Power Amplifier

Model: PA-0G5-3G5-63

0.5-3.5GHz 63W CW

Ultrabroad frequency range, high performanceand exceptional RF characteristics

Features:

- Frequency range: 0.5-3.5GHz
- High output power at saturation, 63W Min.
- High gain, 48 dB Min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview：

The PA-0G5-3G5-63 is a power amplifier with a minimum small signal gain of 48 dB and a minimum Psat of 63 W across the frequency range of 0.5 to 3.5 GHz. The DC power requirement for the amplifier is +28 VDC/11 A. The input and output port configuration offers coax adapter structure with SMA female.

Electrical Specifications at 25℃:

Parameter	Min	Typ	Max	Units
Frequency range	0.5		3.5	GHz
Small Signal Gain	48	50		dB
Small Signal Gain Flatness		±3	±4	dB
Output P1dB	44	45		dBm
Output Psat@Pin=0dBm	48	49		dBm
Harmonics		-15	-8	dBc
Switching Time @1KHz TTL; Pin=0dBm		2	5	us
Input VSWR		1.5	2	:1
DC Voltage		28	30	V DC
Static Current		1		A
Saturation Current		11	12	A
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Notes
Operating Temerature*	-40℃ to +50℃	
Non-operating Temperature*	-50℃ to +60℃	
Relative humidity	95	%
RF Input/Output Connector	SMA Female/SMA Female	
DC Power Supply Connector	J30J-9Pin	
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	195 x 85 x 26.5(Without heatsink) 262.2 x 140 x 88.5(With heatsink)	mm
Weight	6	Kg

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

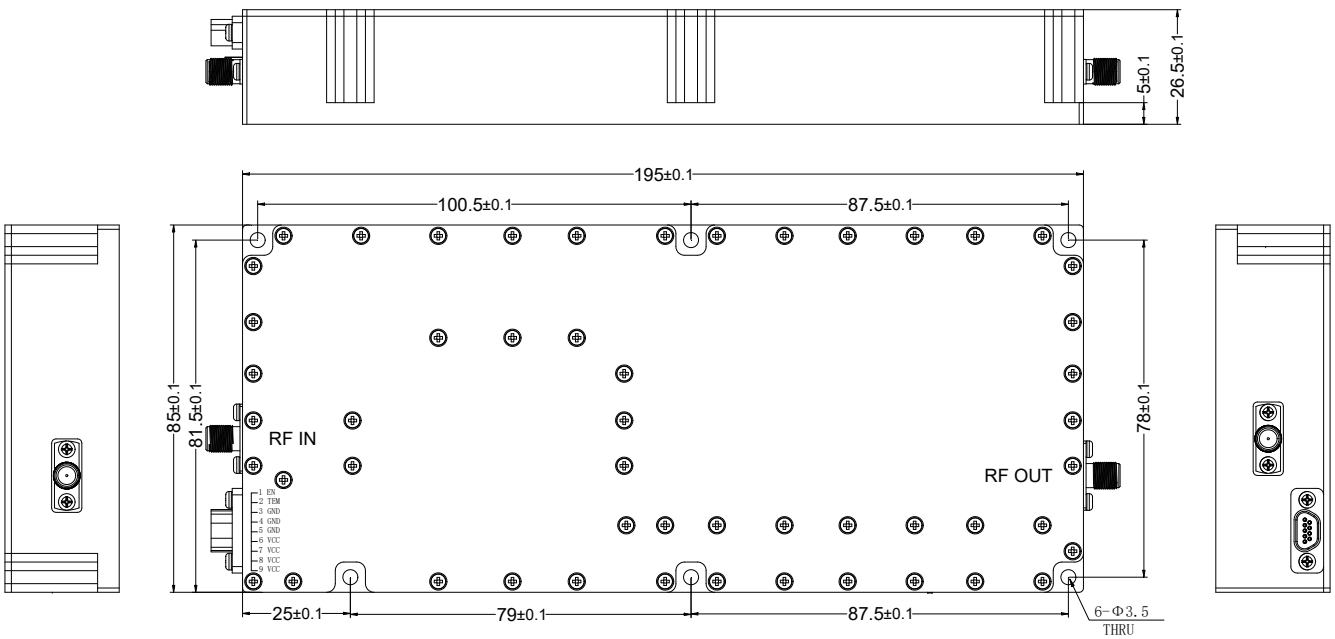
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+30 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm

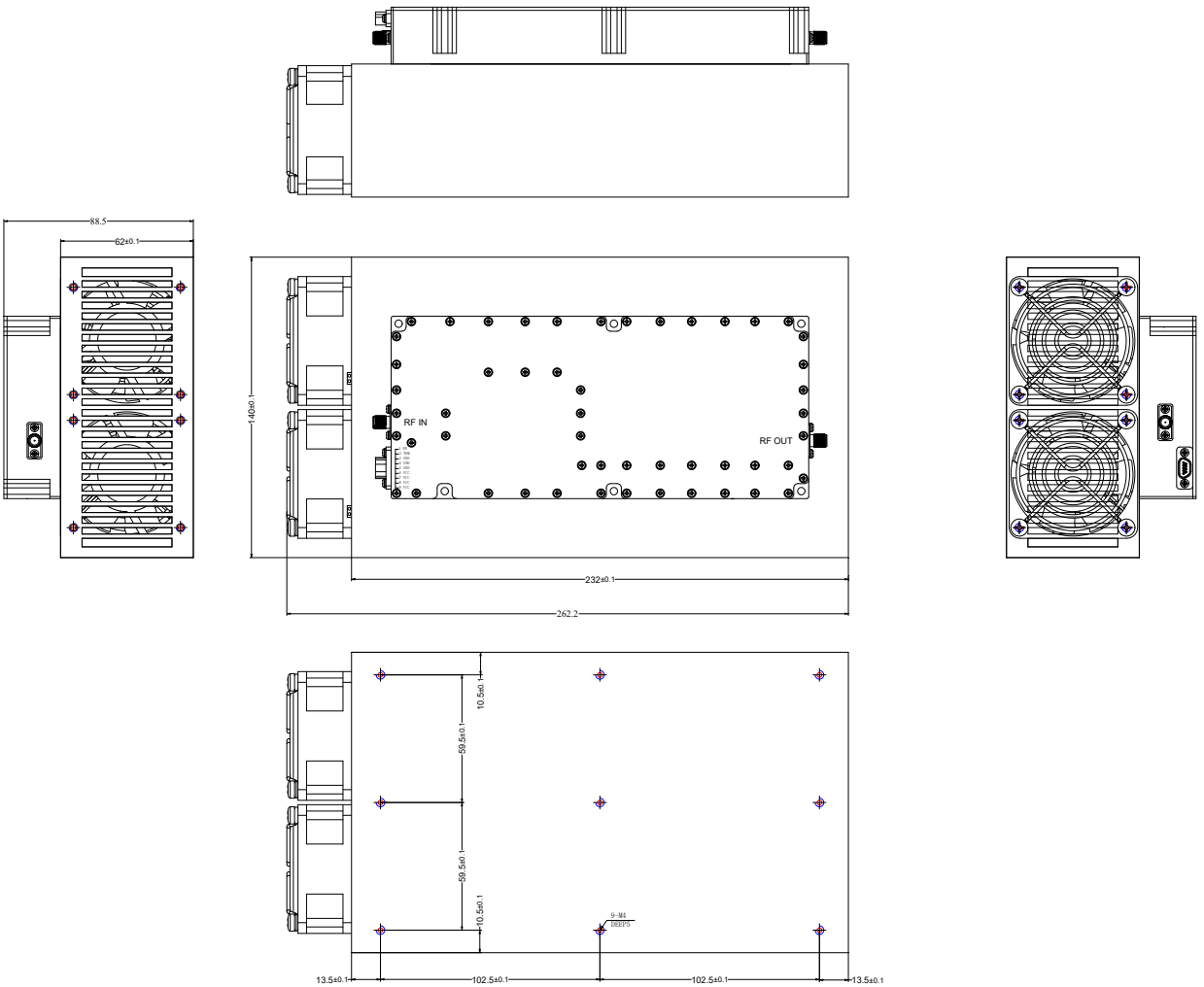
PA-0G5-3G5-63



Outline Drawing:

Unit:mm

PA-0G5-3G5-63-HS



Fan power supply	
Red line	Power supply positive,+24.0-28.0VDC DC current: 0.3A
Black line	Ground

DC Supply Connector(J30J-9Pin):

Pin	Name	Function
1	EN	Amplifier enable: TTL high (5V) (internally pulled high); Amplifier disable: Grounded
2	Over TEM	When the casing temperature exceeds 70° C, the power amplifier is turned off; this pin is pulled high. If the chassis temperature drops to 60° C, the power amplifier resumes normal operation; this pin is pulled low.
3~5	GND	Ground
6~9	VCC	Power supply positive,+26.0-30.0VDC

Instruction Manual:

Power on	
1	Grounding connection and RF input port.
2	Connect the RF output port to the load (the load's VSWR should be less than 3:1).
3	Power on the fan.
4	Power on the amplifier.
5	Turn on the RF signal; ensure that the input signal does not exceed 5 dBm.

Power off	
1	Turn off the RF signal.
2	Power down the amplifier.
3	Turn off the fan.
4	Remove the input signal source.

Ordering Information:

Base Number	Description	Optional
PA-0G5-3G5-63	Power Amplifier,0.5-3.5GHz, Gain:48dB,Psat:63W,+28V DC	Without Heatsink
PA-0G5-3G5-63-HS	Power Amplifier,0.5-3.5GHz, Gain:48dB,Psat:63W,+28V DC	With Heatsink