泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
+86-0512-62657975
sales@talentmw.com
www.talentmw.com

Model:TLPA2.7G3.5G-25-56

Power Amplifier 2.7GHz-3.5GHz,Gain:25dB,Psat:56dBm

Feature:

- Wide Band: 2.7GHz-3.5GHz
- Gain: 25dB Typ
- Psat Output Power: 56 dBm Min
- 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		2.7-3.5		GHz
功率增益 Power Gain	20	25		dB
增益平坦度 Gain Flatness		±1	±2	dB
线性输出功率 Output P1dB		50		dBm
饱和输出功率 Output Psat	56	57		dBm
谐波抑制 Harmonics @Pout=56dBm			20	dBc
输入驻波 Input VSWR		1.5	2.0	:1
直流电压 DC Voltage	26	28	30	V DC
直流电流 DC Supply Current		50	70	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/N Female	
直流偏置 DC Bias	Four core avionics	
尺寸 Size	366*358*141	mm
重量 Weight	14	Kg

绝对最大值 Absolute Maximum Ratings:

参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	30V
输入功率 RF Input Power	40 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

Available 220V System Benchtop Amplifier

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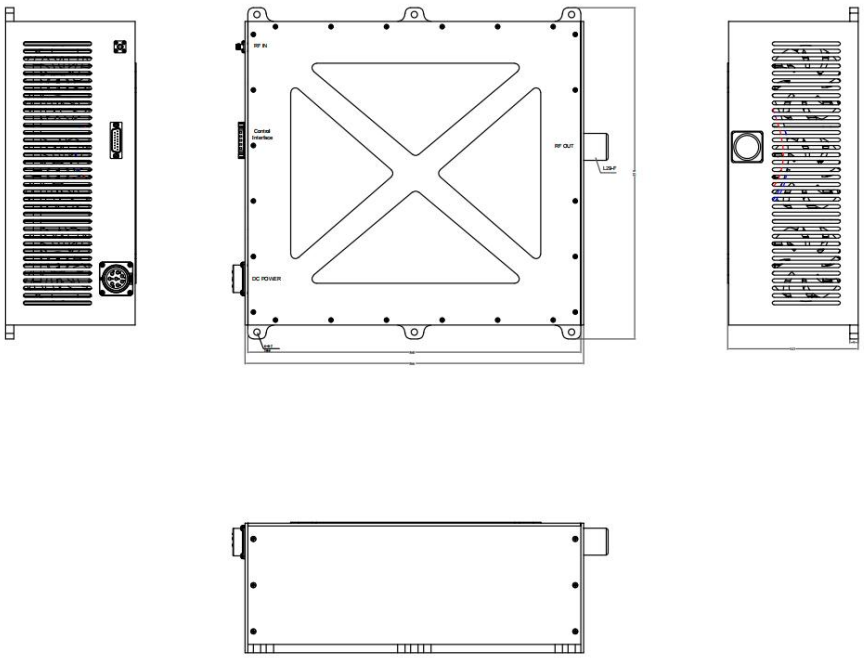
外形尺寸Outline Drawing:

Unit: mm



***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*	-20		+50	℃
存储温度 Non-operating Temperature*	-30		+60	℃
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 Part Number	描述 Description	版本号Revision
TLPA2.7G3.5G-25-56	Power amplifier 2.7GHz-3.5GHz,Gain:25dB,Psat:56dBm,28V DC， Without Heatsink	Rev.1.0
TLPA2.7G3.5G-25-56-HS	Power amplifier 2.7GHz-3.5GHz,Gain:25dB,Psat:56dBm,28V DC， With Heatsink	Rev.1.0

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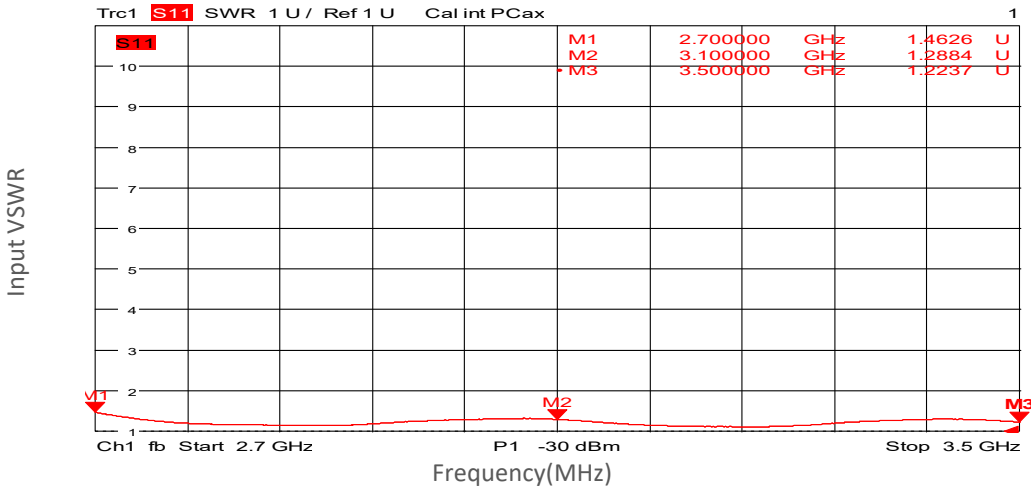
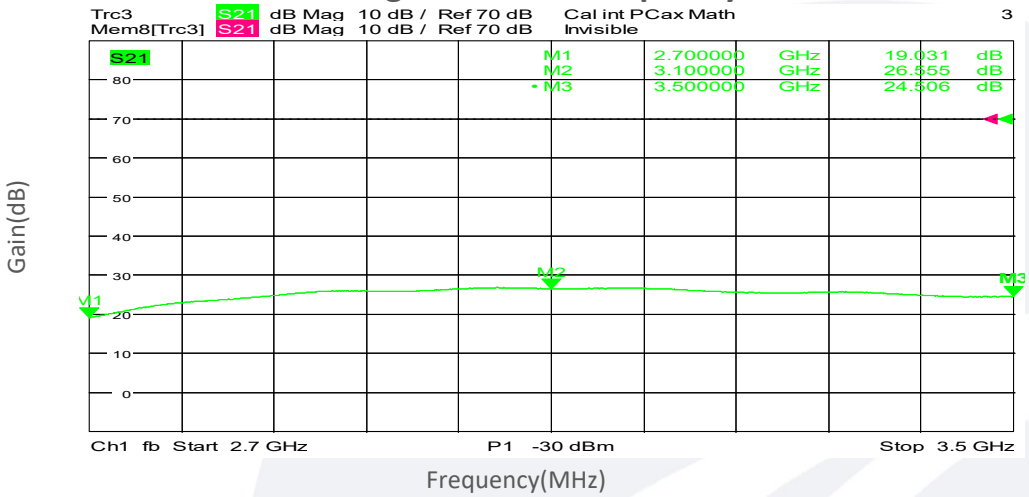
典型曲线 Typical Performance Data:

Test TEM=25℃:

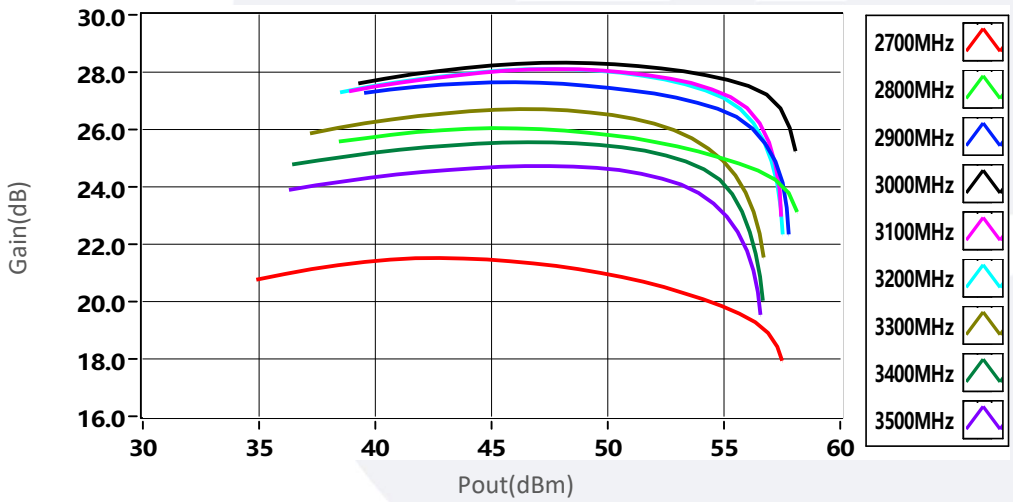
Input VSWR vs Frequency



Small Signal Gain vs Frequency



Gain vs Output Power



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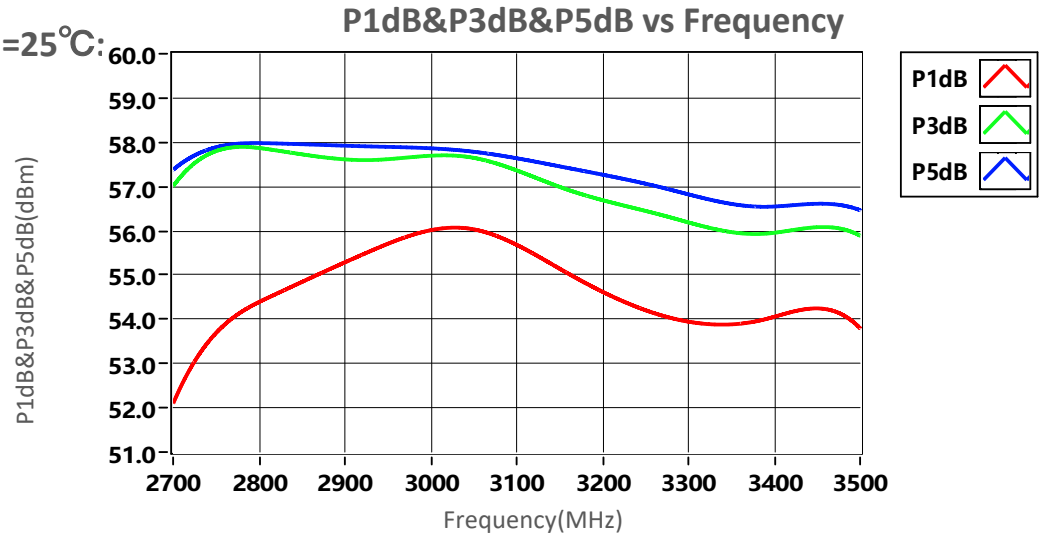

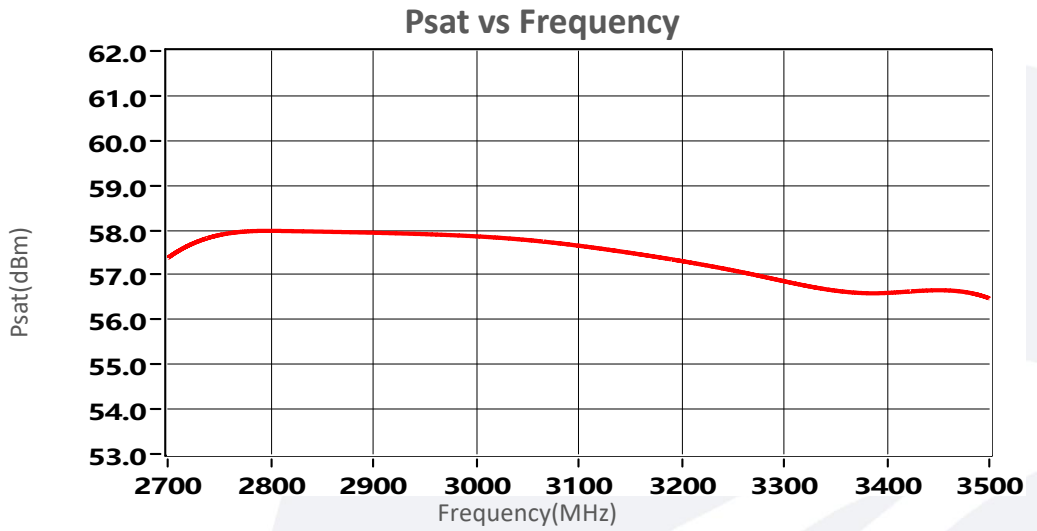

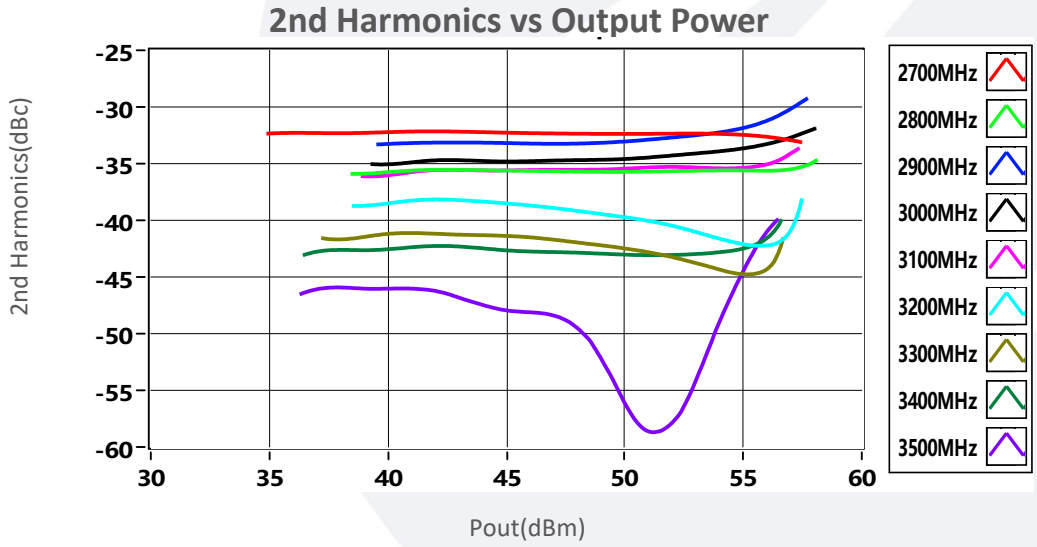

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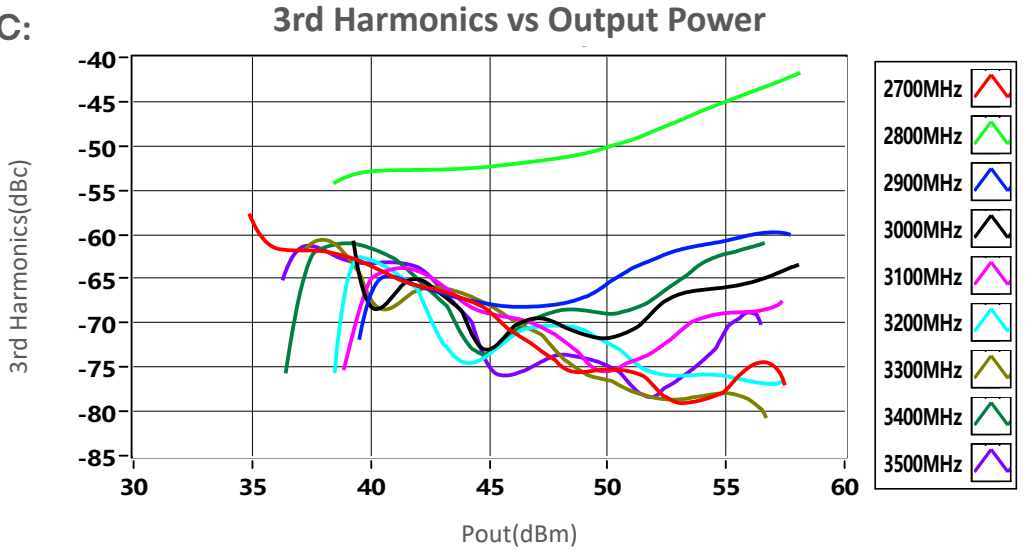

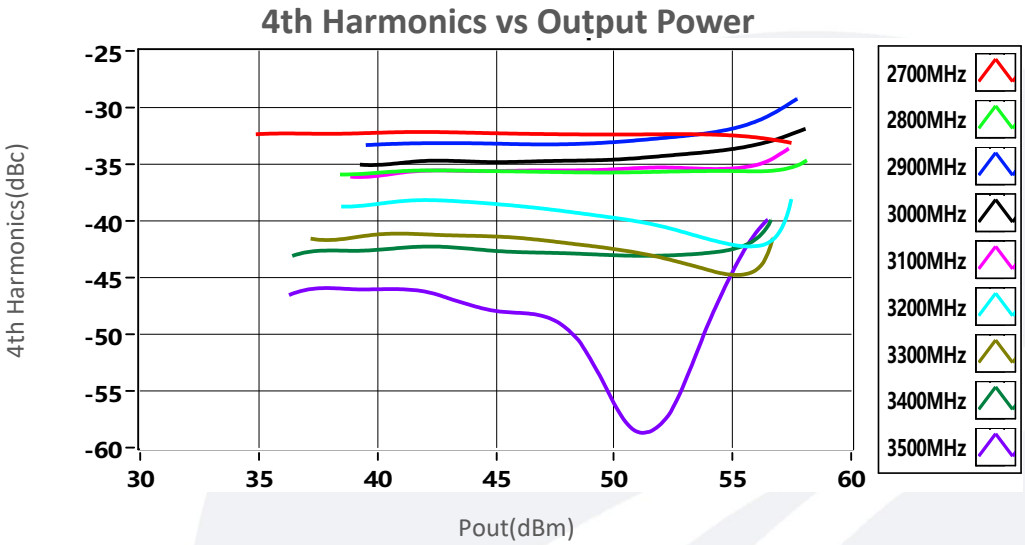

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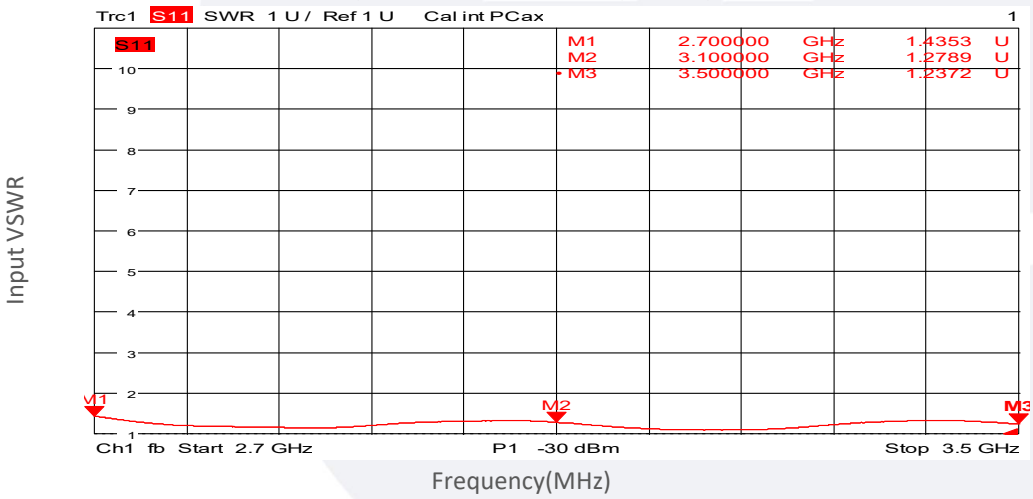

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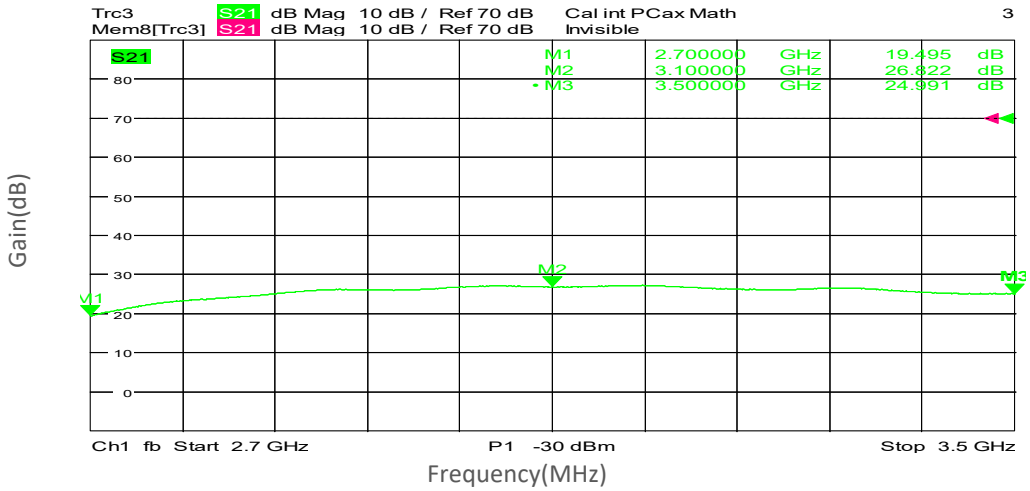
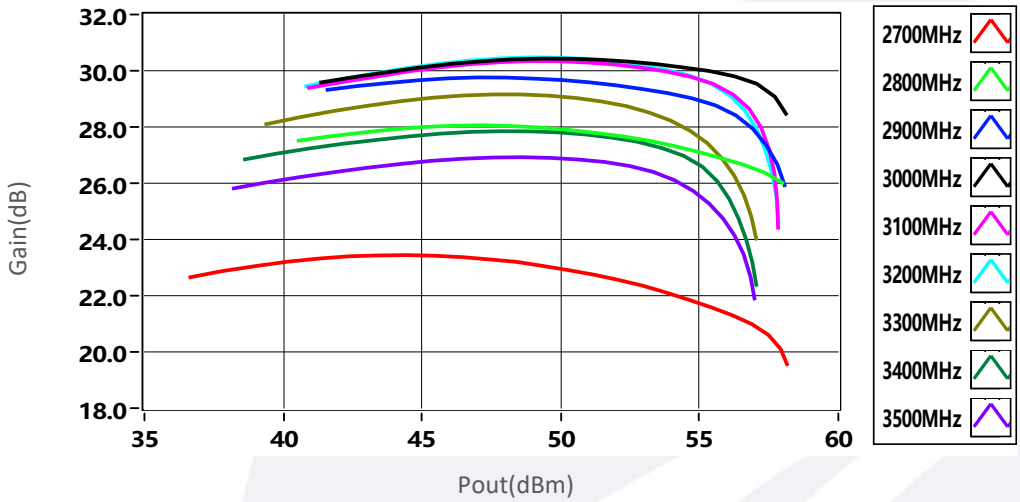
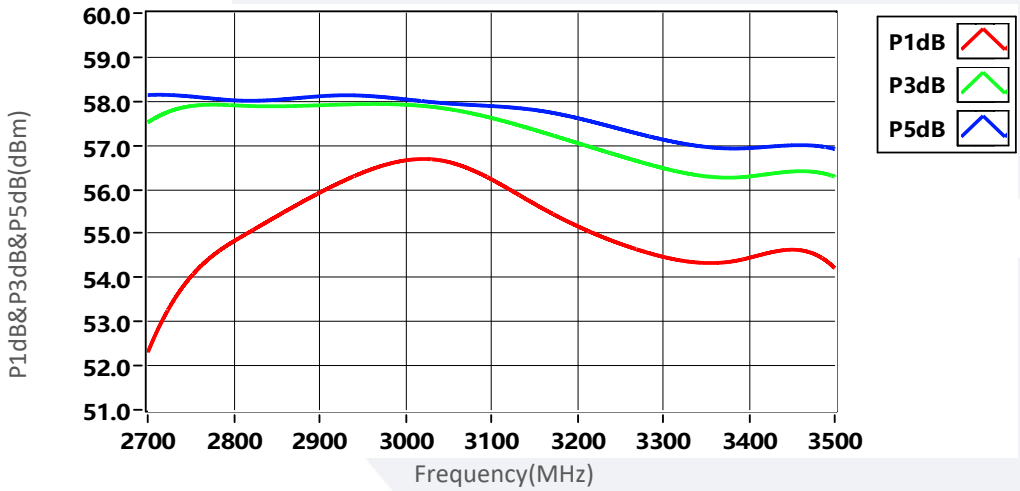
Small Signal Gain vs Frequency



Gain vs Output Power



P1dB&P3dB&P5dB vs Frequency



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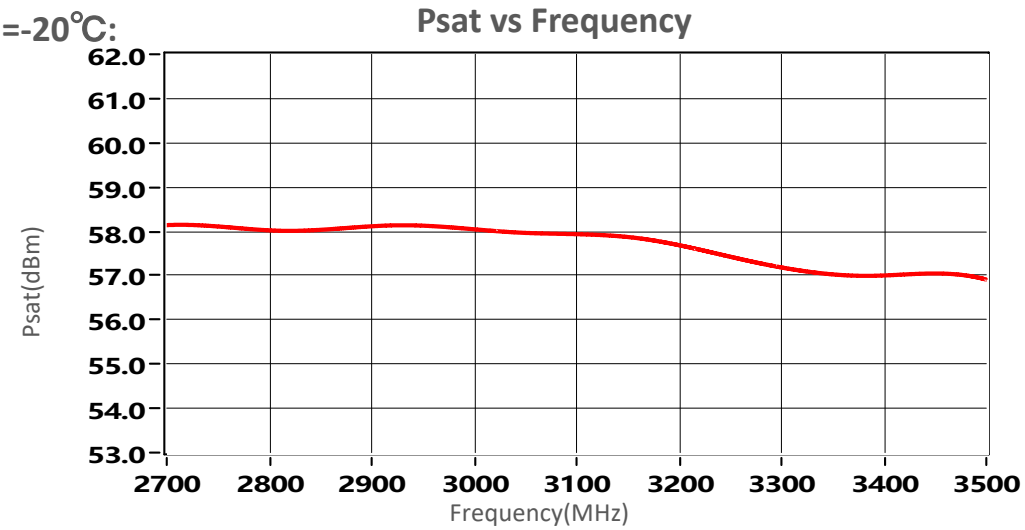

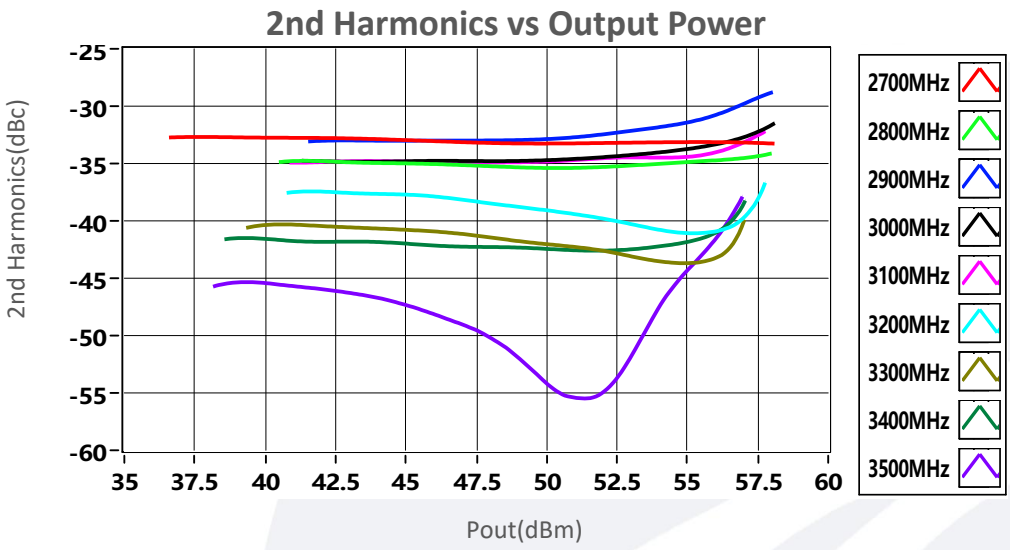

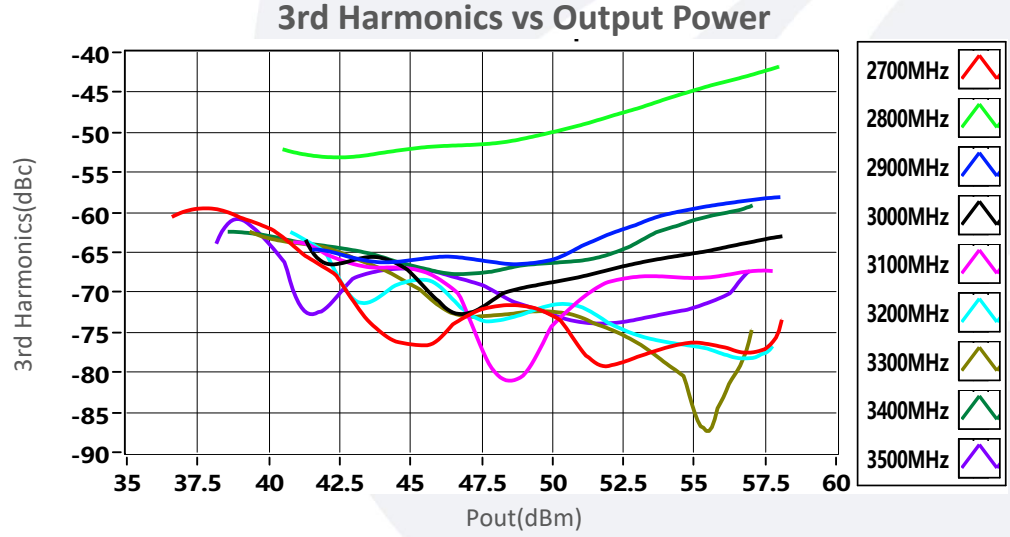

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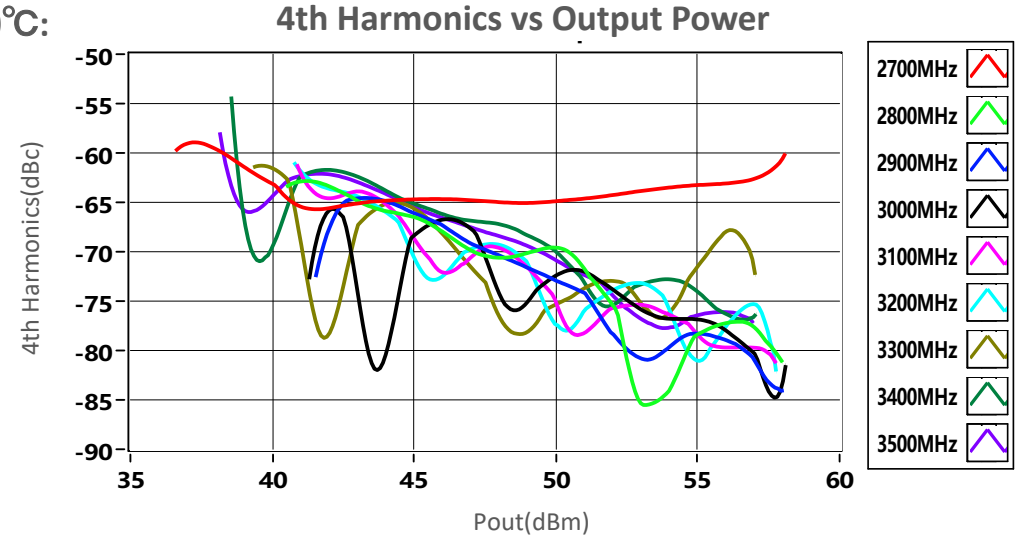

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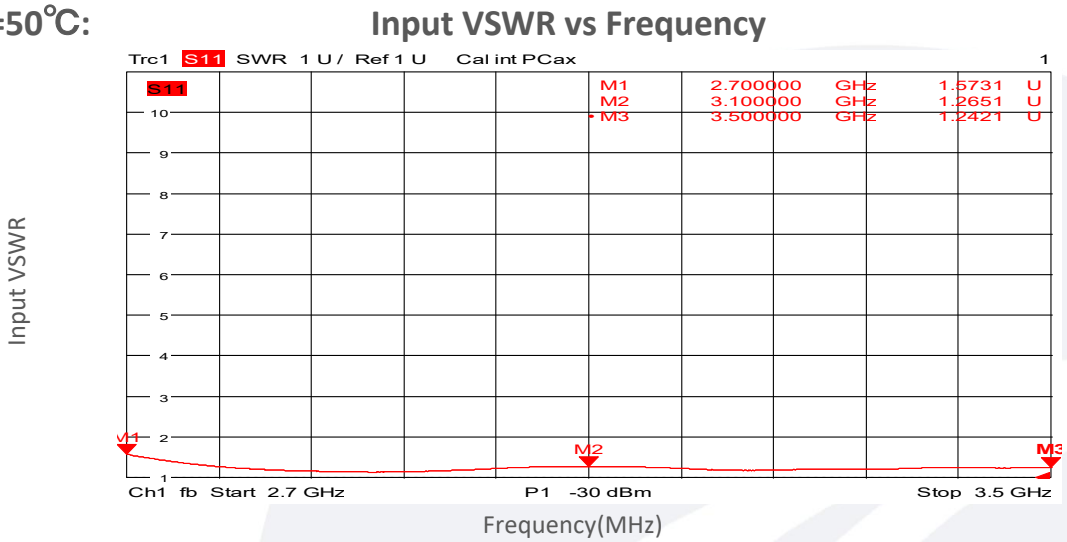

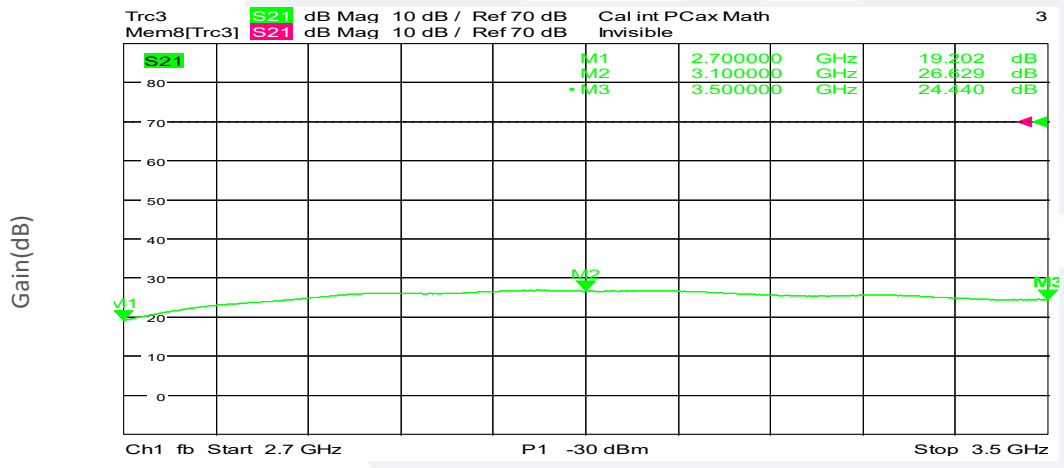

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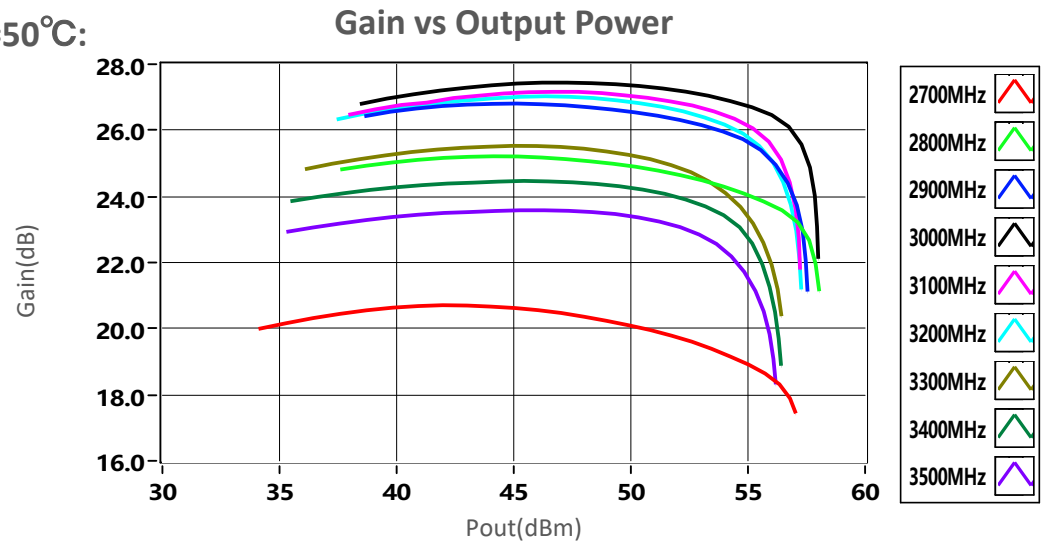

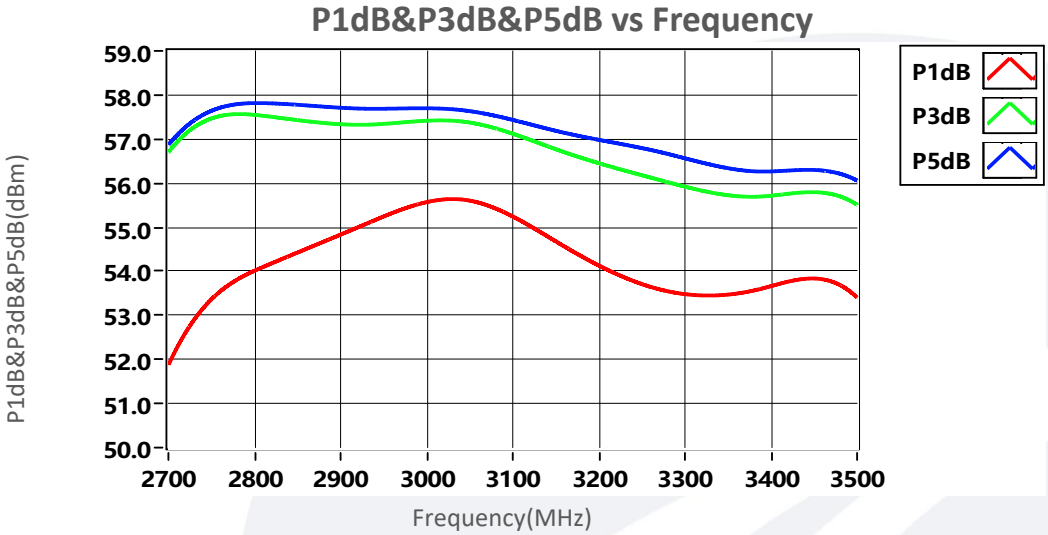

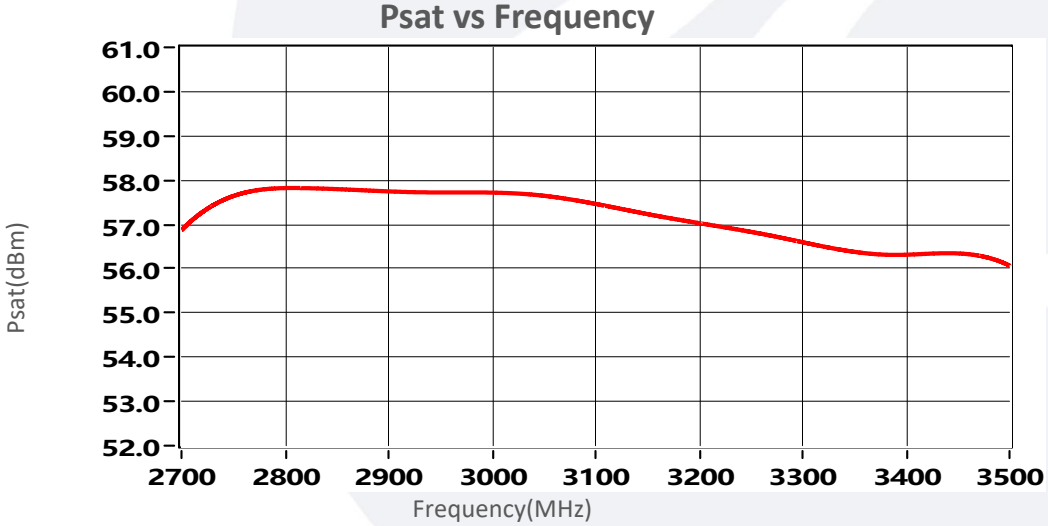

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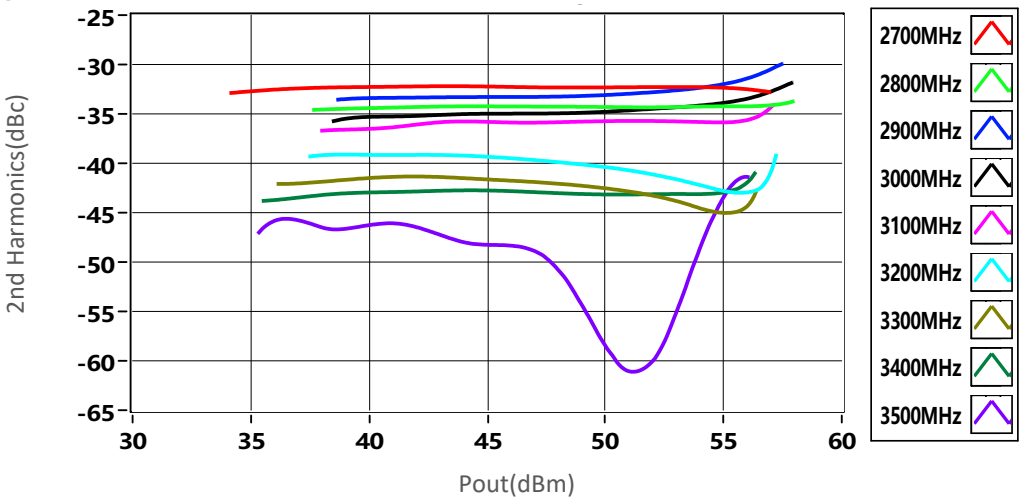
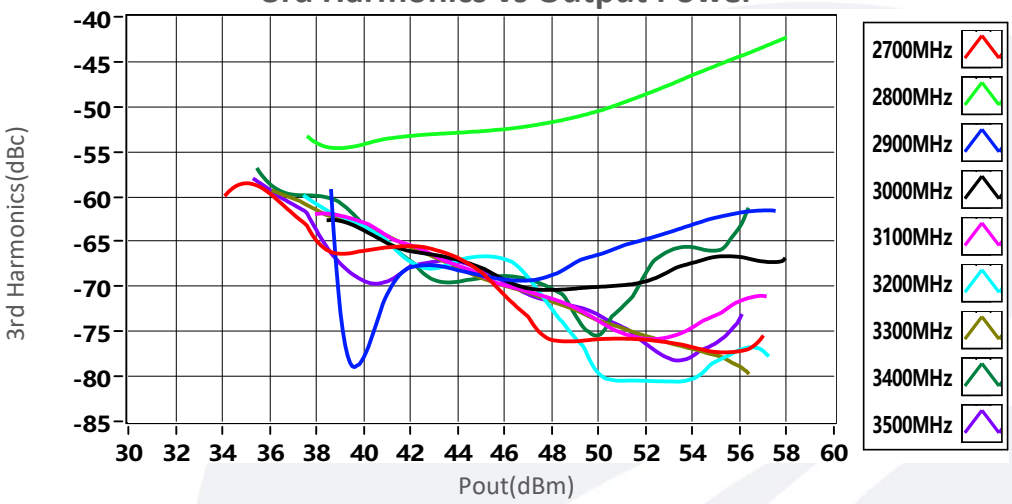
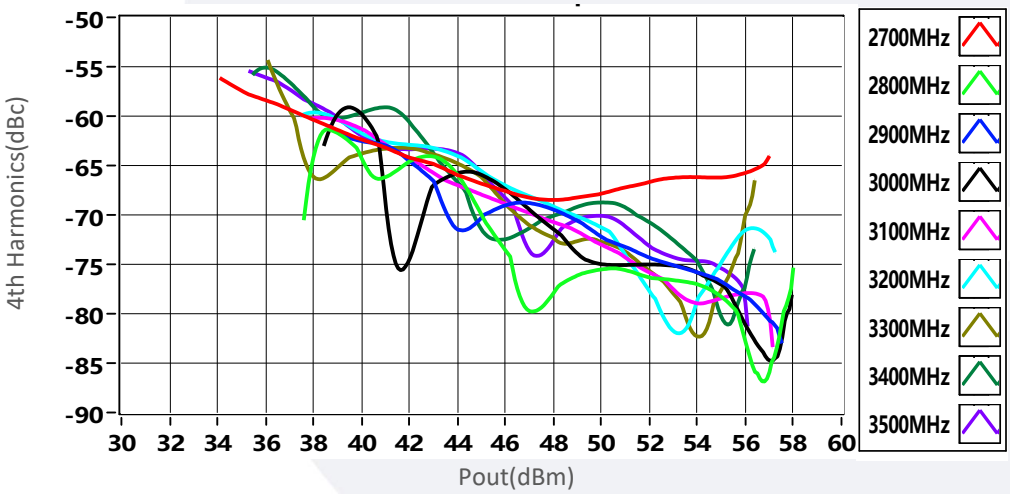
2nd Harmonics vs Output Power



3rd Harmonics vs Output Power



4th Harmonics vs Output Power



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