



Power Amplifier

Model: PA-1M-500M-32

1-500MHz 32W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 1-500MHz
- High output power at saturation, 32W Min.
- High gain, 45 dB Min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-1M-500M-32 is a power amplifier with a minimum small signal gain of 45 dB and a minimum P_{sat} of 32W across the frequency range of 1 to 500MHz. The DC power requirement for the amplifier is +28 VDC/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	1		500	MHz
Small Signal Gain	45	47		dB
Small Signal Gain Flatness		±2	±3	dB
Output Psat	45	45.5		dBm
Supurious			-60	dBc
Harmonic			-10	dBc
Input VSWR			2	:1
DC Voltage		+28		V DC
DC Supply Current		5		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/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	
Depth × Width	200*120*25	mm
Weight	500	g

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

Absolute Maximum Ratings:

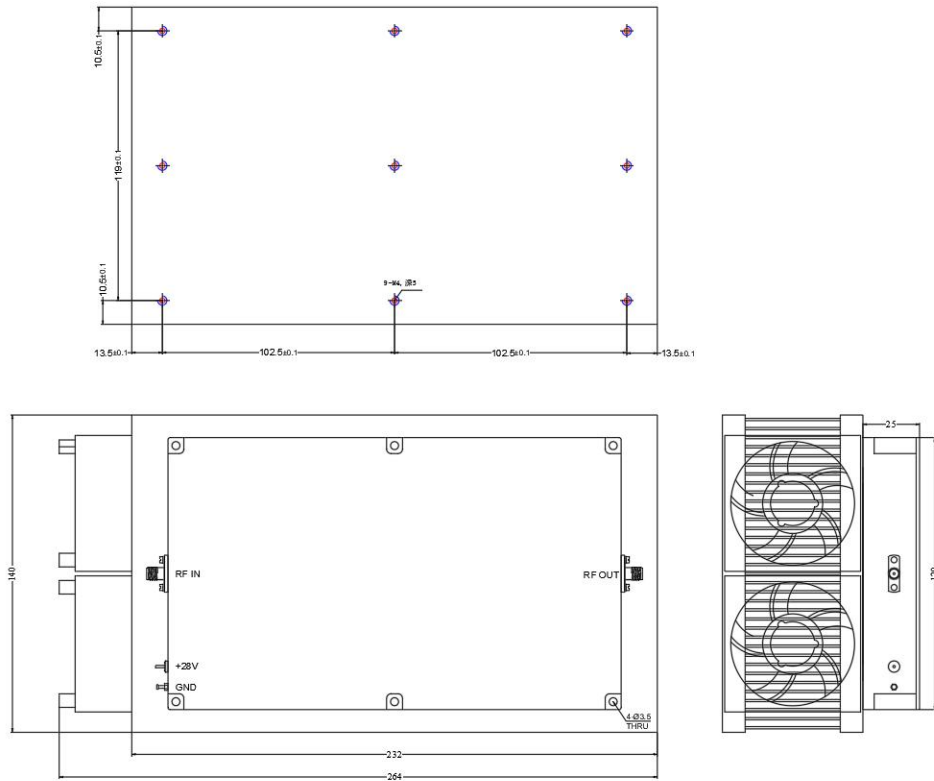
Parameter	Value
Supply Bias Voltage	+32 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm

PA-1M-500M-32-HS



Ordering Information:

Base Number	Description	Optional
PA-1M-500M-32	Power Amplifier, 1-500MHz, Gain:45dB,Psat:32W,+28V DC	Without Heatsink
PA-1M-500M-32-HS	Power Amplifier, 1-500MHz, Gain:45dB,Psat:32W,+28V DC	With Heatsink