



Power Amplifier

Model: PA-4G-8G-40

4-8GHz 40W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 4-8GHz
- High output power at saturation, 40W Min.
- High gain, 46 dB Min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-4G-8G-40 is a power amplifier with a minimum small signal gain of 46 dB and a minimum Psat of 40W across the frequency range of 4 to 8GHz. The DC power requirement for the amplifier is +28 VDC/7 A. The input port configuration offers coax adapter structure with 2.92mm female and output port configuration offers coax adapter structure with N female..



Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	4		8	GHz
Small Signal Gain	46	50		dB
Small Signal Gain Flatness		±2	±3	dB
Output P1dB	45	45.5		dBm
Output Psat	46	46.5		dBm
Input VSWR		1.5	2.0	:1
DC Voltage		+28	+30	V DC
Static Current		2		A
Saturation current		7	8	A
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Notes
Operating Temperature*	-40°C to +50°C	
Non-operating Temperature*	-50°C to +60°C	
Relative humidity	95%	
RF Input/Output Connector	SMA Female/N Female	
DC Bias	D-SUB-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	148*85*27(Without heatsink)	mm
Weight	600	g

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

Absolute Maximum Ratings:

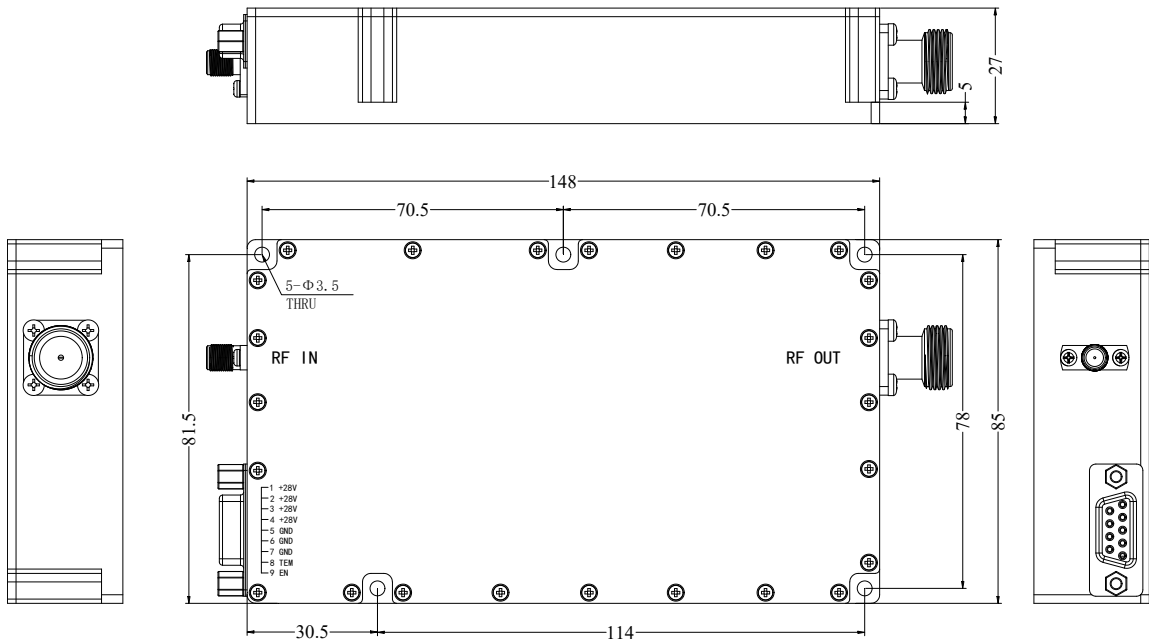
Parameter	Value
Supply Bias Voltage	+30 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



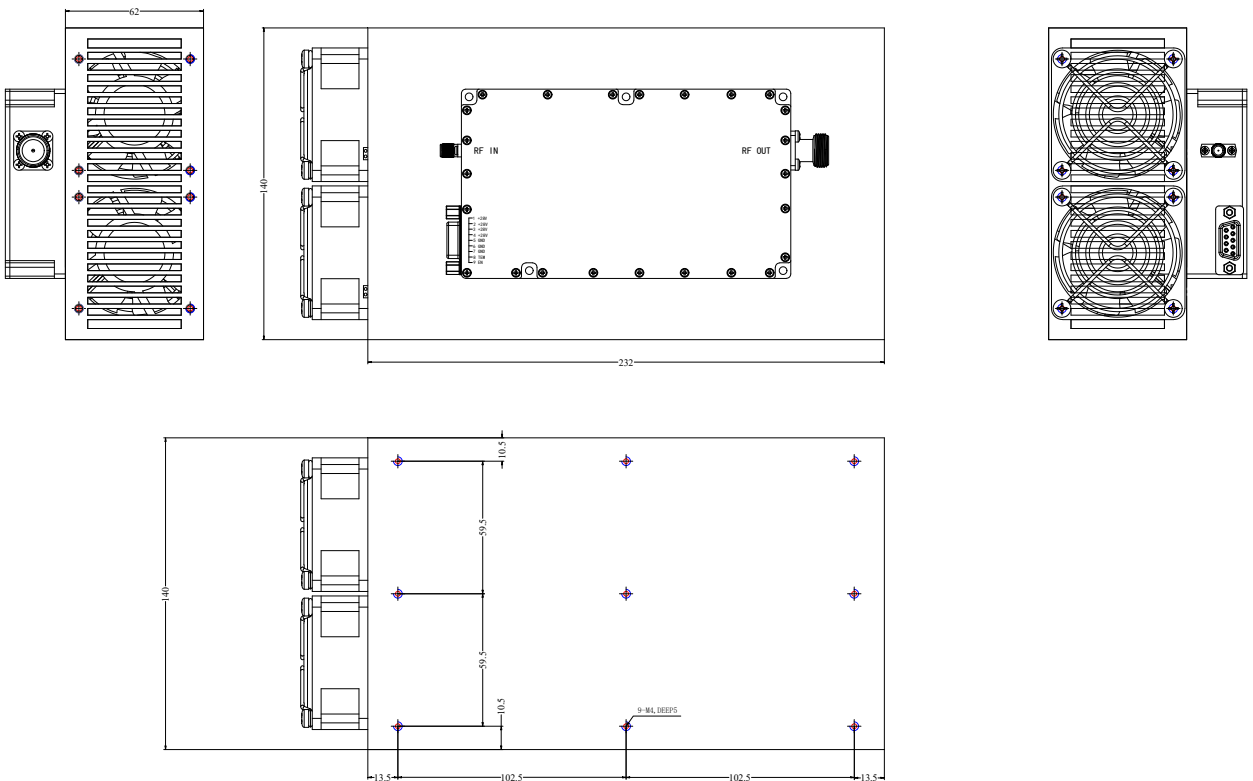
Outline Drawing:

Unit:mm

PA-4G-8G-40



PA-4G-8G-40-HS





DC Supply Connector(DSUB-9 Female):

Pin	Name	Function
1~4	VCC	Power supply positive,+26.0-30.0VDC
5~7	GND	Ground
8	Over TEM	When the temperature of the case exceeds 75 °C, the power amplifier will turn off and this pin will be pulled high. If the temperature of case drops to 70 °C, the power amplifier will return to normal operation, and this pin will be pulled low.
9	EN	Amplifier Enable: TTL High (5V) (Internally Pulled-High) Amplifier Disable: Short to ground

Ordering Information:

Base Number	Description	Optional
PA-4G-8G-40	Power Amplifier, 4-8GHz, Gain:46dB,Psat:40W,+28V DC	Without Heatsink
PA-4G-8G-40-HS	Power Amplifier, 4-8GHz, Gain:46dB,Psat:40W,+28V DC	With Heatsink