

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

$I_{F(AV)}$ **7040A**
 V_{RRM} **2100~3000 V**
 I_{FSM} **80 kA**
 I^2t **32000 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 | 160 | | | 7040 | A |
| V _{RRM} | Repetitive peak reverse voltage | tp=10ms | | 160 | 2100 | | 3000 | V |
| I _{RRM} | Repetitive peak current | at V _{RRM} | | 160 | | | 250 | mA |
| I _{FSM} | Surge forward current | 10ms half sine wave | | 160 | | | 80 | kA |
| I ² t | I ² t for fusing coordination | V _R =0.6V _{RRM} | | | | | | 32000 |
| V _{FO} | Threshold voltage | | | 160 | | | 0.92 | V |
| r _F | Forward slope resistance | | | | | | | 0.07 |
| V _{FM} | Peak forward voltage | I _{FM} =6000A, F=90kN | | 160 | | | 1.80 | V |
| Q _{rr} | Recovery charge | I _{FM} =2000A, tp=2000μs, di/dt=-20A/μs, V _R =50V | | 160 | | 8000 | | μC |
| R _{th(j-c)} | Thermal resistance Junction to case | At 180° sine double side cooled Clamping force 90kN | | | | | 0.005 | °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 | | | | | | | |

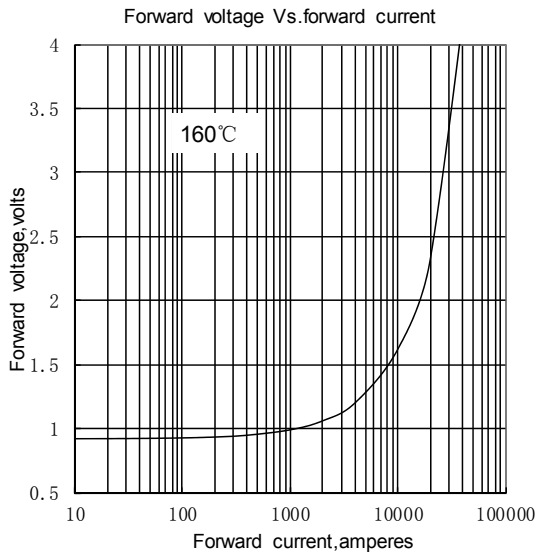


Fig.1

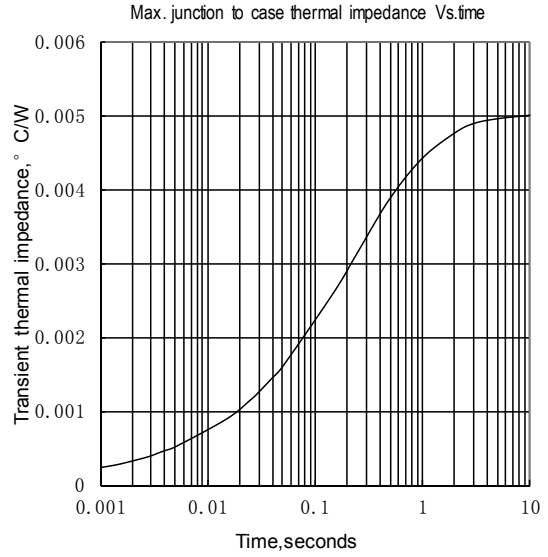


Fig.2

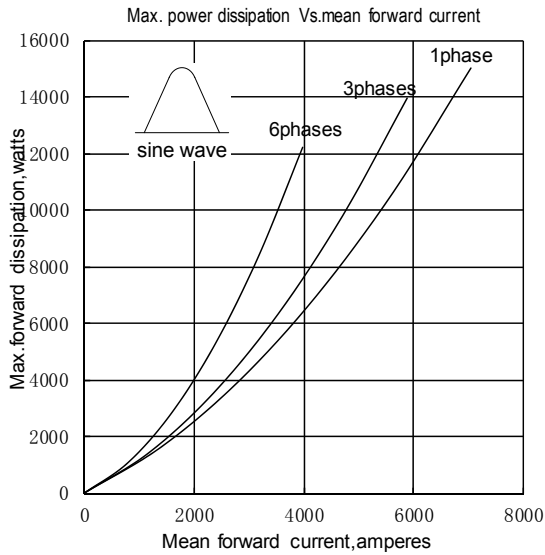


Fig.3

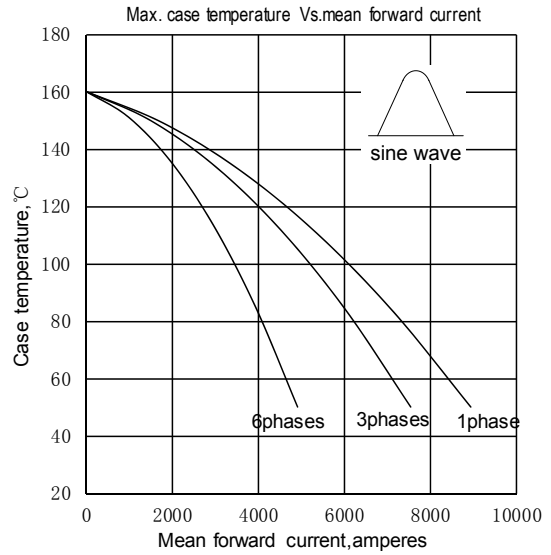


Fig.4

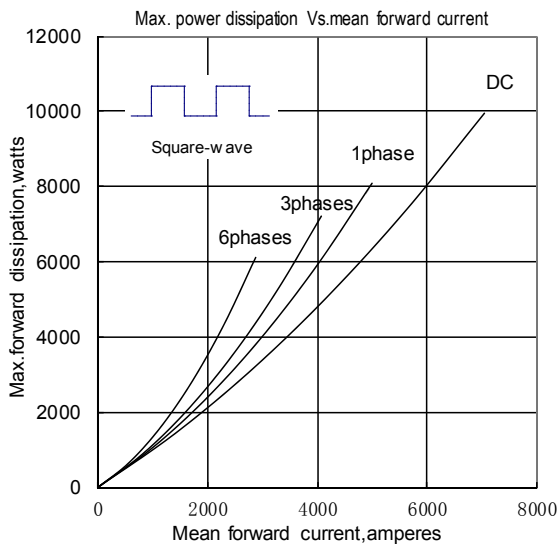


Fig.5

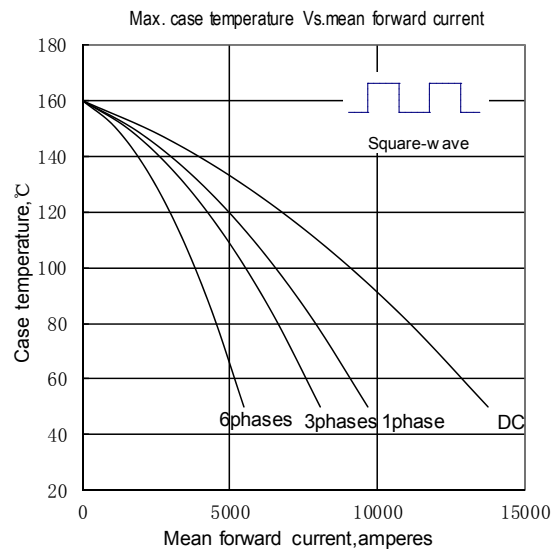


Fig.6

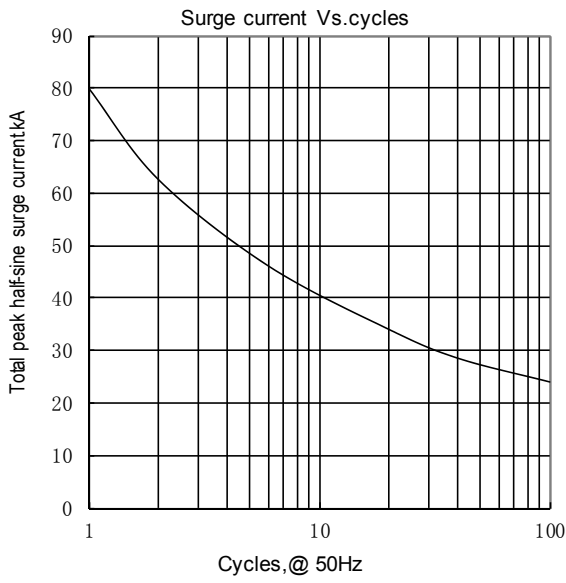


Fig.7

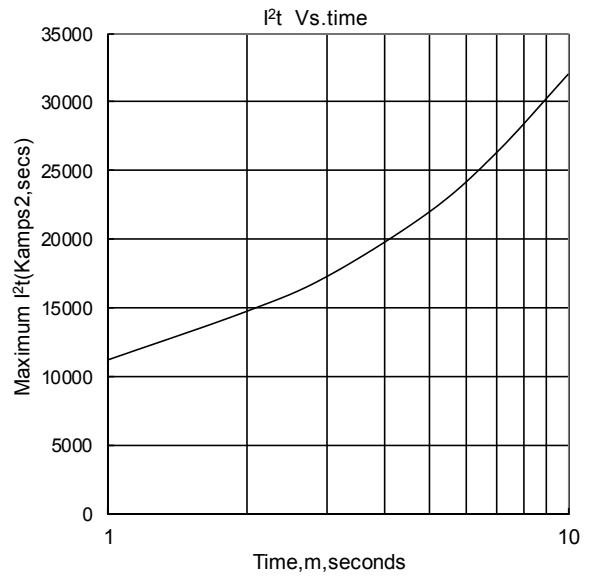


Fig.8

Outline:

