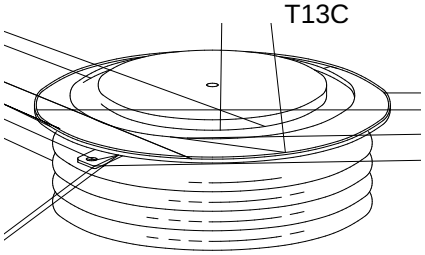
**********

T13C



| Device Type | $V_{RRM}$ (1) | $V_{DRM}$ (1) | $V_{RSM}$ (1) |
|---|---|---|---|
| KK2500/25 | 2500 | 2500 | 2500 |
| KK2500/28 | 2800 | 2800 | 2800 |

$V_{RRM}$ = Repetitive peak reverse voltage
$V_{DRM}$ = Repetitive peak off state voltage
$V_{RSM}$ = Non repetitive peak reverse voltage (2)

| | | |
|---|---|---|
| Repetitive peak reverse leakage and off state leakage | $I_{RRM}/I_{DRM}$ | 5 mA<br>150 mA (3) |
| Critical rate of voltage rise | dv/dt (4) | 1000 V/μs |

| | | | | | | |
|---|---|---|---|---|---|---|
| Peak gate power dissipation | $P_{GM}$ | | 20 | | W | |
| Average gate power dissipation | $P_{G(AV)}$ | | 4 | | W | |
| Gate-trigger current | $I_{GT}$ | | 150 | | mA | $V_D$=12V;$R_L$=3ohms;$T_j$=+25°C |
| Gate- trigger voltage | $V_{GT}$ | 0.70 | 2.5 | | V | $V_D$=12V;$R_L$=3ohms;$T_j$=+25°C |
| Peak negative voltage | $V_{GRM}$ | | 5 | | V | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Delay time | $t_d$ | | 3.0 | 2.5 | μs | $I_{TM}$=1000A; $V_D$=67%$V_{DRM}$<br>Gate pulse: VG=30V; RG=10ohms;<br>$t_r$=0.1μs; $t_p$=20μs |
| Turn-off time (with $V_R$ = -5 V) | $t_q$ | | 70 | | μs | $I_{TM}$ =2500 A; di/dt =- 25 A/μs;<br>$V_R$ =50 V; dv/dt=30V/μs ;<br>$V_D$= 67%$V_{DRM}$;$T_j$=125°C |
| Reverse recovery charge | $Q_{rr}$ | | | | μC | $I_{TM}$=2500 A;di/dt=-25A/μs;<br>$V_R$=50 V; $T_j$=125°C |

| | | | | | | |
|---|---|---|---|---|---|---|
| Operating temperature | $T_j$ | -40 | +125 | | °C | |
| Storage temperature | $T_{stg}$ | -40 | +140 | | °C | |
| Thermal resistance - junction to case | $R_{\Theta(j-c)}$ | | 0.01 | | °C/W | Double sided cooled |
| Thermal resistance - case to heatsink | $R_{\Theta(c-s)}$ | | 0.003 | | °C/W | Double sided cooled |
| Mounting force | F | 33 | 37 | 35 | kN | |
| Weight | m | | | 1.10 | kg | |

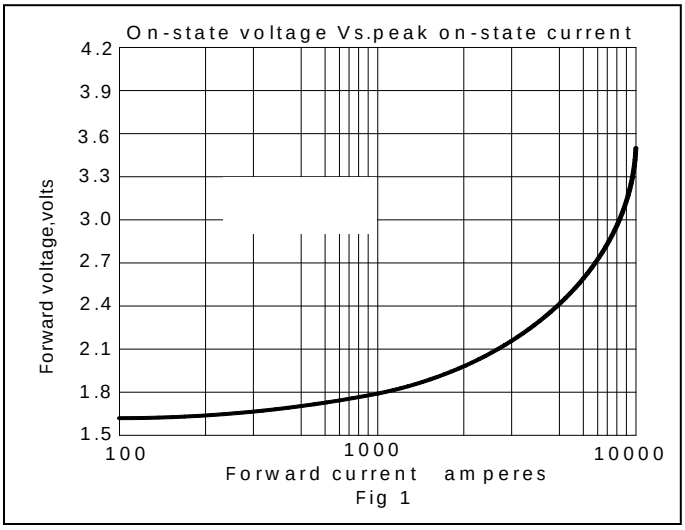


Fig 1

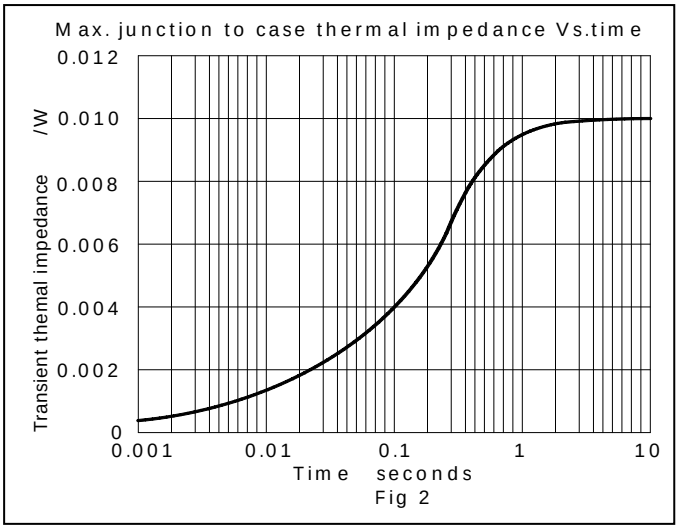


Fig 2

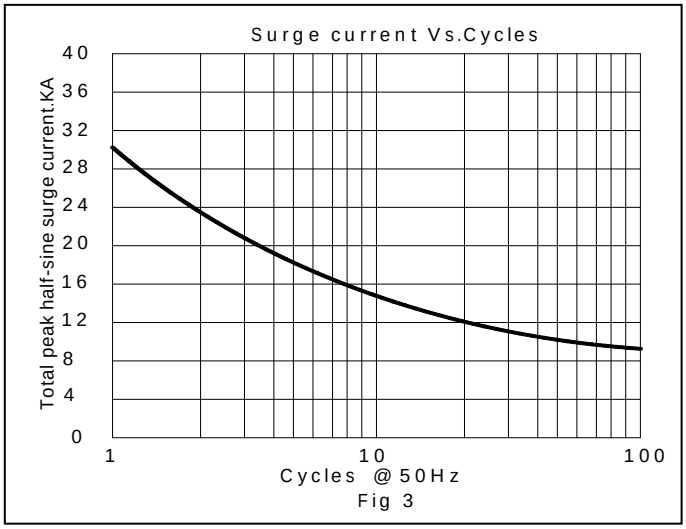


Fig 3

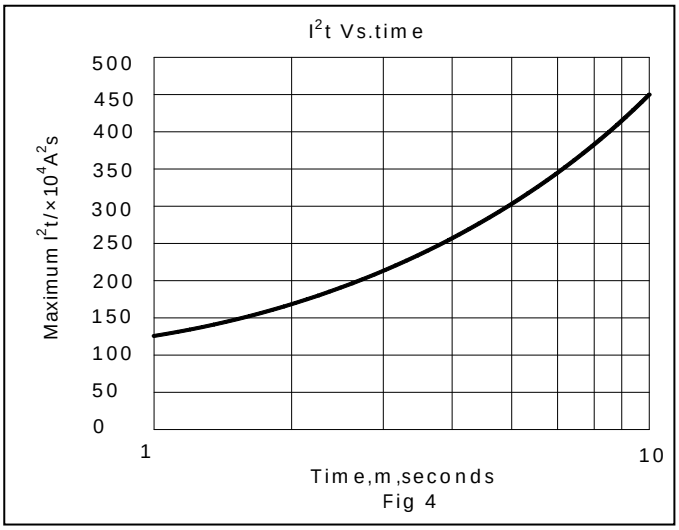
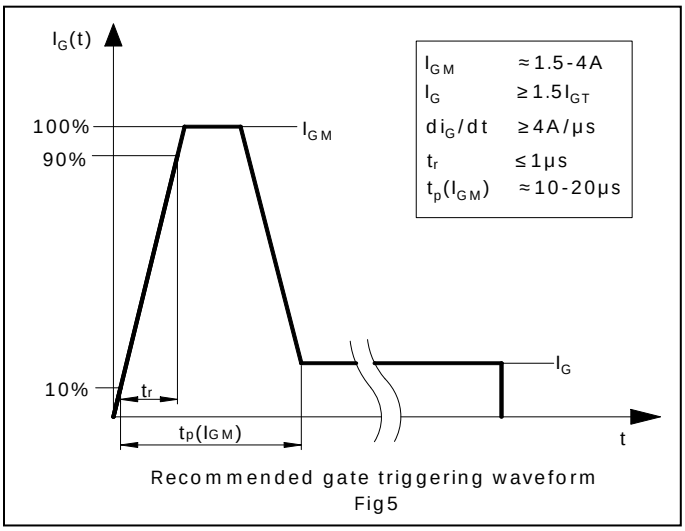


Fig 4



Recommended gate triggering waveform
Fig5

