

Power Amplifier

2-6GHz/47dB Gain/47dBm Psat

Model: TLPA2G6G-47-47

TLPA2G6G-47-47 is a power amplifier with a minimum gain of 47 dB and a minimum Psat of 47 dBm across the frequency range of 2 to 6 GHz. The DC power requirement for the amplifier is +36 VDC/12 A. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 2-6GHz
- Gain: 47dB Min
- Output Power Psat: 47dBm 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	2		6	GHz
Gain	47			dB
Gain Flatness		±3		dB
Output Psat	47			dBm
Output Psat Flatness		±1.5		dB
Spurious			-60	dBc
Harmonics		-15		dBc
Input VSWR			2.0	:1
DC Voltage		+36		V DC
DC Supply Current		12		A
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Power Supply Connector	J30J-21ZKP	
Size	200*120*20	mm
Weight	3	Kg

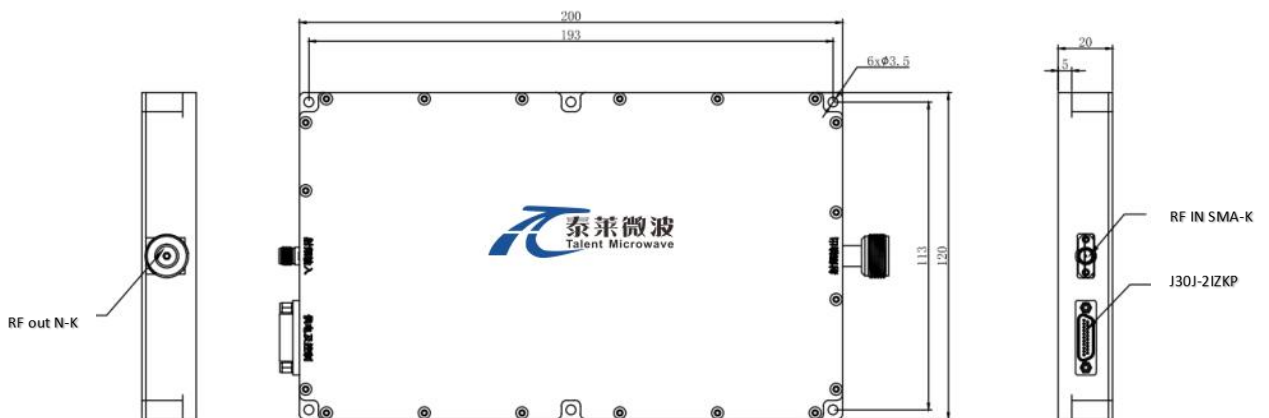
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+36 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm



*****Heat Sink Required During Operation**



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

DC Power Supply Connector(J30J-21ZKP):

Pin	Function
Pin1-9	+36V
Pin10-18	GND
Pin19	Current detection (analog voltage, current/voltage comparison table provided)
Pin20	Temperature detection (analog voltage, temperature/voltage comparison table available)
Pin21	Enable (high level valid, low level and hover invalid)

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-20		+50	°C
Non-operating Temperature*	-30		+60	°C
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
TLPA2G6G-47-47	Power amplifier 2-6GHz, Gain:47dB,Psat:47dBm,+36V DC,Without Heatsink	Rev.1.1
TLPA2G6G-47-47-HS	Power amplifier 2-6GHz, Gain:47dB,Psat:47dBm,+36V DC,With Heatsink	Rev.1.1