

## Power Amplifier

WR-12/71-86GHz/15dB Gain/23dBm Psat

Model: TMPA-071086-1523-12

TMPA-071086-1523-12 is a power amplifier with a typical small signal gain of 15 dB and a nominal Psat of 23 dBm across the frequency range of 71 to 86 GHz. The DC power requirement for the amplifier is +5 VDC/1.5 A. The input and output port configuration offers an inline structure with WR-12 waveguides and UG-387/U-M antcocking flanges.

### Features:

- Frequency range: 71-86GHz
- Gain: 15dB Typ
- Output Power Psat: 23dBm Typ
- Good Power and Gain Flatness

### Applications:

- Passive Imaging
- Communication Systems
- Radar Systems

### Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	71		86	GHz
Small Signal Gain		15		dB
Output Psat	19	23	26	dBm
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage		5		V DC
DC Supply Current		1.5		A

### Mechanical Specifications:

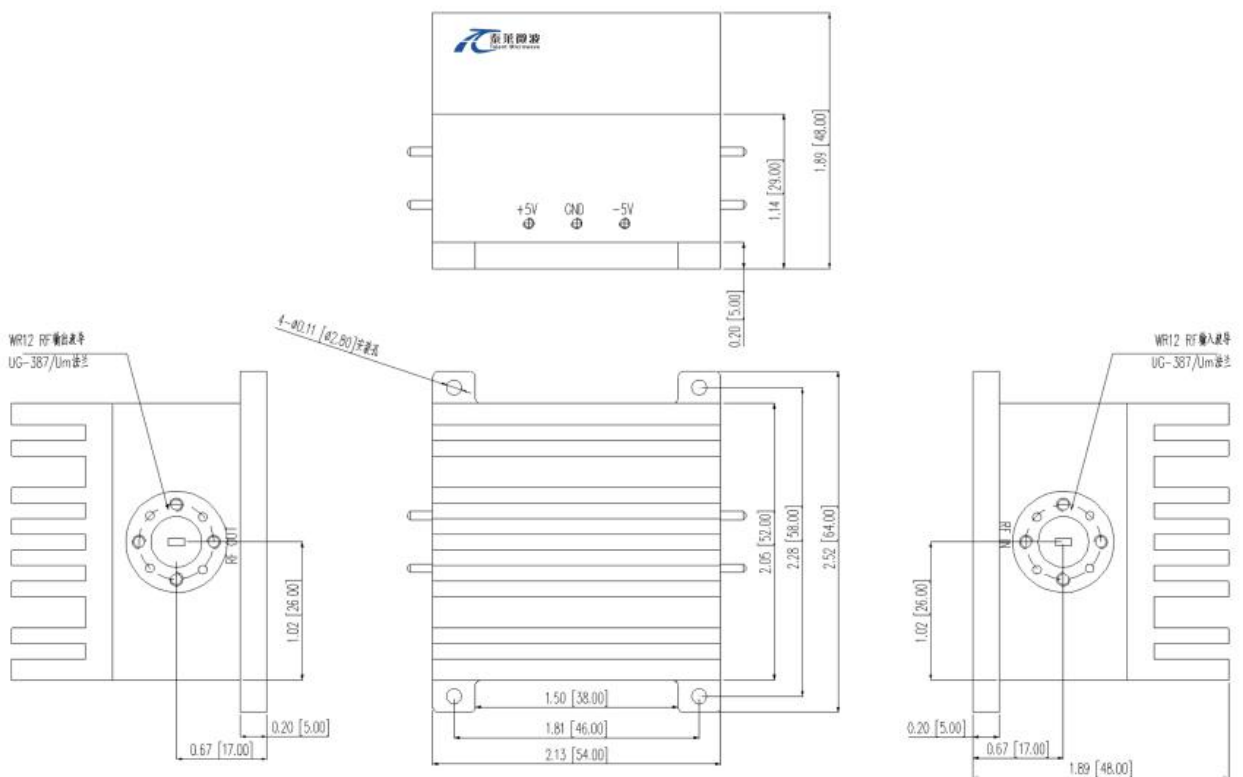
Parameter	Value	Units
Input /Output Connector	WR-12/UG-387/U	
DC Bias	Solder Pin	
Size	54*64*48	mm

### Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	TBD
RF Input Power	TBD
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-071086-1523-12	Power Amplifier, 71-86GHz, Gain: 15dB Type, Psat: 23dBm Type, +5V DC, WR-12, With heasink	Rev.1.0