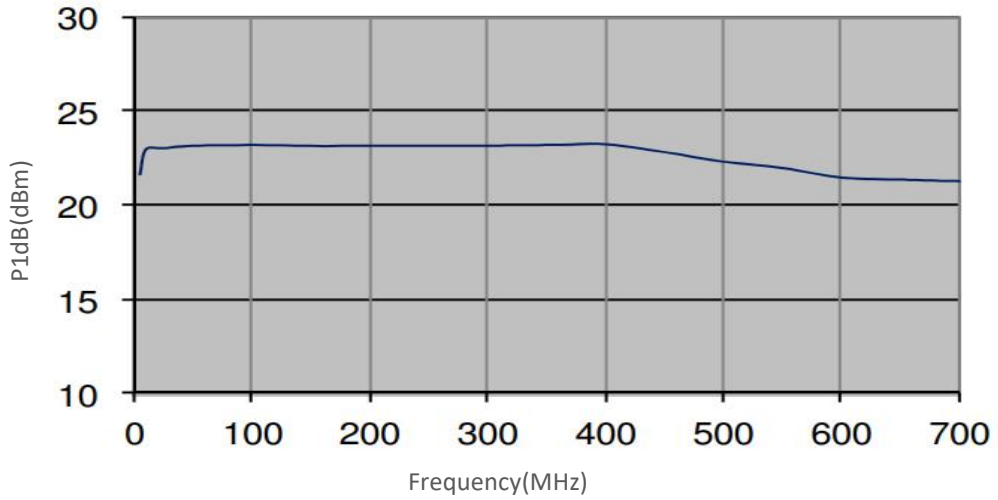


Broadband Gain vs Frequency

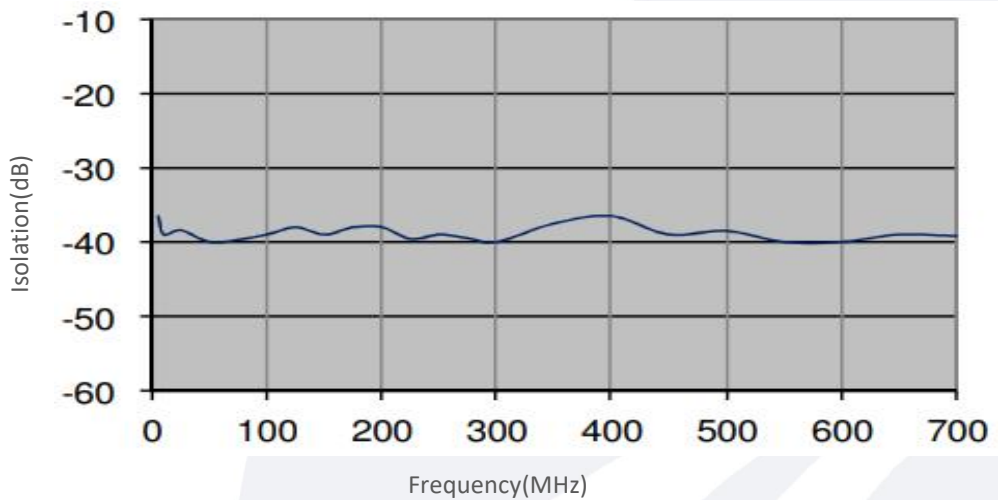


典型曲线 Typical Performance Data:

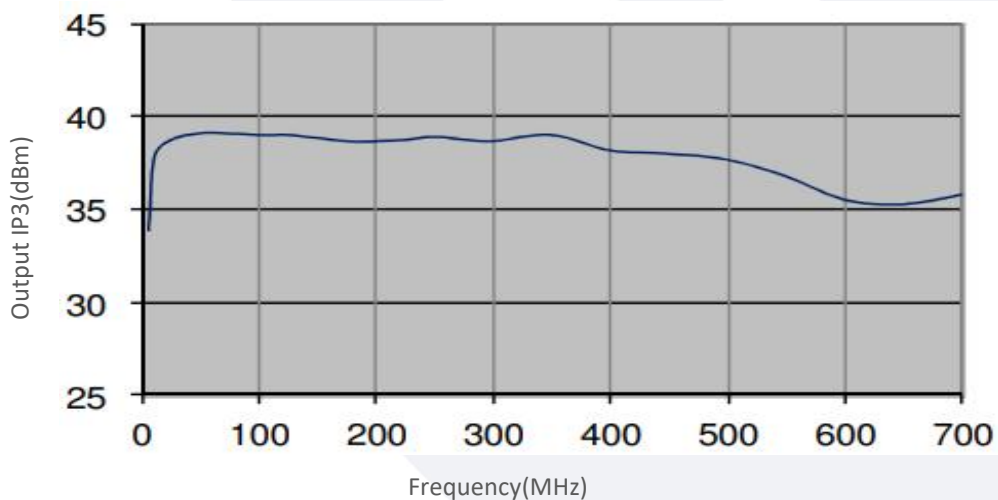
P1dB vs Frequency



Isolation vs Frequency

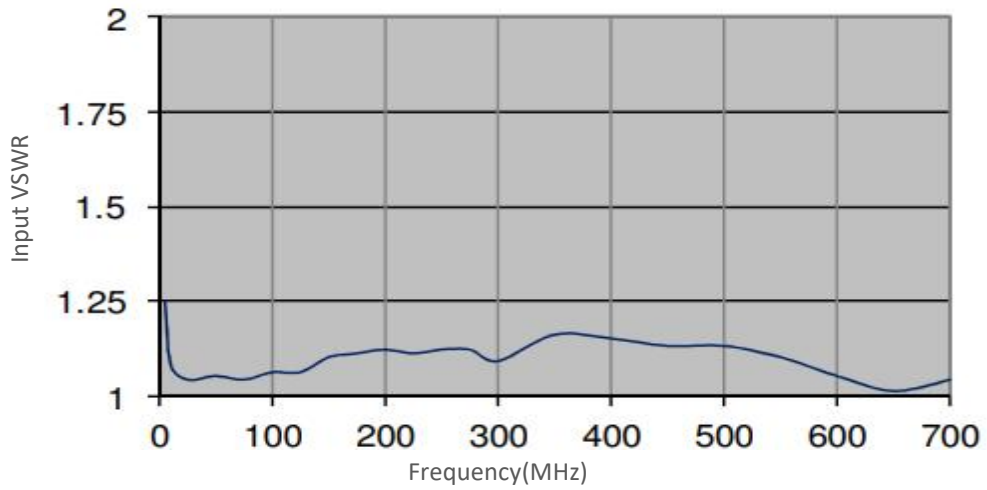


Output IP3 vs Frequency

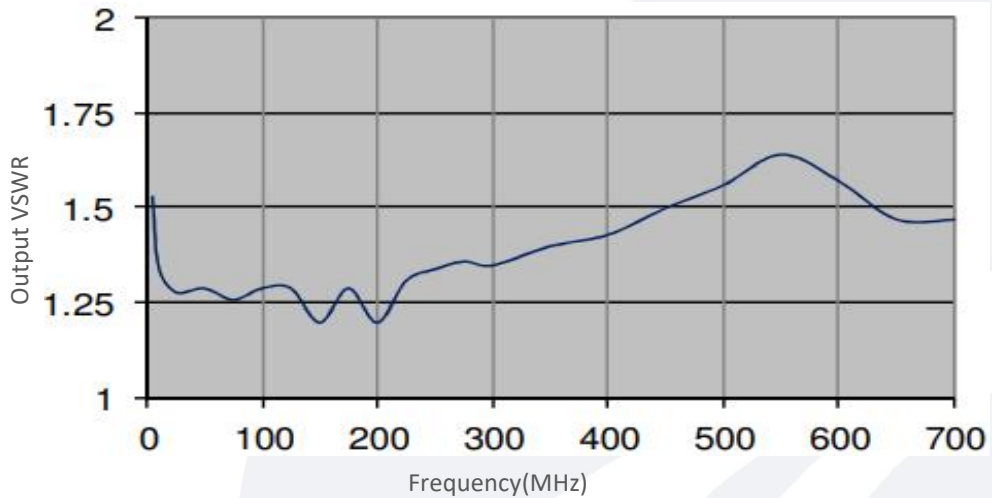


典型曲线 Typical Performance Data:

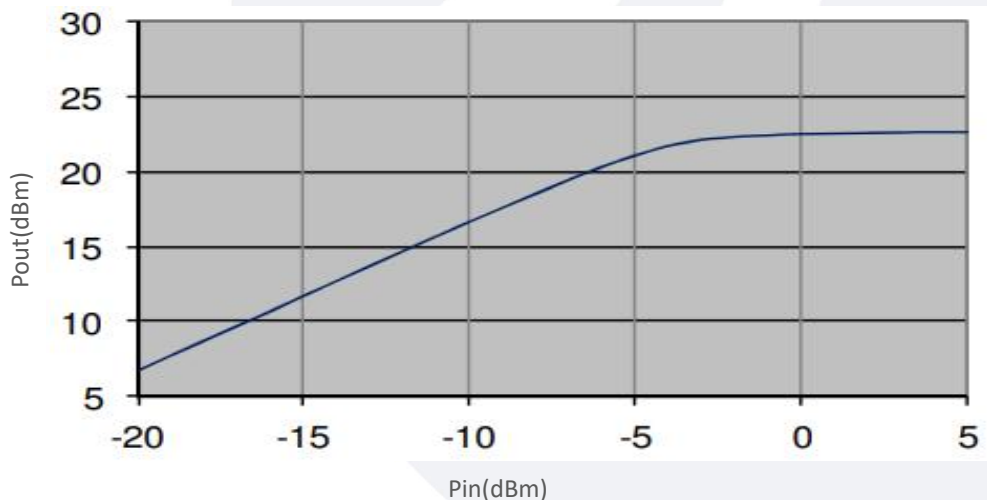
Input VSWR vs Frequency



Output VSWR vs Frequency

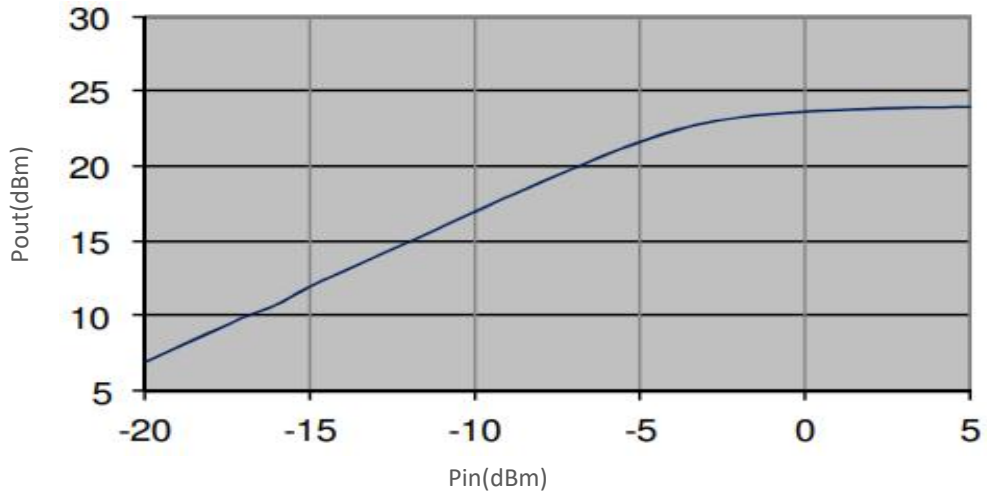


Pout vs Pin@5MHz

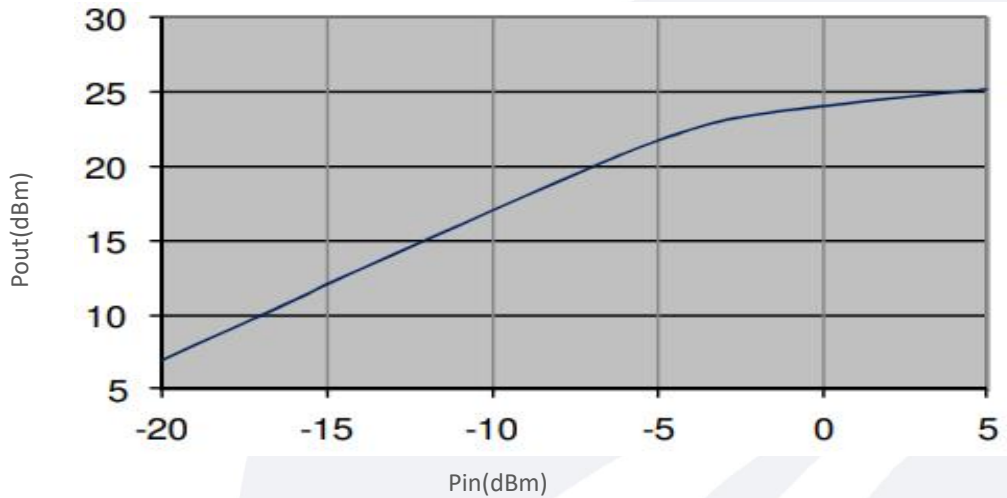


典型曲线 Typical Performance Data:

Pout vs Pin@10MHz



Pout vs Pin@50MHz



Pout vs Pin@100MHz

