



# Power Amplifier

## Model: PA-50G-65G-0.3

50-65GHz 0.3W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

### Features:

- Frequency range: 50-65GHz
- High output power at saturation, 0.3W Typ.
- High gain, 33dB Min.
- 50 Ohm Matched Input / Output.

### Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

### Product Overview:

The PA-50G-65G-0.3 is a power amplifier with a minimum gain of 33 dB and a nominal Psat of 0.3W across the frequency range of 50 to 65GHz. The DC power requirement for the amplifier is +4 VDC/1.7 A. The input and output port configuration offers coax adapter structure with 1.85mm female.



## Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	50		65	GHz
Gain	33	36		dB
Gain Flatness		±3		dB
Output P1dB	22	23		dBm
Output Psat		25		dBm
Input VSWR			2	:1
Output VSWR			2	:1
DC Voltage		+4	+5	V DC
DC Supply Current		1.7		A
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	1.85mm Female/1.85mm Female	
DC Bias	Solder Pin	
Altitude	30,000	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	80*80*15	mm

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

## Absolute Maximum Ratings:

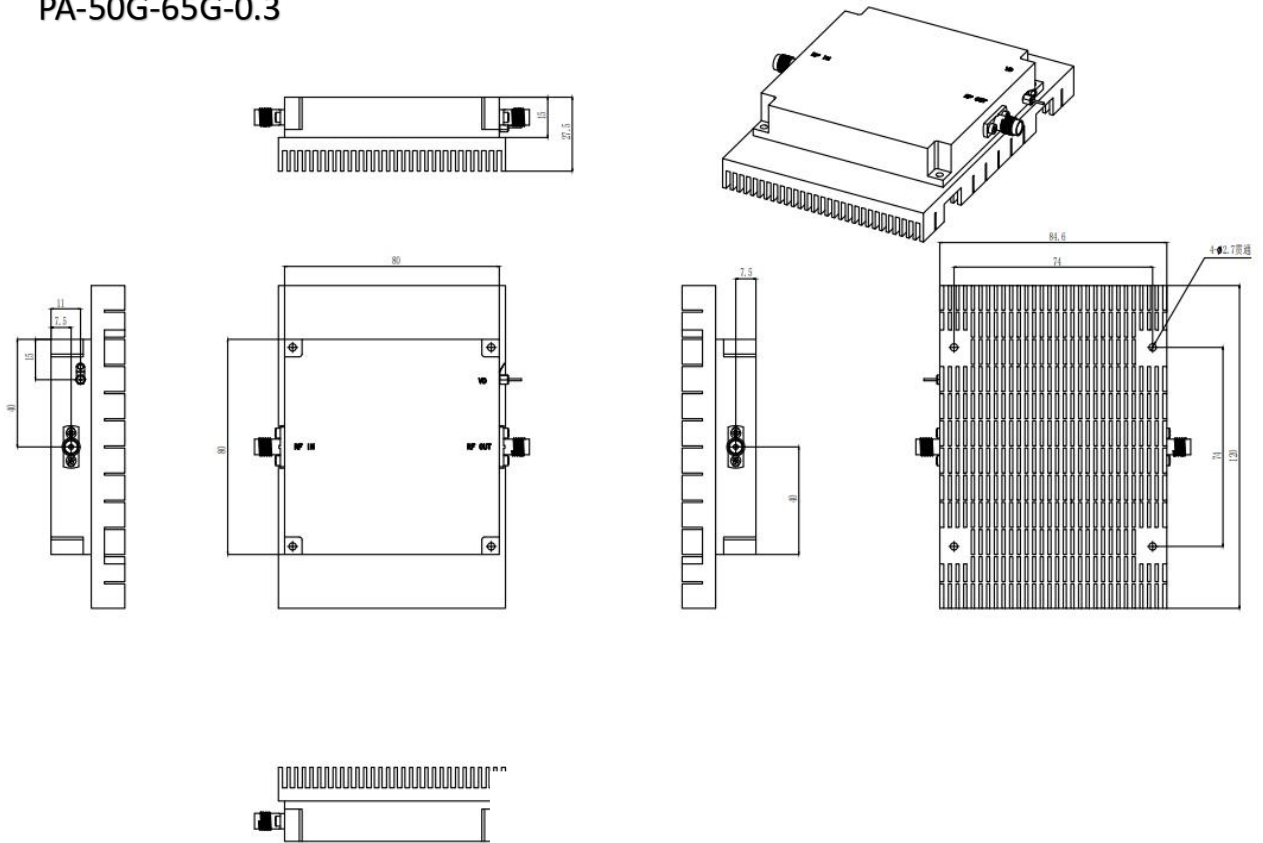
Parameter	Value
Supply Bias Voltage	+5 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



# Outline Drawing:

Unit:mm

PA-50G-65G-0.3



# Ordering Information:

Base Number	Description	Optional
PA-50G-65G-0.3	Power Amplifier,50-65GHz, Gain:33dB,Psat:0.3W,+4V DC	Without Heatsink
PA-50G-65G-0.3-HS	Power Amplifier,50-65GHz, Gain:33dB,Psat:0.3W,+4V DC	With Heatsink