Suzhou Talent Microwave,Inc
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Power Amplifier

6-12GHz/30dB Gain/36dBm Psat

Model: TLPA6G12G-30-36

TLPA6G12G-30-36 is a power amplifier with a minimum power gain of 30 dB and a nominal Psat of 36 dBm across the frequency range of 6 to 12 GHz. The DC power requirement for the amplifier is +12 VDC/2.3 A. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 6-12GHz
- Gain: 30dB Min
- Output Power Psat: 36dBm 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	6		12	GHz
Power Gain	30			dB
Gain Flatness		±1.5	±2.5	dB
Output P1dB		35		dBm
Output Psat		36		dBm
Noise Figure		6	8	dB
Spurious		-60		dBc
Input VSWR		1.5	2	:1
Output VSWR		1.5	2	:1
DC Voltage		12		V DC
DC Supply Current		2.3	2.5	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	50*55*12(Without heatsink) 80*160*62(With heatsink)	mm
Weight	820	g

Absolute Maximum Ratings:

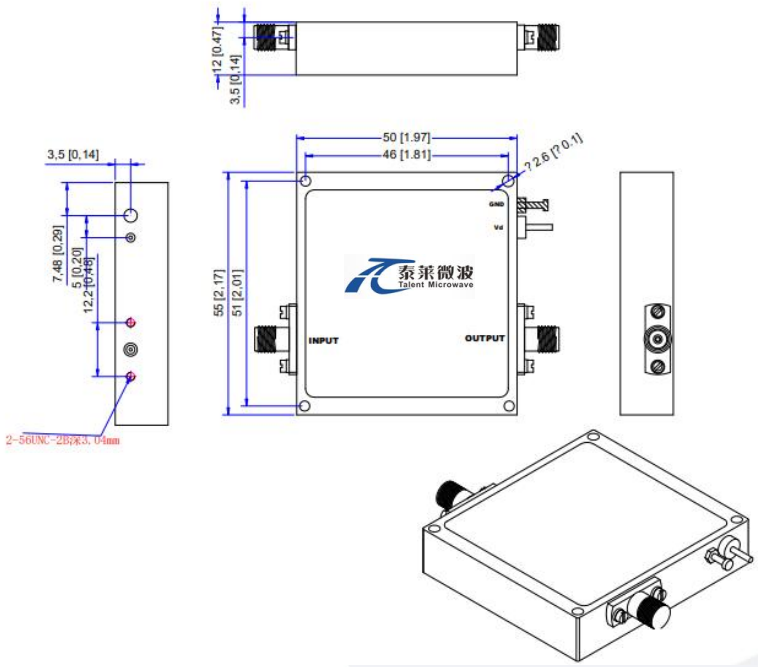
Parameter	Value
Supply Bias Voltage	+12 V
RF Input Power	+12 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Simple 220V System
Available SAC option

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



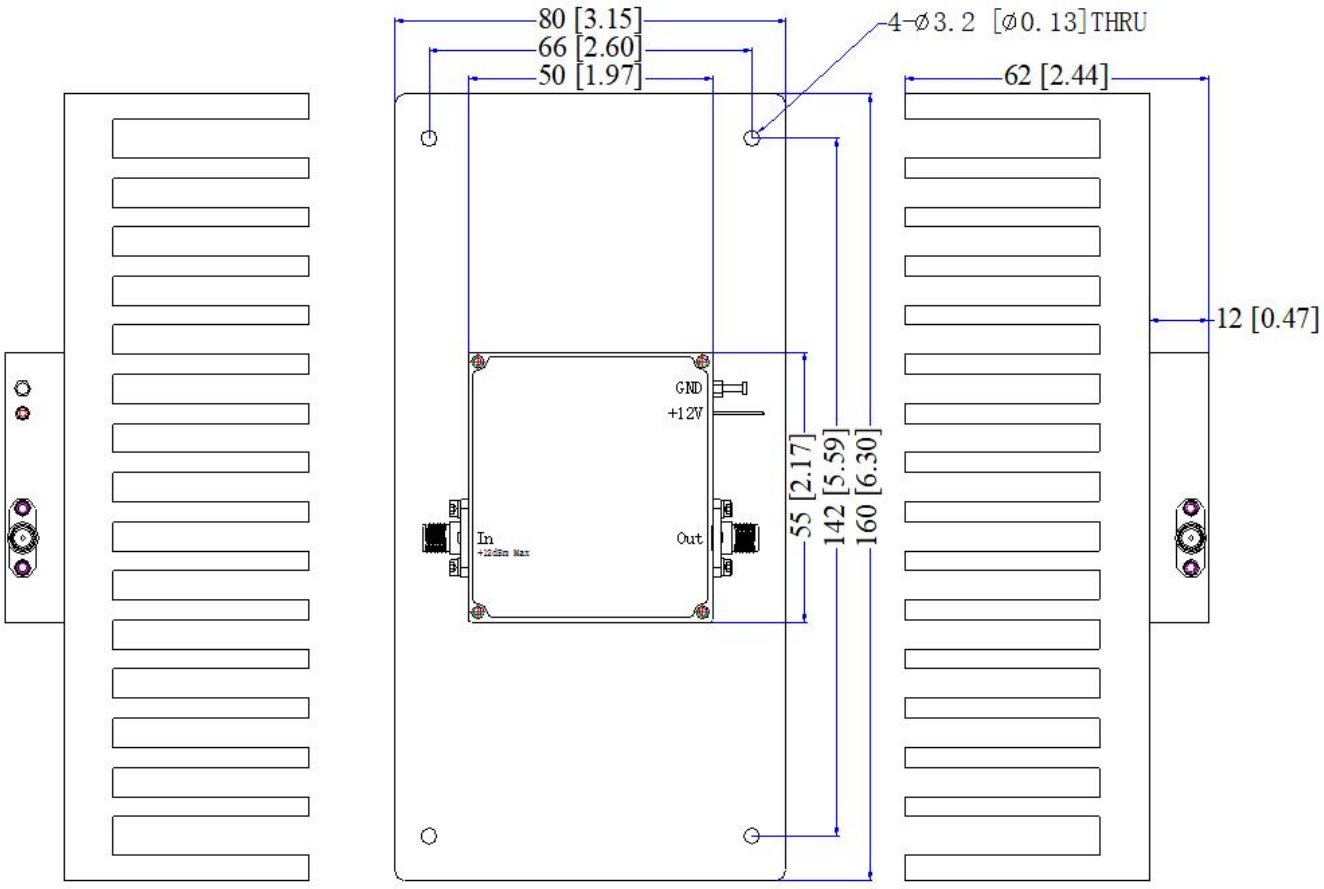
***Heat Sink Required During Operation

ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

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Outline Drawing:

Unit:mm; Tolerance:±0.1mm



Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+50	℃
Non-operating Temperature*	-50		+60	℃
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			

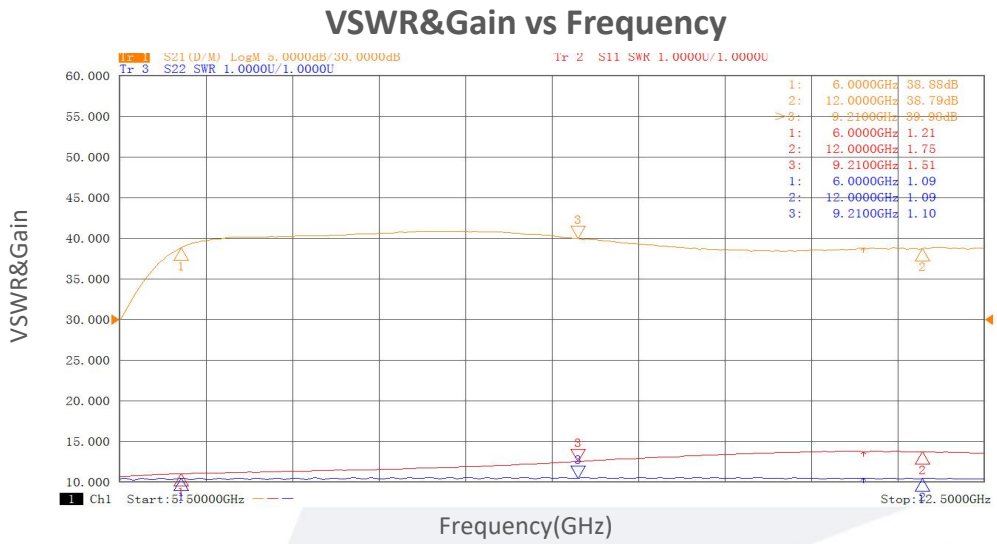
*Note: For a wider temperature range, please consult the manufacturer.

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Ordering Information:

Base Number	Description	Revision
TLPA6G12G-30-36	Power amplifier 6-12GHz, Gain:30dB,Psat:36dBm,+12V DC,Without Heatsink	Rev.1.1
TLPA6G12G-30-36-HS	Power amplifier 16-12GHz, Gain:30dB,Psat:36dBm,+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.