



Power Amplifier

Model: PA-17G-40G-1

17-40GHz 1W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 17-40GHz
- High output power at saturation, 1W Typ.
- High gain, 35 dB Typ.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-17G-40G-1 is a power amplifier with a typical small signal gain of 35 dB and a nominal Psat of 1 W across the frequency range of 17 to 40 GHz. The DC power requirement for the amplifier is +12 VDC/700 mA. The input and output port configuration offers coax adapter structure with 2.92mm female.



Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	17		40	GHz
Small Signal Gain	33	35	38	dB
Output P1dB	27.5	29		dBm
Output Psat	28.5	30		dBm
Input VSWR		1.8		:1
Output VSWR		1.8		:1
DC Voltage		12		V DC
DC Supply Current		700		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	2.92mm Female/2.92mm 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	50*65*14(Without heatsink) 50*111*64(With heatsink)	mm

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

Absolute Maximum Ratings:

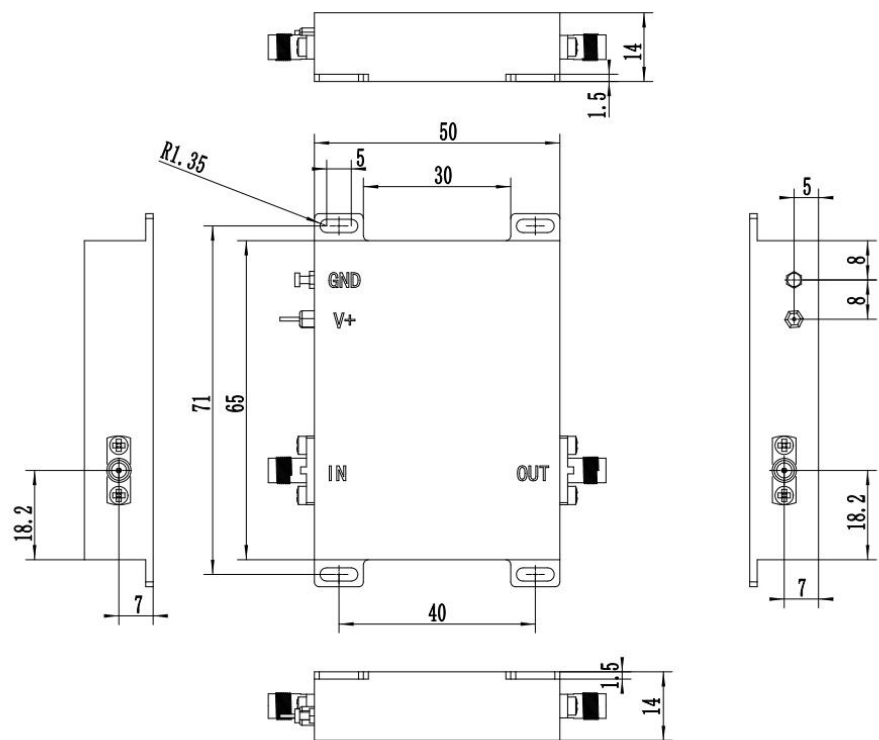
Parameter	Value
Supply Bias Voltage	+8 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



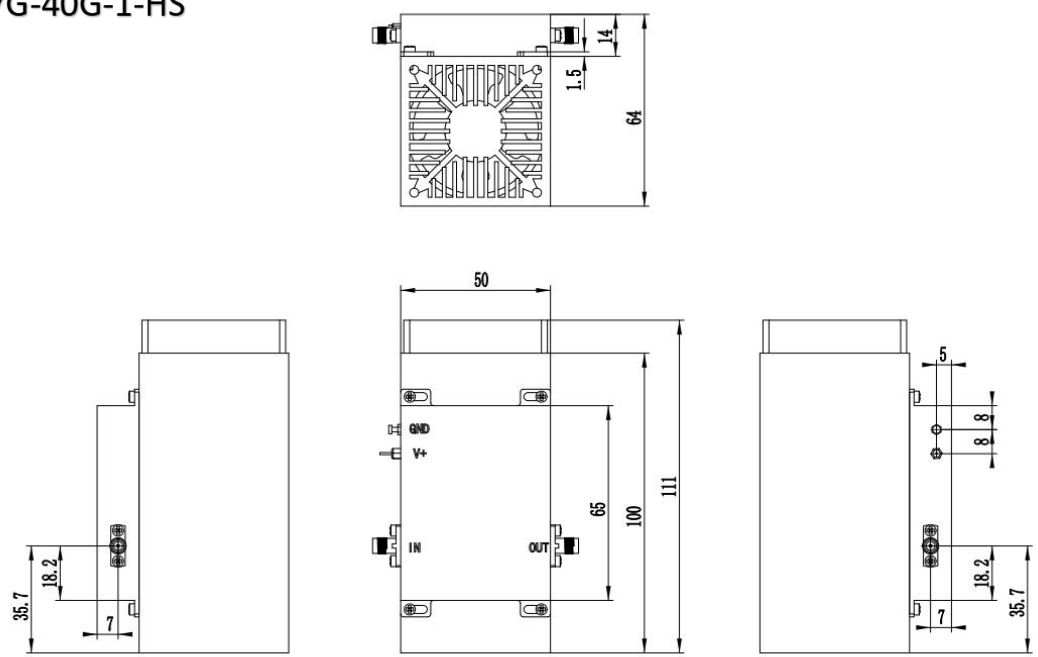
Outline Drawing:

Unit:mm

PA-17G-40G-1



PA-17G-40G-1-HS





Ordering Information:

Base Number	Description	Optional
PA-17G-40G-1	Power Amplifier,17-40GHz, Gain:35dB,Psat:1W,+12V DC	Without Heatsink
PA-17G-40G-1-HS	Power Amplifier,17-40GHz, Gain:35dB,Psat:1W,+12V DC	With Heatsink