

## Power Amplifier

WR-19/40-60GHz/17dB Gain/30dBm Psat

Model: TMPA-040060-1730-19

TMPA-040060-1730-19 is a power amplifier with a typical small signal gain of 17 dB and a minimum Psat of 30 dBm across the frequency range of 40 to 60 GHz. The DC power requirement for the amplifier is +19 VDC/0.8 A. The input and output port configuration offers an inline structure with WR-19 waveguides and UG-383/U-M anticocking flanges.

### Features:

- Frequency range: 40-60GHz
- Gain: 17dB Typ
- Output Power Psat: 30dBm Min
- Good Power and Gain Flatness

### Applications:

- Passive Imaging
- Communication Systems
- Radar Systems

### Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	40		60	GHz
Small Signal Gain		17		dB
Output P1dB		27		dBm
Output Psat	30			dBm
Input VSWR		1.7		:1
Output VSWR		1.9		:1
DC Voltage		19		V DC
DC Supply Current		0.8		A

### Mechanical Specifications:

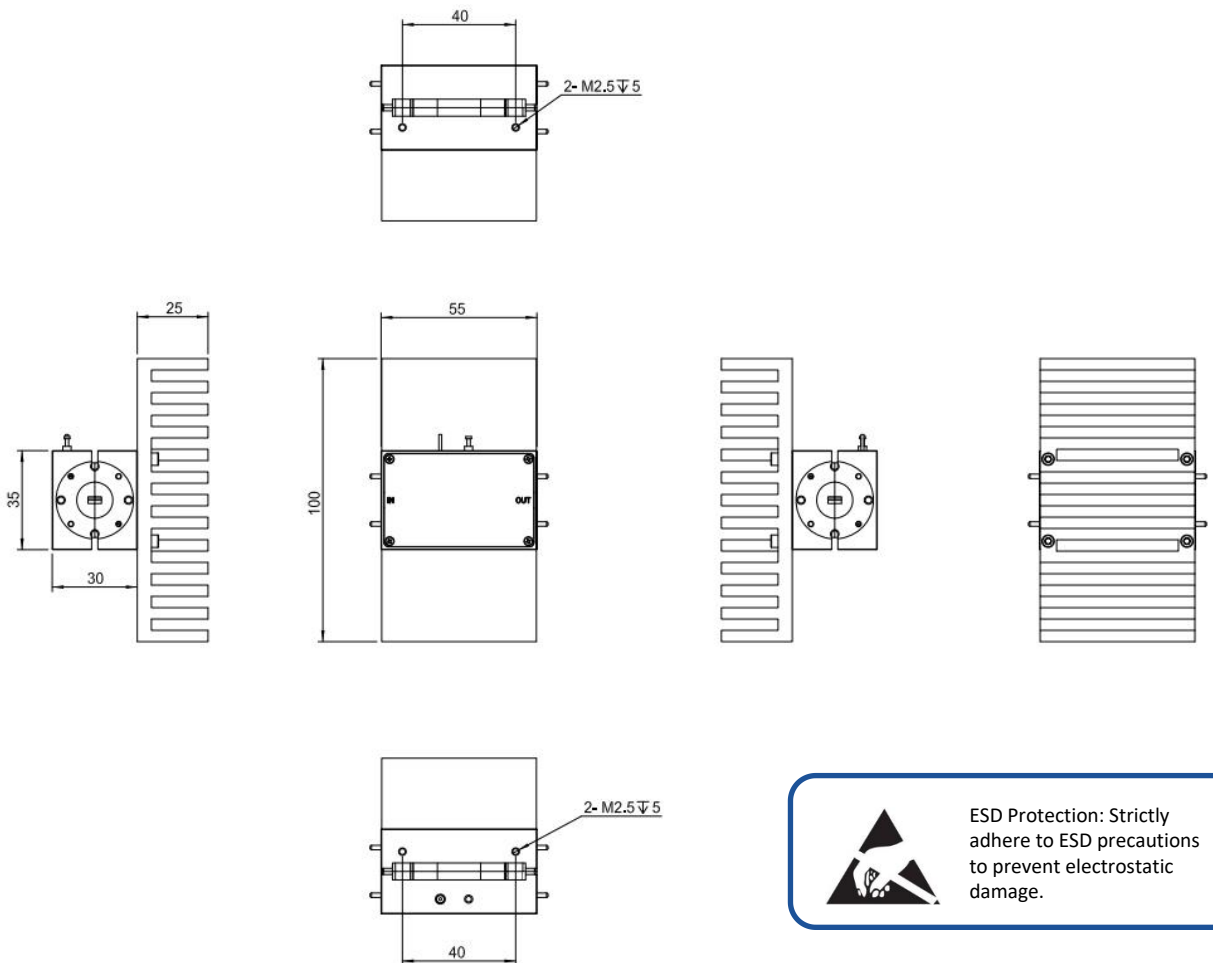
Parameter	Value	Units
Input /Output Connector	WR-19/UG-383/U	
DC Bias	Solder Pin	
Size	55*35*30(Without heatsink) 55*100*55(With heatsink)	mm

### Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+20 V
RF Input Power	+32 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

### Outline Drawing:

Unit:mm



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-040060-1730-19	Power Amplifier, 40-60GHz, Gain: 17dB Type, P <sub>sat</sub> : 30dBm Min, +19V DC,WR-19	Rev.1.0