

Power Amplifier

1-500MHz /45dB Gain/45 dBm Psat

Model: TLPA1M500M-45-45

TLPA1M500M-45-45 is a power amplifier with a typical small signal gain of 47 dB and a nominal Psat of 45.5 dBm across the frequency range of 1 to 500 MHz. 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.

Features:

- Output Frequency: 1-500MHz
- Gain: 45dB Min
- Output Power Psat: 45dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	1-500			MHz
Small Signal Gain	45	47		dB
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:

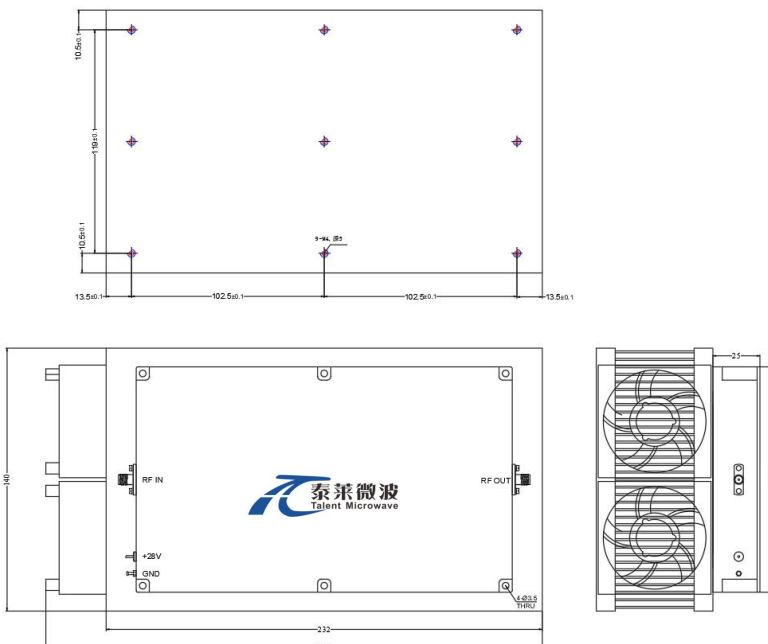
Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	200*120*25	mm
Weight	500	g

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



Fans Supply Current: 0.4A@24V



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+50	°C
Non-operating Temperature*	-50		+60	°C
Relative humidity		95		%
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			

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

Ordering Information:

Base Number	Description	Revision
TLPA1M500M-45-45	Power amplifier 1-500MHz,Gain:45dB,Psat:45dBm, +28V DC,Without Heatsink	Rev.1.1
TLPA1M500M-45-45-HS	Power amplifier 1-500MHz,Gain:45dB,Psat:45dBm, +28V DC,With Heatsink	Rev.1.1