

Power Amplifier

WR-15/50-75GHz/35dB Gain/35dBm Psat**Model: TMPA-050075-3535-15**

TMPA-050075-3535-15 is a power amplifier with a minimum small signal gain of 35 dB and a minimum Psat of 35 dBm across the frequency range of 50 to 75 GHz. The DC power requirement for the amplifier is +18VDC/5 A. The input and output port configuration offers an inline structure with WR-15 waveguides and UG-385/U-M antiracking flanges.

Features:

- Frequency: 50-75GHz
- Gain: 35dB Min
- Output Power Psat: 35dBm Min
- Good Power and Gain Flatness

Applications:

- Passive Imaging
- Communication Systems
- Radar Systems

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	50-75			GHz
Small Signal Gain	35			dB
Output Psat	35			dBm
Spurious@Pout=35dBm			-50	dBc
DC Voltage		18		V DC
DC Supply Current		5		A

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	WR-15/UG-385/U	
DC Supply Connector	J30J-9ZKP	Pin1~5:+18V Pin6~9:GND
Size	155*90*28	mm
Weight	≤300	g

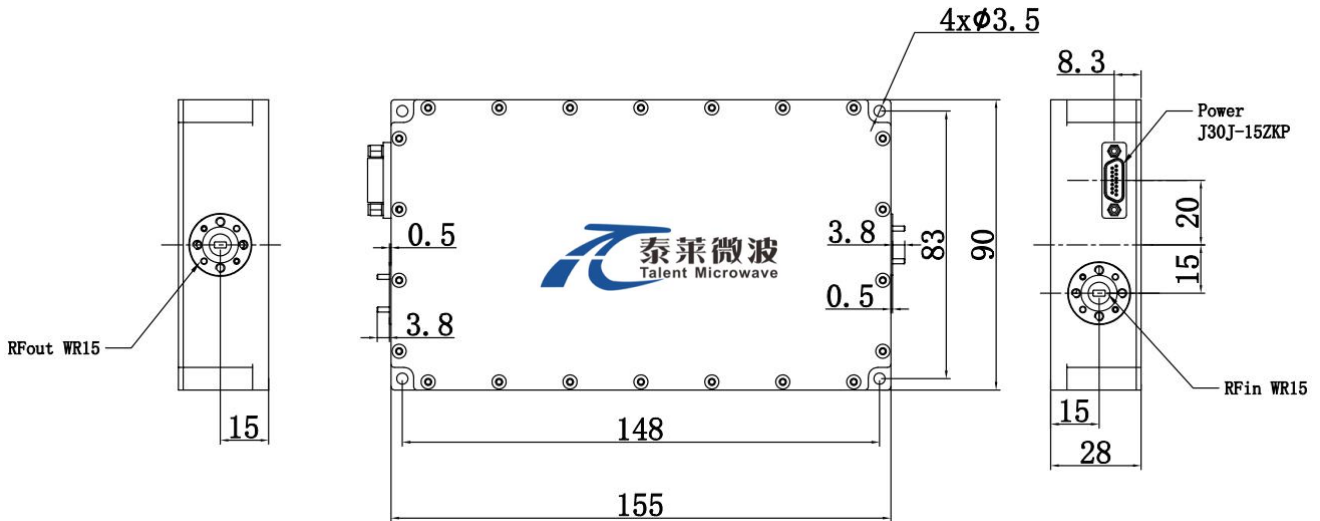
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	TBD
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm

Regulatory Compliance:



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-40		+60	°C
Non-operating Temperature	-50		+70	°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
TPMA-050075-3535-15	Power Amplifier, 50-75 GHz, Gain:35dB Min, Psat:35 dBm Min, +18V DC,WR-15,Without Heatsink	Rev.1.1
TPMA-050075-3535-15-HS	Power Amplifier, 50-75 GHz, Gain:35dB Min, Psat:35 dBm Min, +18V DC,WR-15,With Heatsink	Rev.1.1