

Power Amplifier

100-1000MHz/35dB Gain/45dBm Psat

Model: TLPA100M1000M-35-45

TLPA100M1000M-35-45 is a power amplifier with a minimum gain of 35 dB and a minimum Psat of 45 dBm across the frequency range of 100 to 1000 MHz. The DC power requirement for the amplifier is +28 VDC/1 A. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 100-1000MHz
- Gain: 35dB 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	100		1000	MHz
Gain	35	38		dB
Gain Flatness		±1.5	±2	dB
Outout P1dB	42	43		dBm
Output Psat	45	46		dBm
Input VSWR		1.5	2.0	:1
Output VSWR		1.5	2.0	:1
DC Voltage		+28		V DC
DC Supply Current		1	12	A
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Power Supply Connector	DSUB-9	
Size	170*80*20	mm
Weight	200	g

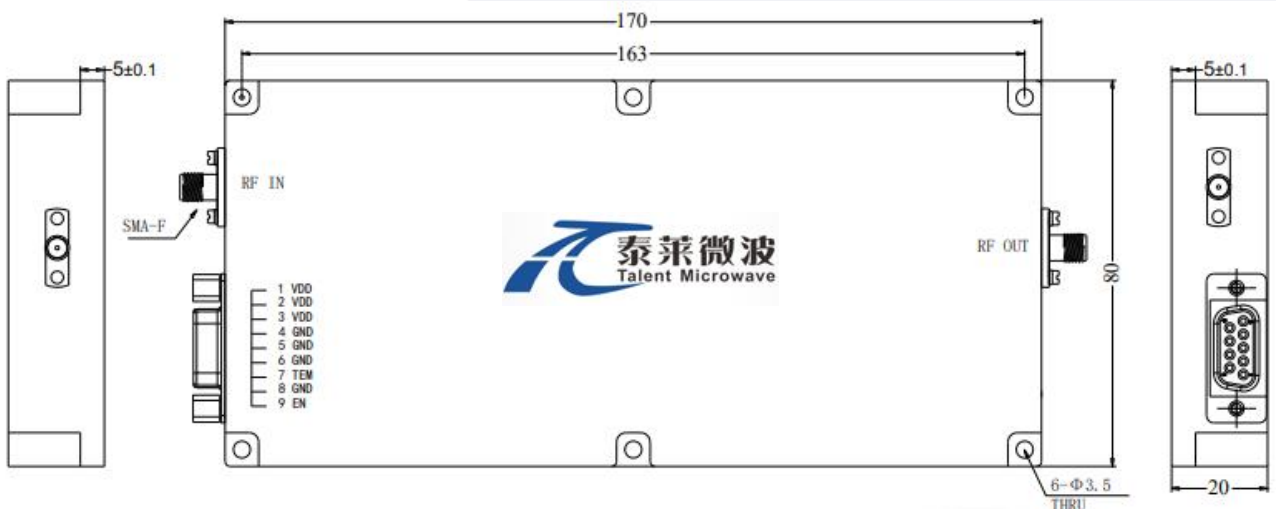
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+30 V
RF Input Power	+16 dBm
ESD sensitivity (HBM)	Class 0, passed 150V



Outline Drawing:

Unit:mm; Tolerance:±0.1mm



*****Heat Sink Required During Operation**



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

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)	20g,11ms,saw-tooth			
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
TLPA100M1000M-35-45	Power amplifier, 100-1000MHz, Gain:35dB,Psat:45dBm,+28V DC,Without Heatsink	Rev.1.1
TLPA100M1000M-35-45-HS	Power amplifier, 100-1000MHz, Gain:35dB,Psat:45dBm,+28V DC,With Heatsink	Rev.1.1