

Power Amplifier

WR-10/87.5-94GHz/23dB Gain/31dBm Psat

Model: TMPA-87.5094-2331-10

TMPA-87.5094-2331-10 is a power amplifier with a typical small signal gain of 23 dB and a nominal Psat of 31 dBm across the frequency range of 87.5 to 94 GHz. The DC power requirement for the amplifier is +18.5 VDC/1750 mA. The input and output port configuration offers an inline structure with WR-10 waveguides and UG-387/U-M anticocking flanges.

Features:

- Frequency range: 87.5-94GHz
- Gain: 23dB Typ
- Output Power Psat: 31dBm Typ
- Good Power and Gain Flatness

Applications:

- Passive Imaging
- Communication Systems
- Radar Systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	87.5		94	GHz
Small Signal Gain	20	23		dB
Output Psat	30	31		dBm
Input VSWR		2		:1
Output VSWR		2.5		:1
DC Voltage		18.5		V DC
DC Supply Current		1750		mA

Mechanical Specifications:

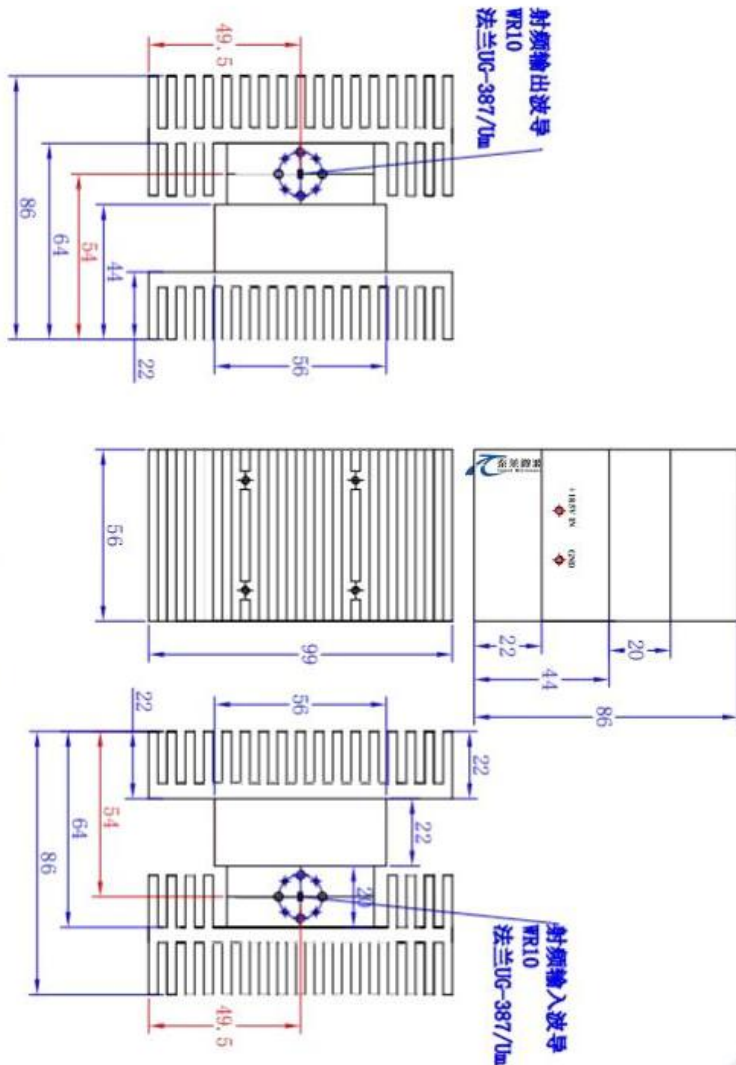
Parameter	Value	Units
Input /Output Connector	WR-10/UG-387/U	
DC Bias	Solder Pin	
Size	56*99*86(With Heatsink)	mm

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	TBD
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



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-87.5094-2331-10	Power Amplifier, 87.5-94GHz, Gain: 23dB Type, Psat: 31dBm Type, +18.5V DC, WR-10, With heasink	Rev.1.0