



# Power Amplifier

## Model: PA-8G-12G-2

8-12GHz 2W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

### Features:

- Frequency range: 8-12GHz
- High output power at saturation, 2W Typ.
- High gain, 30 dB Min.
- 50 Ohm Matched Input / Output.

### Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

### Product Overview:

The PA-8G-12G-2 is a power amplifier with a minimum power gain of 30 dB and a nominal  $P_{sat}$  of 2W across the frequency range of 8 to 12GHz. The DC power requirement for the amplifier is +12 VDC/500 mA. 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	8		12	GHz
Power Gain	30			dB
Power Gain Flatness			±2	dB
Output P1dB	30			dBm
Output Psa		33		dBm
Spurious		-60		dBc
Input VSWR		2	2.2	:1
Output VSWR			2.5	:1
DC Voltage		+12		V DC
DC Supply Current		500		mA
Impedance		50		Ohms

## Mechanical Specifications:

Parameter	Value	Notes
Operating Temperature*	-40°C to +60°C	
Non-operating Temperature*	-50°C to +70°C	
Relative humidity	95%	
RF Input/Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
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	58.5*38*12.5	mm

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

## Absolute Maximum Ratings:

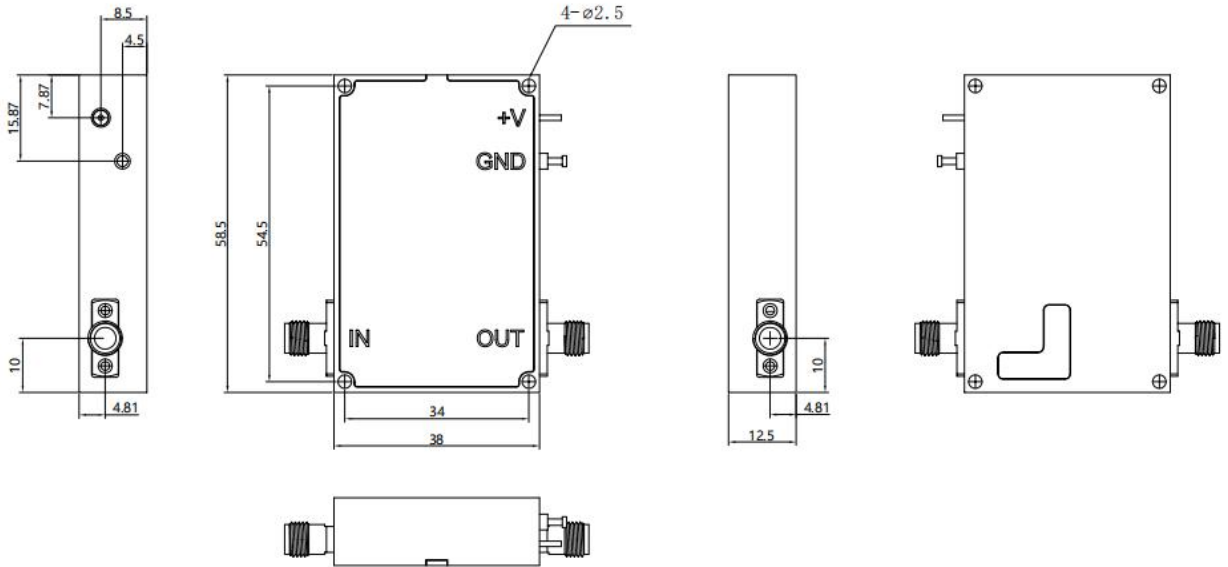
Parameter	Value
Supply Bias Voltage	+20 V
RF Input Power	+15 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



## Outline Drawing:

Unit:mm

### PA-8G-12G-2



## Ordering Information:

Base Number	Description	Optional
PA-8G-12G-2	Power Amplifier, 8-12GHz, Gain:30dB,Psat:2W,+12V DC	Without Heatsink
PA-8G-12G-2-HS	Power Amplifier, 8-12GHz, Gain:30dB,Psat:2W,+12V DC	With Heatsink