

Power Amplifier

WR-6.5/150-170GHz/30dB Gain/25dBm Psat

Model: TMPA-150170-3025-06

TMPA-150170-3025-06 is a power amplifier with a typical small signal gain of 30 dB and a nominal Psat of 25 dBm across the frequency range of 150 to 170 GHz. The DC power requirement for the amplifier is +12 VDC/3.2A. The input and output port configuration offers an inline structure with WR-6.5 waveguides and UG-387/U-M antcocking flanges.

Features:

- Frequency range: 150-170GHz
- Gain: 30dB Typ
- Output Power Psat: 25dBm Typ
- Good Power and Gain Flatness

Applications:

- Passive Imaging
- Communication Systems
- Radar Systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	150		170	GHz
Small Signal Gain		30		dB
Output Psat	25			dBm
Input VSWR		2.5		:1
Output VSWR		2		:1
DC Voltage		12		V DC
DC Supply Current		3.2		mA

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	WR-6.5/UG-387/U	
DC Bias	Solder Pin	
Size	TBD	mm

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	+20 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-150170-3025-06	Power Amplifier, 150-170GHz, Gain: 30dB Type, Psat: 25dBm Min, +12V DC,WR-6.5, Without heatsink	Rev.1.1
TMPA-150170-3025-06-HS	Power Amplifier, 150-170GHz, Gain: 30dB Type, Psat: 25dBm Min, +12V DC,WR-6.5, With heatsink	Rev.1.1