Suzhou Talent Microwave,Inc
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Power Amplifier

40-67GHz/39dB Gain/34dBm Psat

Model: TLPA40G67G-39-34

TLPA40G67G-39-34 is a power amplifier with a typical small signal gain of 39 dB@40-60GHz and a nominal Psat of 34 dBm across the frequency range of 40 to 67 GHz. The DC power requirement for the amplifier is +20 VDC/2.05 A. The input and output port configuration offers coax adapter structure with 1.85mm female.

Features:

- Frequency range: 40-67GHz
- Gain: 39dB Typ@40-60GHz
- Output Power Psat: 34dBm 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		40		67	GHz
Small Signal Gain	@40-60GHz	35	39		dB
	@60-67GHz	33	35		
Output P1dB			29		dBm
Output Psat		33	34		dBm
Input VSWR			5.8		:1
Output VSWR			2.3		:1
DC Voltage			20	24	V DC
DC Supply Current			2.05		A
Impedance			50		Ohms

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Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	1.85mm Female/1.85mm Female	
DC Bias	Feedthru capacitor	
Size	50*80*13	mm

Absolute Maximum Ratings:

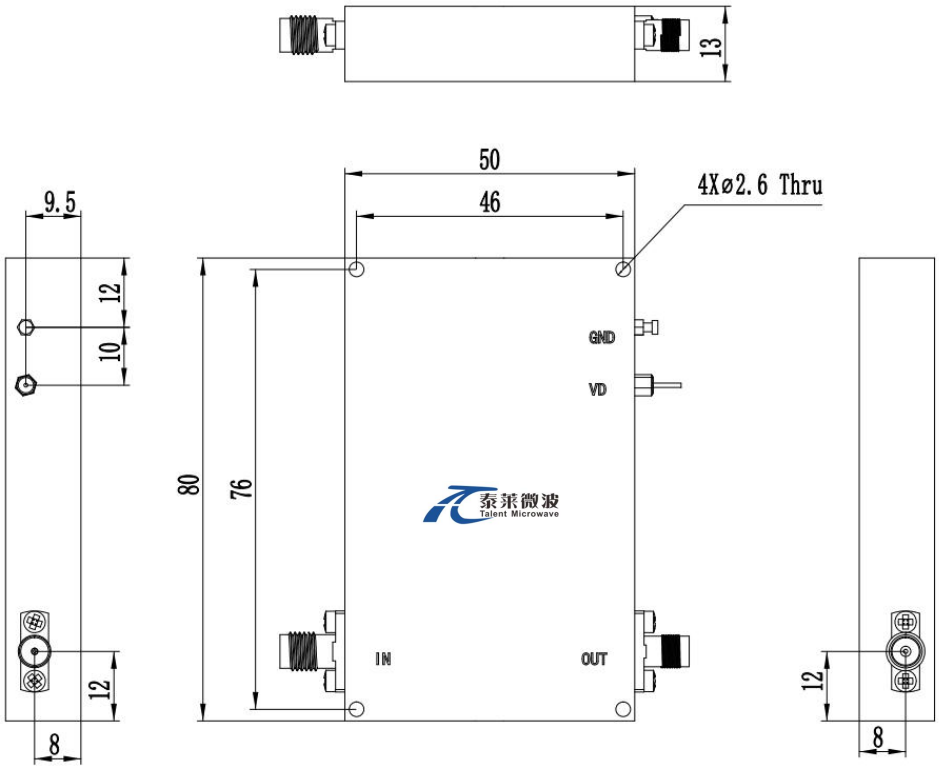
Parameter	Value
Supply Bias Voltage	+24 V
RF Input Power	+15 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



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			

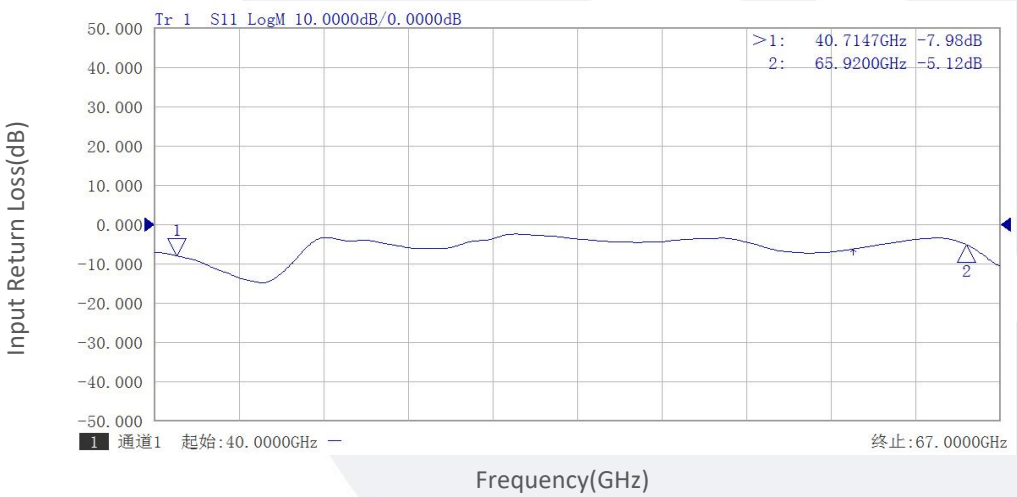
*Note: For a wider temperature range, please consult the manufacturer.

Ordering Information:

Base Number	Description	Revision
TLPA40G67G-39-34	Power amplifier 40-67GHz, Gain:39dB,Psat:34dBm,+20V DC,Without Heatsink	Rev.1.1
TLPA40G67G-39-34-HS	Power amplifier Power amplifier 40-67GHz, Gain:39dB,Psat:34dBm,+20V DC,With Heatsink	Rev.1.1

Typical Performance Data:

Input Return Loss vs Frequency

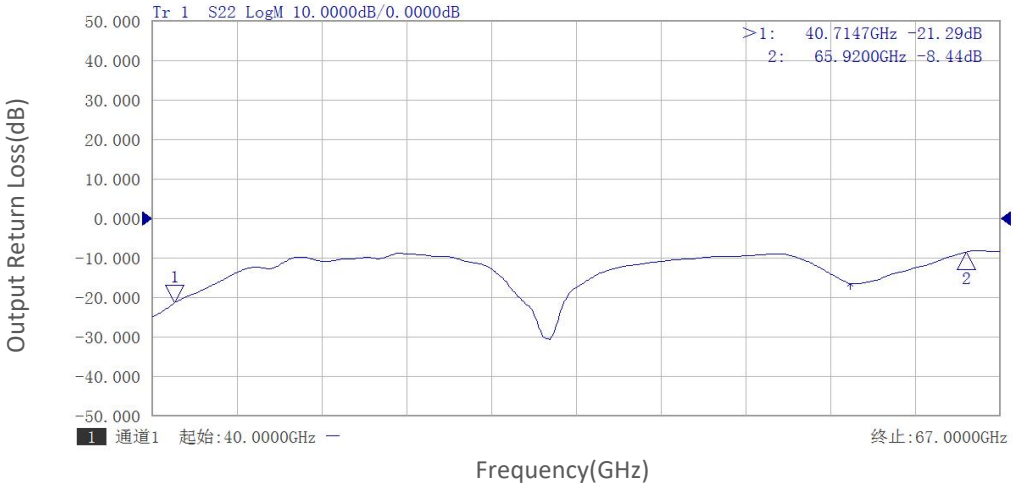


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

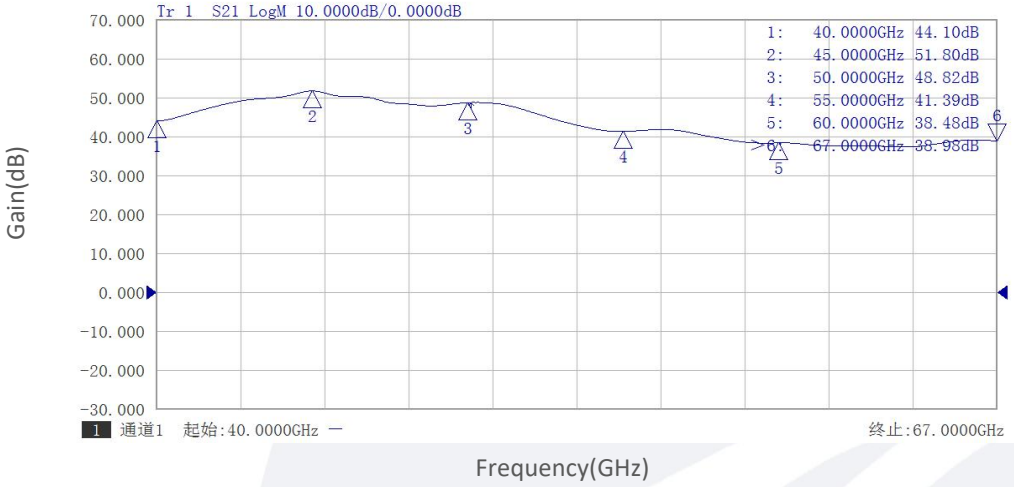
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Typical Performance Data:

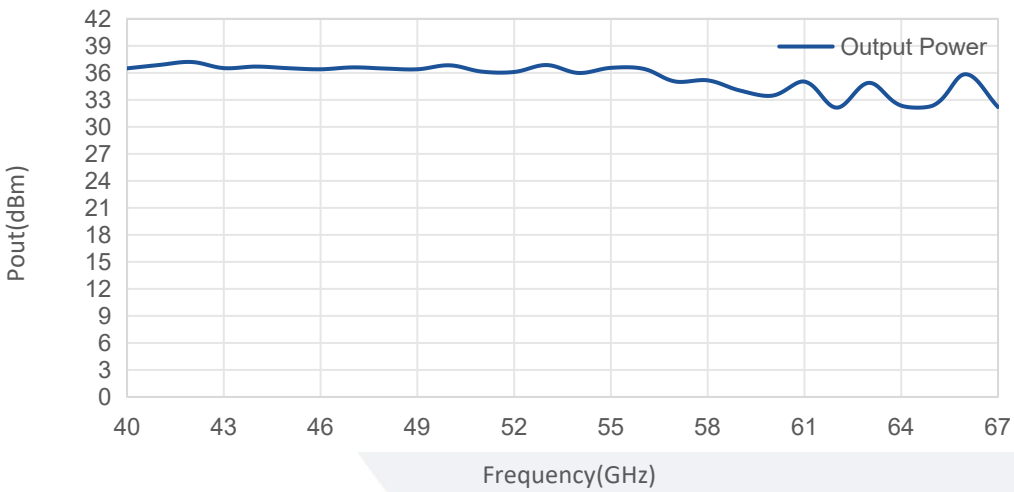
Output Return Loss vs Frequency



Small Signal Gain vs Frequency



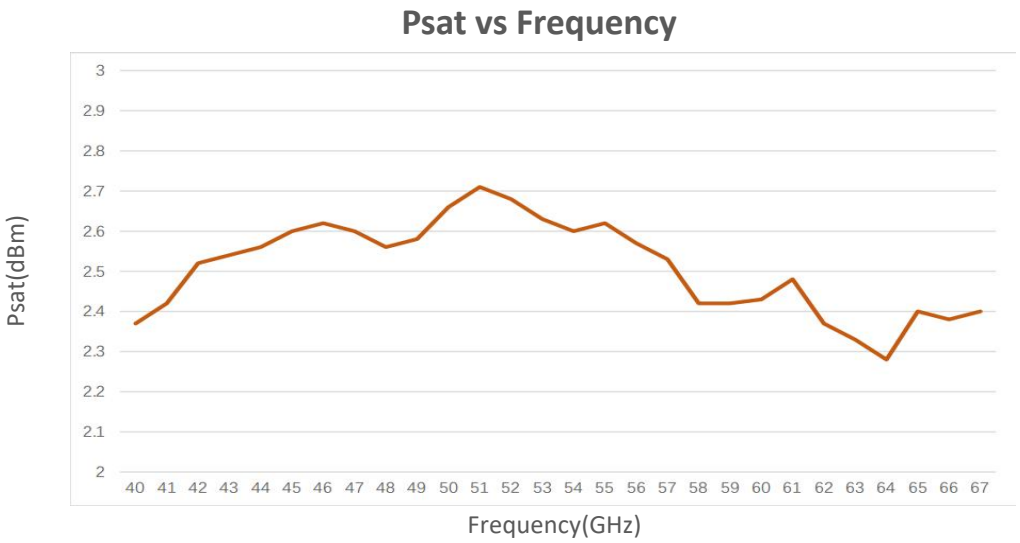
Pout vs Frequency



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