

**Features**

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

Typical Applications

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

| Part No. Y76ZPG-ZT73cT | |
|-------------------------------|--------------------|
| I_{F(AV)} | 3290A |
| V_{RRM} | 4500V 5000V |

| 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 | | | 3290 A |
| V _{RRM} | Repetitive peak reverse voltage | tp=10ms | 150 | 4300 | | | 5000 V |
| I _{RRM} | Repetitive peak current | at V _{RRM} | 150 | | | 200 | mA |
| I _{FSM} | Surge forward current | 10ms half sine wave V _R =0.6V _{RRM} | 150 | | | 35 | kA |
| I ² t | I ² t for fusing coordination | | | | | 6125 | A ² s*10 ³ |
| V _{FO} | Threshold voltage | | 150 | | | 0.88 | V |
| r _F | Forward slope resistance | | | | | 0.12 | mΩ |
| V _{FM} | Peak on-state voltage | I _{FM} =4000A, F=40kN | 25 | | | 2.00 | V |
| Q _{rr} | Recovery charge | I _{FM} =2000A, tp=4000μs, di/dt=-20A/μs, V _R =100V | 150 | | 6000 | | 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 | | 150 | °C |
| T _{stg} | Stored temperature | | | -40 | | 160 | °C |
| W _t | Weight | | | | 1100 | | g |
| Outline | | ZT73cT | | | | | |

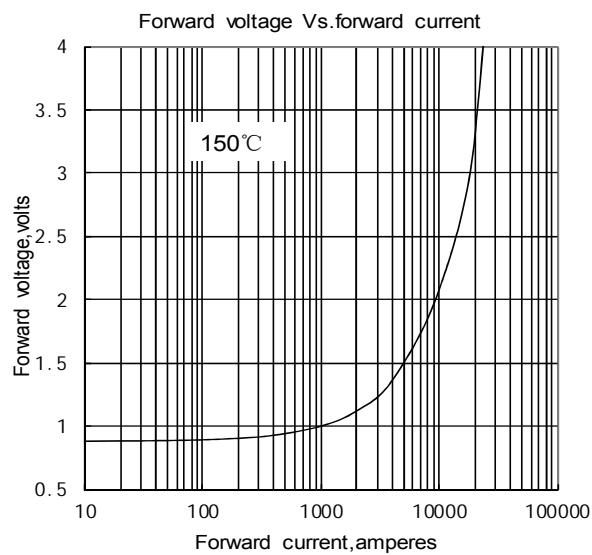


Fig.1

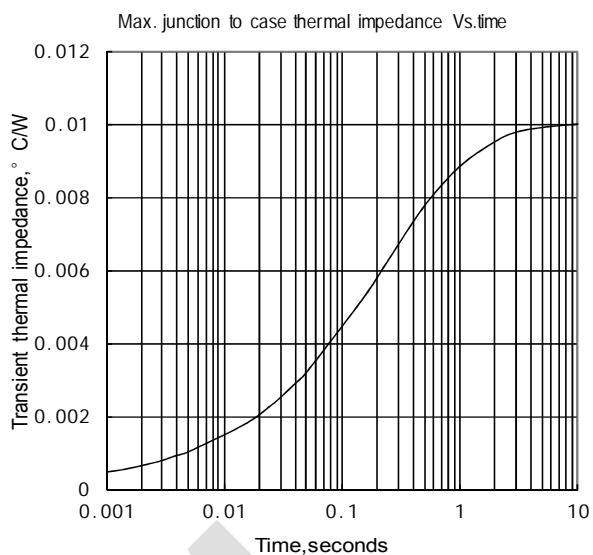


Fig.2

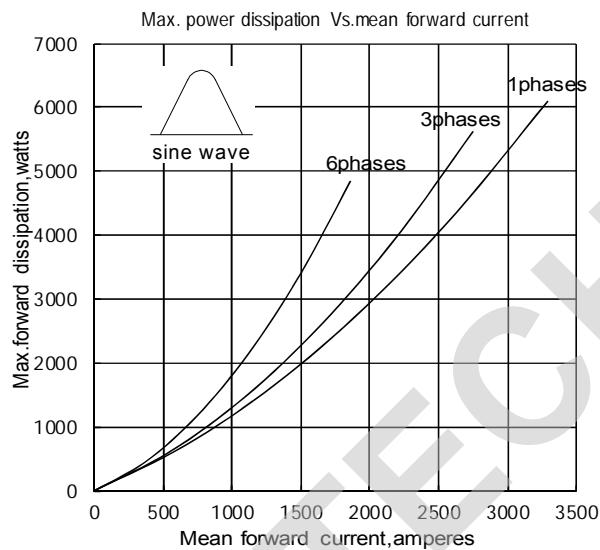


Fig.3

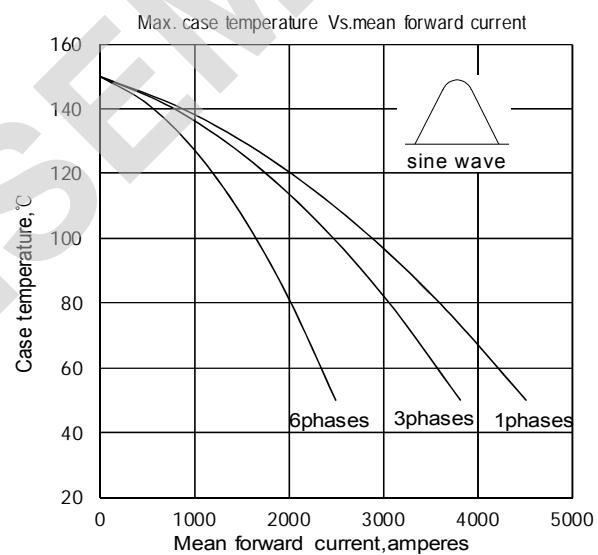


Fig.4

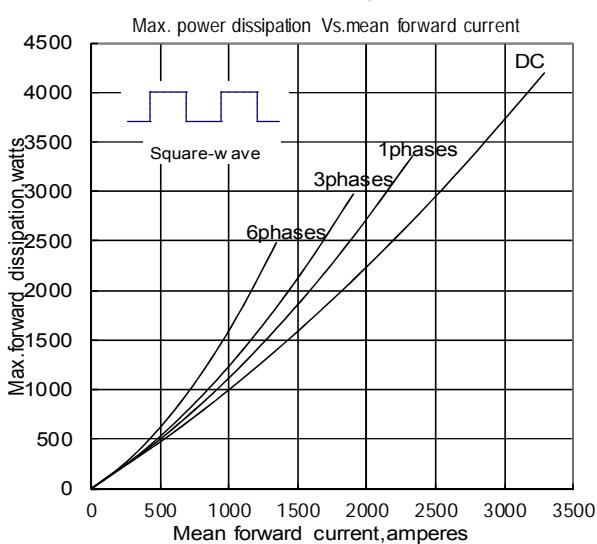


Fig.5

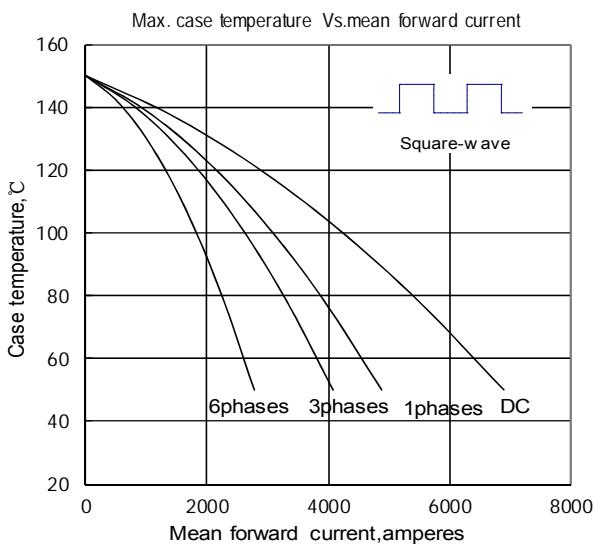


Fig.6

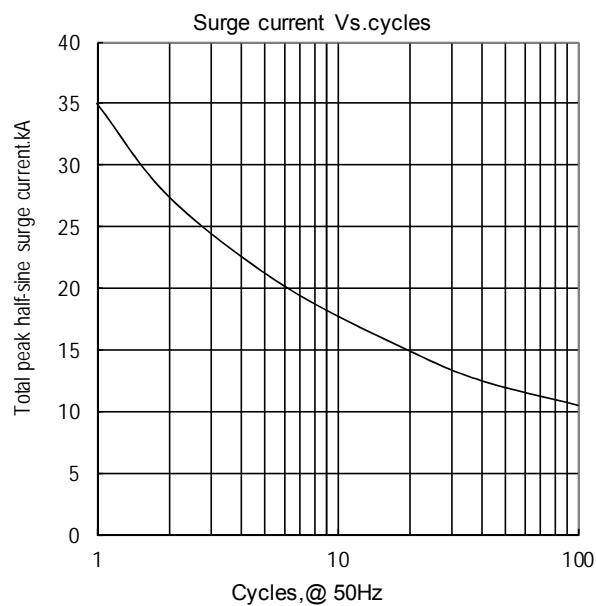


Fig.7

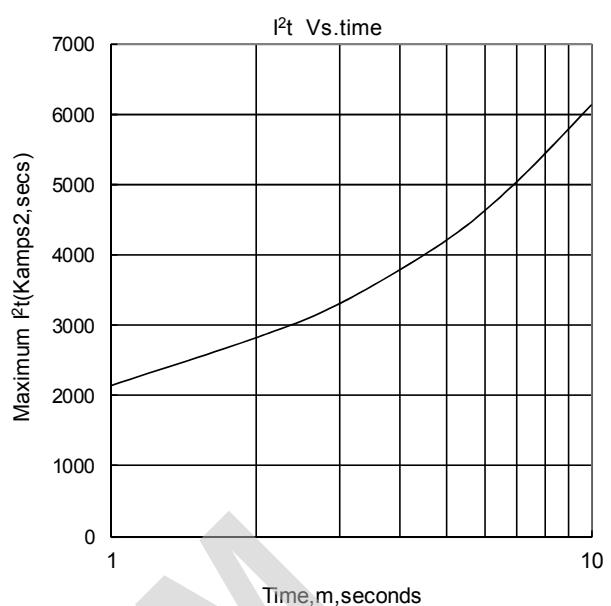
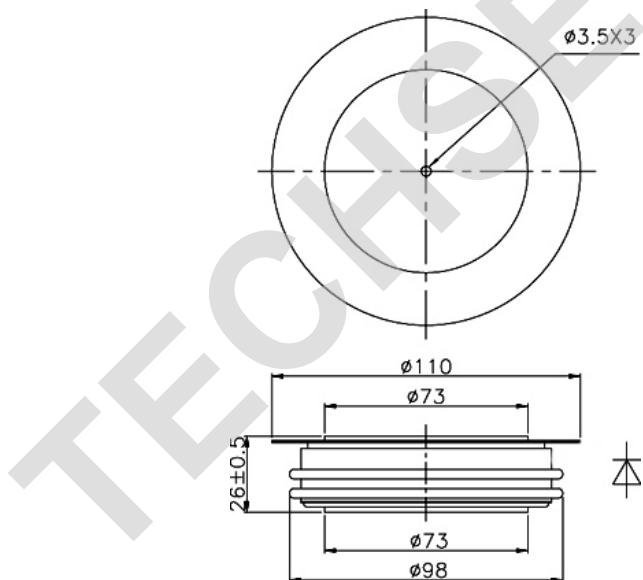


Fig.8

Outline:

TECHSEM reserves the right to change specifications without notice.