Suzhou Talent Microwave,Inc
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Power Amplifier

WR-12/71-86GHz/23dB Gain/16dBm Psat

Model: TMPA-071086-2316-12

TMPA-071086-2316-12 is a power amplifier with a typical small signal gain of 23 dB and a nominal Psat of 16 dBm across the frequency range of 71 to 86 GHz. The DC power requirement for the amplifier is +5 VDC/250 mA. The input and output port configuration offers an inline structure with WR-12 waveguides and UG-387/U-M anticocking flanges.

Features:

- Frequency range: 71-86GHz
- Gain: 23dB Typ
- Output Power Psat: 16dBm 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		23		dB
Output Psat		16		dBm
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage	-4	5		V DC
DC Supply Current	20	250		mA

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	WR-12/UG-387/U	
DC Bias	Solder Pin	
Size	50*30*29	mm

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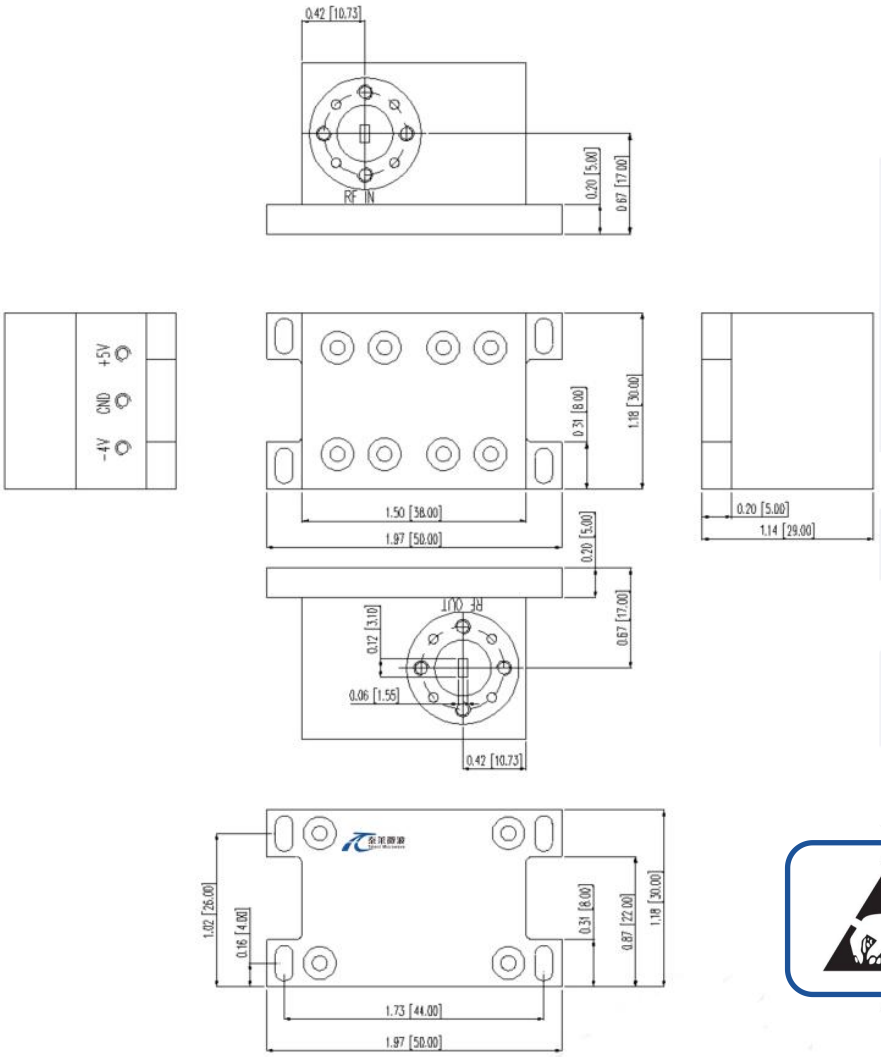
Absolute Maximum Ratings:

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.

***Heat Sink Required During Operation

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Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-10		+65	℃
Non-operating Temperature	-45		+85	℃
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-071086-2316-12	Power Amplifier, 71-86GHz, Gain: 23dB Type, Psat: 16dBm Type, +5V DC,WR-12, Without heasink	Rev.1.0
TMPA-071086-2316-12-HS	Power Amplifier, 71-86GHz, Gain: 23dB Type, Psat: 16dBm Type, +5V DC,WR-12, With heatsink	Rev.1.0