



# Power Amplifier

## Model: PA-3G-6G-12.5

3-6GHz 12.5W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

### Features:

- Frequency range: 3-6GHz
- High output power at saturation, 12.5W Min.
- High gain, 40 dB Min.
- 50 Ohm Matched Input / Output.

### Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

### Product Overview:

The PA-3G-6G-12.5 is a power amplifier with a minimum gain of 40 dB and a minimum Psat of 12.5W across the frequency range of 3 to 6GHz. The DC power requirement for the amplifier is +28 VDC/0.5 A. The input and output port configuration offers coax adapter structure with SMA female.



## Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	3		6	GHz
Gain	40	42		dB
Gain Flatness		±2	±3	dB
Output P1dB	40	40.5		dBm
Output Psat	41	41.5		dBm
Harmonics @Pout=40dBm		-15		dBc
Input VSWR		1.5	2	:1
DC Voltage	+26	+28	+30	V DC
DC Supply Current		0.5	2	A
Impedance		50		Ohms

## Mechanical Specifications:

Parameter	Value	Notes
Operating Temperature*	-40°C to +50°C	
Non-operating Temperature*	-50°C to +60°C	
Relative humidity	95%	
RF Input/Output Connector	SMA Female/SMA Female	
DC Supply Connecyor	J30J-9ZKP	
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	
Dimensions W x H x D	100*70*15	mm
Weight	250	g

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

## Absolute Maximum Ratings:

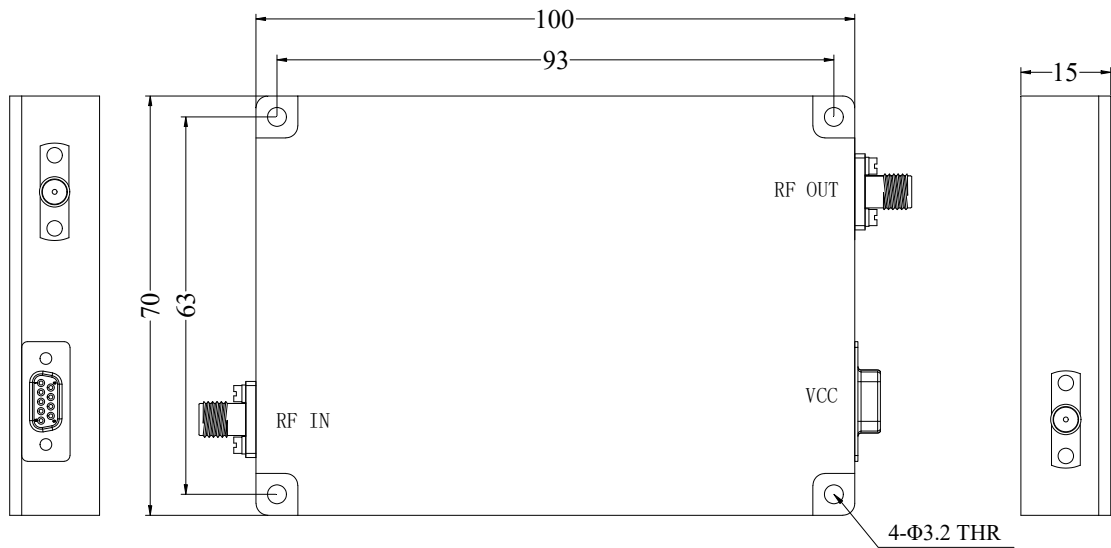
Parameter	Value
Supply Bias Voltage	+30 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



## Outline Drawing:

Unit:mm

PA-3G-6G-12.5



## DC Supply Connector(J30J-9ZKP):

Pin	Name	Function
1	EN	Amplifier Enable: TTL High (5V) (Internally Pulled-High) Amplifier Disable: Short to ground
2	GND	Power supply negative electrode
3	GND	Power supply negative electrode
4	GND	Power supply negative electrode
5	GND	Power supply negative electrode
6	+28V	Power supply positive,+26.0-30.0VDC
7	+28V	Power supply positive,+26.0-30.0VDC
8	+28V	Power supply positive,+26.0-30.0VDC
9	+28V	Power supply positive,+26.0-30.0VDC



## Ordering Information:

Base Number	Description	Optional
PA-3G-6G-12.5	Power Amplifier, 3-6GHz, Gain:40dB,Psat:12.5W,+28V DC	Without Heatsink
PA-3G-6G-12.5-HS	Power Amplifier, 3-6GHz, Gain:40dB,Psat:12.5W,+28V DC	With Heatsink