

## Narrowband High Power 100W Amplifier Module

### Typical Applications

- Aerospace and Military Applications
- Narrowband Communication Systems
- Point-to-Point Radios
- Point-to-Multi-Point Radios

### Main Features

- High power;
- High Efficiency;
- Great Linearity;
- Small Size & Light Weight;
- Low Distortion

The model TWAMP-2400-2500-50 is a high power amplifier operating between 2400 MHz and 2500 MHz and offering a wide dynamic Range with 100 Watts Min P1dB. The employment of advanced high power devices in manufacturing ensures this module exceptional power performance, long term reliability and high efficiency. It is ideal for high power RF linear applications.

### ELECTRICAL SPECIFICATIONS @ +28.0VDC, 25°C, 50Ω

Parameter	Symbol	Min	Typ	Max	Units
Operating Frequency	BW	2400		2500	MHz
Output Power@1dB Gain Compression	P1dB	100			Watt
Power Gain	Gp		52		dB
Power Gain Flatness	Δ G		±2		dB
Input Return Loss	S <sub>11</sub>			-10	dB
Harmonics @100W	H		-12		dBc
Spurious Signals	Spur		-60		dBc
Switch On/Off@10-90% Time	TON/OFF		8	12	μS
In/Output Impedance	Impedance		50		Ω
Operating Voltage	VDC	24	28	32	Volt
DC Current @100W	IDD		13		Amp

### MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Notes
Dimensions	170x130x30 [6.69x5.12x1.18]	mm [inch]	Maximum
Weight	2.2	kg	Maximum
RF Connectors Input	SMA, Female		
RF Connectors Output	Type-N, Female		
DC Interface Connector	Hybrid,D-sub 7 Pin, Male		
Cooling	External Heatsink Required (Not Supplied)		

Products and Product Information are Subject to Change Without Notice

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## Narrowband High Power 100W Amplifier Module

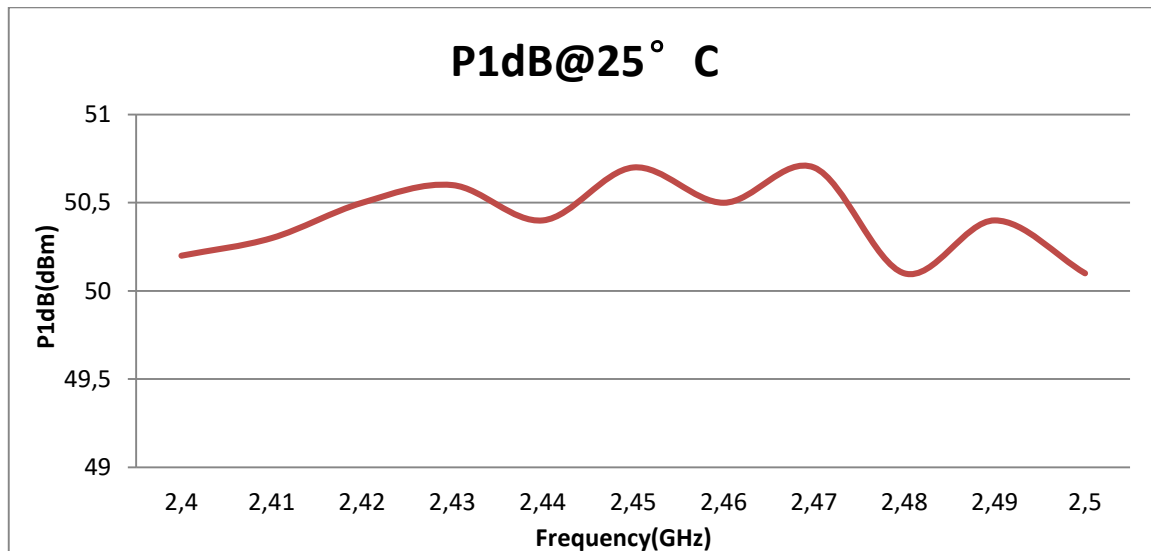
### ENVIRONMENTAL CHARACTERISTICS (Design to Meet)

Parameter	Minimum	Typical	Maximum	Units	Notes
Operating Temperature	-20		60	°C	
Non-operating Temperature	-40		65	°C	Storage
Relative Humidity (non-condensing)			95	%	

### ABSOLUTE MAXIMUM RATING

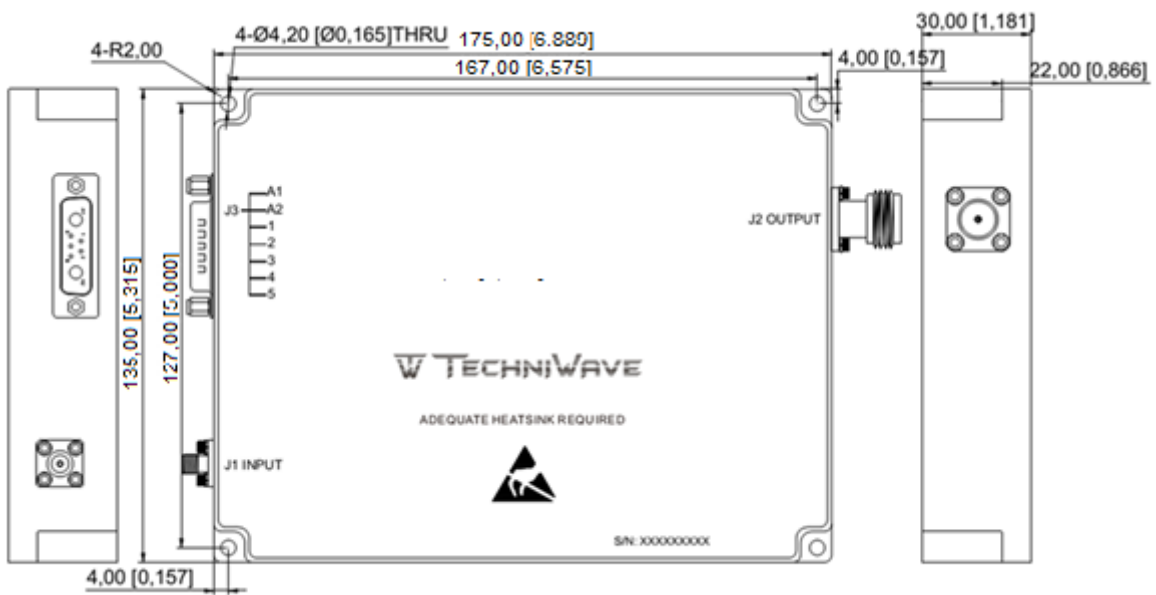
Input RF drive level without damage	+10 dBm (Max)
Load VSWR @ POUT =50W	∞ @ all load phase & amplitude for duration of 1 minutes; 3:1 @ all load phase & amplitude continuous
Over Temperature	85°C @ heatsink [restored @ 60°C]

### TYPICAL PERFORMANCE PLOTS



**Narrowband High Power 100W Amplifier Module**

OUTLINE DRAWING (All dimensions in mm [inch])



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