

### Performance

- Technology: 0.5um Power GaN HEMT
- Frequency: 1.3~1.5GHz
- Typical Pout : 58dBm
- Typical Gain: 15dB
- Typical PAE: 68%
- Bias: 50V/-3.1V
- Package: Metal Ceramic

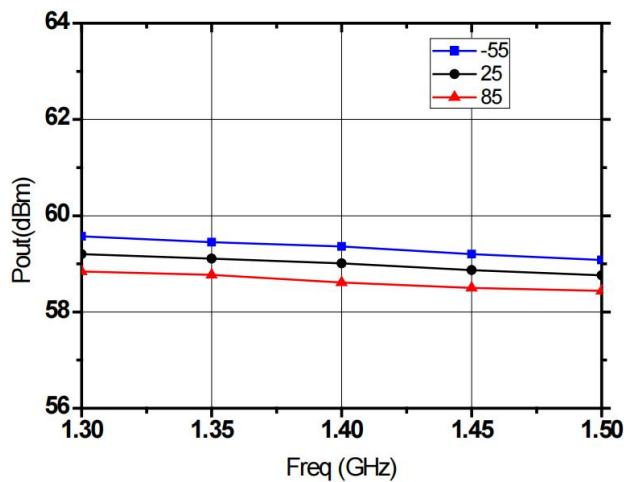


### Electrical Specifications (TA=25°C, Vd=50V, Vg= -3.1V, F: 1.3~1.5GHz, PL=300us, D.C=10%)

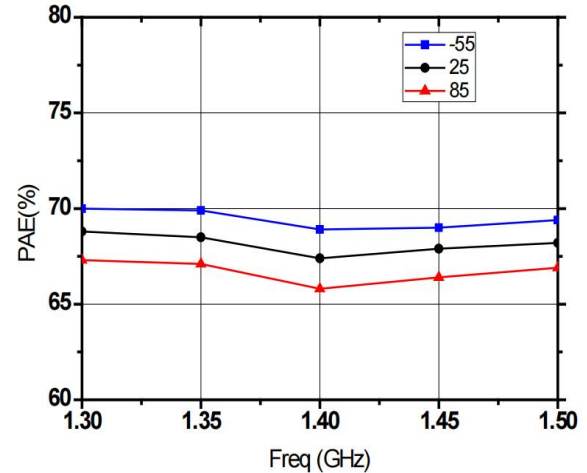
| Symbol | Parameter          | Min | Typical | Max  | Unit |
|--------|--------------------|-----|---------|------|------|
| Pout   | Output Power       | -   | 650     | -    | W    |
| Gp     | Power Gain         | -   | 15      | -    | dB   |
| Eff    | Efficiency         | -   | 68      | -    | %    |
| Rth    | Thermal Resistance | -   | -       | 0.18 | °C/W |

### Test Curves

Pout&Freq. @ Different Temp.



PAE&Freq. @ Different Temp.

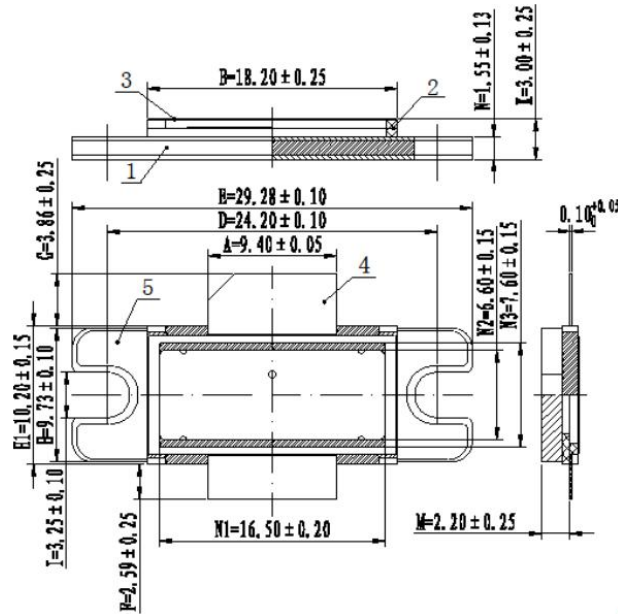


### Absolute Max Ratings (TA=25°C)

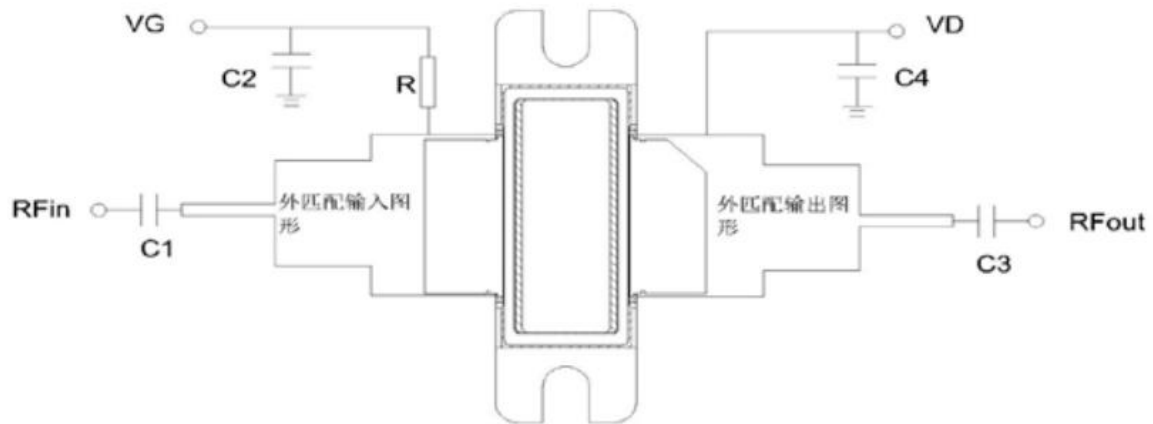
| Symbol | Parameter           | Value     | Remark |
|--------|---------------------|-----------|--------|
| Vd     | Drain Voltage       | 60V       |        |
| Vg     | Grid Voltage        | -10V      |        |
| Tch    | Channel Temperature | 225°C     | 【1】    |
| Tstg   | Storage Temperature | -55~150°C |        |

【1】 Exceeding any one or combination of these limits may cause permanent damage.

## Outline Drawing



## Application Circuit



### Note:

- (1) The typical packaging form is JY02F019 shell packaging;
- (2) The specific external matching circuit diagram is designed according to the specific power of different power tubes, operating frequency band and other factors;
- (3) Connect the circuit according to the drawing, pay attention to anti-static, the root of the pin should be in full contact with the circuit, and ensure good grounding and heat dissipation when using the power device;
- (4) In order to ensure the good performance of the power module, the capacity value of power filter and energy storage capacitor shall be reasonably selected according to the modulation mode during pulse operation. The size of  $R$  in the figure is generally recommended to be 2 ohms.