



Power Amplifier

Model: PA-900M-950M-100

900-950MHz 100W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 900-925MHz
- High output power at saturation, 100W Min.
- High gain, 50 dB Min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-900M-950M-100 is a power amplifier with a minimum gain of 50 dB and a minimum Psat of 100W across the frequency range of 900 to 950 MHz. The DC power requirement for the amplifier is +28 VDC/15 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	900		950	MHz
Gain	50	52		dB
Gain Flatness			±1	dB
Output Psat	50			dBm
Input VSWR		1.5	2.0	:1
DC Voltage		+28		V DC
DC Supply Current		15		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	D-SUB-9	
Altitude	10,000	feet
Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth	
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions	
Dimensions W x H x D	180*115*25	mm
Weight	250	g

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

Absolute Maximum Ratings:

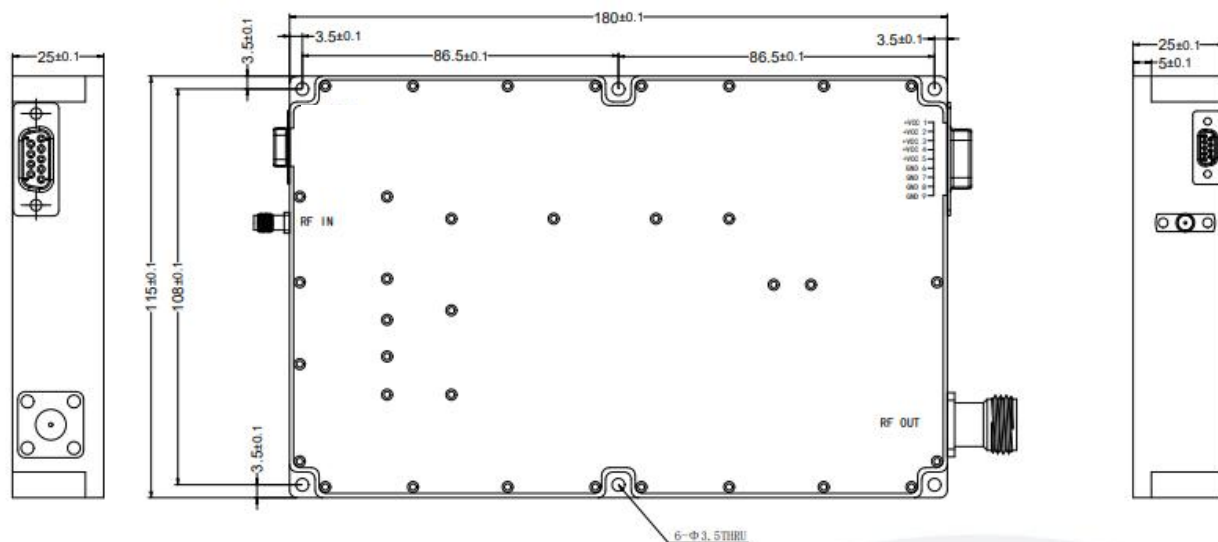
Parameter	Value
Supply Bias Voltage	+30 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm

PA-900M-950M-100



DC Supply Connector(DSUB-9 Female):

Pin	Name	Function
1	+28V	Power supply positive,+28.0-33.0VDC
2	+28V	Power supply positive,+28.0-33.0VDC
3	+28V	Power supply positive,+28.0-33.0VDC
4	+28V	Power supply positive,+28.0-33.0VDC
5	+28V	Power supply positive,+28.0-33.0VDC
6	GND	Power supply negative
7	GND	Power supply negative
8	GND	Power supply negative
9	GND	Power supply negative



Control Connector(J30J-9 Female):

Pin	Name	Function
1	EN	Amplifier Enable:High level (or high-impedance) turns the amplifier on; low level turns it off
2	Over VSWR	When the external standing wave of the power amplifier output is greater than 5, the power amplifier is turned off, and this pin will output a high level. When the external standing wave is less than 5, this pin outputs a low level.
3	Over TEM	When the temperature of the case exceeds 70 °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.
4	Reset	When the power amplifier triggers VSWR protection, the power amplifier will shut down and enter a state lock. Giving this pin a low pulse of 10us will restart the power amplifier. Only VSWR protection can be reset.
5	NC	Not connected
6	NC	Not connected
7	NC	Not connected
8	NC	Not connected
9	GND	Ground

Ordering Information:

Base Number	Description	Optional
PA-900M-950M-100	Power Amplifier, 900-950MHz, Gain:50dB,Psat:100W,+28V DC	Without Heatsink
PA-900M-950M-100-HS	Power Amplifier, 900-950MHz, Gain:50dB,Psat:100W,+28V DC	With Heatsink