

**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. H100ZPU-ZT100dT

| | | |
|--------------------------|---------------|--------------|
| I_{F(AV)} | 3300 A | |
| V_{RRM} | 8000V | 8500V |

| 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 | | | 3300 | A |
| V _{RRM} | Repetitive peak reverse voltage | tp=10ms | | 150 | 8000 | | 8500 | V |
| I _{RRM} | Repetitive peak current | at V _{RRM} tp=10ms | | 150 | | | 300 | mA |
| I _{FSM} | Surge forward current | 10ms half sine wave. V _R =0.6V _{RRM} | | 150 | | | 50 | kA |
| I ² t | I ² t for fusing coordination | | | | | | 12500 | 10 ³ A ² s |
| V _{FO} | Threshold voltage | | | 150 | | | 0.96 | V |
| r _F | Forward slope resistance | | | | | | 0.24 | mΩ |
| V _{FM} | Peak forward voltage | I _{FM} =5000A, F=100kHz | | 25 | | | 2.10 | V |
| Q _{rr} | Recovery charge | I _{FM} =2000A, tp=4000μs, di/dt=-20A/μs, V _R =100V | | 150 | | 23500 | | μC |
| R _{th(j-c)} | Thermal resistance Junction to case | At 180° sine. double side cooled Clamping force 100kN | | | | | 0.005 | °C/W |
| R _{th(c-h)} | Thermal resistance case to heatsink | | | | | 0.0015 | | |
| F _m | Mounting force | | | | 98 | | 113 | kN |
| T _{vj} | Junction temperature | | | | -40 | | 150 | °C |
| T _{stg} | Stored temperature | | | | -40 | | 160 | °C |
| W _t | Weight | | | | | 2500 | | g |
| Outline | ZT100dT | | | | | | | |

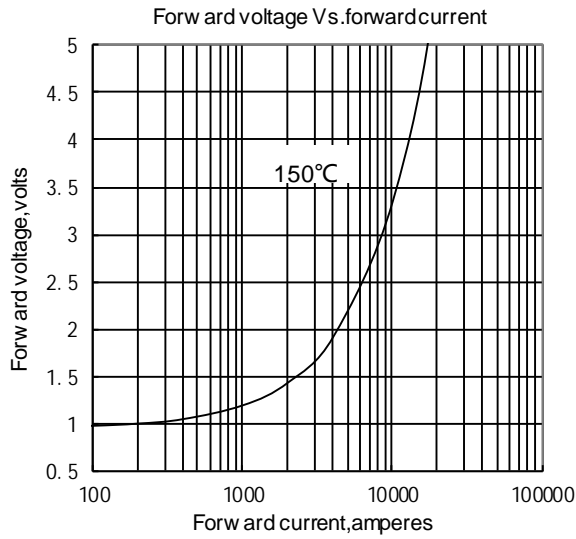


Fig.1

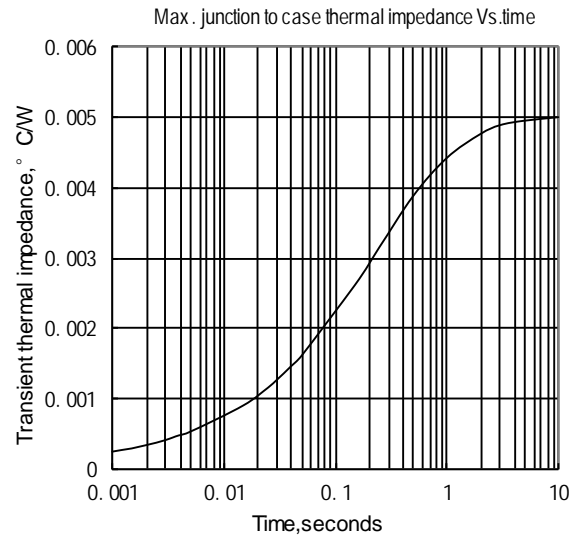


Fig.2

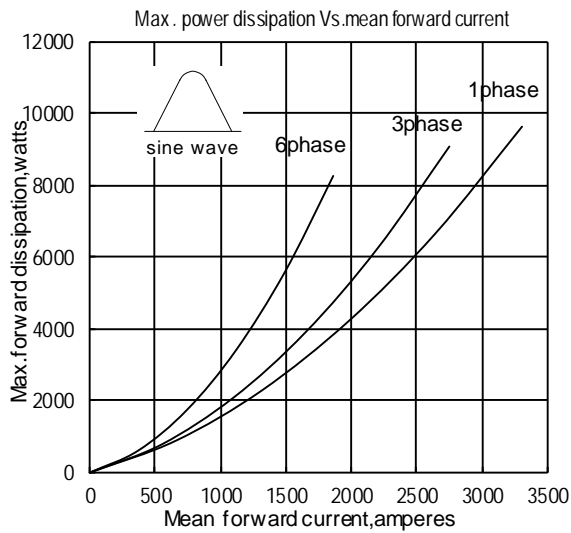


Fig.3

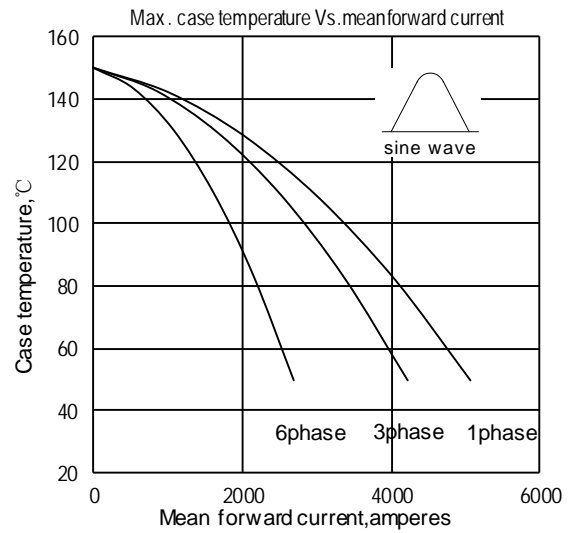


Fig.4

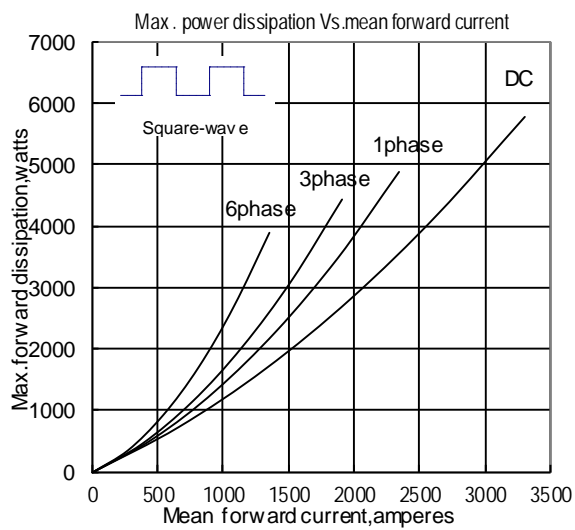


Fig.5

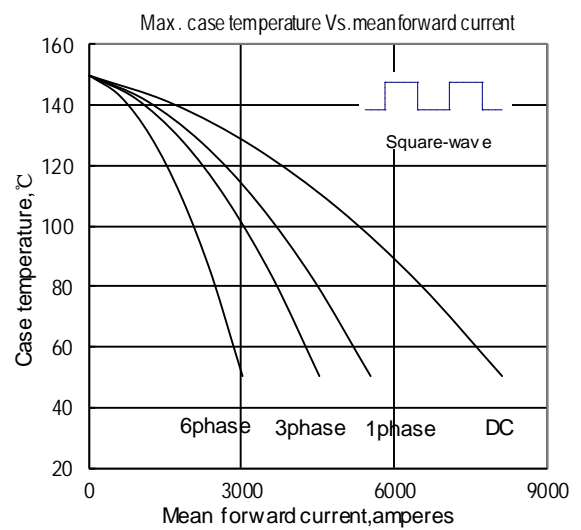


Fig.6

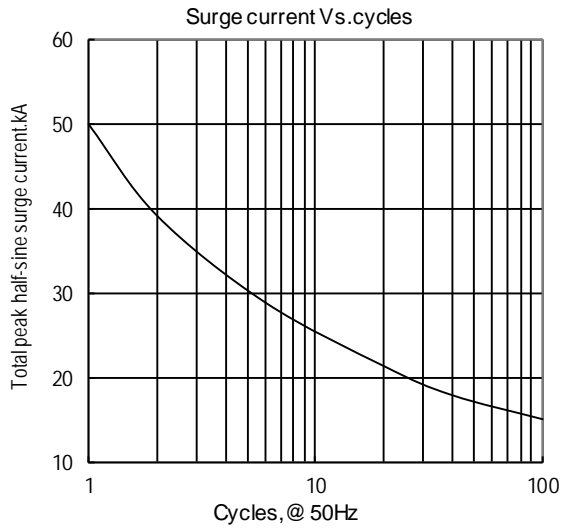


Fig.7

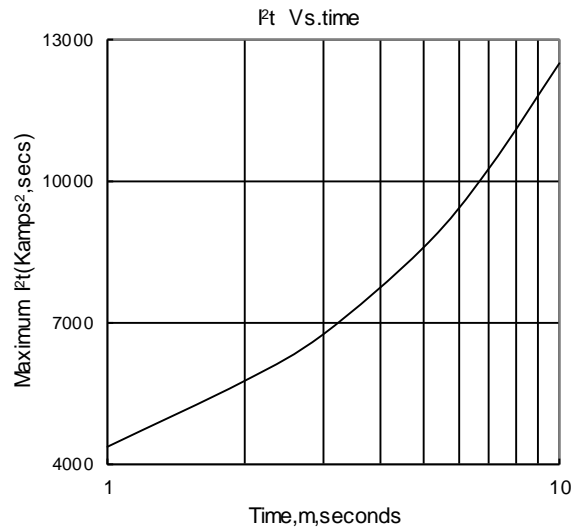
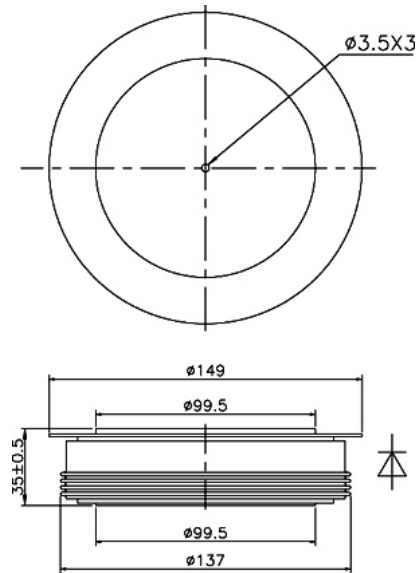


Fig.8

Outline:



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