

## Performance

- Technology: 0.25um Power GaN HEMT
- Frequency: 0.03~1GHz
- Typical Pout :  $\geq 40\text{dBm(CW)}$
- Typical Gain:  $\geq 32\text{dB}$
- Typical PAE:  $\geq 50\%$
- Bias: 28V/-2.5~-1.8V@0.3A
- Package: Metal Ceramic

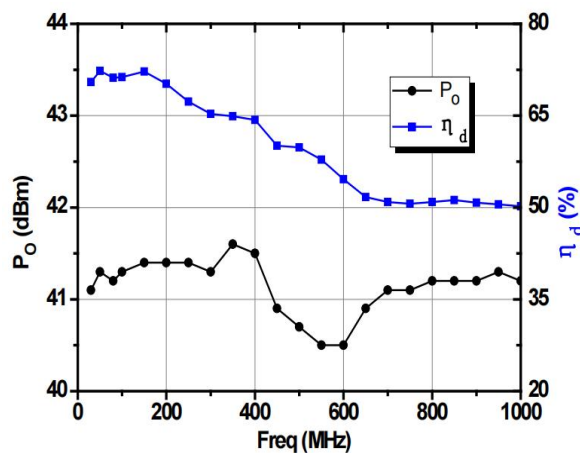


## Electrical Specifications ( $T_A=25^\circ\text{C}$ , $V_d=28\text{V}$ , $I_{dQ}=0.3\text{A}$ , $F: 0.03\sim 1\text{GHz}$ , $P_{in}=8\text{dBm}$ )

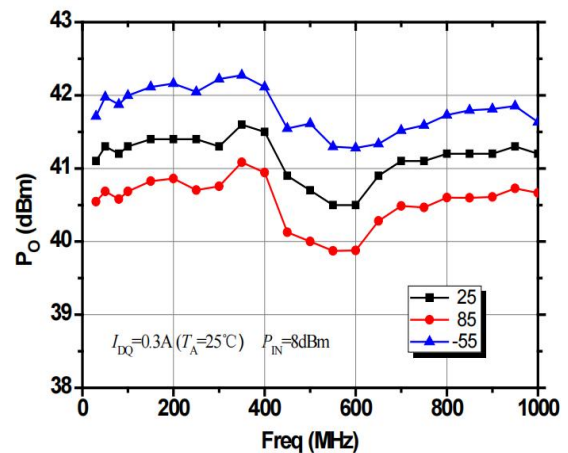
| Symbol       | Parameter              | Min  | Typical | Max  | Unit               |
|--------------|------------------------|------|---------|------|--------------------|
| Pout         | Output Power           | 40   | -       | -    | dBm                |
| Gp           | Power Gain             | 32   | -       | -    | dB                 |
| $\eta_{add}$ | Power Added Efficiency | 50   | -       | -    | %                  |
| $\Delta Gp$  | Gain Flatness          | -0.6 | -       | +0.6 | dB                 |
| Rth          | Thermal Resistance     | -    | 3       | -    | $^\circ\text{C/W}$ |

## Test Curves

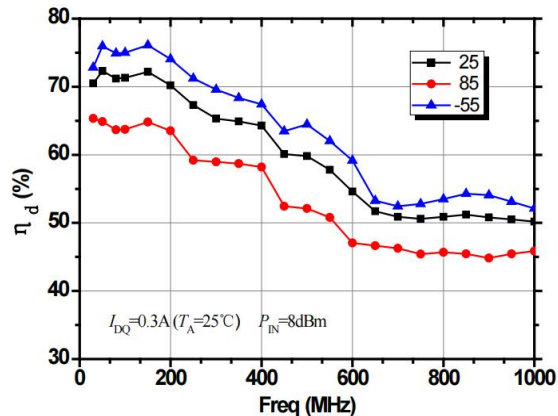
Pout,  $\eta_{add}$ &Freq.



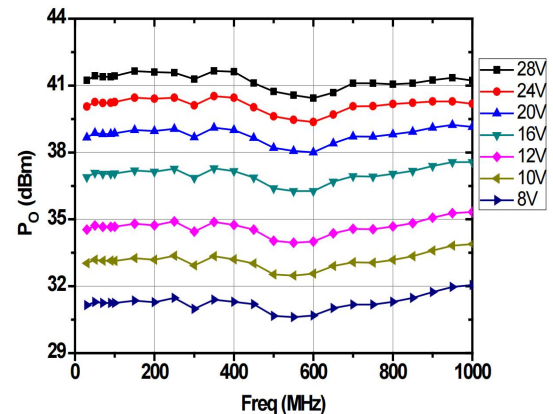
Pout&Freq. @ Different Temp.

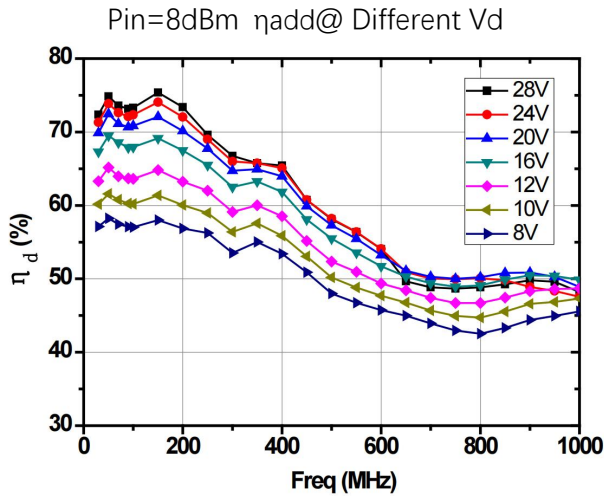


$\eta_{add}$ &Freq. @ Different Temp.



$P_{in}=8\text{dBm}$  Pout@ Different  $V_d$

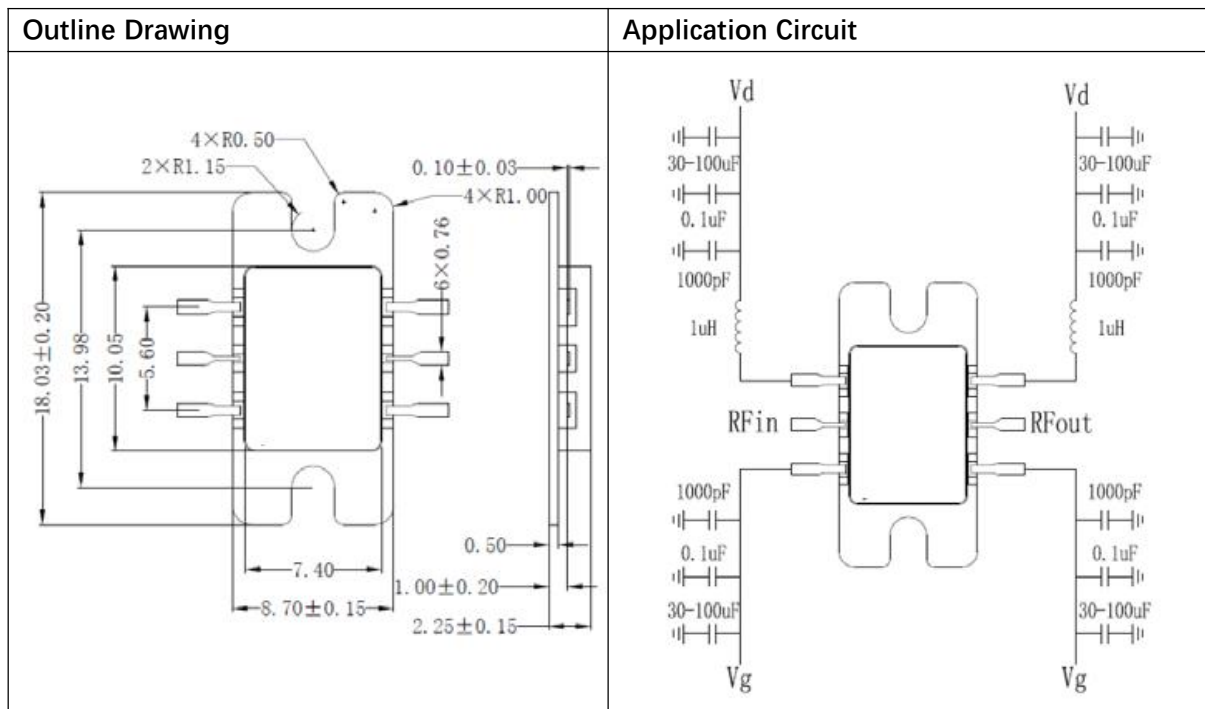




#### Absolute Max Ratings (TA=25°C)

| Symbol | Parameter            | Value     | Remark               |
|--------|----------------------|-----------|----------------------|
| Vd     | Drain Voltage        | 36V       |                      |
| Vg     | Grid Voltage         | -5V       |                      |
| Pd     | DC Dissipation       | 50W       | 25°C                 |
| Tch    | Channel Temperature  | 225°C     | <b>【1】</b>           |
| Tm     | Mounting Temperature | 300°C     | 1 min, N2 Protection |
| Tstg   | Storage Temperature  | -55~175°C |                      |

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



**Note:**

- (1) The input standing wave of this product is less than 2.9 (Pin=8dBm);
- (2) The RF input and output impedance values of this product are both 50 ohms;
- (3) Please strictly follow the order of adding negative electricity first and then positive electricity in the power-on sequence of this product. When de-energizing, first reduce the drain voltage and then reduce the gate voltage;
- (4) Pay attention to heat dissipation during the use of this product. The higher the shell temperature, the shorter the service life, and the operating temperature should not be higher than 85 degrees;
- (5) This product is an electrostatic sensitive device. It is necessary to pay attention to electrostatic protection during storage and use, and it needs to be well grounded when using it.