泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

Power Amplifier

0.5-6GHz/43dB Gain/40 dBm Psat Model: TLPA0.5G6G-40-40

TLPA0.5G6G-40-40 is a power amplifier with a typical small signal gain of 43 dB and a nominal Psat of 40 dBm across the frequency range of 0.5 to 6 GHz. The DC power requirement for the amplifier is +28 VDC/2 A. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 0.5-6GHz
- Gain: 43dB Typ
- Output Power Psat: 40dBm Min
- 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		0.5-6		GHz
Small Signal Gain	40	43		dB
Gain Flatness		±2.5	±3.5	dB
Output P1dB	37	38		dBm
Output Psat	40			dBm
Spurious		-60		dBc
Harmonic		-15	-13	dBc
Input VSWR		1.5	2.5	:1
DC Voltage		28	29	V DC
DC Supply Current		2		A
Impedance		50		Ohms

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Mechanical Specifications:

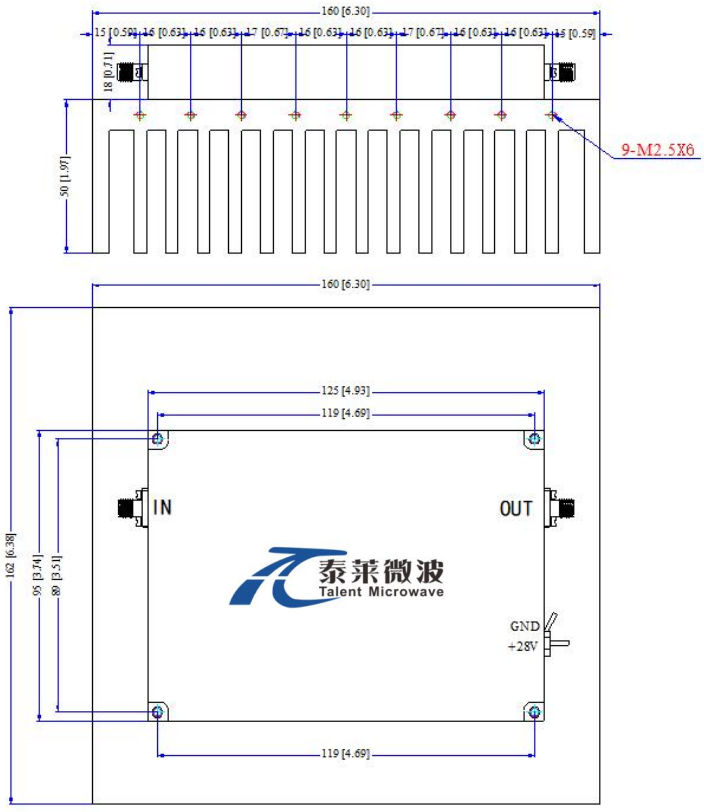
Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	125*95*18(Without Heatsink) 160*162*68(With Heatsink)	mm
Weight	2	Kg

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+29 V
RF Input Power	+8 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

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:

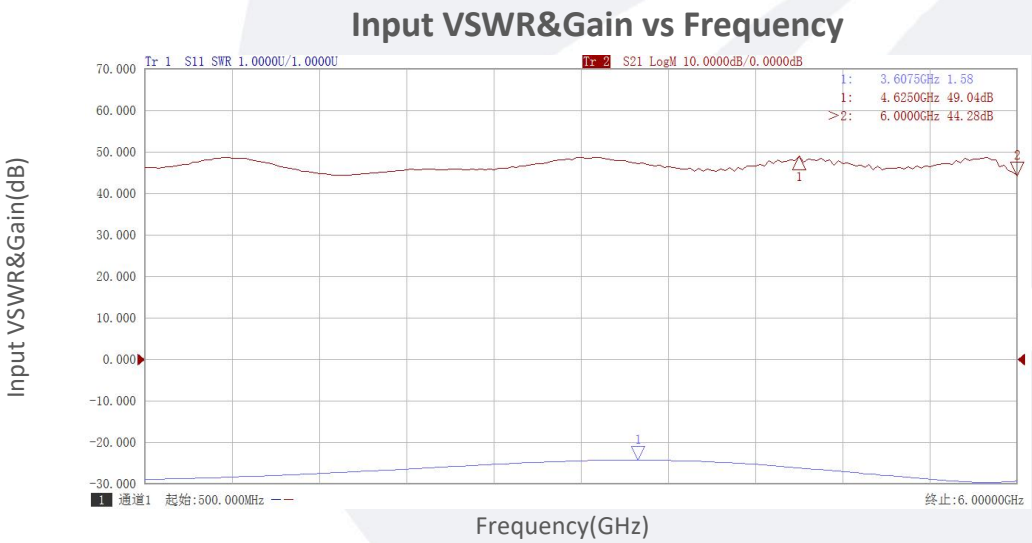
Parameter	Min	Typ	Max	Units
Operating Temperature*	-20		+40	℃
Non-operating Temperature*	-30		+50	℃
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

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

Ordering Information:

Base Number	Desciption	Revision
TLPA0.5G6G-40-40	Power amplifier 0.5-6GHz,Gain:43dB,Psat:40dBm, +28V DC,Without Heatsink	Rev.1.1
TLPA0.5G6G-40-40-HS	Power amplifier 0.5-6GHz,Gain:43dB,Psat:40dBm, +28V 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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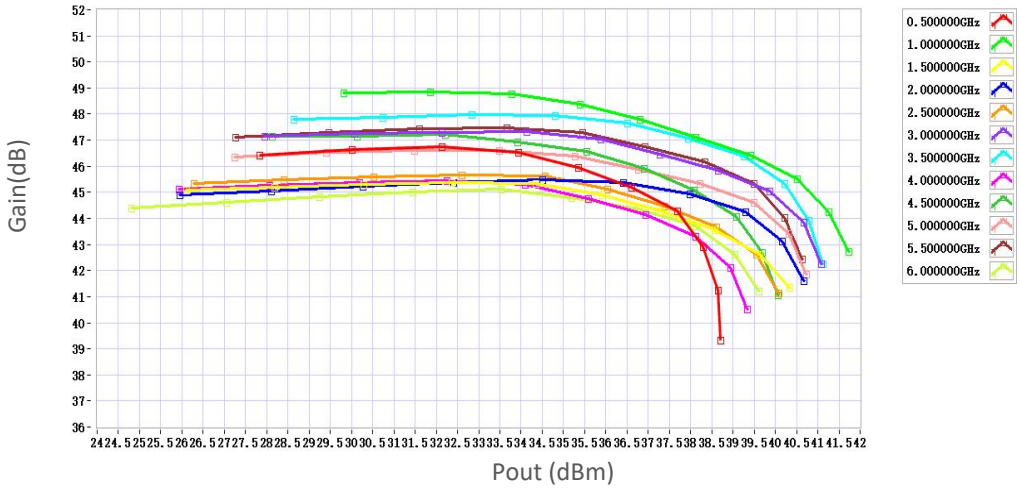
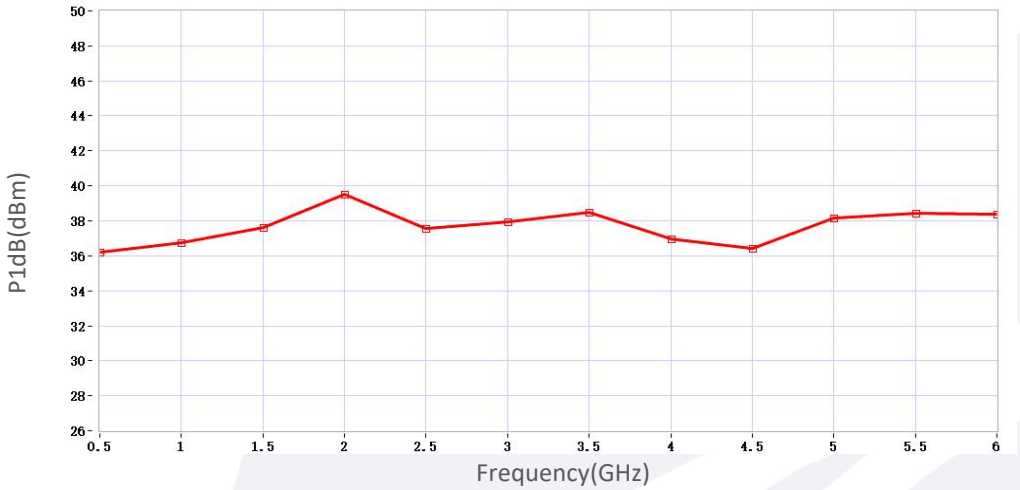
Typical Performance Data:

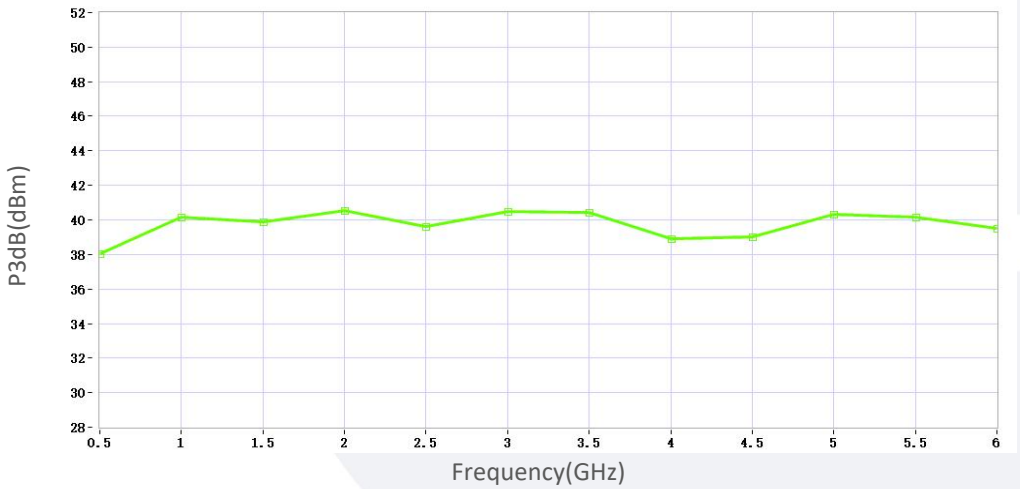
Gain vs Output Power



P1dB vs Frequency



P3dB vs Frequency



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