

## Performance

- Technology: 0.5um Power GaN HEMT
- Frequency: 0.35~0.45GHz
- Typical Pout: 61dBm
- Typical Gain: 19dB
- Typical PAE: 70%
- Bias: 50V/-3.3V@5.5A
- Package: Metal Ceramic

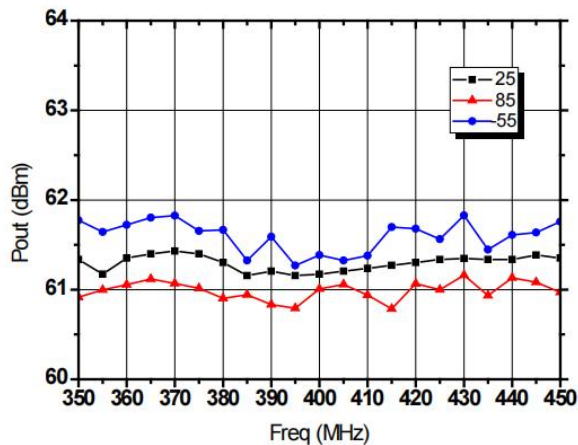


**Electrical Specifications** ( $T_A=25^{\circ}\text{C}$ ,  $V_d=50\text{V}$  (PL=300us, D.C=15%),  $V_g=-3.3\text{V}$ ,  $I_d \approx 5.5\text{A}$ ,  
F: 0.35~0.45GHz)

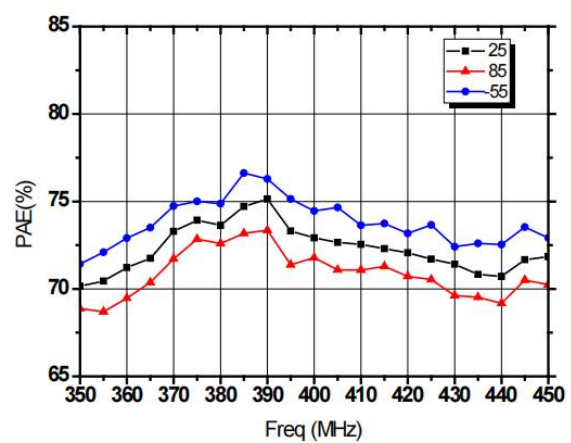
| Symbol              | Parameter              | Min  | Typical | Max  | Unit |
|---------------------|------------------------|------|---------|------|------|
| Pout                | Output Power           | -    | 61      | -    | dBm  |
| Gp                  | Power Gain             | -    | 19      | -    | dB   |
| $\eta_{\text{add}}$ | Power Added Efficiency | -    | 70      | -    | %    |
| $\Delta G_p$        | Gain Flatness          | -0.3 | -       | +0.3 | dB   |

## Test Curves

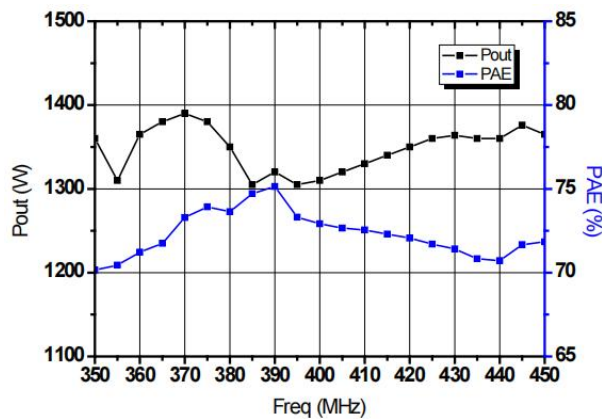
Pout&Freq. @ Different Temp.



PAE&Freq. @ Different Temp.



Pout, PAE&Freq.

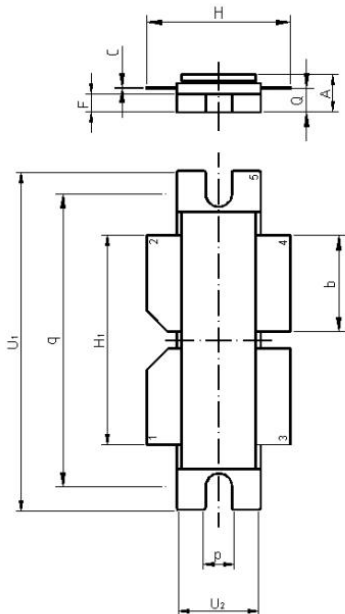


### Absolute Max Ratings (TA=25°C)

| Symbol | Parameter            | Value     | Remark               |
|--------|----------------------|-----------|----------------------|
| Vd     | Drain Voltage        | 55V       |                      |
| Vg     | Grid Voltage         | -5V       |                      |
| Tch    | Channel Temperature  | 225°C     | <b>【1】</b>           |
| Tm     | Mounting Temperature | 300°C     | 1 min, N2 Protection |
| Tstg   | Storage Temperature  | -65~150°C |                      |

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

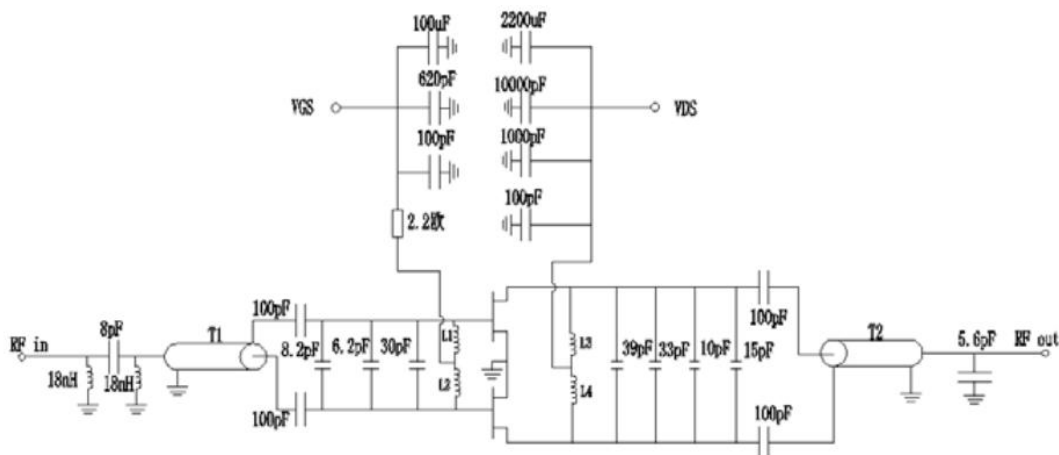
### Outline Drawing



### Dimension symbols

| Symbol | Value (unit: mm) |       |
|--------|------------------|-------|
|        | Min.             | Max.  |
| A      | -                | 4.70  |
| b      | 11.56            | 11.87 |
| C      | 0.05             | 0.15  |
| F      | 2.07             | 2.33  |
| H      | 17.17            | -     |
| H1     | 25.27            | 25.53 |
| P      | 3.04             | 3.30  |
| Q      | 2.77             | 3.02  |
| q      | 35.43            | 35.69 |
| U1     | 41.02            | 41.28 |
| U2     | 10.03            | 10.29 |

### Application Circuit



**Note:**

- (1) Connect the circuit according to the diagram, pay attention to anti-static, and ensure good grounding and heat dissipation when using power devices;
- (2) In order to ensure the good performance of the power module, the capacity value of the power filter and the energy storage capacitor shall be reasonably selected according to the modulation mode during pulse operation;
- (3) Power module power-up sequence VGS, VDS;
- (4) Power module power-off sequence VDS, VGS.