Suzhou Talent Microwave,Inc
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Power Amplifier

18-50GHz/35dB Gain/27dBm Psat

Model: TLPA18G50G-35-27

TLPA18G50G-35-27 is a power amplifier with a typical power gain of 35 dB and a nominal Psat of 27 dBm across the frequency range of 18 to 50 GHz. The DC power requirement for the amplifier is +12 VDC/0.8 A. The input and output port configuration offers coax adapter structure with 2.4mm female.

Features:

- Frequency range: 18-50GHz
- Gain: 35dB Typ
- Output Power Psat: 27dBm 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	18		50	GHz
Power Gain	33	35		dB
Gain Flatness		±1.5	±2.5	dB
Noise Figure		5	6.5	dB
Output P1dB		24		dBm
Output Psat		27		dBm
Input VSWR		1.8	2.5	:1
DC Voltage		+12		V DC
DC Supply Current		0.8		A
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	56*65*12	mm

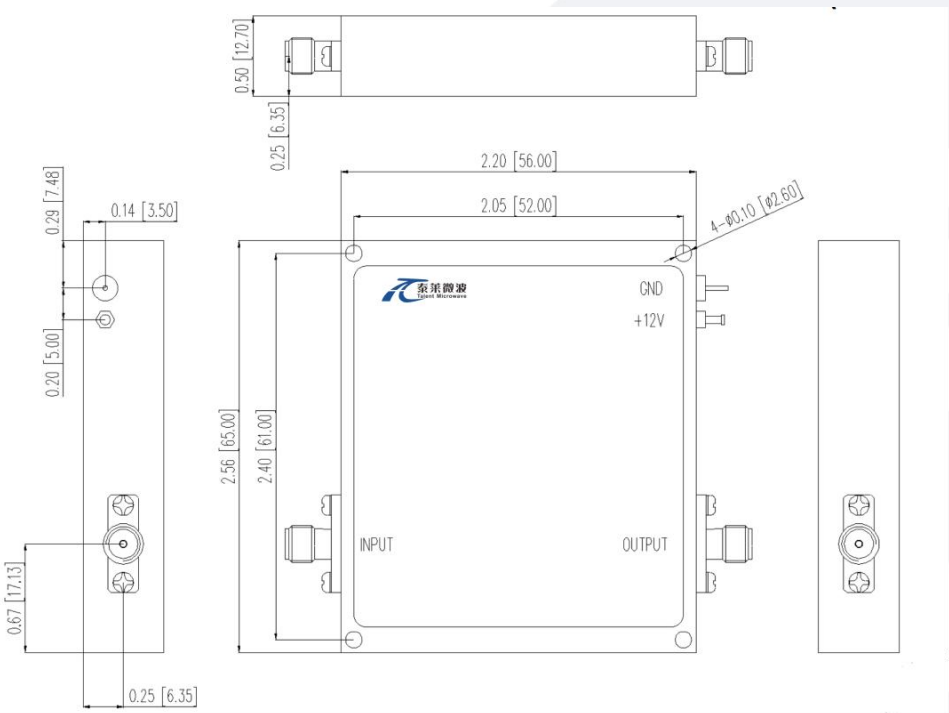
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	TBD
RF Input Power	TBD
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:

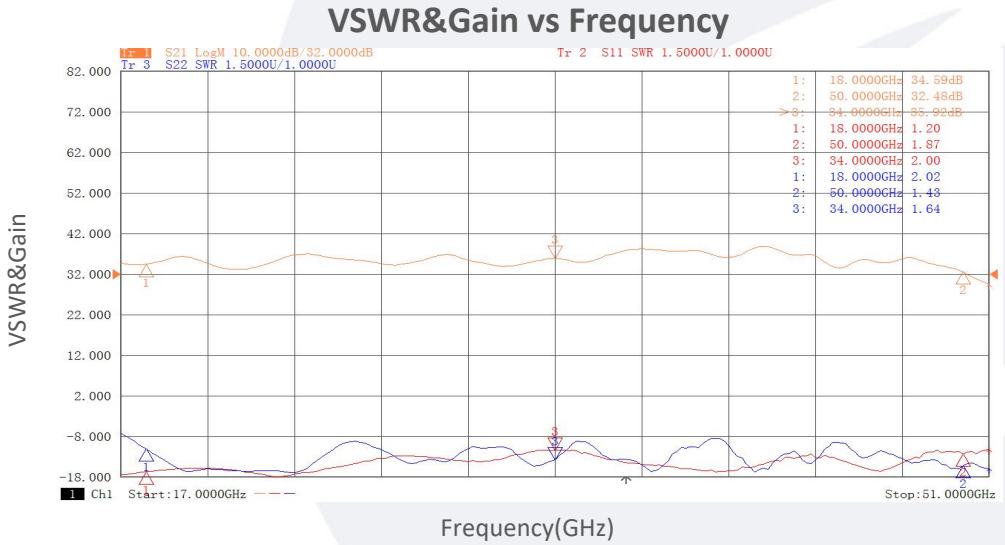
Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+60	℃
Non-operating Temperature*	-50		+70	℃
Relative humidity	95			%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

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

Ordering Information:

Base Number	Description	Revision
TLPA18G50G-35-27	Power amplifier 18-50GHz, Gain:35dB,Psat:27dBm,+12V DC,Without Heatsink	Rev.1.1
TLPA18G50G-35-27-HS	Power amplifier 18-50GHz, Gain:35dB,Psat:27dBm,+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.