

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

| | |
|-------------|--|
| $I_{F(AV)}$ | 1290 A |
| V_{RRM} | 200~1000 V |
| I_{FSM} | 15 kA |
| I^2t | 1125 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 =55°C | | | 1560 | A |
| | | | T _C =85°C | | | 1290 | |
| V _{RRM} | Repetitive peak reverse voltage | V _{RRM} tp=10ms V _{RSM} = V _{RRM} +100V | 175 | 200 | | 1000 | V |
| I _{RRM} | Repetitive peak current | V _{RM} = V _{RRM} | 175 | | | 40 | mA |
| I _{FSM} | Surge forward current | 10ms half sine wave | 175 | | | 15 | kA |
| I ² t | I ² T for fusing coordination | V _R =0.6V _{RRM} | | | | 1125 | A ² s*10 ³ |
| V _{FO} | Threshold voltage | | 175 | | | 1.05 | V |
| r _F | Forward slop resistance | | | | | 0.30 | mΩ |
| V _{FM} | Peak on-state voltage | I _{FM} =1800A, F=15kN | 175 | | | 1.59 | V |
| Q _{rr} | Recovery charge | I _{FM} =2000A, tp=2000μs, di/dt=-20A/μs, V _R =50V | 175 | | 1900 | 189 | μC |
| R _{th(j-c)} | Thermal resistance Junction to case | At 180° sine double side cooled Clamping force 15.0kN | | | | 0.035 | °C /W |
| R _{th(c-h)} | Thermal resistance case to heat sink | | | | | 0.008 | |
| F _m | Mounting force | | | 10 | | 20 | kN |
| T _{stg} | Stored temperature | | | -40 | | 175 | °C |
| W _t | Weight | | | | 240 | | g |
| Outline | ZT33cT | | | | | | |

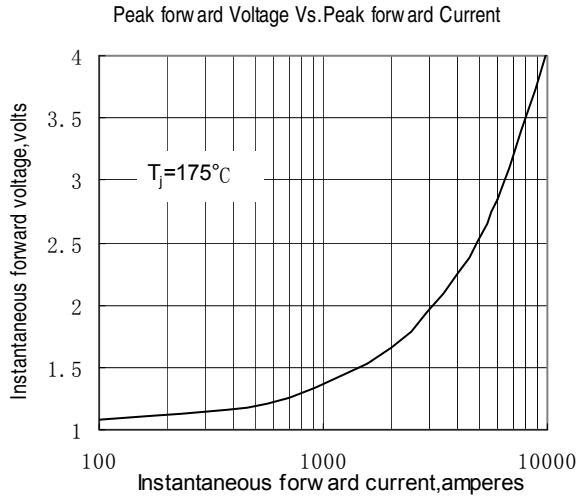


Fig.1

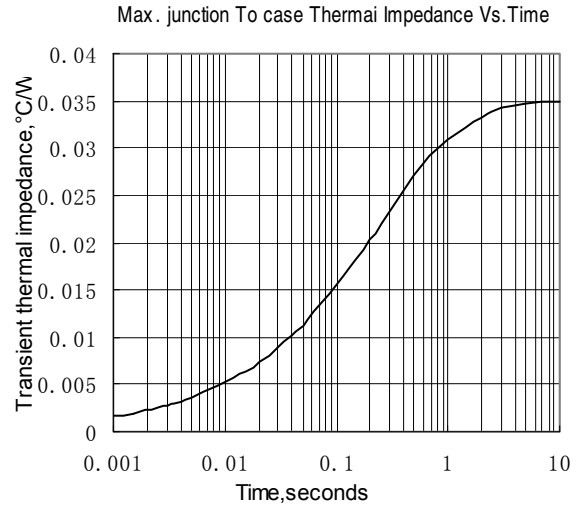


Fig.2

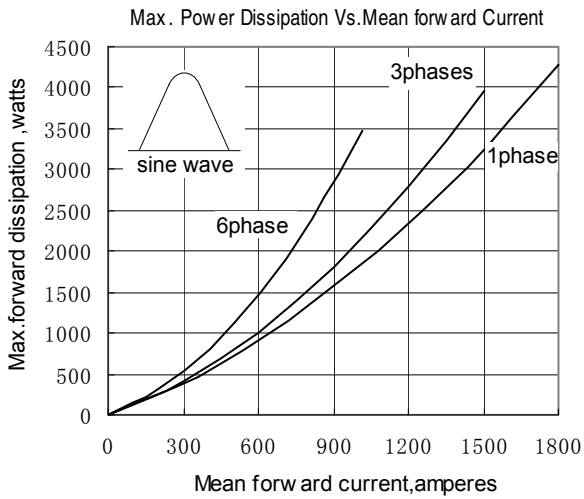


Fig.3

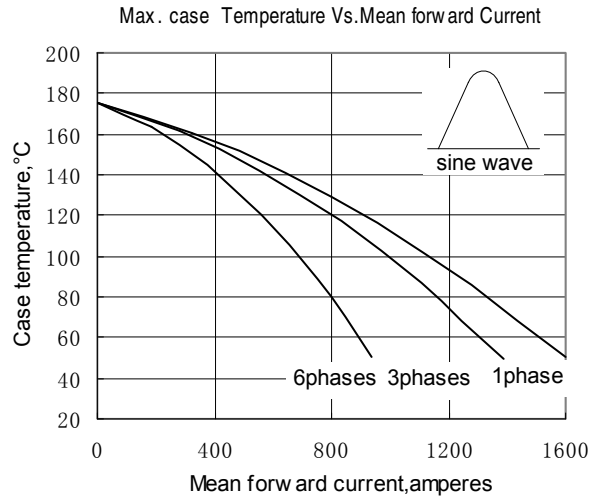


Fig.4

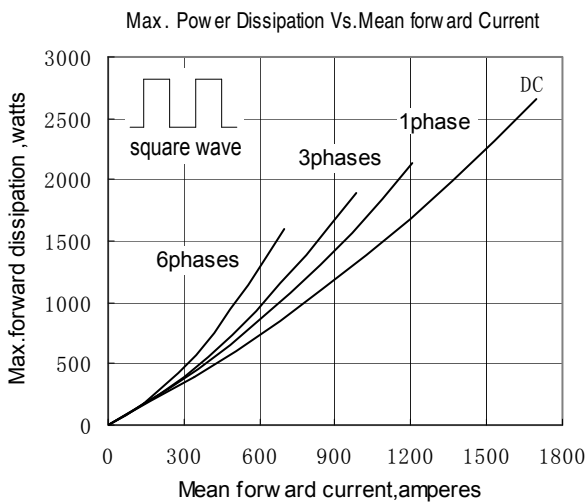


Fig.5

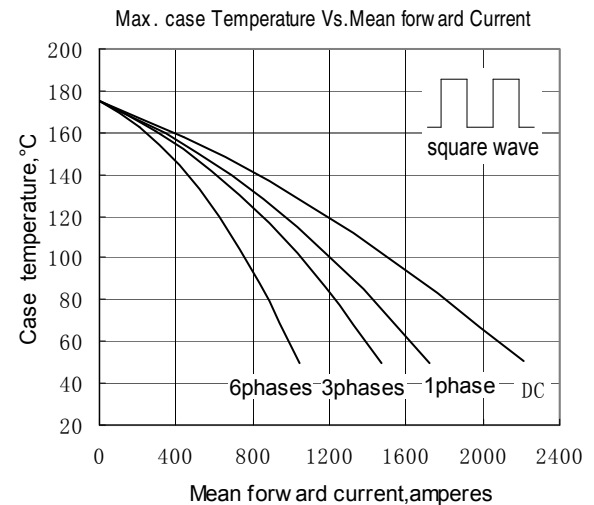


Fig.6

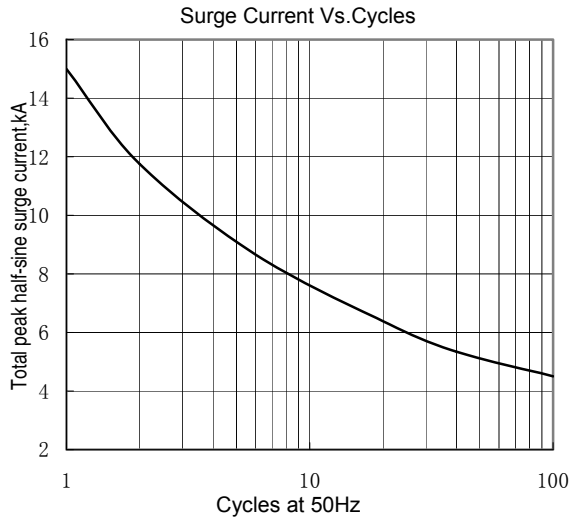


Fig.7

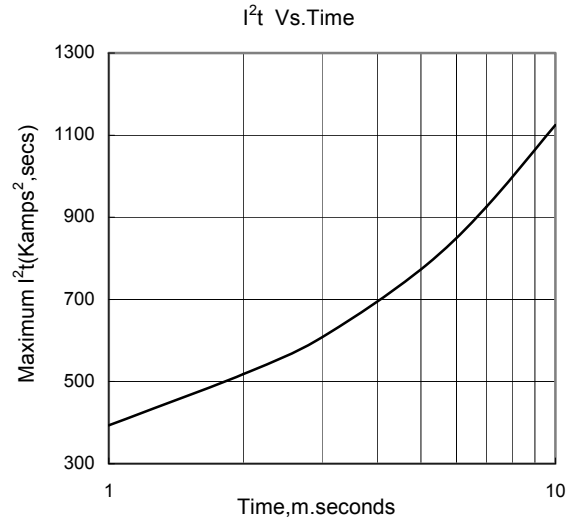


Fig.8

Outline:

