Suzhou Talent Microwave,Inc
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Power Amplifier

24-47GHz/25dB Gain/26dBm Psat

Model: TLPA24G47G-25-26

TLPA24G47G-25-26 is a power amplifier with a minimum small signal gain of 25 dB and a nominal Psat of 26 dBm across the frequency range of 24 to 47 GHz. The DC power requirement for the amplifier is +12 VDC/600 mA. The input and output port configuration offers coax adapter structure with 2.4mm female.

Features:

- Frequency range: 24-47GHz
- Gain: 25dB Min
- Output Power Psat: 26dBm 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	24		47	GHz
Small Signal Gain	25	30		dB
Gain Flatness		±2		dB
Output P1dB	25	26		dBm
Output Psat		26		dBm
Input VSWR		2	2.5	:1
DC Voltage		+12		V DC
DC Supply Current		600	1000	mA
Impedance		50		Ohms

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Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.4mm Female/2.4mm Female	
DC Bias	Solder Pin	
Size	43*35*12	mm

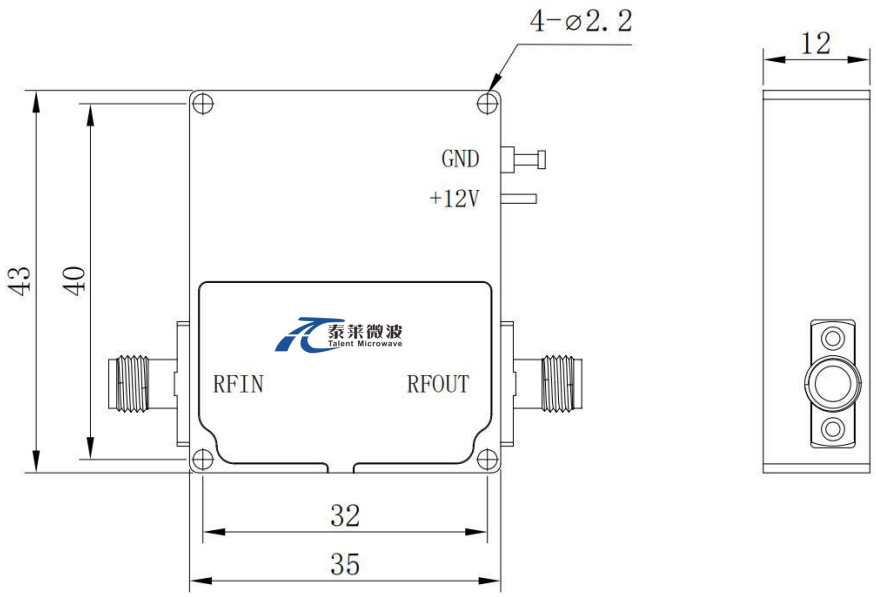
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+12 V
RF Input Power	+5 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:

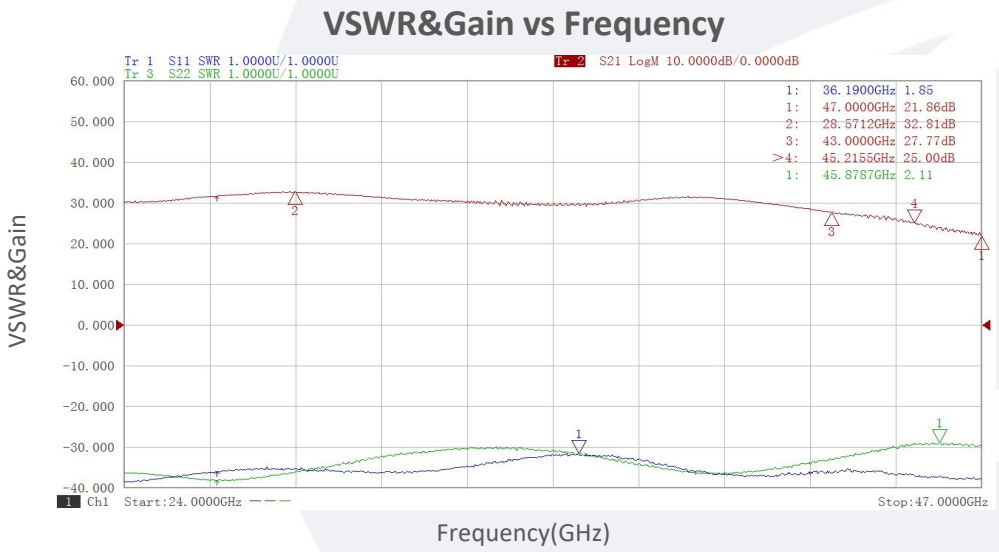
Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+60	℃
Non-operating Temperature*	-50		+70	℃
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

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

Ordering Information:

Base Number	Description	Revision
TLPA24G47G-25-26	Power amplifier 24-47GHz, Gain:25dB,Psat:26dBm,+12V DC,Without Heatsink	Rev.1.1
TLPA24G47G-25-26-HS	Power amplifier 24-47GHz, Gain:25dB,Psat:26dBm,+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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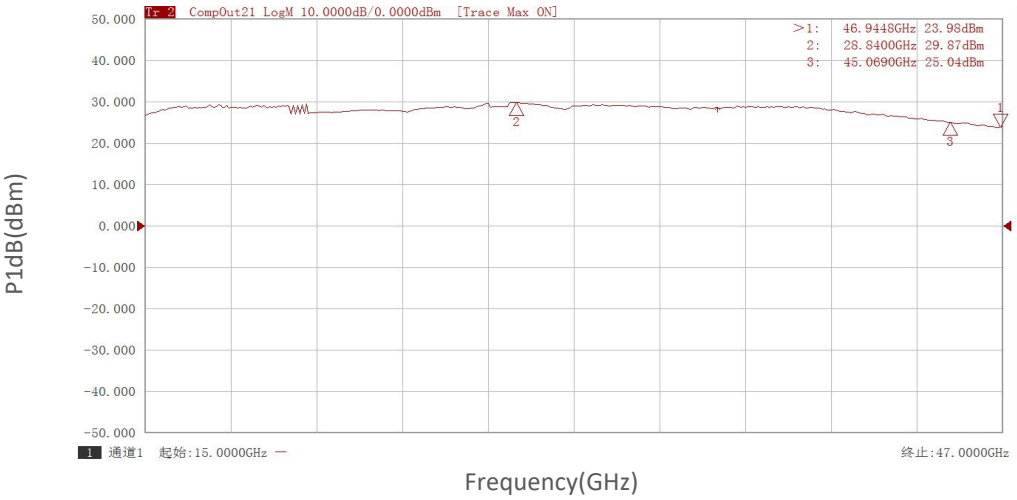
Typical Performance Data:

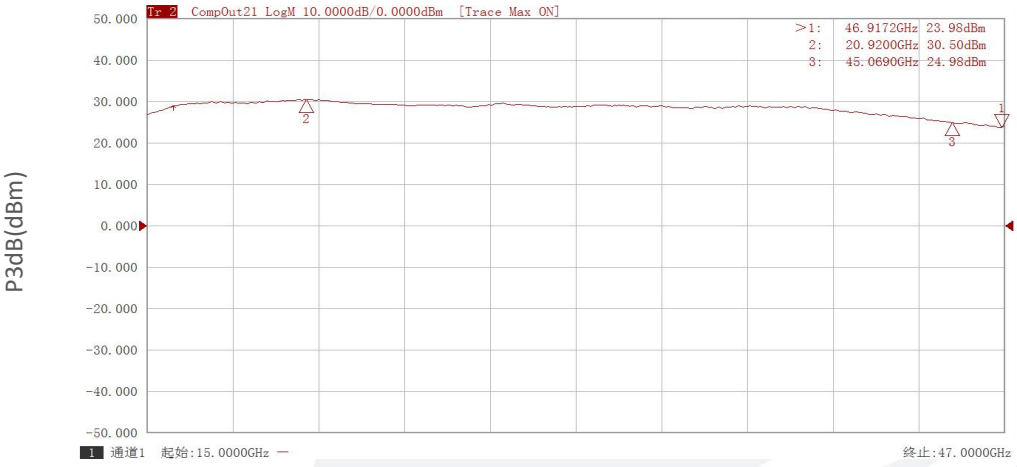
P1dB vs Frequency



P1dB(dBm)

Frequency(GHz)

P3dB vs Frequency



P3dB(dBm)

Frequency(GHz)

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