**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

Part No. T50ZPR-ZT50c(d)T

| | |
|--------------------------|------------------------------|
| I_{F(AV)} | 970A |
| V_{RRM} | 5600V 6000V 6500V |

| 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 =100°C | 150 | | | 970 | A |
| V _{RRM} | Repetitive peak reverse voltage | tp=10ms | 150 | 5600 | | 6500 | V |
| I _{RRM} | Repetitive peak current | At V _{RRM} | 150 | | | 100 | mA |
| I _{FSM} | Surge forward current | 10ms half sine wave | 150 | | | 16.5 | kA |
| I ² t | I ² t for fusing coordination | V _R =0.6V _{RRM} | | | | | 1361 |
| V _{FO} | Threshold voltage | | 150 | | | 0.91 | V |
| r _F | Forward slope resistance | | | | | | 0.60 |
| V _{FM} | Peak forward voltage | I _{FM} =1500A, F=26kN | 25 | | | 2.15 | V |
| Q _{rr} | Recovery charge | I _{FM} =1000A, tp=4000μs, di/dt=-20A/μs, V _R =100V | | | 3500 | | μC |
| R _{th(j-c)} | Thermal resistance Junction to case | At 180° sine double side cooled Clamping force 26kN | | | | 0.022 | °C/W |
| R _{th(c-h)} | Thermal resistance case to heatsink | | | | | 0.005 | |
| F _m | Mounting force | | | 19 | | 26 | kN |
| T _{vj} | Junction temperature | | | -40 | | 150 | °C |
| T _{stg} | Stored temperature | | | -40 | | 160 | °C |
| W _t | Weight | | | | 440 | | g |
| Outline | ZT50cT/ ZT50dT | | | | | | |

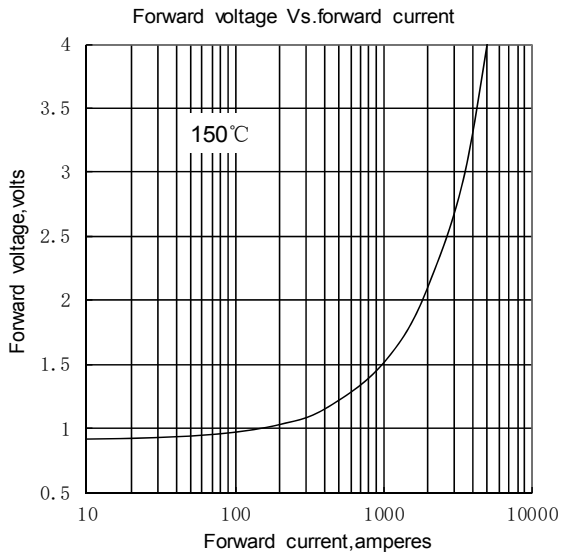


Fig.1

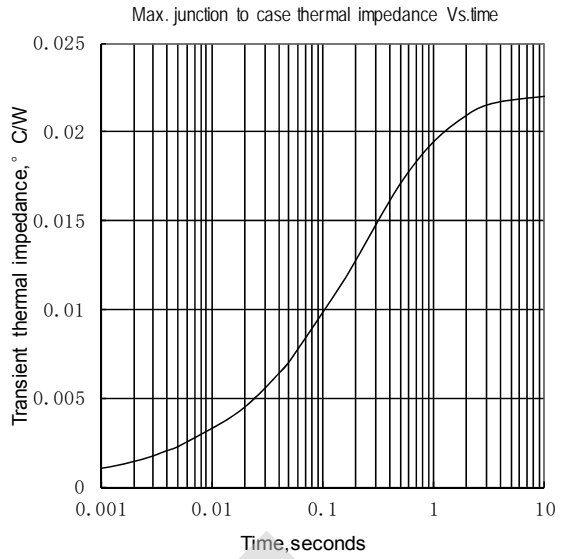


Fig.2

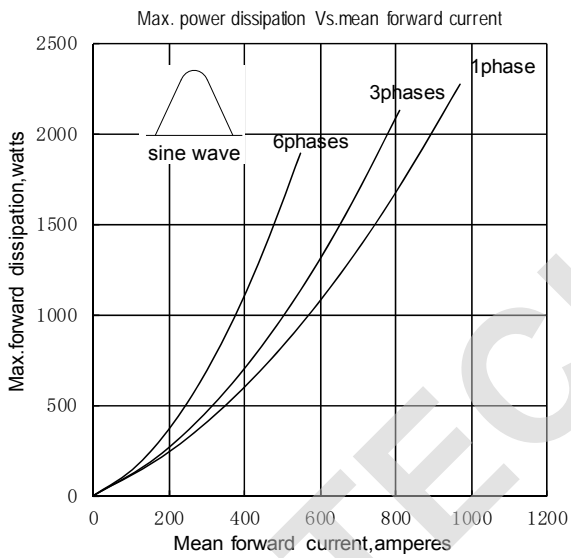


Fig.3

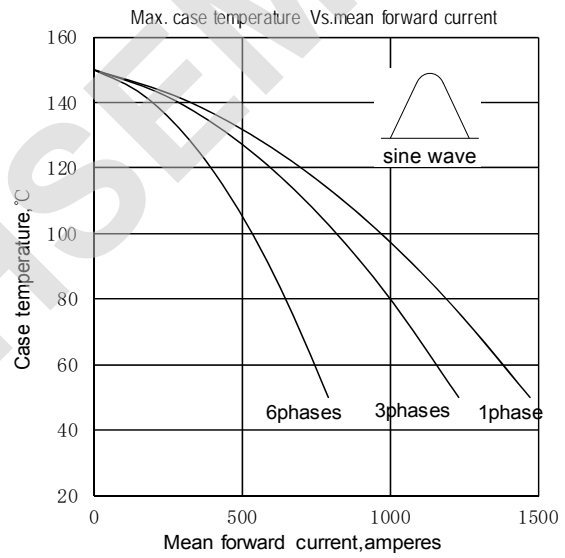


Fig.4

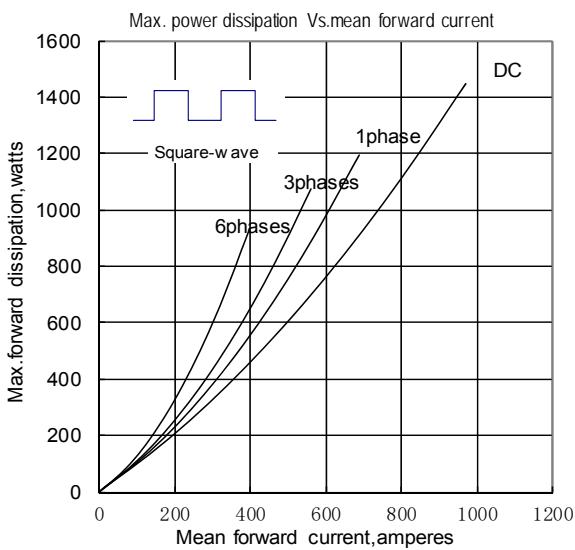


Fig.5

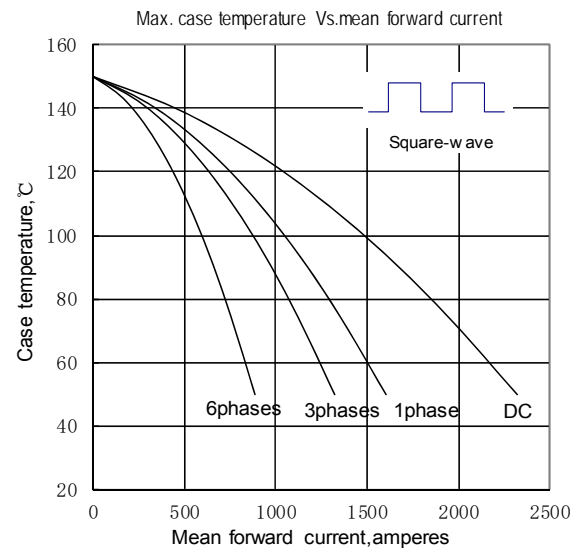


Fig.6

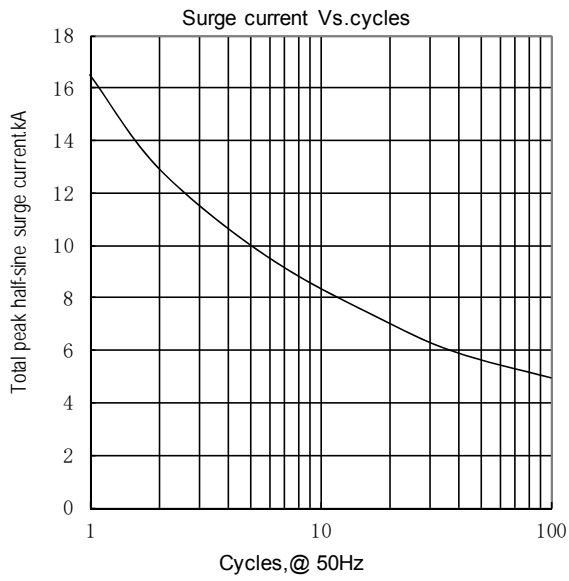


Fig.7

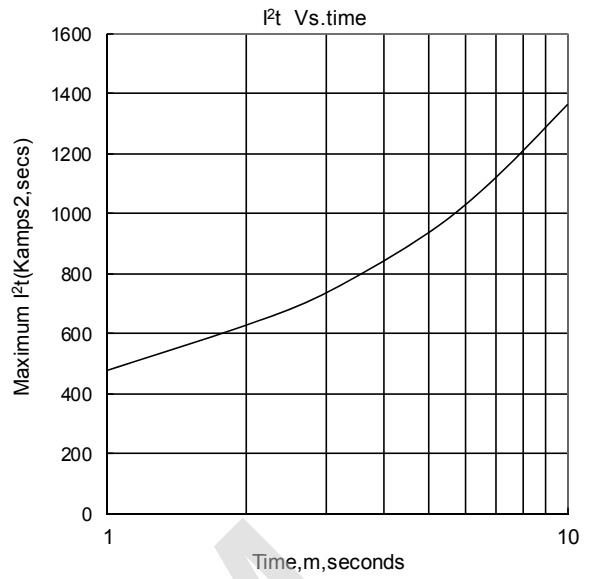
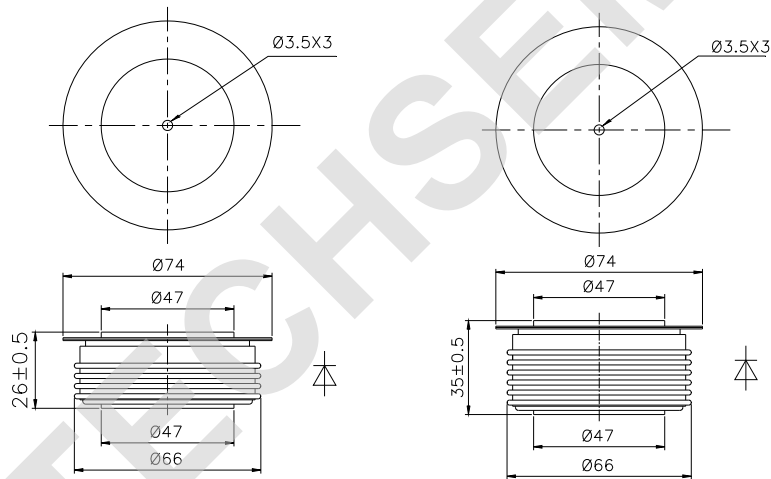


Fig.8

Outline:



TECHSEM reserves the right to change specifications without notice.