



Power Amplifier

Model: PA-10M-20G-1

0.01-20GHz 1W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 0.01-20GHz
- High output power at saturation, 1W Typ.
- High gain, 46 dB Typ.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-10M-20G-1 is a power amplifier with a typical gain of 46 dB and a nominal P_{sat} of 1W across the frequency range of 0.01 to 20GHz. The DC power requirement for the amplifier is +24 VDC/600 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	0.01		20	GHz
Gain	45	46		dB
Gain Flatness		±3		dB
Output P1dB		29.5		dBm
Output Psat		30.5		dBm
Input VSWR		1.8		:1
Output VSWR		1.8		:1
DC Voltage		+24		V DC
DC Supply Current		600		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	50*65*14(Without heatsink) 50*111*64(With heatsink)	mm

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

Absolute Maximum Ratings:

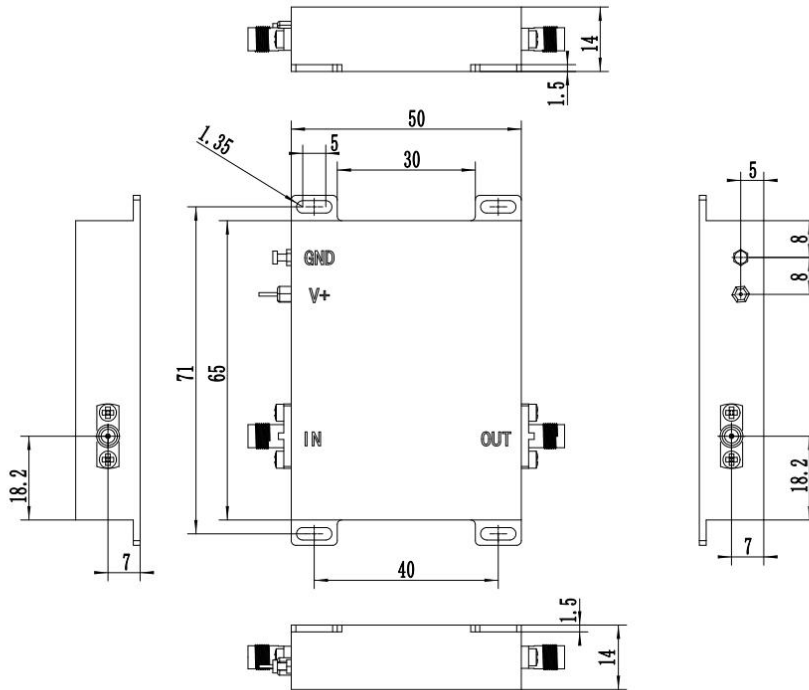
Parameter	Value
Supply Bias Voltage	TBD
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



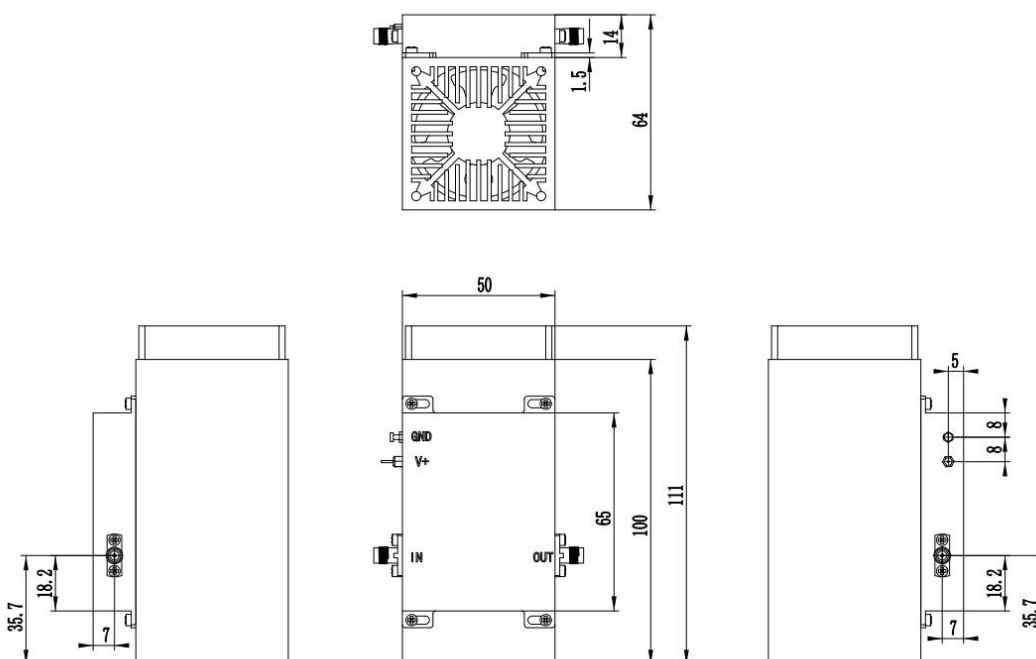
Outline Drawing:

Unit:mm

PA-10M-20G-1



PA-10M-20G-1-HS





Ordering Information:

Base Number	Description	Optional
PA-10M-20G-1	Power Amplifier, 0.01-20GHz, Gain:46dB,Psat:1W,+24V DC	Without Heatsink
PA-10M-20G-1-HS	Power Amplifier, 0.01-20GHz, Gain:46dB,Psat:1W,+24V DC	With Heatsink