

Features

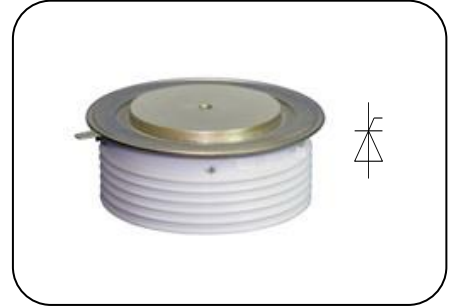
- Center amplifying gate
- Metal case with ceramic insulator
- Low on-state and switching losses

Typical Applications

- AC controllers
- DC and AC motor control
- Controlled rectifiers

品名: FH700T**

$I_{T(AV)}$ **700A**
 V_{DRM}, V_{RRM} **8000V**
 8500V



| SYMBOL | CHARACTERISTIC | TEST CONDITIONS | | $T_j(^{\circ}C)$ | VALUE | | | UNIT |
|------------------------|--|--|-------------------|------------------|-------|------|-------|-------------------|
| | | | | | Min | Type | Max | |
| $I_{T(AV)}$ | Mean on-state current | 180° half sine wave 50Hz Double side cooled, | $T_C=70^{\circ}C$ | 125 | | | 700 | A |
| I_{DRM} I_{RRM} | Repetitive peak current | at V_{DRM} $t_p=10ms$ at V_{RRM} $t_p=10ms$ | | 125 | | | 200 | mA |
| I_{TSM} | Surge on-state current | 10ms half sine wave $V_R=0.6V_{RRM}$ | | 125 | | | 9.8 | kA |
| I^2t | I^2t for fusing coordination | | | | | | 480 | $A^2s \cdot 10^3$ |
| V_{TO} | Threshold voltage | | | 125 | | | 1.04 | V |
| r_T | On-state slope resistance | | | | | | 1.50 | m Ω |
| V_{TM} | Peak on-state voltage | $I_{TM}=1000A, F=24kHz$ | | 25 | | | 2.65 | V |
| dv/dt | Critical rate of rise of off-state voltage | $V_{DM}=0.67V_{DRM}$ | | 125 | | | 2000 | V/ μs |
| di/dt | Critical rate of rise of on-state current | $V_{DM}=67\%V_{DRM}$ Gate pulse $t_r \leq 0.5\mu s$ $I_{GM}=2.0A$ | | 125 | | | 100 | A/ μs |
| Q_{rr} | Recovery charge | $I_{TM}=2000A, t_p=4000\mu s, di/dt=-5A/\mu s,$ $V_R=50V$ | | 125 | | 2500 | | μC |
| I_{GT} | Gate trigger current | | | | 40 | | 300 | mA |
| V_{GT} | Gate trigger voltage | $V_A=12V, I_A=1A$ | | 25 | 0.8 | | 3.0 | V |
| I_H | Holding current | | | | 25 | | 200 | mA |
| V_{GD} | Non-trigger gate voltage | $V_{DM}=0.67V_{DRM}$ | | 125 | 0.3 | | | V |
| $R_{th(j-c)}$ | Thermal resistance Junction to case | DC Double side cooled | | | | | 0.022 | $^{\circ}C/W$ |
| $R_{th(c-h)}$ | Thermal resistance case to heatsink | Clamping force 24.0kN | | | | | 0.004 | $^{\circ}C/W$ |
| F_m | Mounting force | | | | 19 | 24 | 26 | kN |
| T_{stg} | Stored temperature | | | | -40 | | 140 | $^{\circ}C$ |
| W_t | Weight | | | | | 560 | | g |
| Outline | P24 | | | | | | | |

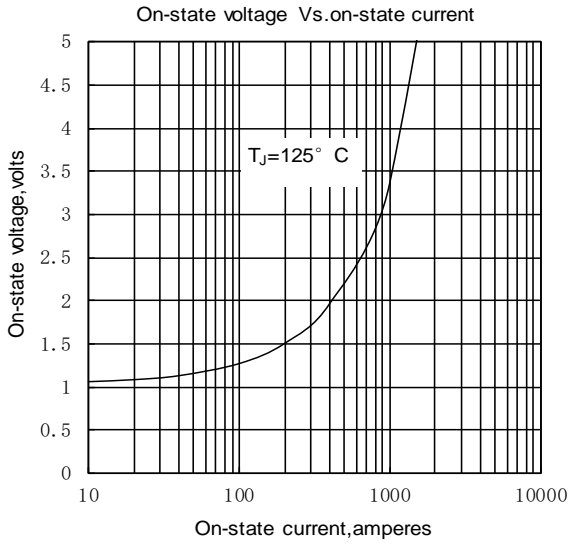


Fig.1

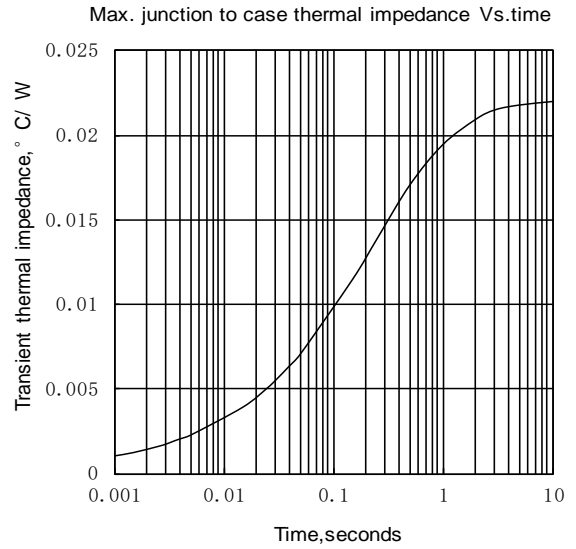


Fig.2

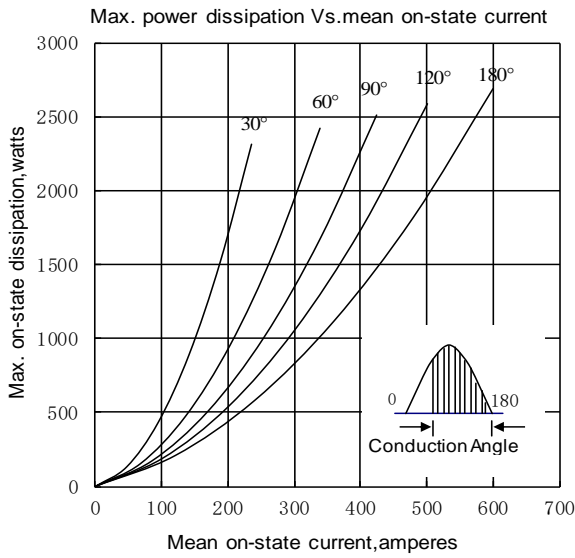


Fig.3

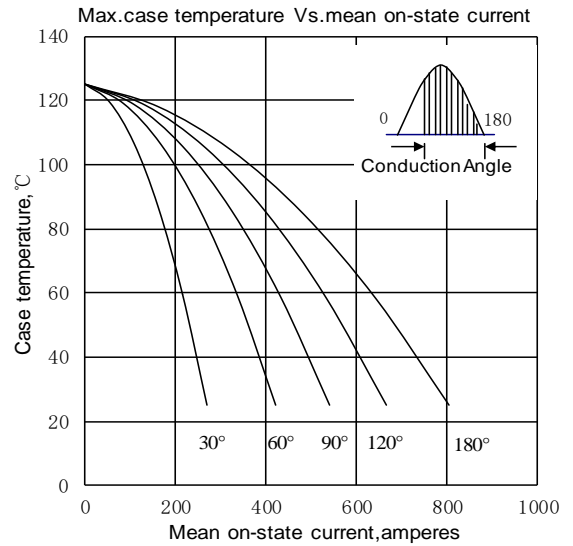


Fig.4

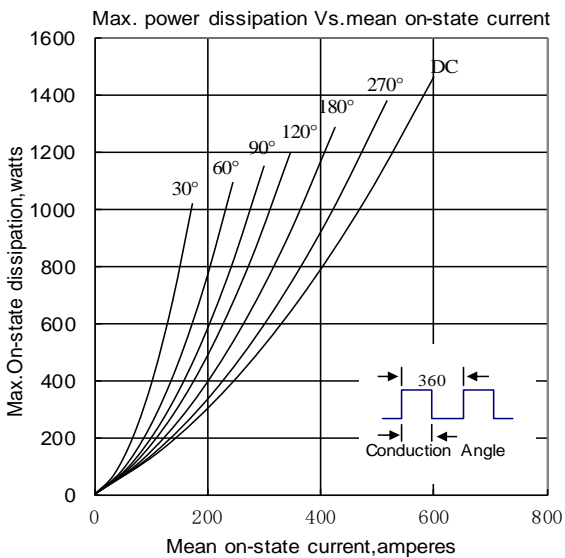


Fig.5

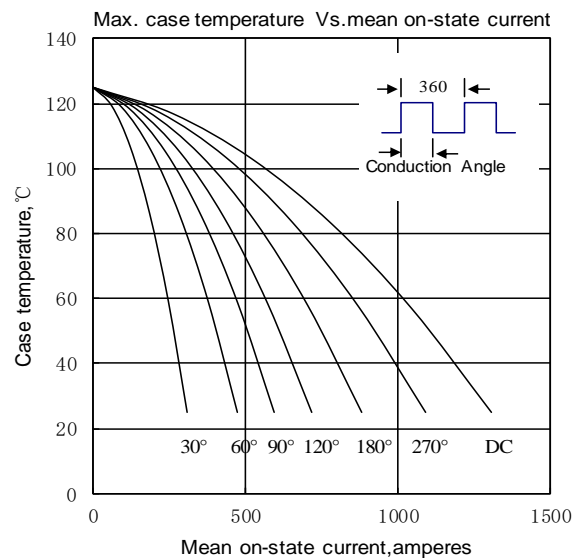


Fig.6

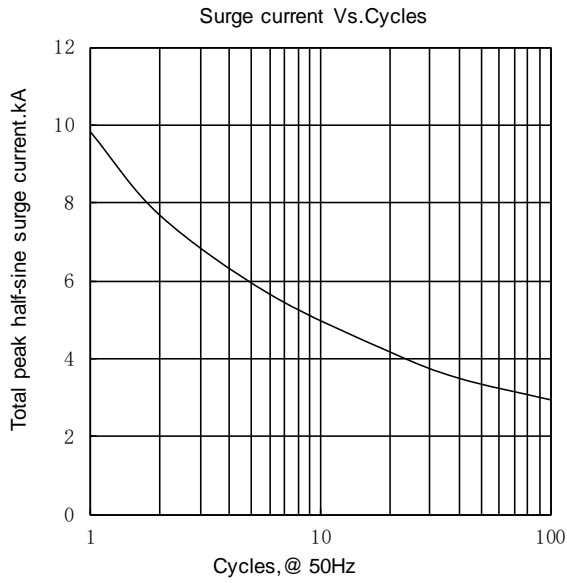


Fig.7

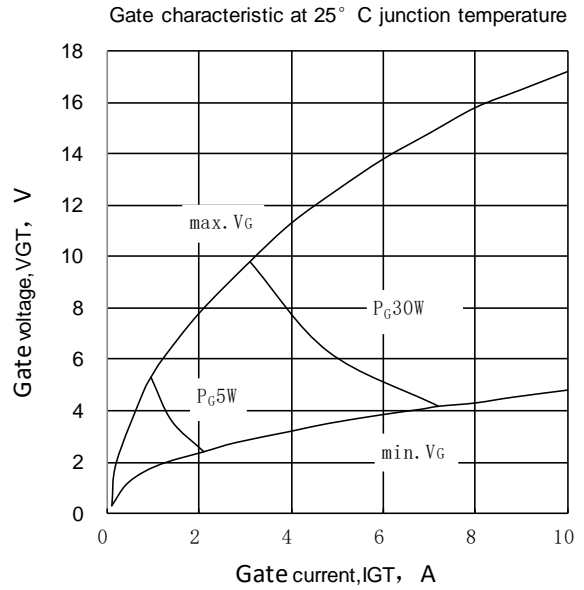


Fig.8

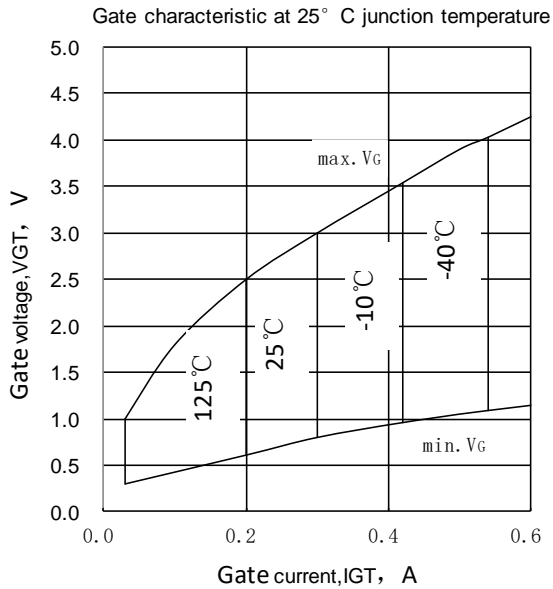
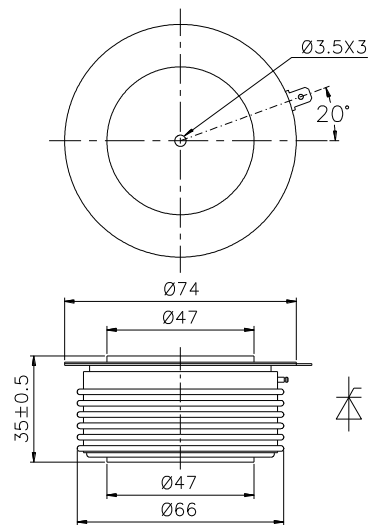


Fig.9



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