

Features

- Low forward voltage drop
- High reverse voltage
- Hermetic metal cases with ceramic insulators

Typical Applications

- All purpose high power rectifier diodes
- High power resistance welding equipment
- Non-controllable and half-controllable rectifiers
- Controlled rectifiers

| | |
|-------------|------------------------------------|
| $I_{F(AV)}$ | 970 A |
| V_{RRM} | 5600~6500 V |
| I_{FSM} | 16.5 kA |
| I^2t | 1360 $10^3 A^2S$ |



| SYMBOL | CHARACTERISTIC | TEST CONDITIONS | $T_J(^{\circ}C)$ | VALUE | | | UNIT |
|---------------|--|--|------------------|-------|------|-------|-------------------|
| | | | | Min | Type | Max | |
| $I_{F(AV)}$ | Mean forward current | 180° half sine wave 50Hz Double side cooled, | 150 | | | 1430 | A |
| | | | | | | 970 | |
| V_{RRM} | Repetitive peak reverse voltage | V_{RRM} tp=10ms | 150 | 5600 | | 6500 | V |
| I_{RRM} | Repetitive peak current | $V_{RM} = V_{RRM}$ | 150 | | | 100 | mA |
| I_{FSM} | Surge forward current | 10ms half sine wave | 150 | | | 16.5 | kA |
| I^2t | I^2T for fusing coordination | $V_R = 0.6V_{RRM}$ | | | | 1360 | $A^2s \cdot 10^3$ |
| V_{FO} | Threshold voltage | | 150 | | | 0.91 | V |
| r_F | Forward slop resistance | | | | | 0.60 | mΩ |
| V_{FM} | Peak on-state voltage | $I_{FM} = 15000A, F = 24kN$ | 150 | | | 2.15 | V |
| Q_{rr} | Recovery charge | $I_{FM} = 20000A, tp = 2000\mu s,$ $di/dt = -5A/\mu s, V_R = 50V$ | | | 3500 | | μC |
| $R_{th(j-c)}$ | Thermal resistance Junction to case | At 180° sine double side cooled Clamping force 24kN | | | | 0.022 | °C /W |
| $R_{th(c-h)}$ | Thermal resistance case to heatsink | | | | | 0.005 | |
| F_m | Mounting force | | | 19 | | 26 | kN |
| T_{stg} | Stored temperature | | | -40 | | 160 | °C |
| W_t | Weight | | | | 590 | | g |
| Outline | ZT50dT | | | | | | |

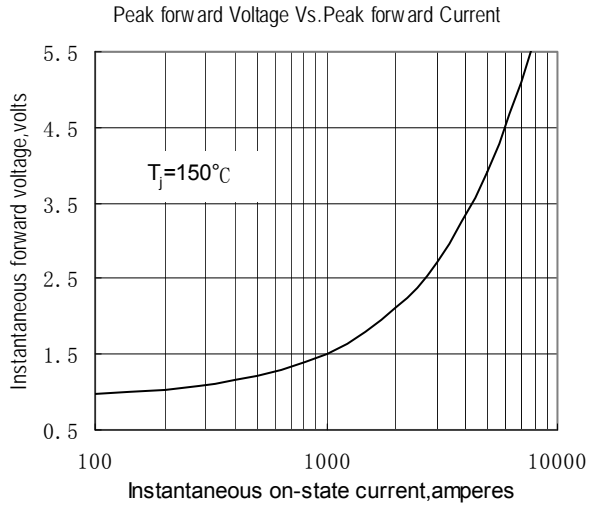


Fig.1

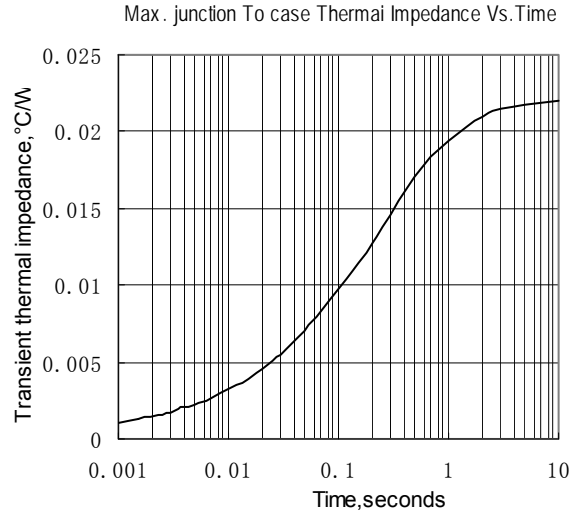


Fig.2

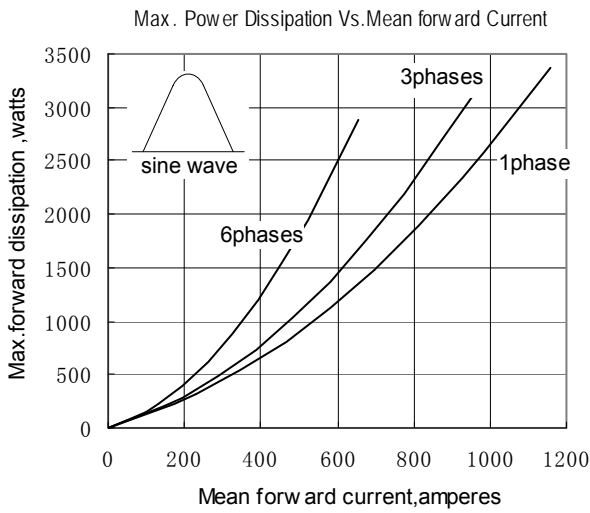


Fig.3

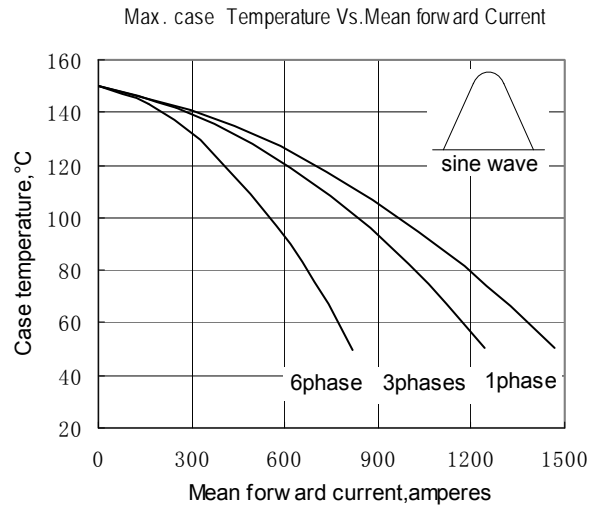


Fig.4

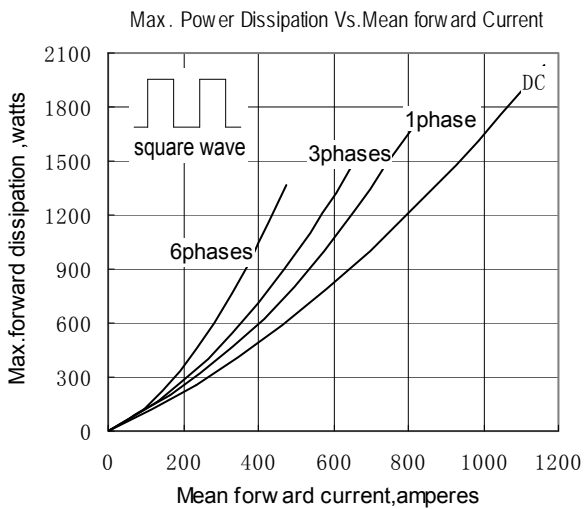


Fig.5

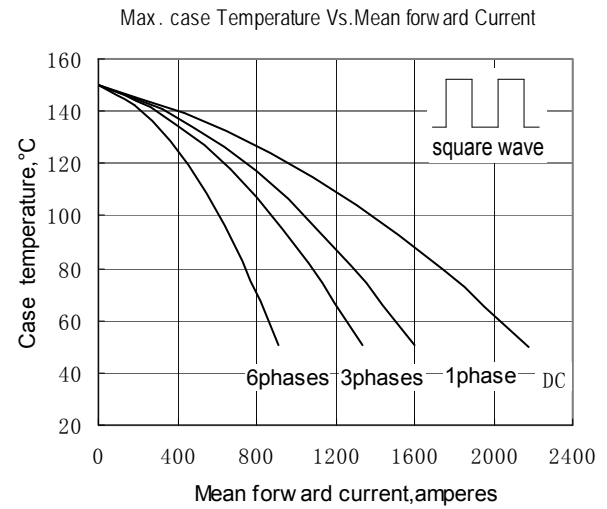


Fig.6

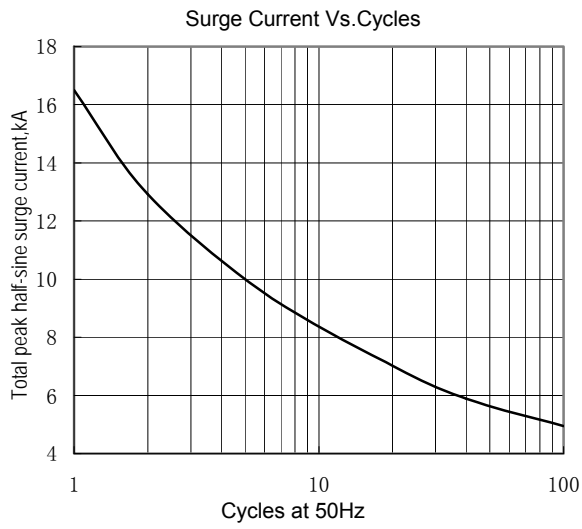


Fig.7

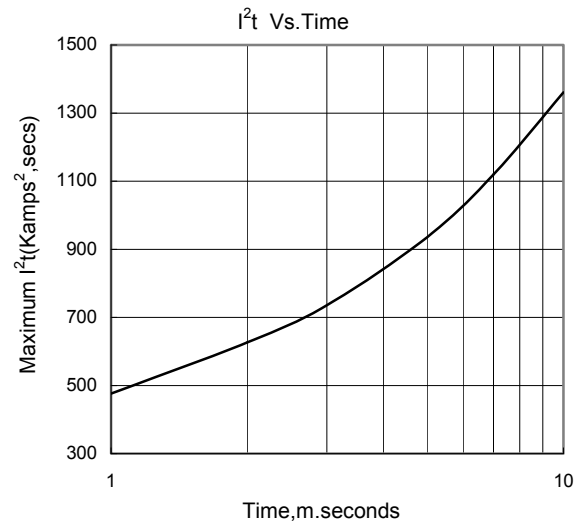


Fig.8

Outline:

