

Power Amplifier

WR-3.4/210-230GHz/11dB Gain/17dBm Psat

Model: TMPA-210230-1117-03

TMPA-210230-1117-03 is a power amplifier with a typical small signal gain of 11 dB and a nominal Psat of 17 dBm across the frequency range of 210 to 230 GHz. The DC power requirement for the amplifier is +15 VDC/340 mA. The input and output port configuration offers an inline structure with WR-3.4 waveguides and UG-387/U-M antcocking flanges.

Features:

- Frequency range: 210-230GHz
- Gain: 11dB Typ
- Output Power Psat: 17dBm Typ
- Good Power and Gain Flatness

Applications:

- Passive Imaging
- Communication Systems
- Radar Systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	210		230	GHz
Small Signal Gain		11		dB
Output Psat		17		dBm
Input VSWR		3		:1
Output VSWR		3		:1
DC Voltage		15		V DC
DC Supply Current		340		mA

Mechanical Specifications:

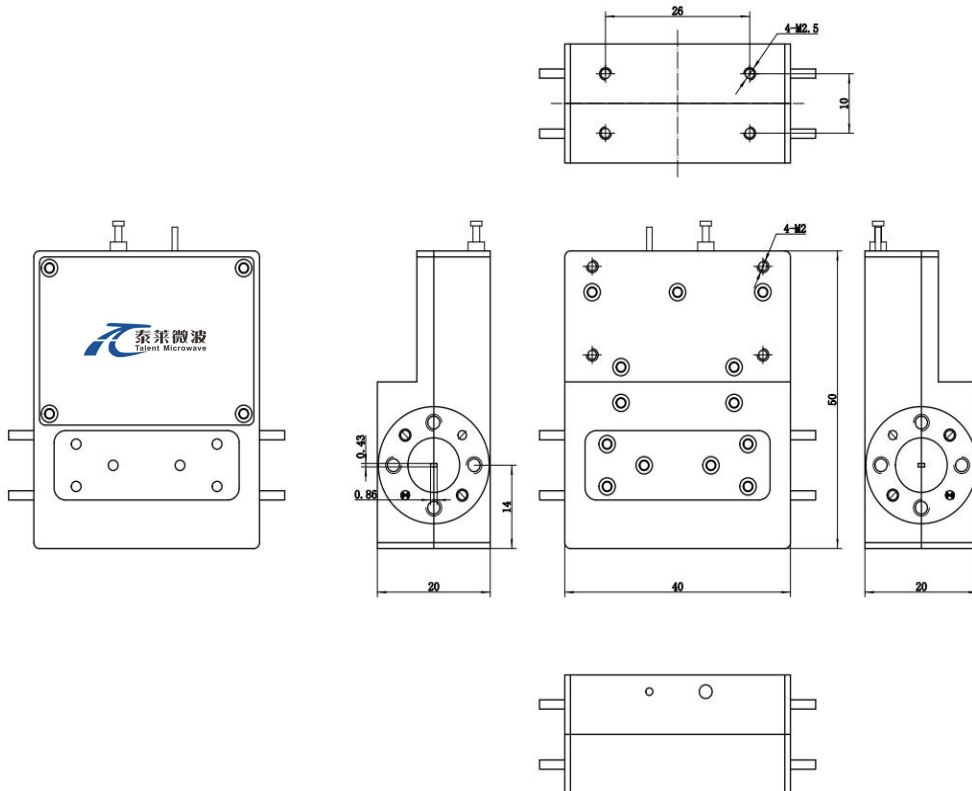
Parameter	Value	Units
Input /Output Connector	WR-3.4/UG-387/U	
DC Bias	Solder Pin	
Size	40*50*20	mm

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+16 V
RF Input Power	+15 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	-10		+65	°C
Non-operating Temperature	-45		+85	°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			

Ordering Information:

Base Number	Description	Revision
TMPA-210230-1117-03	Power Amplifier, 210-230GHz, Gain: 11dB Type, Psat: 17dBm Type, +15V DC, WR-3.4, Without heatsink	Rev.1.1
TMPA-210230-1117-03-HS	Power Amplifier, 210-230GHz, Gain: 11dB Type, Psat: 17dBm Type, +15V DC, WR-3.4, With heatsink	Rev.1.1