

## Power Amplifier

WR-2.8/300-317GHz /12dB Gain/12dBm Psat

Model: TMPA-300317-1212-2.8

TMPA-300317-1212-2.8 is a power amplifier with a typical small signal gain of 12 dB and a nominal Psat of 12 dBm across the frequency range of 300 to 317 GHz. The DC power requirement for the amplifier is +12 VDC. The input and output port configuration offers an inline structure with WR-2.8 waveguides and UG-387/U-M antcocking flanges.

### Features:

- Ultra Wide Band: 300-317GHz
- Gain: 12dB Typ
- Output Power Psat: 12dBm Typ
- Good Power and Gain Flatness

### Applications:

- Passive Imaging
- Communication Systems
- Radar Systems

### Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	300		317	GHz
Small Signal Gain		12		dB
Output Psat		12		dBm
Input VSWR		2		:1
Output VSWR		2.6		:1
DC Voltage		12		V DC

### Mechanical Specifications:

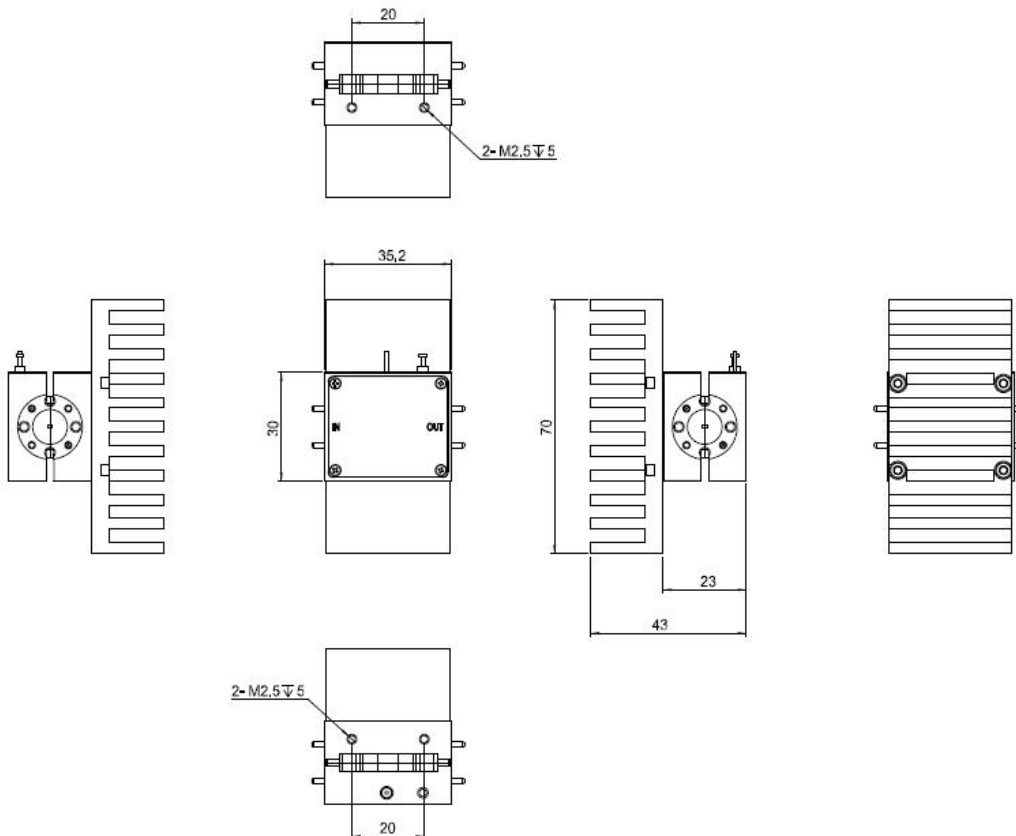
Parameter	Value	Units
Input /Output Connector	WR-2.8/UG-387/U	
DC Bias	Solder Pin	
Size	35.2*30*23 (Without Heatsink) 35.2*70*43 (With Heatsink)	mm

### Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 V
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-300317-1212-2.8	Power Amplifier, 300-317 GHz, Gain:12dB Type, P <sub>sat</sub> :12dBm Type, +12V DC,WR-2.8	Rev.1.1