



# Power Amplifier

## Model: PA-0G4-3G-25

0.4-3GHz 25W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

### Features:

- Frequency range: 0.4-3GHz
- High output power at saturation, 25W Min.
- High gain, 44 dB Typ.
- 50 Ohm Matched Input / Output.

### Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

### Product Overview:

The PA-0G4-3G-25 is a power amplifier with a typical gain of 44 dB and a minimum Psat of 25W across the frequency range of 0.4 to 3GHz. The DC power requirement for the amplifier is +48 VDC/1 A. The input and output port configuration offers coax adapter structure with SMA female. And it has built-in protection functions included over voltage, over current, and over TEM protection.



## Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	0.4		3	GHz
Gain	40	44		dB
Gain Flatness		±3	±3.5	dB
Input P1dB		42		dBm
Output Psat	44	45		dBm
Harmonics@Pout=44dBm		-10		dBc
Input VSWR		1.5	2	:1
DC Voltage		+48	+50	V DC
DC Supply Current		1	3	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 Bias	D-SUB-9	
Altitude	10,000	feet
Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth	
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions	
Dimensions W x H x D	160*95*20	mm
Weight	550	g

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

## Absolute Maximum Ratings:

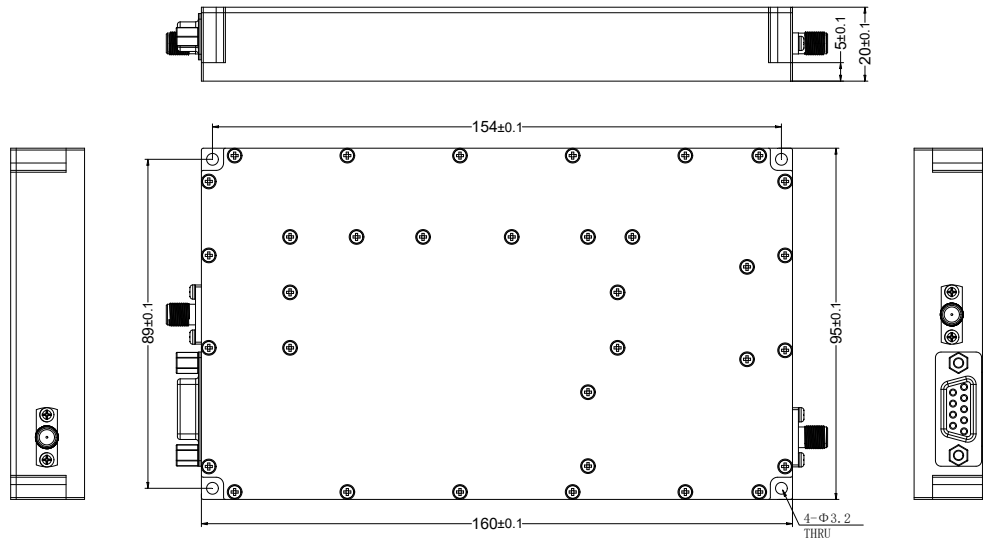
Parameter	Value
Supply Bias Voltage	+50 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



## Outline Drawing:

Unit:mm

PA-0G4-3G-25



## DC Supply Connector(D-SUB-9 Female):

Pin	Name	Function
1	Over Voltage	When the power supply voltage of the power amplifier exceeds the threshold, the power amplifier is turned off and this pin outputs a high level.
2	GND	Power supply negative
3	GND	Power supply negative
4	VCC	Power supply positive
5	VCC	Power supply positive
6	EN	Amplifier Enable: TTL High (5V) (Internally Pulled-High) Amplifier Disable: Short to ground
7	Reset	When the power amplifier triggers overcurrent protection, the power amplifier will be turned off and enter a state of lockout, and shorting to ground for 10ms will restart the power amplifier. Only the overcurrent protection can be reset.
8	Over TEM	When the temperature of the power amplifier housings is greater than 70° C, the power amplifier is closed and this pin will output a high level. When the temperature of the power shell is reduced to 60°C, the power amplifier returns to normal operation, and this pin will output a low level.
9	Over Current	When the power amplifier current exceeds the threshold, the power amplifier is turned off and this pin outputs a high level.



## Ordering Information:

Base Number	Description	Optional
PA-0G4-3G-25	Power Amplifier, 0.4-3GHz, Gain:44dB,Psat:25W,+48V DC	Without Heatsink
PA-0G4-3G-25-HS	Power Amplifier, 0.4-3GHz, Gain:44dB,Psat:25W,+48V DC	With Heatsink