泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
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Power Amplifier

400MHz-8GHz/35dB Gain/22dBm Psat

Model: TLPA400M8G-35-20

TLPA400M8G-35-20 is a power amplifier with a typical small signal gain of 35 dB and a nominal Psat of 22 dBm across the frequency range of 400MHz to 8 GHz. The DC power requirement for the amplifier is +12 VDC/200 mA. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 400MHz-8GHz
- Gain: 35dB Typ
- Output Power Psat: 22dBm Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	400MHz		8GHz	
Small Signal Gain	32	35		dB
Gain Flatness		±2	±3	dB
Output P1dB	20	21		dBm
Output Psat		22		dBm
Input VSWR		1.5	2	:1
Harmonics		-15		dBc
DC Voltage		+12	+15	V DC
DC Supply Current		200	250	mA
Impedance		50		Ohms

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Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	60*40*12	mm
Weight	150	g

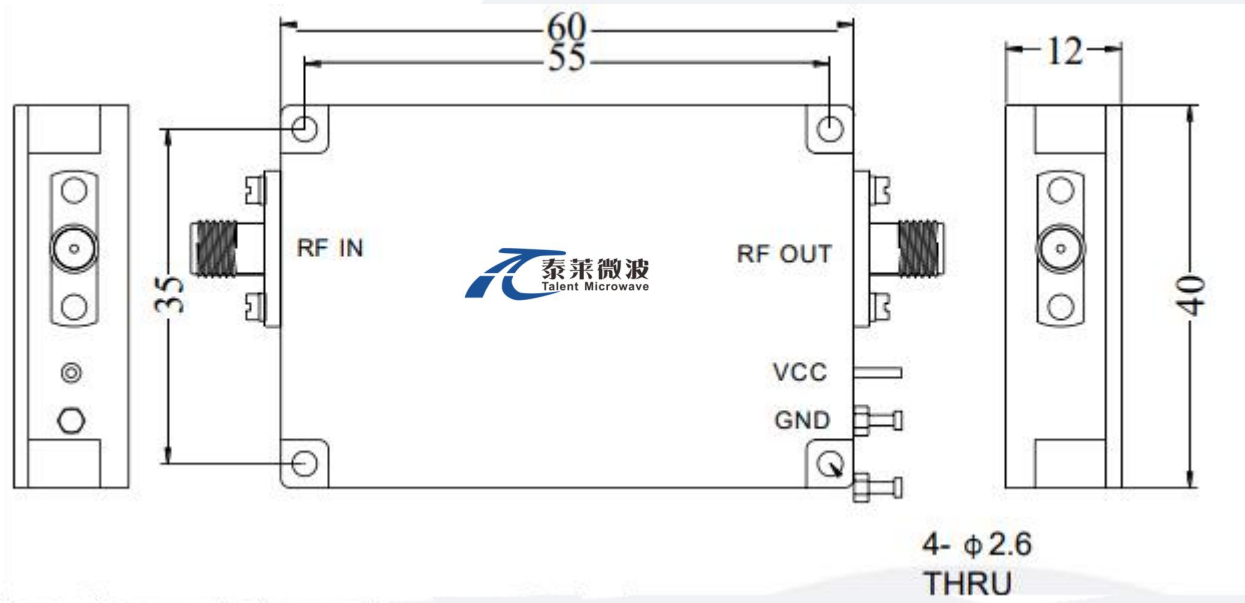
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	0 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Simple 220V System
Available SAC option

Outline Drawing:

Unit:mm



***Heat Sink Required During Operation

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

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Environmental Conditions:

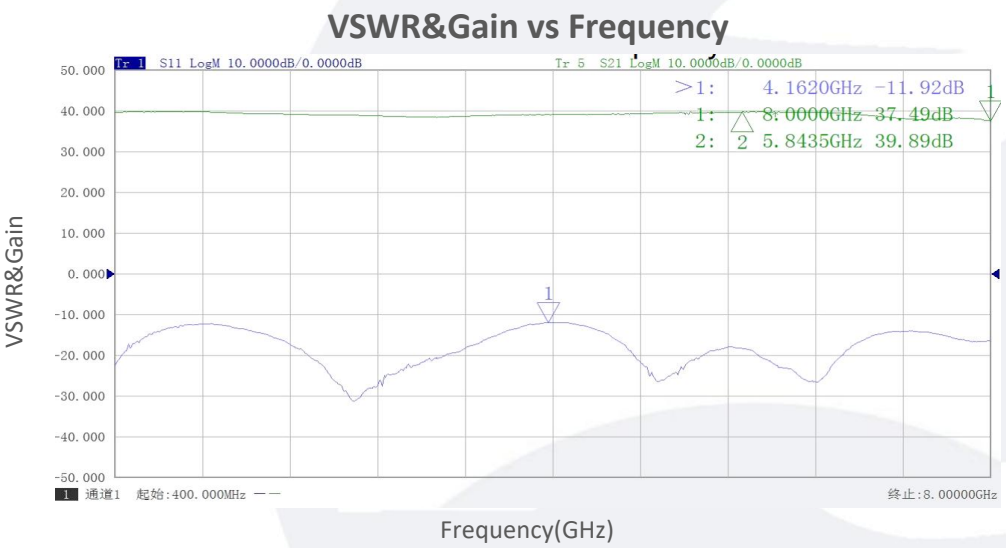
Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+60	℃
Non-operating Temperature*	-50		+70	℃
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

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

Ordering Information:

Base Number	Description	Revision
TLPA400M8G-35-20	Power amplifier 400MHz-8GHz, Gain:35dB,Psat:22dBm,+12V DC,Without Heatsink	Rev.1.1
TLPA400M8G-35-20-HS	Power amplifier 400MHz-8GHz, Gain:35dB,Psat:22dBm,+12V DC,With Heatsink	Rev.1.1

Typical Performance Data:



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.

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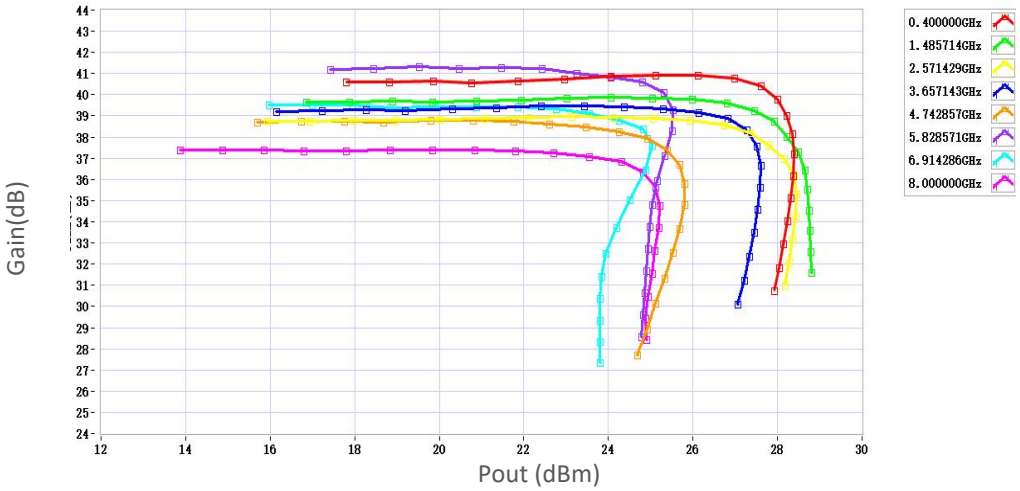
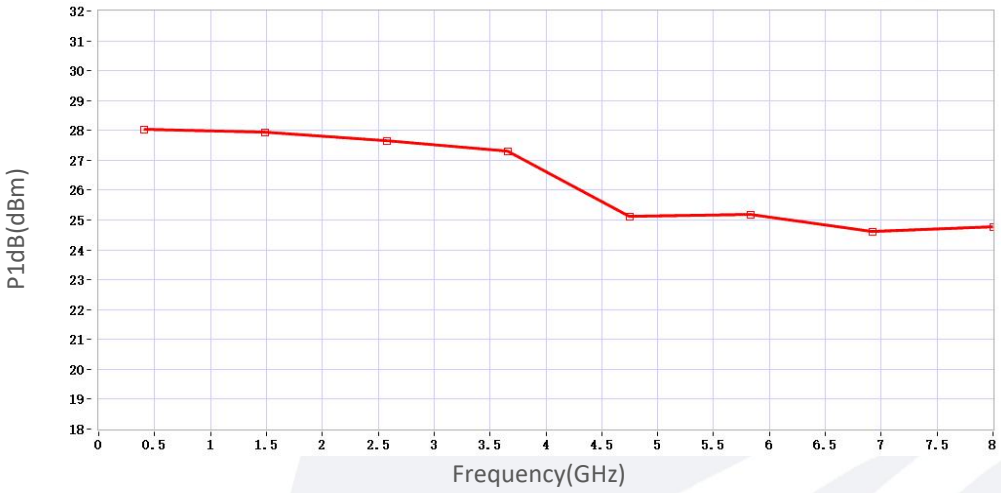
Typical Performance Data:

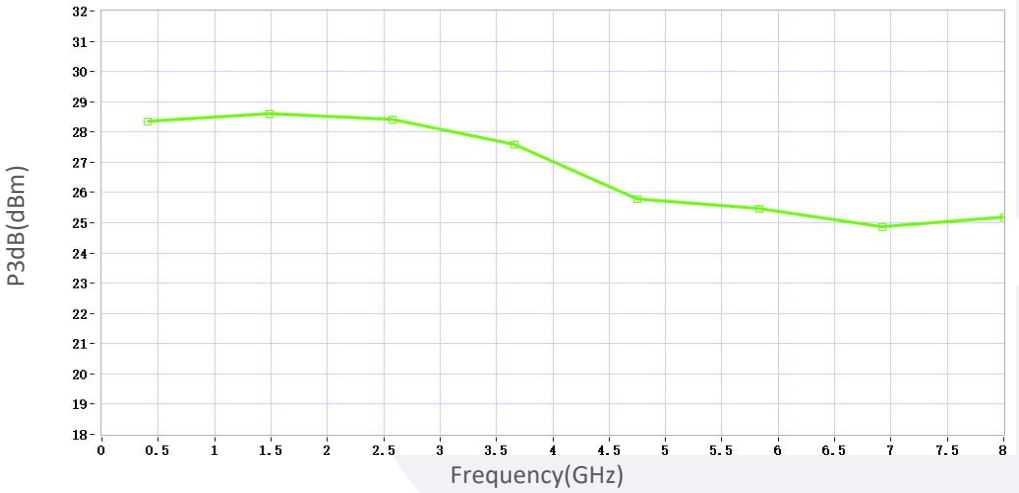
Gain vs Output Power



P1dB vs Frequency



P3dB vs Frequency



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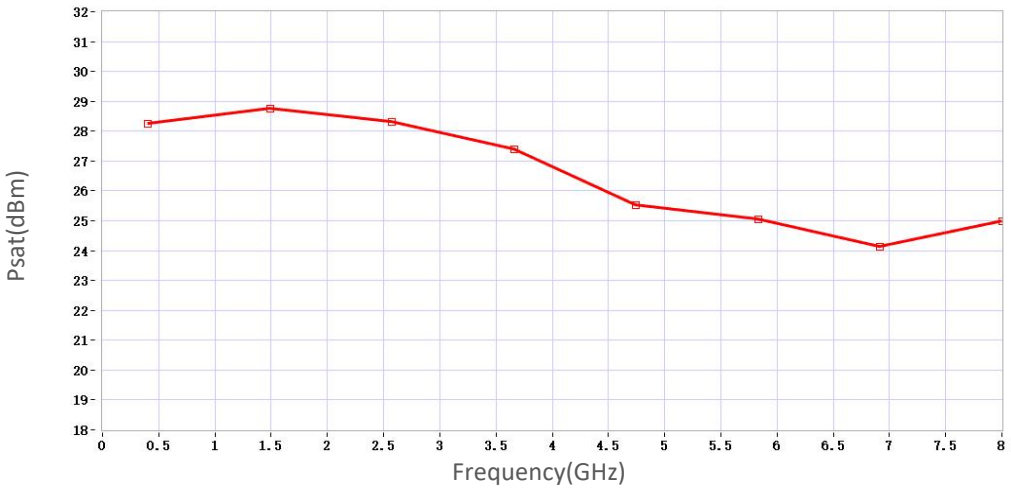
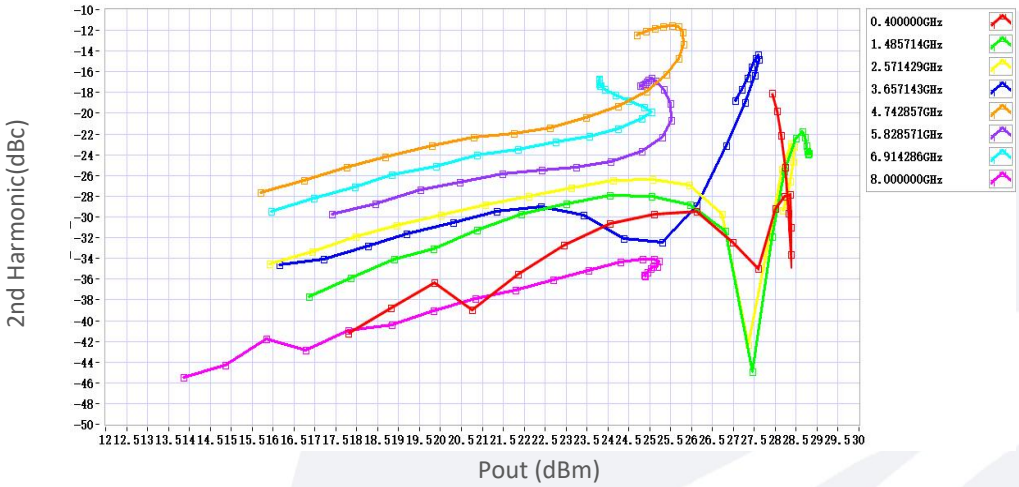
Typical Performance Data:

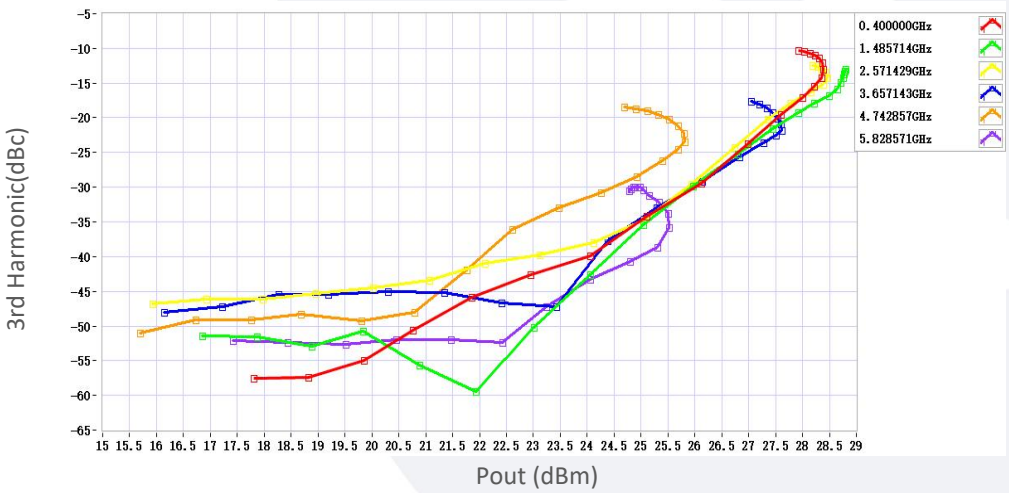
Psat vs Frequency



2nd Harmonic vs Output Power



3rd Harmonic vs Output Power



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