

## Power Amplifier Module

### Product Features

- Frequency: 110-170GHz
- Small signal gain: 20dB
- Psat: 16dBm
- DC power supply



### Electrical Specs:

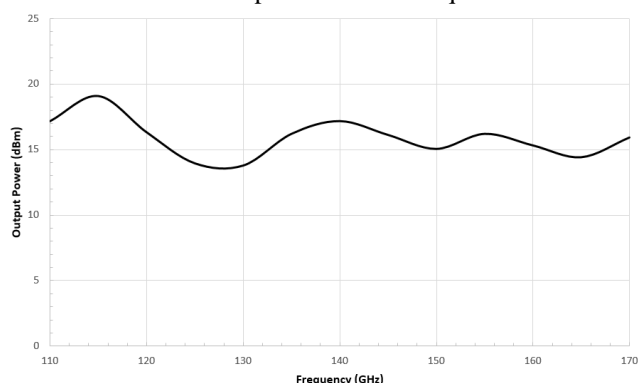
Parameter	Minimum	Typical	Maximum
Frequency Range	110GHz		170GHz
Small Signal Gain		20dB	
Saturated Output Power		16dBm	
Input Power		1dBm	16dBm
Input VSWR		2	
Output VSWR		2	
Drain Positive Voltage		+10V	+15 V
Saturation current		200 mA	
Storage Temperature	5 °C	+25 °C	35 °C
Operating Temperature	-55 °C		+85 °C

### Mechanical Specs:

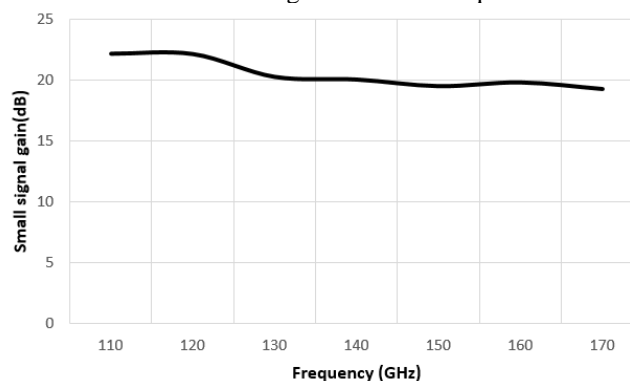
Item	Specification
Input	WR06 waveguide, UG-387/UM
Output	WR06 waveguide, UG-387/UM
Bias	Solder Pin
Size (W×L×H)	40mm×30mm×22mm

**Measured Performance:** ( $V_d=10V$ ,  $I_d=200mA$ ,  $T_A=+25^{\circ}C$ )

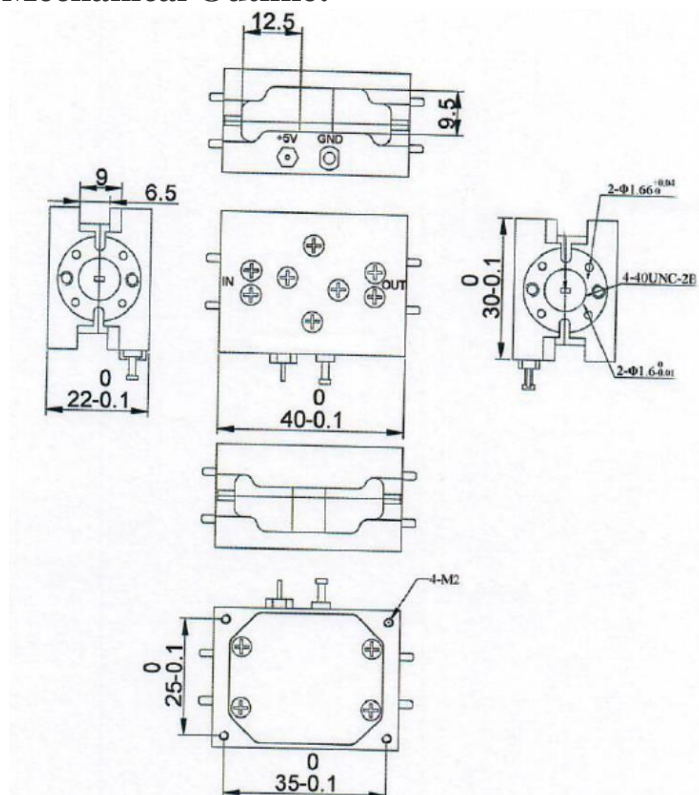
Saturated Output Power vs. Freq. @Pin=1dBm



Small Signal Gain vs. Freq.



**Mechanical Outline:**



Interface definition

Symbol	Function
IN	RF input
OUT	RF output
Vd	Power supply+10V
GND	Ground

Notes:

- 1) Electrostatic protection: Please strictly abide by the ESD protection requirements to avoid electrostatic damage;
- 2) When in use, the module should be grounded first, and then powered on;
- 3) It is necessary to ensure good heat dissipation during use;
- 4) The dimensions of the module can be customized according to user requirements;
- 5) Please contact terahub if you have any questions.

Notes:

1. Datasheet may be changed according to update of MMIC, Raw materials, process, and so on.
2. This data is the typical performance for the reference.