



Power Amplifier

Model: PA-0G4-8G-10

0.4-8GHz 10W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 0.4-8GHz
- High output power at saturation, 10W min.
- High gain, 40 dB min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-0G4-8G-10 is a power amplifier with a minimum small signal gain of 40 dB and a minimum Psat of 10W across the frequency range of 0.4 to 8 GHz. The DC power requirement for the amplifier is +28 VDC/2.5 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	0.4		8	GHz
Small Signal Gain	40	42		dB
Gain Flatness		±3	±4	dB
Output P1dB	35	36		dBm
Output Psat	40			dBm
Harmonic		-15	-8	dBc
Input VSWR		1.5	2	:1
DC Voltage		28	30	V DC
Static Current		1.5		A
Saturation current		2.5	3	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	J30J-9TJSL	
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	60 x 85 x 15(Without heatsink) 140 x 180 x 77(With heatsink)	mm
Weight	500(Without heatsink) 3500(With heatsink)	

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

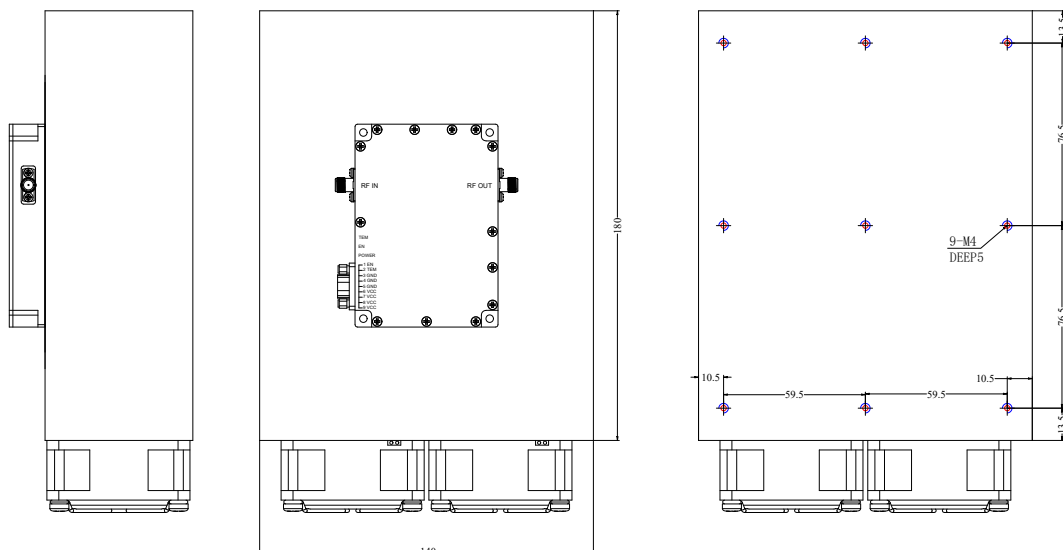
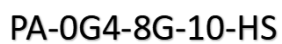
Absolute Maximum Ratings:

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



Unit:mm

PA-0G4-8G-10





Optional items:

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

DC Supply Connector(J30J-9TLSJ)

Pin	Name	Function
1	EN	Amplifier Enable: TTL High (5V) (Internally Pulled-High) Amplifier Disable: Short to ground.
2	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 60 °C, the power amplifier will return to normal operation, and this pin will be pulled low.
3~5	GND	Ground
6~9	VCC	Power supply positive,+26.0-30.0VDC.

Instruction Manual:

Power on	
1	Connect ground and RF input connector.
2	Connect the RF output port to the load (The VSWR of the load should be less than 3:1).
3	Connect the 24V power supply to the fan.
4	Connect the 28V power supply to the amplifier.
5	Turn on the RF signal and ensure that the input signal does not exceed 5dBm.

Power off	
1	Turn off RF signal.
2	Disconnect the 28V power supply to the amplifier.
3	Disconnect the 24V power supply to the fan.
4	Disconnect the RF connectors.

Ordering Information:

Base Number	Description	Optional
PA-0G4-8G-10	Power Amplifier, 0.4-8GHz, Gain:40dB,Psat:10W,+28V DC	Without Heatsink
PA-0G4-8G-10-HS	Power Amplifier, 0.4-8GHz, Gain:40dB,Psat:10W,+28V DC	With Heatsink