



Power Amplifier

Model: PA-4G-6G-50

4-6GHz 50W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 4-6GHz
- High output power at saturation, 50W Typ.
- High gain, 53 dB Typ.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-4G-6G-50 is a power amplifier with a typical gain of 53 dB and a nominal P_{sat} of 50W across the frequency range of 4 to 6 GHz. The DC power requirement for the amplifier is +28 VDC/1 A. 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	4		6	GHz
Gain	50	53		dB
Gain Flatness		±2	±3	dB
Output Psat	46	47		dBm
Harmonics @Pout=47dBm		-15		dBc
Input VSWR		1.5	2.0	:1
DC Voltage		+28		V DC
DC Supply Current		1	10	A
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Notes
Operating Temperature*	-20°C to +50°C	
Non-operating Temperature*	-30°C to +60°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	200*120*20	mm
Weight	1000	g

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

Absolute Maximum Ratings:

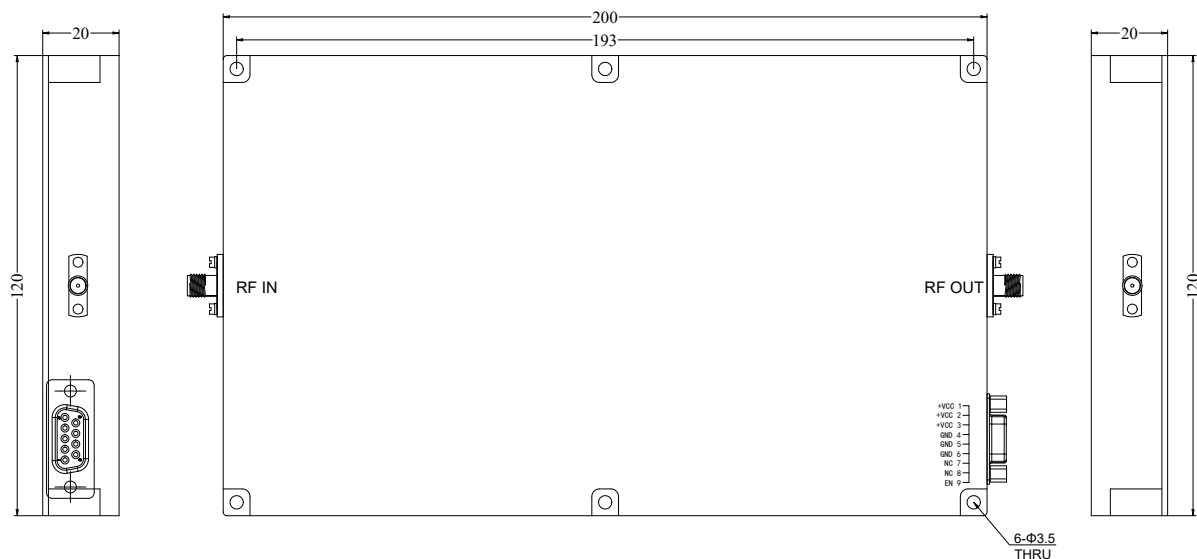
Parameter	Value
Supply Bias Voltage	+38 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm

PA-4G-6G-50



DC Supply Connector(DSUB-9 Female):

Pin	Name	Function
1	VDD	+26.0-30.0VDC
2	VDD	+26.0-30.0VDC
3	VDD	+26.0-30.0VDC
4	GND	Ground
5	GND	Ground
6	GND	Ground
7	Current Sensor	Analog voltage relative to ID @ 25mV /100mA
8	Temp. Sensor	Analog voltage relative to Module's Temperature @ 10 mV/°C
9	EN	Amplifier Enable: TTL "Low" (Logic 0) or Open Amplifier Disable: TTL "High" (Logic 1)



Ordering Information:

Base Number	Description	Optional
PA-4G-6G-50	Power Amplifier, 4-6GHz, Gain:53dB,Psat:50W,+28V DC	Without Heatsink
PA-4G-6G-50-HS	Power Amplifier, 4-6GHz, Gain:53dB,Psat:50W,+28V DC	With Heatsink