Suzhou Talent Microwave,Inc
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W-Band Power Amplifier

WR-10/75-110GHz/25dB Gain/30dBm Psat Model: TMPA-075110-2530-10

TMPA-075110-2530-10 is a W-Band power amplifier with power gain of 25 dB and Psat of 30 dBm across the frequency range of 75 to 110 GHz. The DC power requirement for the amplifier is +18 VDC/2 A. The input and output port configuration offers an inline structure with WR-10 waveguides and UG-387/U-M anticocking flanges.

Features:

- Frequency range: 75-110 GHz
- Gain: 25dB Min
- 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	75		110	GHz
Power Gain	25			dB
Output Psat	30			dBm
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage		18		V DC
DC Supply Current		3	3.9	A

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	WR-10/UG-387/U	
DC Bias	J30J-9ZKP	Pin1~5:+18V Pin6~9:GND
Size	125*80*39	mm

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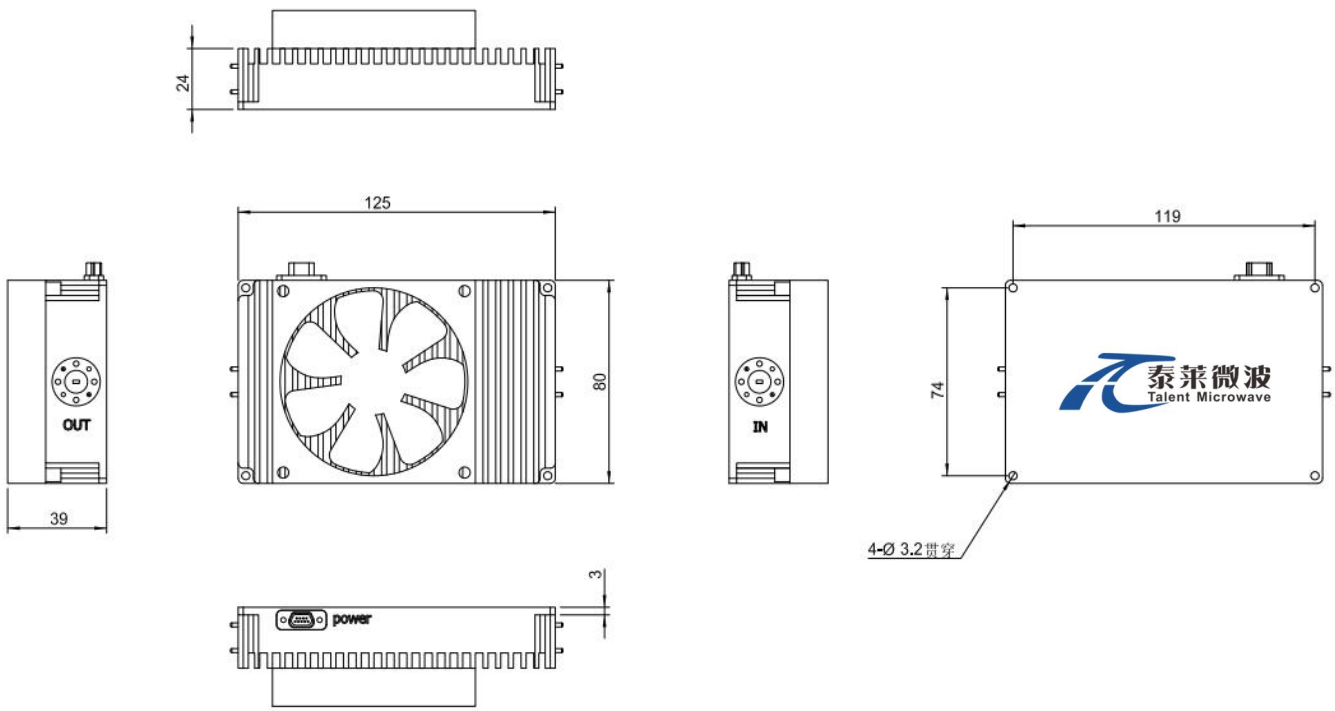
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+18.5 V
RF Input Power	+15 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.

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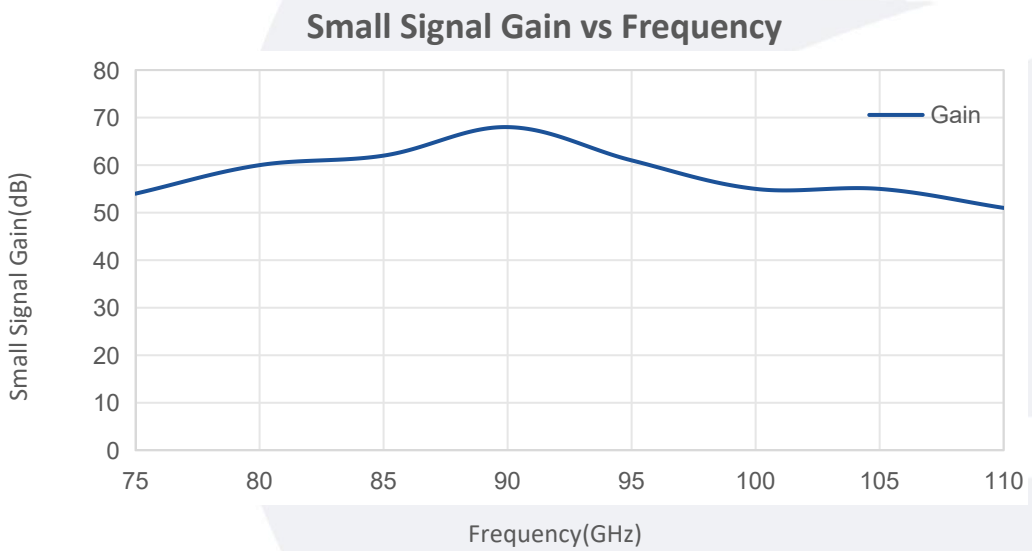
Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	10		+40	℃
Non-operating Temperature	0		+50	℃
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-075110-2530-10	Power Amplifier, 75-110 GHz, Gain:25 dB Min, Psat:30 dBm Min, +18V DC,WR-10	Rev.1.1

Typical Performance Data:



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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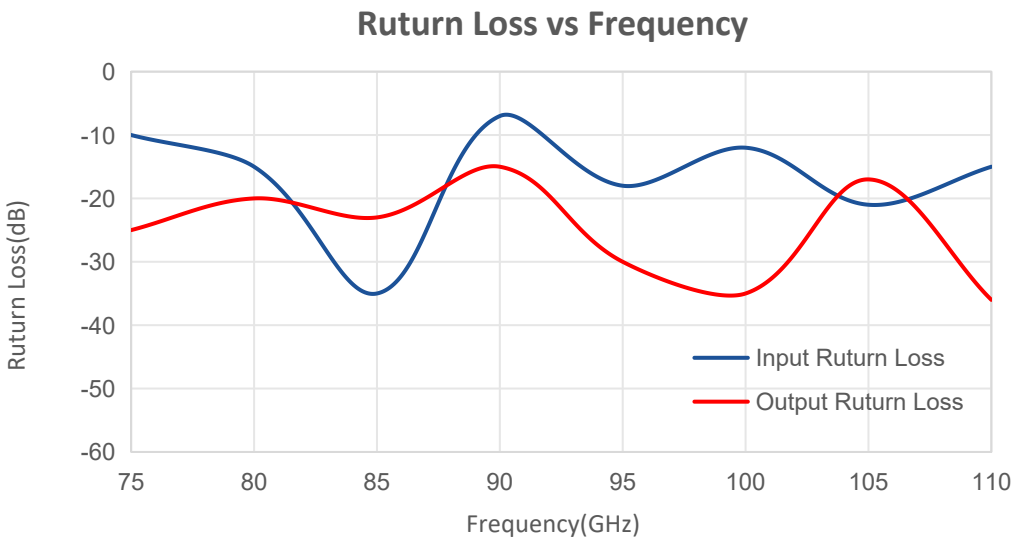
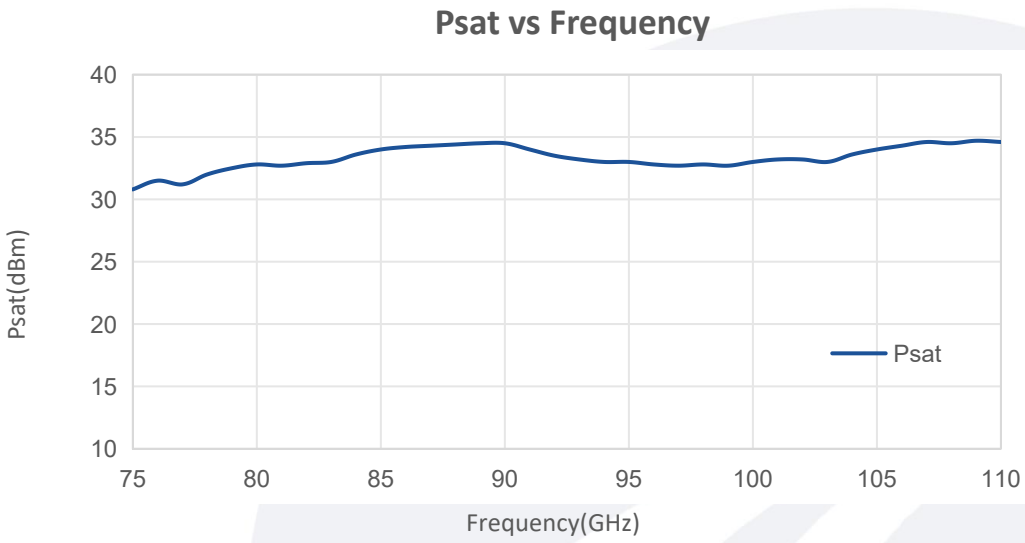
典型曲线 Typical Performance Data:





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