Suzhou Talent Microwave,Inc
sales@talentmw.com
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Power Amplifier

8-12.4GHz /30dB Gain/25 dBm Psat

Model: TLPA8G12.4G-30-23

TLPA8G12.4G-30-23 is a power amplifier with a typical small signal gain of 30 dB and Psat of 25 dBm across the frequency range of 8 to 12.4 GHz. The DC power requirement for the amplifier is +12 VDC/0.2 A. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 8-12.4 GHz
- Gain: 30dB Typ
- Output Power Psat: 25dBm 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	8		12.4	GHz
Small Signal Gain		30		dB
Gain Flatness		±1		dB
Output P1dB	23			dBm
Output Psat	25			dBm
Spurious			-50	dBc
Harmonic			-10	dBc
Input VSWR		2.0		:1
Output VSWR		2.0		
DC Voltage		12		V DC
DC Supply Current		0.2		A
Impedance		50		Ohms

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Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA female	
DC Bias	Solder Pin	
Size	44.8*29.2*11	mm
Weight	40	g

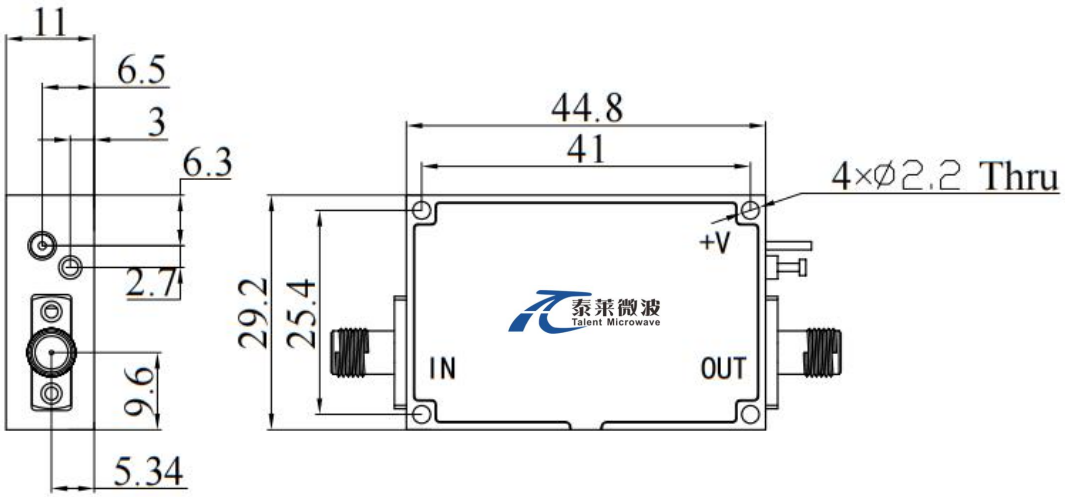
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	+12 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:

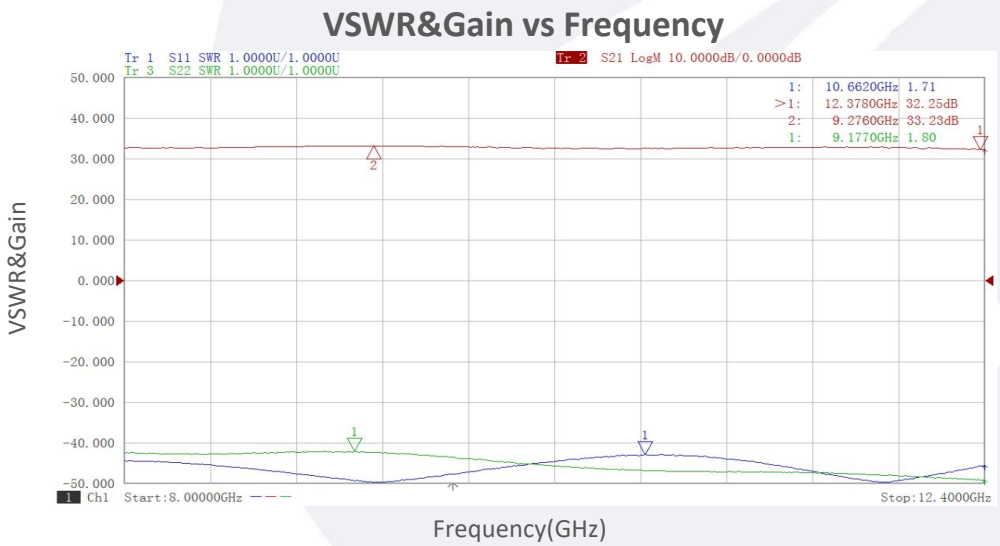
Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+60	℃
Non-operating Temperature*	-50		+70	℃
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

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

Ordering Information:

Base Number	Description	Revision
TLPA8G12.4G-30-23	Power amplifier 8-12.4 GHz, Gain:30dB,Psat:25dBm,+12V DC,Without Heatsink	Rev.1.1
TLPA8G12.4G-30-23-HS	Power amplifier 8-12.4 GHz, Gain:30dB,Psat:25dBm,+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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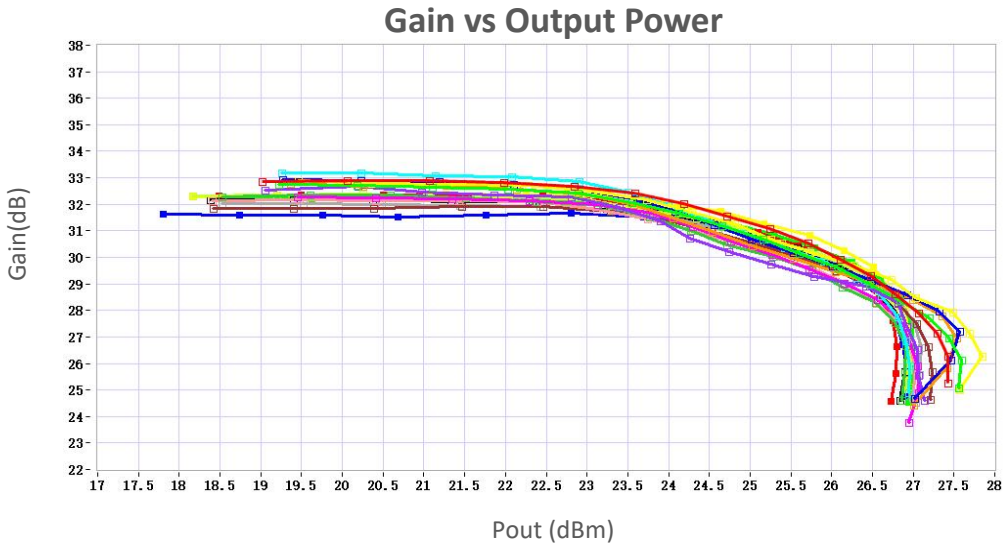

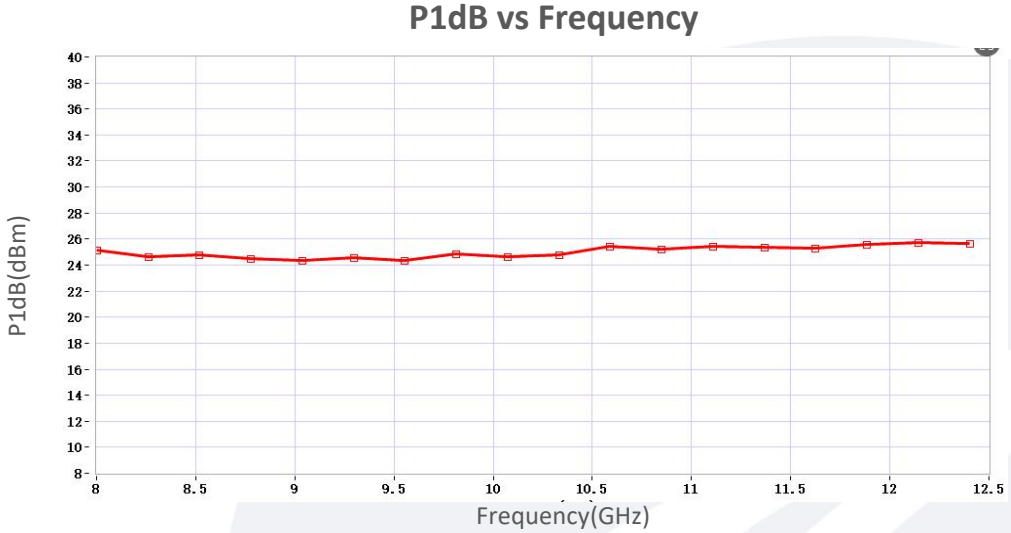

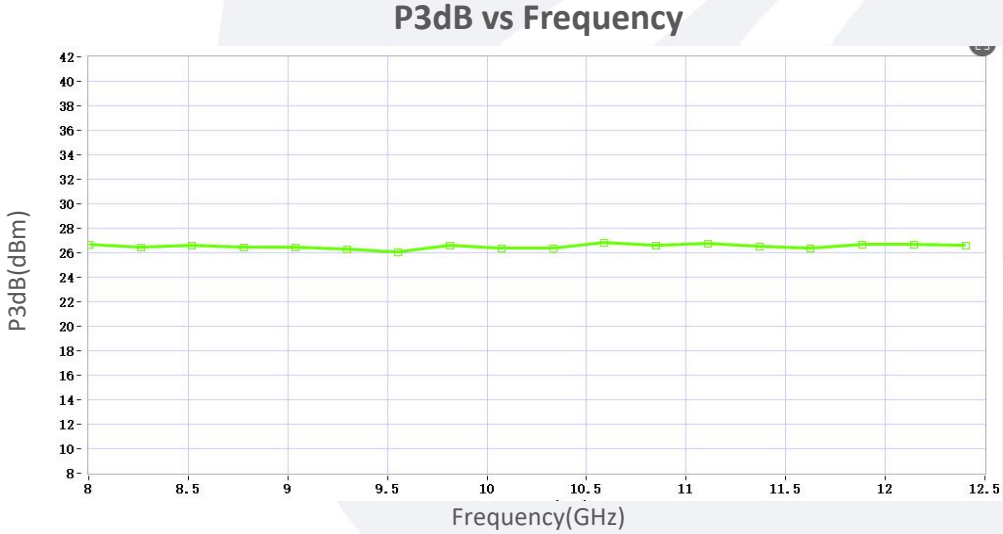

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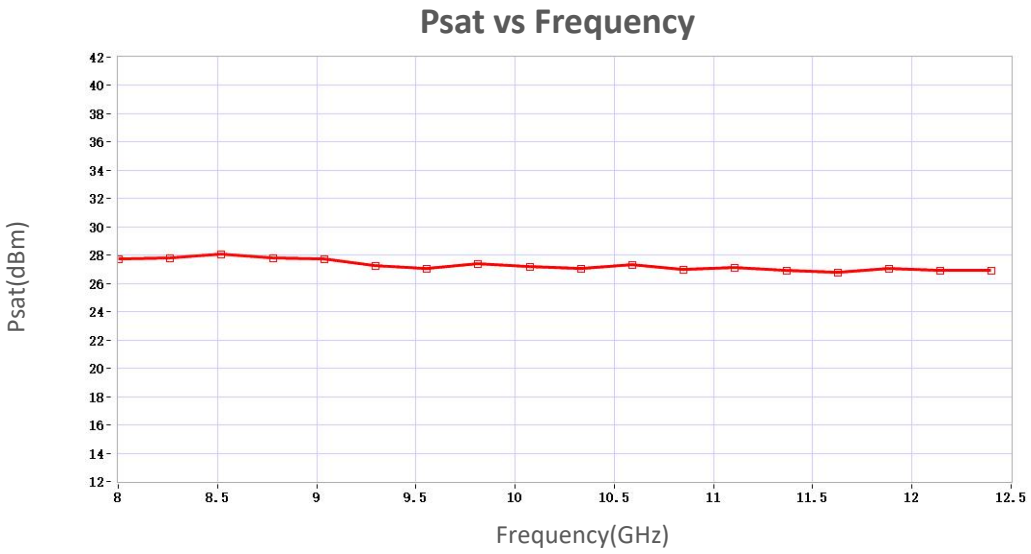

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