

**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

Part No. Y76ZPB-ZT73cT

| | |
|--------------------------|------------------|
| I_{F(AV)} | 7600A |
| V_{RRM} | 200V 400V |
| | 600V 800V |
| | 1000V |

| 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 | 190 | | | 7600 A |
| V _{RRM} | Repetitive peak reverse voltage | tp=10ms | | 190 | 200 | | 1000 V |
| I _{RRM} | Repetitive peak current | at V _{RRM} | | 190 | | | 100 mA |
| I _{FSM} | Surge forward current | 10ms half sine wave | | 190 | | | 72 kA |
| I ² t | I ² t for fusing coordination | V _R =0.6V _{RRM} | | | | | 25920 A ² s*10 ³ |
| V _{FO} | Threshold voltage | | 190 | | | 0.67 | V |
| r _F | Forward slope resistance | | | | | 0.038 mΩ | |
| V _{FM} | Peak on-state voltage | I _{FM} =5000A, F=40kN | 25 | | | 1.24 | V |
| Q _{rr} | Recovery charge | I _{FM} =2000A, tp=4000μs, di/dt=-20A/μs, V _R =100V | 190 | | 5000 | | μC |
| R _{th(j-c)} | Thermal resistance Junction to case | At 180° sine double side cooled Clamping force 40kN | | | | 0.010 | °C /W |
| R _{th(c-h)} | Thermal resistance case to heat sink | | | | | 0.003 | |
| F _m | Mounting force | | | 35 | | 47 | kN |
| T _{vj} | Junction temperature | | | -40 | | 190 | °C |
| T _{stg} | Stored temperature | | | -40 | | 190 | °C |
| W _t | Weight | | | | 1100 | | g |
| Outline | | ZT73cT | | | | | |

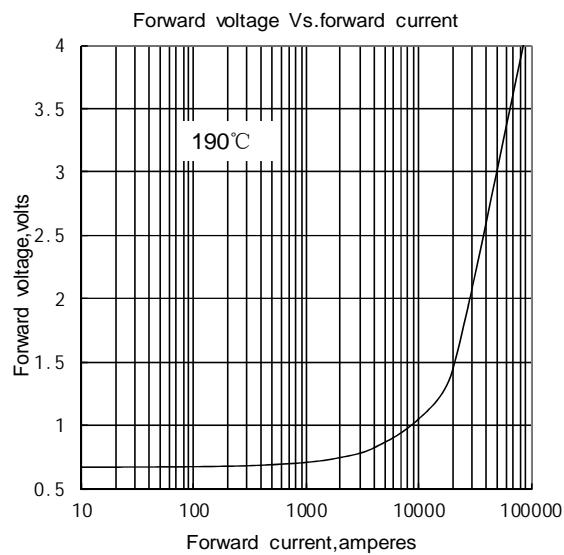


Fig.1

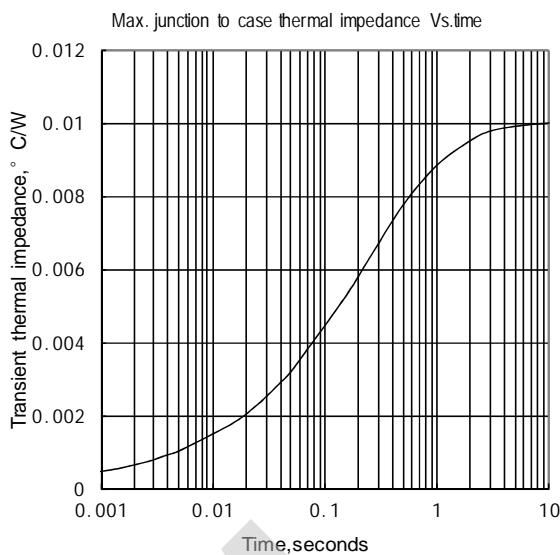


Fig.2

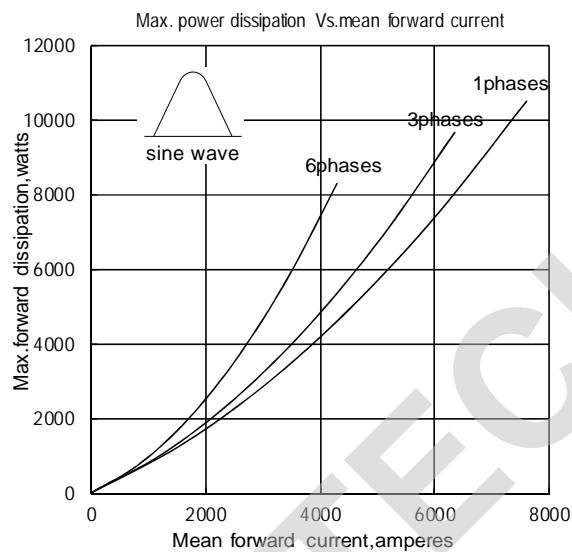


Fig.3

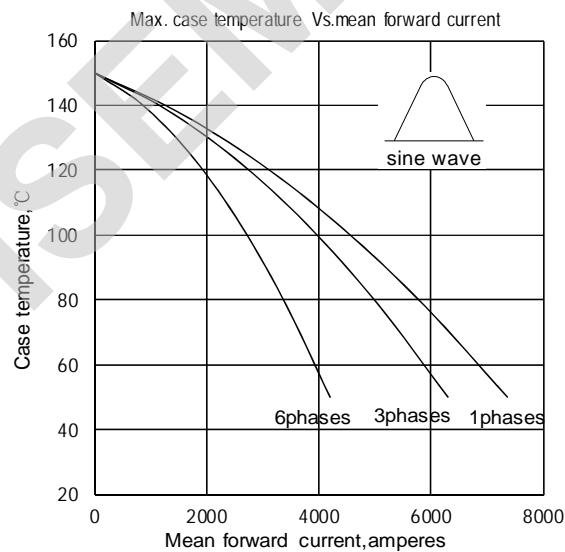


Fig.4

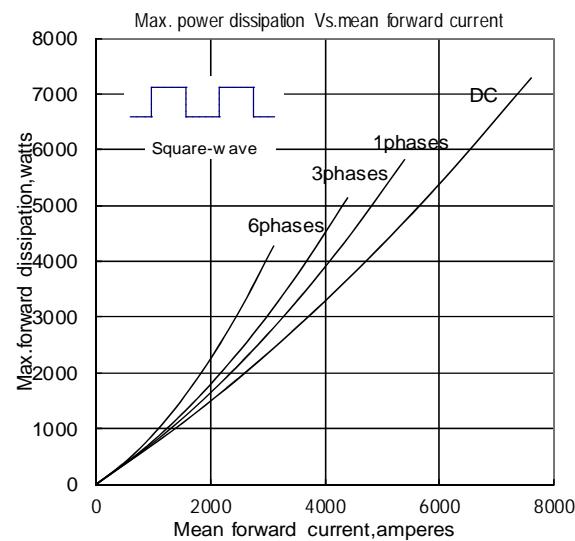


Fig.5

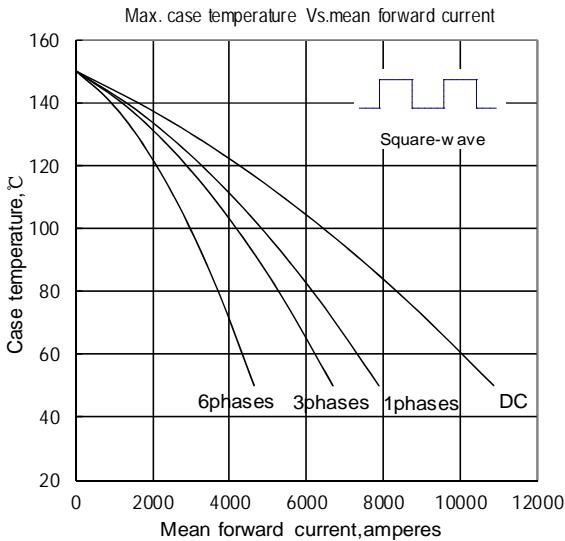


Fig.6

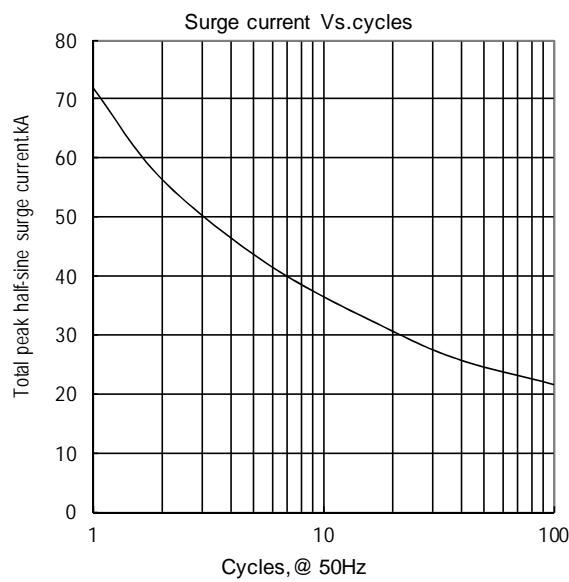


Fig.7

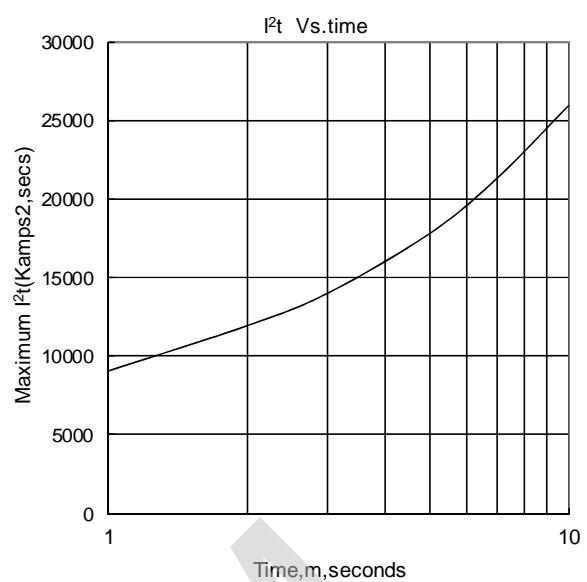
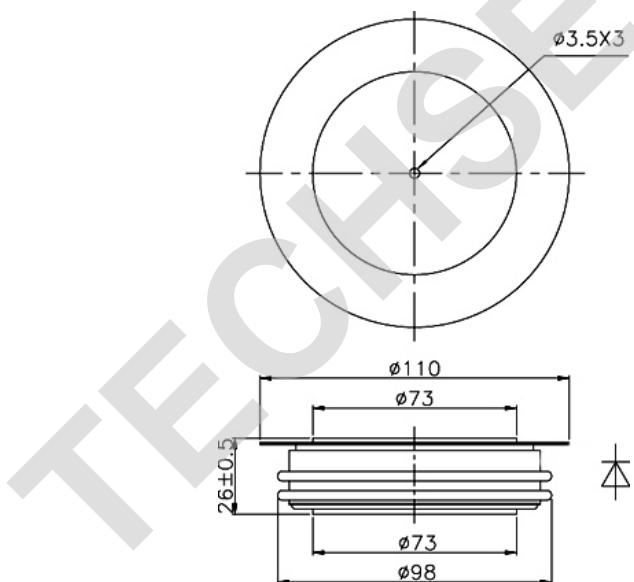


Fig.8

Outline:

TECHSEM reserves the right to change specifications without notice.