Power Amplifier Module

Product Features

- Frequency: 90-98GHz
- Small signal gain: 20dB
- Psat: 34dBm@9%PAE
- DC power supply

Electrical Specs:

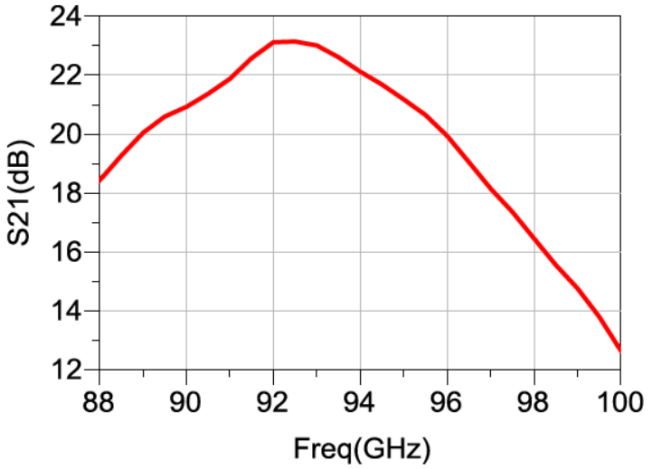
Parameter	Minimum	Typical	Maximum
Frequency Range	90GHz		98GHz
Small Signal Gain		20dB	
Saturated Output Power		34dBm	
Input Power			28dBm
PAE		9%	
Input VSWR		2	
Output VSWR		2	
Drain Positive Voltage		+18V	+20 V
Negative Gate Voltage		-5V	
Saturation current		1550 mA	
Specification Temperature	5℃	+25 ℃	35℃
Operating Temperature	-55 ℃		+85℃

Mechanical Specs:

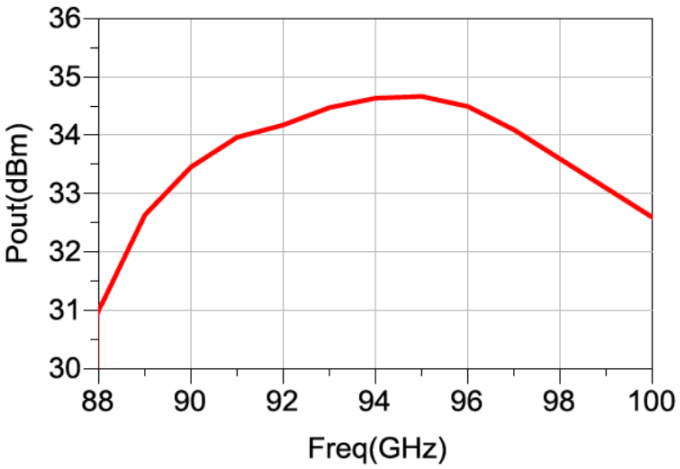
Item	Specification
Input	WR10 waveguide，UG-387/UM
Output	WR10 waveguide，UG-387/UM
Bias	Solder Pin
Size（W×L×H）	40mm×40mm×25mm

Measured Performance: (Vd=18V，Id=640mA，TA=+25℃)

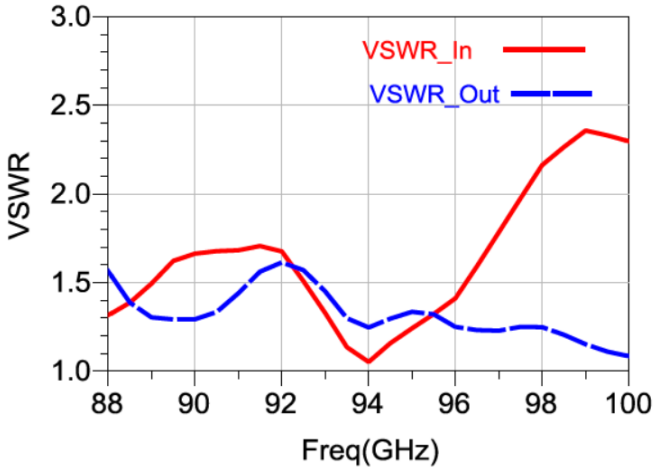
Small Signal Gain vs. Freq.



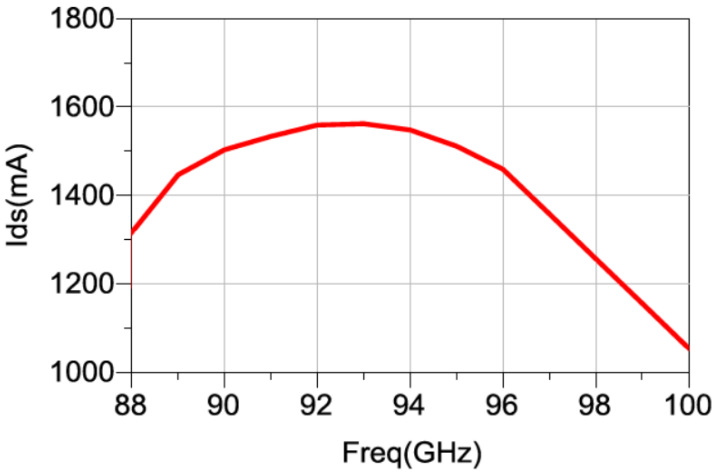
Saturated Output Power vs. Freq. @Pin=22dBm



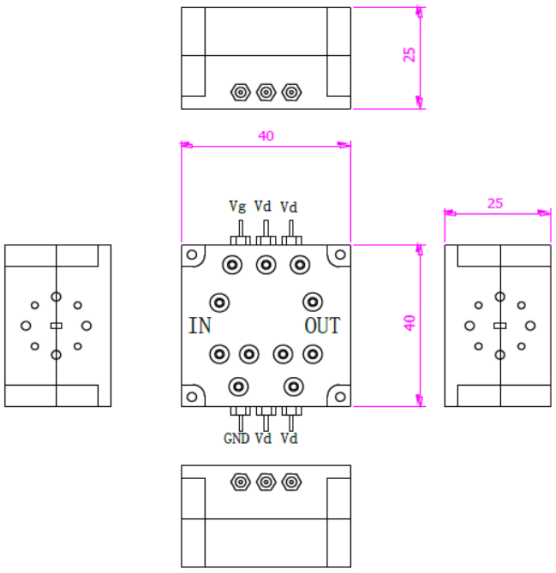
Input / Output VSWR vs. Freq.



Saturation current vs. Freq. @Pin=22dBm



Mechanical Outline:



Interface definition

Symbol	Function
IN	RF input
OUT	RF output
Vd	Power supply+18V
Vg	Power supply-1.7V
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) The power-on sequence is first Vg and then Vd, and the power-off sequence is Vd first and then Vg;
4) It is necessary to ensure good heat dissipation during use;
5) The dimensions of the module can be customized according to user requirements;
6) 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.