



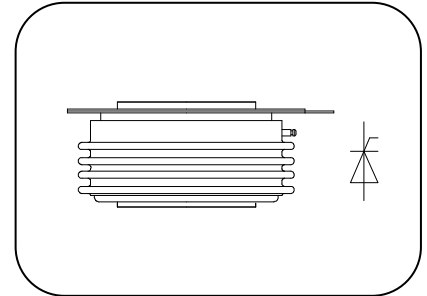
**Features**

- 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

$I_{T(AV)}$       **3000 A**  
 $V_{DRM}/V_{RRM}$     **1900-3000V**  
 $I_{TSM}$             **44 kA**  
 $I^2t$                 **9680 10<sup>3</sup>A<sup>2</sup>S**



| SYMBOL                 | CHARACTERISTIC   | TEST CONDITIONS   |                      | T <sub>j</sub> (°C) | VALUE |           |       | UNIT  |
|------------------------|--|---|----------------------|---------------------|-------|-----------|-------|-------|
|                        |  |   |                      |                     | Min   | Type      | Max   |       |
| $I_{T(AV)}$            | Mean on-state current  | 180° half sine wave 50Hz<br>Double side cooled,   | T <sub>C</sub> =70°C | 125                 |       | 3000      | 3860  | A     |
| $V_{DRM}$<br>$V_{RRM}$ | Repetitive peak off-state voltage<br>Repetitive peak reverse voltage | tp=10ms   |                      | 125                 | 1900  |           | 3000  | V     |
| $I_{DRM}$<br>$I_{RRM}$ | Repetitive peak current  | at $V_{DRM}$<br>at $V_{RRM}$  |                      | 125                 |       |           | 250   | mA    |
| $I_{TSM}$              | Surge on-state current   | 10ms half sine wave   |                      | 125                 |       |           | 44    | kA    |
| $I^2t$                 | $I^2t$ for fusing coordination                                       | $V_R=0.6V_{RRM}$  |                      |                     |       |           |       | 9680  |
| $V_{TO}$               | Threshold voltage  |   |                      | 125                 |       |           | 0.99  | V     |
| $r_T$                  | On-state slope resistance  |   |                      |                     |       |           |       | 0.11  |
| $V_{TM}$               | Peak on-state voltage  | $I_{TM}=6000A, F=70kN$  |                      | 25                  |       |           | 2.10  | V     |
| $dv/dt$                | Critical rate of rise of off-state voltage                           | $V_{DM}=0.67V_{DRM}$  |                      | 125                 |       |           | 1000  | V/μs  |
| $di/dt$                | Critical rate of rise of on-state voltage current                    | $V_{DM}=67\%V_{DRM}$ to 4000A, t=5s f=50Hz<br>Gate pulse t <sub>r</sub> ≤ 0.5μs I <sub>GM</sub> =1.5A |                      | 125                 |       |           | 250   | A/μs  |
| $Q_{rr}$               | Recovery charge  | $I_{TM}=2000A, tp=1000μs, di/dt=-20A/μs,$<br>$V_R=100V$   |                      | 125                 |       | 3000      |       | μC    |
| $I_{GT}$               | Gate trigger current   |   |                      | 25                  | 40    |           | 300   | mA    |
| $V_{GT}$               | Gate trigger voltage   | $V_A=12V, I_A=1A$   |                      |                     | 0.8   |           | 3.0   | V     |
| $I_H$                  | Holding current  |   |                      |                     | 20    |           | 300   | mA    |
| $V_{GD}$               | Non-trigger gate voltage   | $V_{DM}=67\%V_{DRM}$  |                      | 125                 |       |           | 0.3   | V     |
| $R_{th(j-c)}$          | Thermal resistance<br>Junction to case                               | At 180° sine double side cooled<br>Clamping force 70.0kN  |                      |                     |       |           | 0.007 | °C /W |
| $R_{th(c-h)}$          | Thermal resistance<br>case to heatsink                               |   |                      |                     |       |           | 0.002 |       |
| $F_m$                  | Mounting force   |   |                      |                     | 63    |           | 84    | kN    |
| $T_{stg}$              | Stored temperature   |   |                      |                     | -40   |           | 140   | °C    |
| $W_t$                  | Weight   |   |                      |                     |       | 1460/1880 |       | g     |
| <b>Outline</b>         | KT95cT/KT95dT  |   |                      |                     |       |           |       |       |

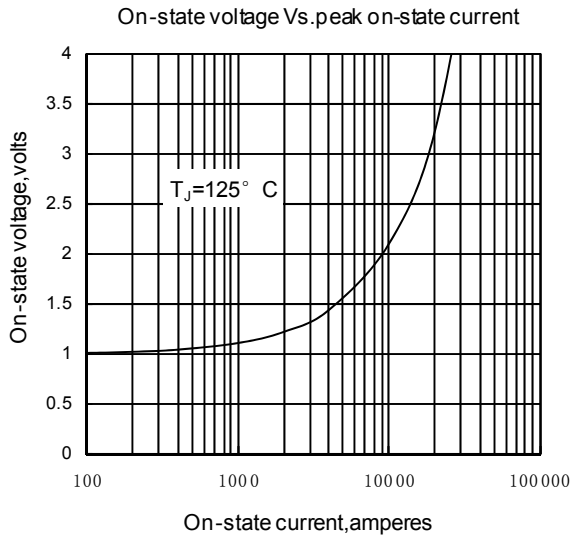


Fig1

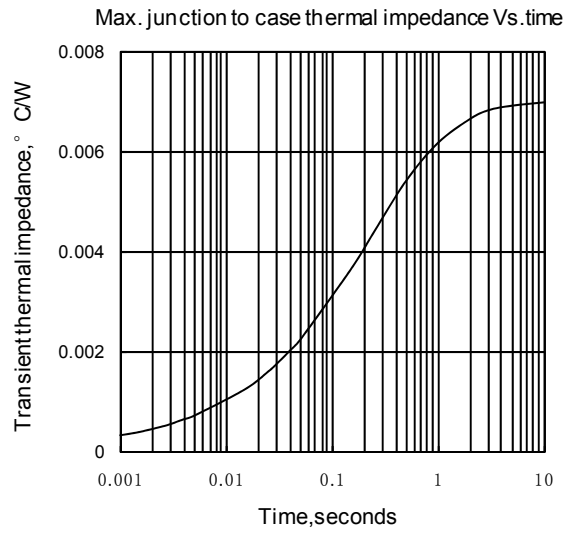


Fig2

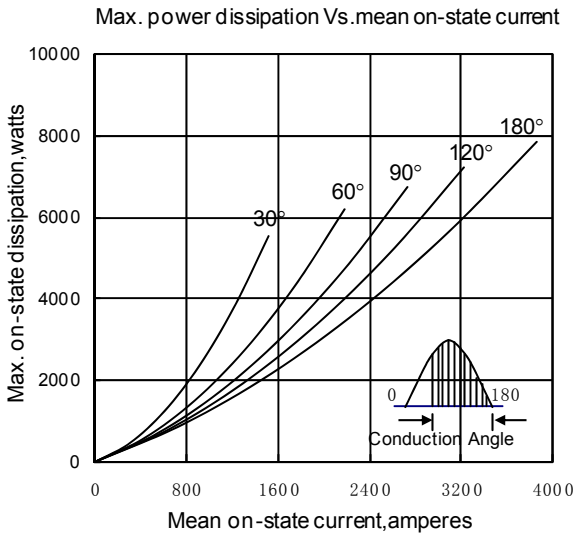


Fig3

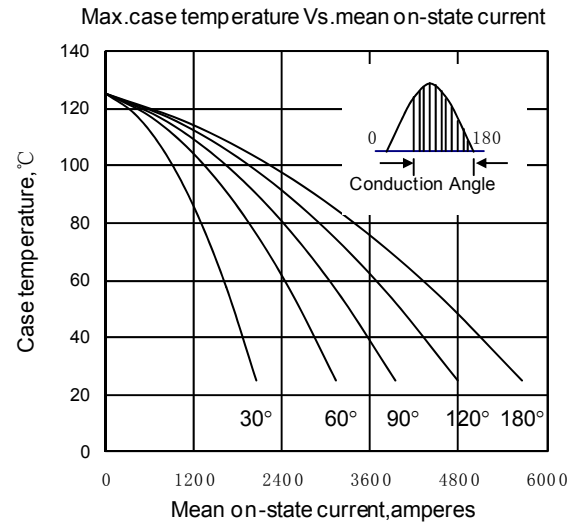


Fig4

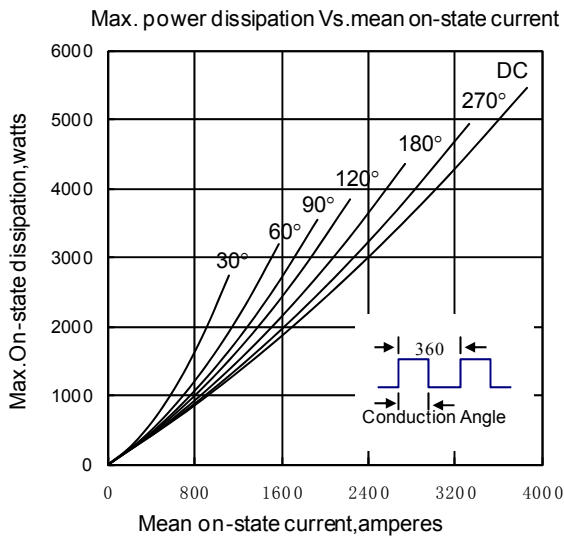


Fig5

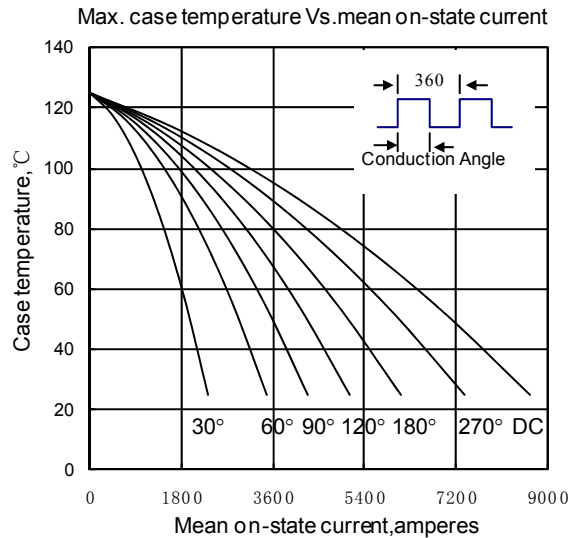


Fig6

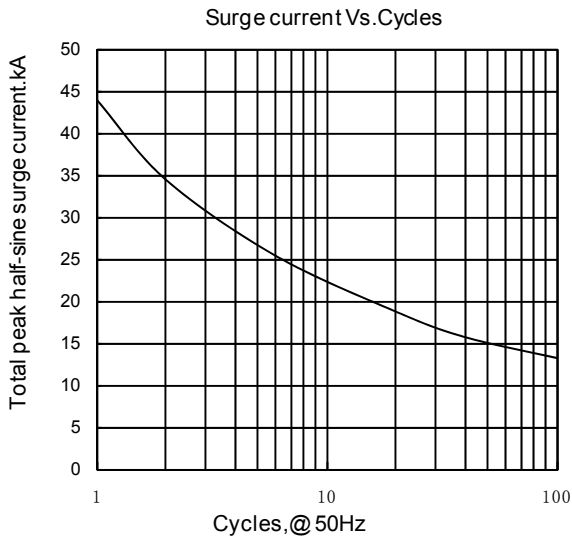


Fig7

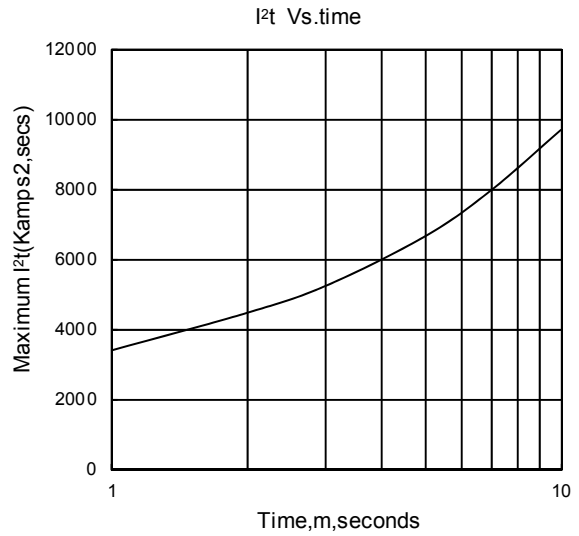


Fig8

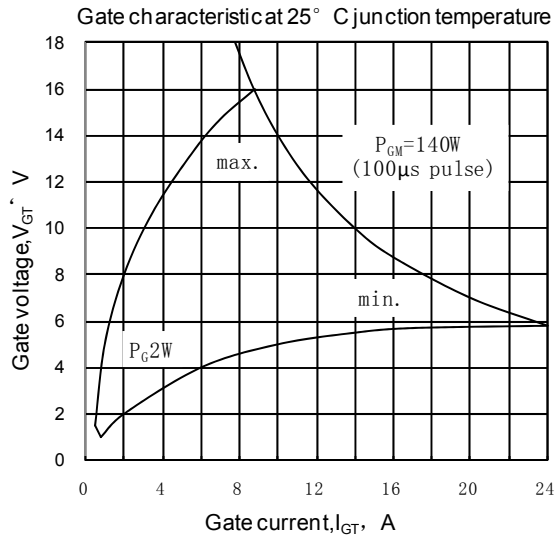


Fig9

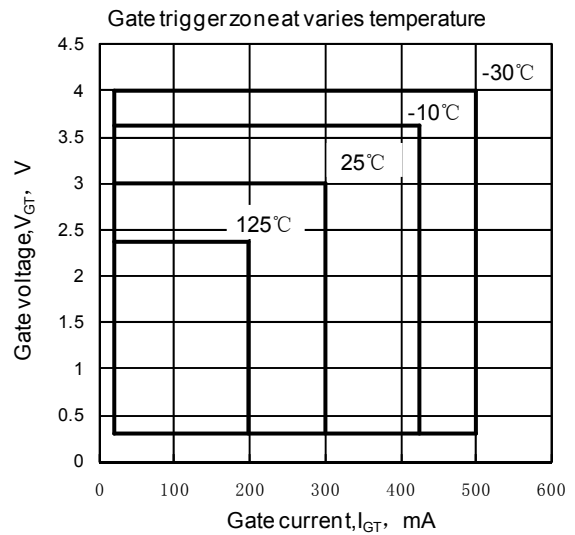


Fig10

Outline: 图19-KT95CT

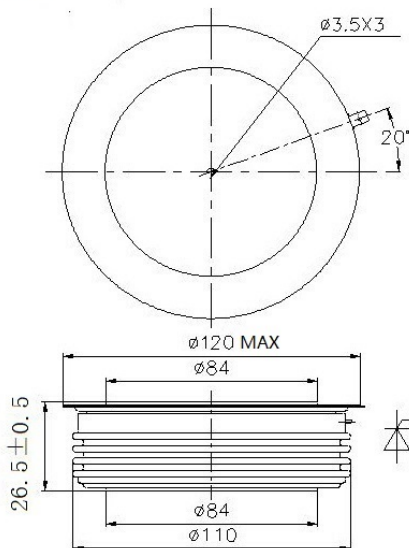


图20-KT95dT

