**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. Y70ZPC-ZT60cT

| | | |
|--------------------------|--------------|--------------|
| I_{F(AV)} | 4520A | |
| V_{RRM} | 1200V | 1400V |
| | 1600V | 1800V |
| | 2000V | |

| 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 | 175 | | | 4520 | A |
| V _{RRM} | Repetitive peak reverse voltage | tp=10ms | | 175 | 1100 | | 2000 | V |
| I _{RRM} | Repetitive peak current | at V _{RRM} | | 175 | | | 160 | mA |
| I _{FSM} | Surge forward current | 10ms half sine wave | | 175 | | | 44 | kA |
| I ² t | I ² t for fusing coordination | V _R =0.6V _{RRM} | | | | | 9680 | A ² s*10 ³ |
| V _{FO} | Threshold voltage | | | 175 | | | 0.85 | V |
| r _F | Forward slope resistance | | | | | | 0.073 | mΩ |
| V _{FM} | Peak forward voltage | I _{FM} =4000A, F=35kN | | 25 | | | 2.0 | V |
| Q _{rr} | Recovery charge | I _{FM} =2000A, tp=4000μs, di/dt=-20A/μs, V _R =100V | | 175 | | 5000 | | μC |
| R _{th(j-c)} | Thermal resistance Junction to case | At 180° sine double side cooled Clamping force 35kN | | | | | 0.012 | °C/W |
| R _{th(c-h)} | Thermal resistance case to heat sink | | | | | | 0.003 | |
| F _m | Mounting force | | | | 30 | | 40 | kN |
| T _{vj} | Junction temperature | | | | -40 | | 175 | °C |
| T _{stg} | Stored temperature | | | | -40 | | 175 | °C |
| W _t | Weight | | | | | 880 | | g |
| Outline | ZT60cT | | | | | | | |

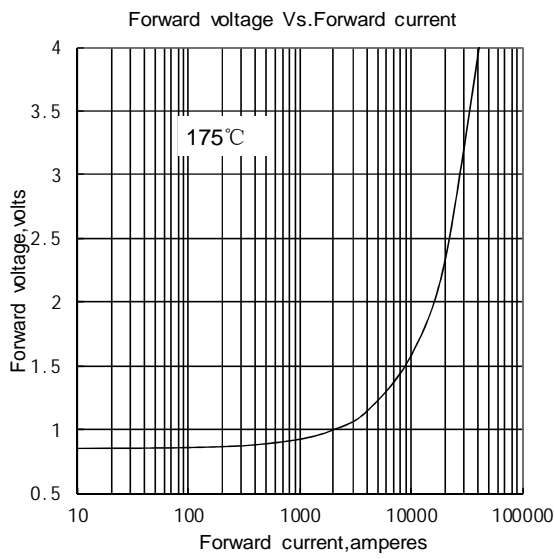


Fig.1

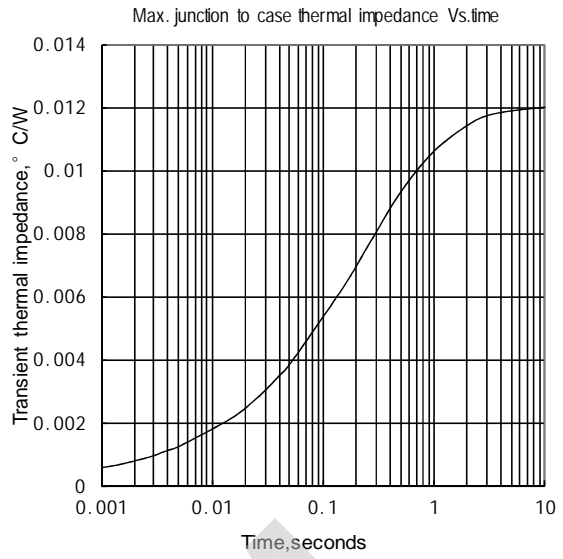


Fig.2

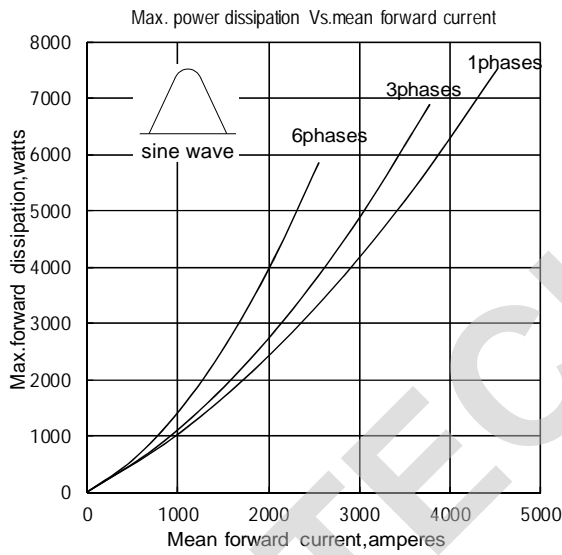


Fig.3

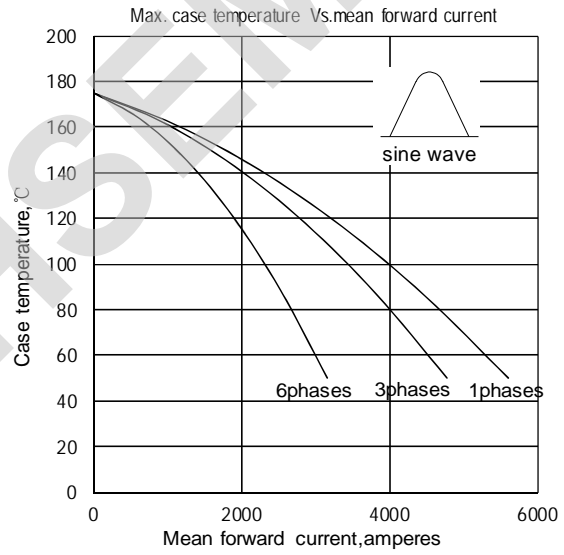


Fig.4

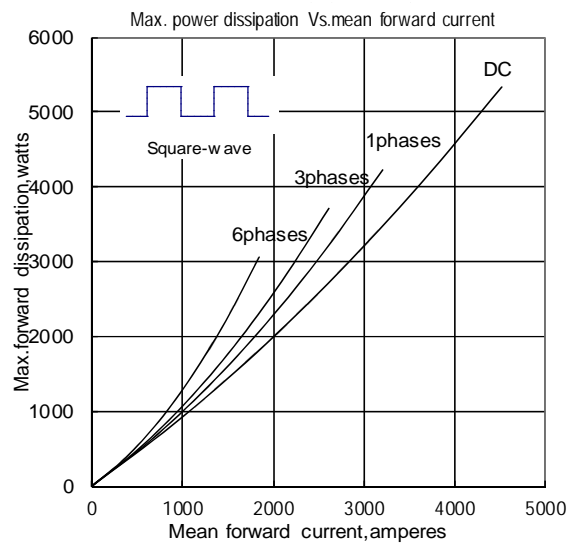


Fig.5

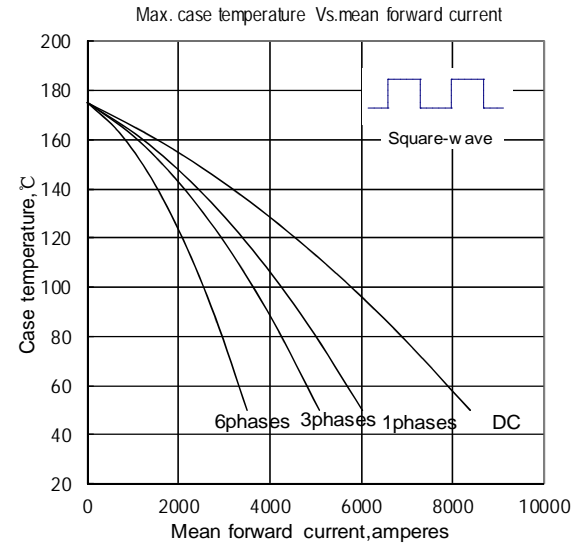


Fig.6

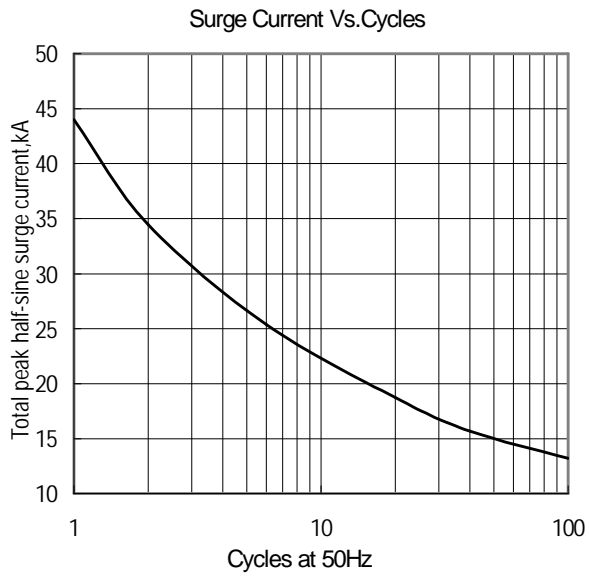


Fig.7

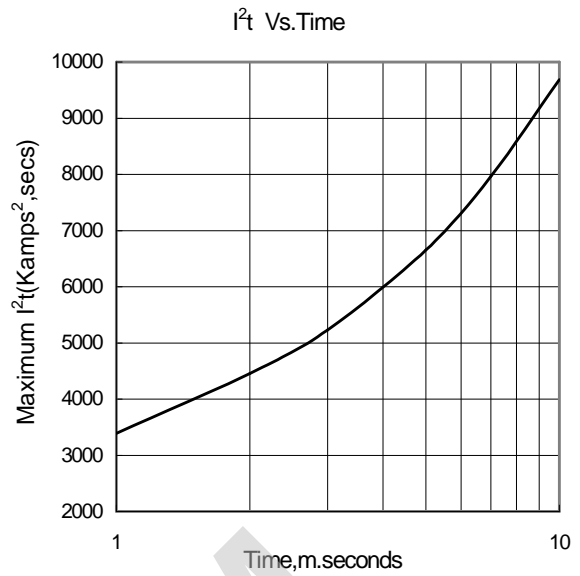
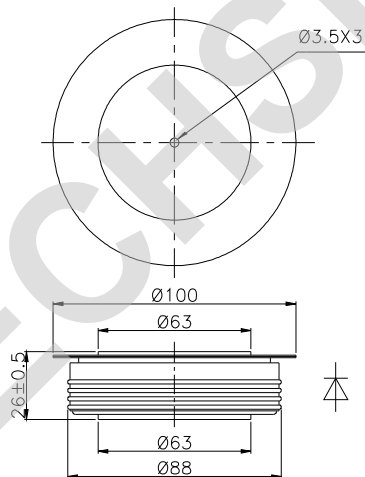


Fig.8

Outline:



TECHSEM reserves the right to change specifications without notice.