

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

$I_{F(AV)}$ **5650A**
 V_{RRM} **4300~5000 V**
 I_{FSM} **60 kA**
 I^2t **18000 10³A²S**



| SYMBOL | CHARACTERISTIC | TEST CONDITIONS | | T _j (°C) | VALUE | | | UNIT |
|---------------|--|--|----------------------|---------------------|-------|--------|--------|----------------------------------|
| | | | | | Min | Type | Max | |
| $I_{F(AV)}$ | Mean forward current | 180° half sine wave 50Hz Double side cooled, | T _c =85°C | 150 | | | 5650 | A |
| V_{RRM} | Repetitive peak reverse voltage | tp=10ms | | 150 | 4300 | | 5000 | V |
| I_{RRM} | Repetitive peak current | at V _{RRM} | | 150 | | | 300 | mA |
| I_{FSM} | Surge forward current | 10ms half sine wave | | 150 | | | 60 | kA |
| I^2t | I ² t for fusing coordination | V _R =0.6V _{RRM} | | | | | 18000 | A ² s*10 ³ |
| V_{FO} | Threshold voltage | | | 150 | | | 0.91 | V |
| r_F | Forward slope resistance | | | | | | 0.10 | mΩ |
| V_{FM} | Peak forward voltage | I _{FM} =5000A, F=108kN | | 25 | | | 2.00 | V |
| Q_{rr} | Recovery charge | I _{FM} =2000A, tp=2000μs, di/dt=-20A/μs, V _R =50V | | 150 | | 9000 | | μC |
| $R_{th(j-c)}$ | Thermal resistance Junction to case | At 180° sine double side cooled Clamping force 108kN | | | | | 0.0050 | °C /W |
| $R_{th(c-h)}$ | Thermal resistance case to heat sink | | | | | 0.0015 | | |
| F_m | Mounting force | | | | 81 | | 108 | kN |
| T_{stg} | Stored temperature | | | | -40 | | 160 | °C |
| W_t | Weight | | | | | 2000 | | g |
| Outline | ZT100cT | | | | | | | |

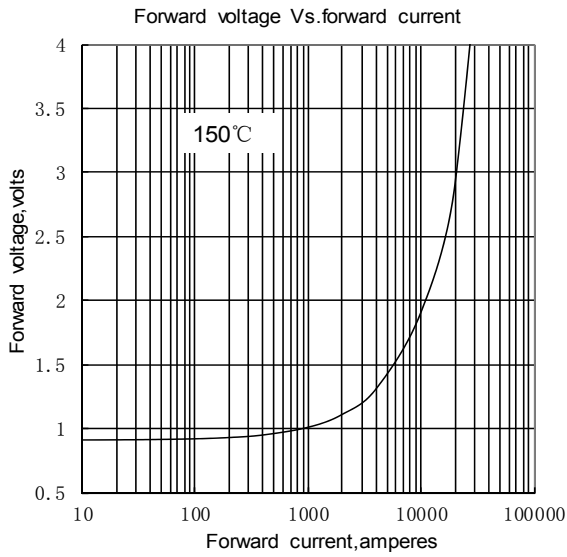


Fig.1

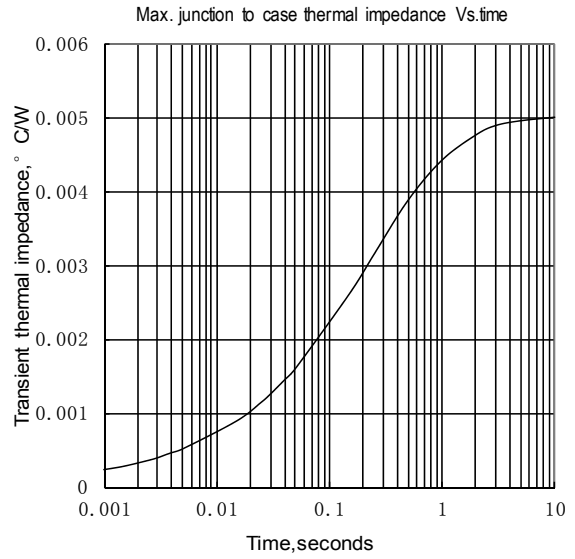


Fig.2

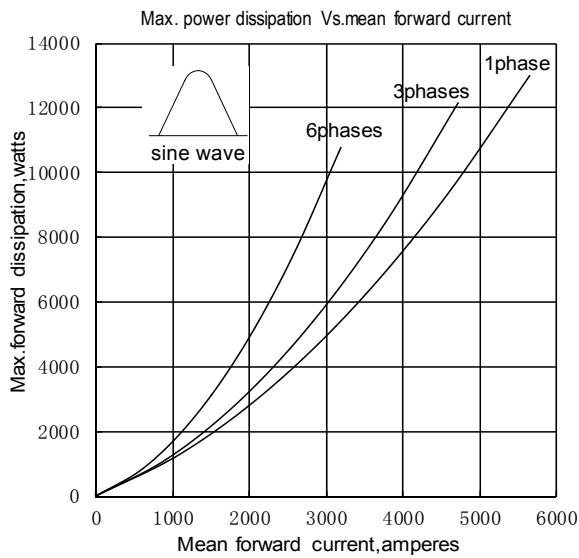


Fig.3

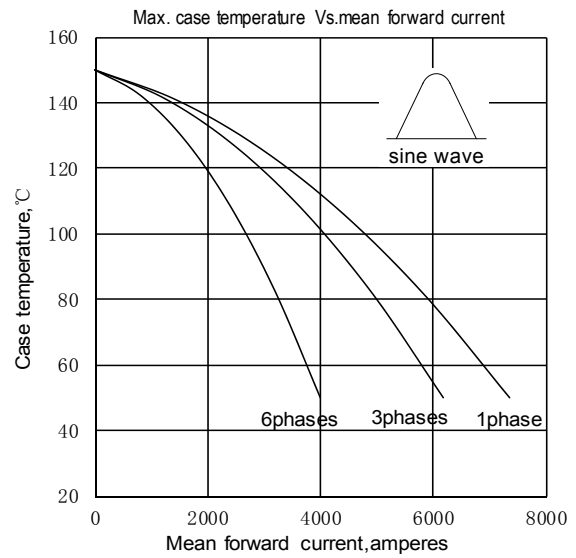


Fig.4

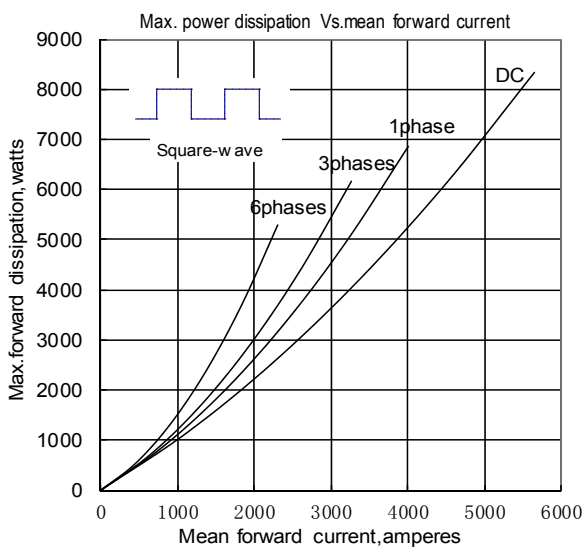


Fig.5

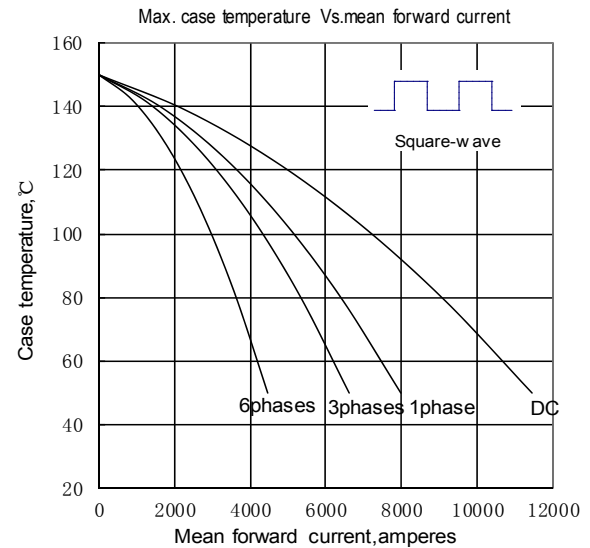


Fig.6

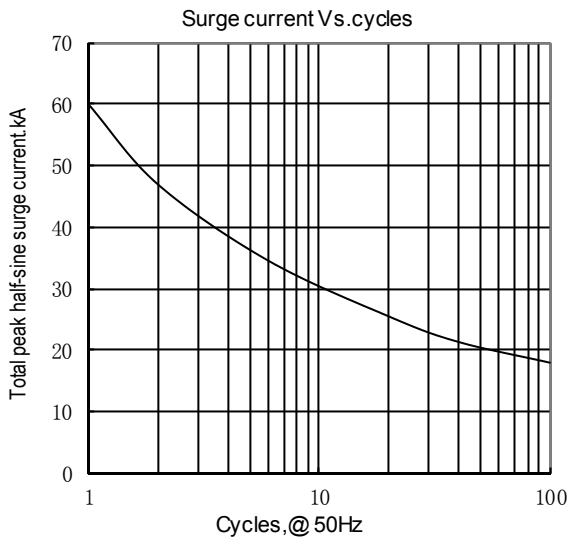


Fig7

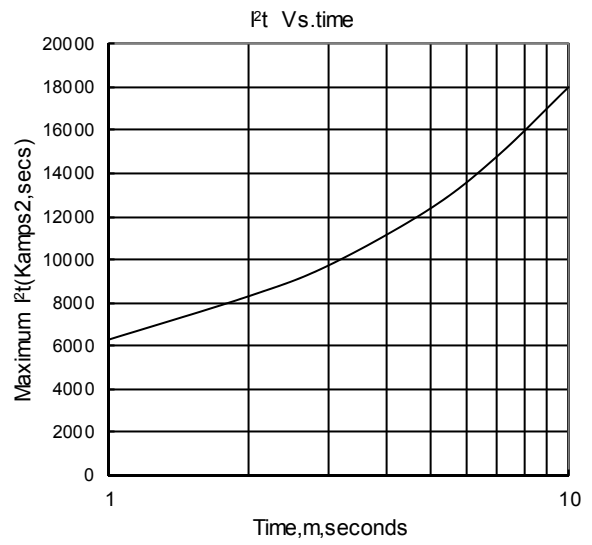


Fig8

Outline:

