



Power Amplifier

Model: PA-18G-52G-0.6

18-52GHz 0.6W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 18-52GHz
- High output power at saturation, 0.6W typ.
- High gain, 33 dB typ.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-18G-52G-0.6 is a power amplifier with a typical small signal gain of 33 dB and a nominal P_{sat} of 0.6W across the frequency range of 18 to 52 GHz. The DC power requirement for the amplifier is +12 VDC/1.3 A. The input and output port configuration offers coax adapter structure with 2.4mm female.



Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	18		52	GHz
Small Signal Gain	30	33		dB
Output P1dB	25	26		dBm
Output Psat	26	28		dBm
Ruturn Loss		-10		dB
DC Voltage	10	12	15	V DC
Static Current		0.85		A
Saturation current		1.3	1.5	A
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Notes
Operating Temerature*	-40°C to +60°C	
Non-operating Temperature*	-50°C to +70°C	
Relative humidity	95	%
RF Input/Output Connector	2.4mm Female/2.4mm 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	65 x 50 x 14(Without heatsink) 50 x 100 x 64(With heatsink)	mm

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

Absolute Maximum Ratings:

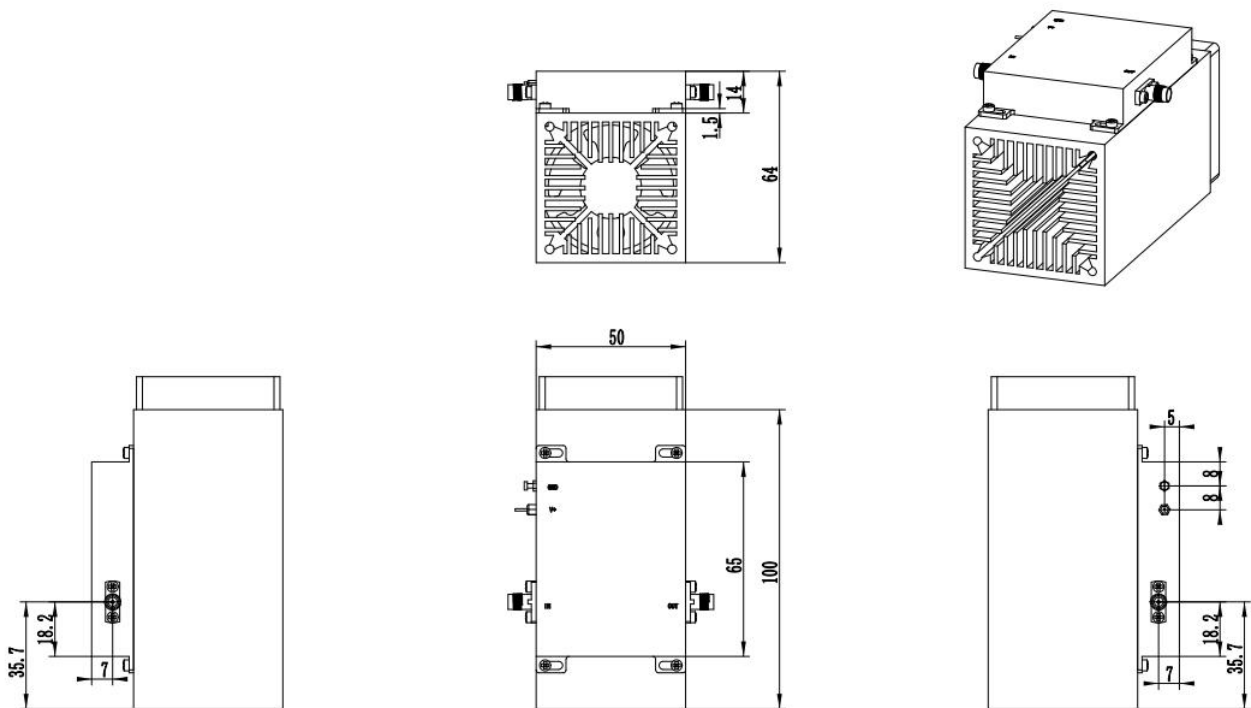
Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm

PA-18G-52G-0.6



Ordering Information:

Base Number	Description	Optional
RPA-18G-52G-0.6	Power Amplifier, 18-52GHz, Gain:33dB,Psat:0.6W,+12V DC	Without Heatsink
RPA-18G-52G-0.6-HS	Power Amplifier, 18-52GHz, Gain:33dB,Psat:0.6W,+12V DC	With Heatsink