**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

| | |
|---|---|
| $I_{F(AV)}$ | **500 A** |
| $V_{RRM}$ | **5600~6500 V** |
| $I_{FSM}$ | **9.5 kA** |
| $I^2t$ | **451 $10^3A^2S$** |

| 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 | | | 500 | A |
| $V_{RRM}$ | Repetitive peak reverse voltage | tp=10ms | | 150 | 5600 | | 6500 | V |
| $I_{RRM}$ | Repetitive peak current | at $V_{RRM}$ | | 150 | | | 50 | mA |
| $I_{FSM}$ | Surge forward current | 10ms half sine wave $V_R$=0.6$V_{RRM}$ | | 150 | | | 9.5 | kA |
| $I^2t$ | $I^2t$ for fusing coordination | | | | | | 451 | $A^2s*10^3$ |
| $V_{FO}$ | Threshold voltage | | | 150 | | | 0.89 | V |
| $r_F$ | Forward slope resistance | | | | | | 1.05 | mΩ |
| $V_{FM}$ | Peak forward voltage | $I_{FM}$=1000A, F=20kN | | 150 | | | 2.20 | V |
| $Q_{rr}$ | Recovery charge | $I_{FM}$=1000A, tp=2000μs, di/dt=-5A/μs, $V_R$=50V | | 150 | | 2500 | | μC |
| $R_{th(j-c)}$ | Thermal resistance Junction to case | DC, double side cooled Clamping force 20.0kN | | | | | 0.045 | °C /W |
| $R_{th(c-h)}$ | Thermal resistance case to heatsink | | | | | | 0.008 | |
| $F_m$ | Mounting force | | | | 10 | | 20 | kN |
| $T_{stg}$ | Stored temperature | | | | -40 | | 160 | °C |
| $W_t$ | Weight | | | | | 340 | | g |
| Outline | P50 | | | | | | | |

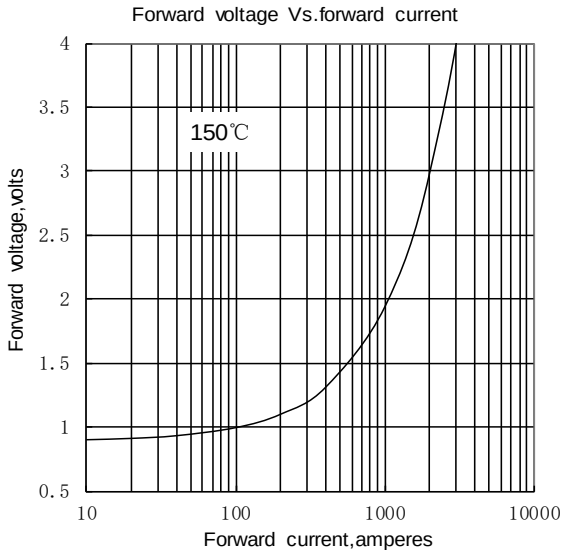


Fig.1

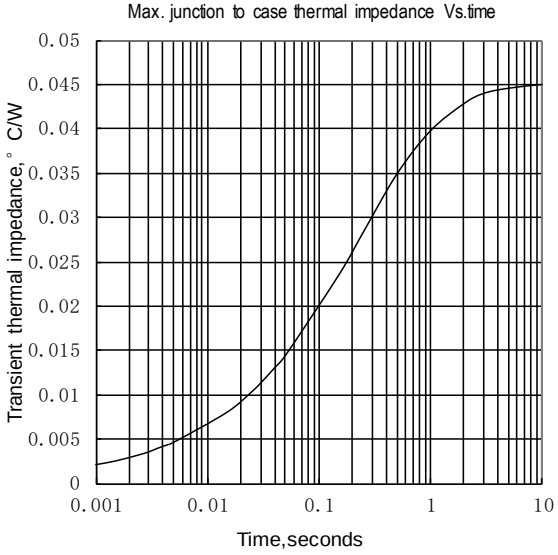


Fig.2

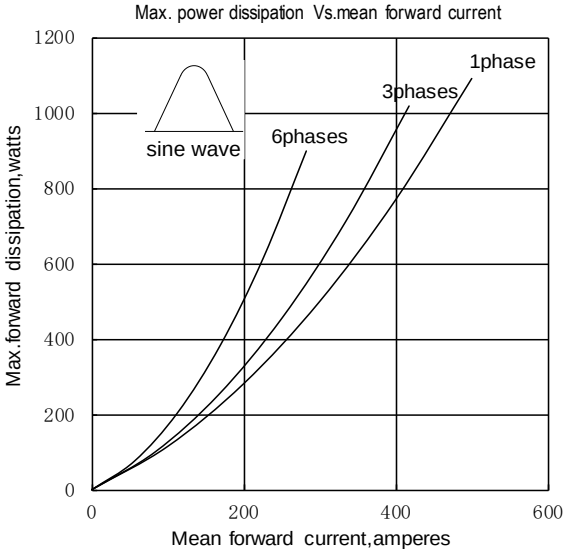


Fig.3

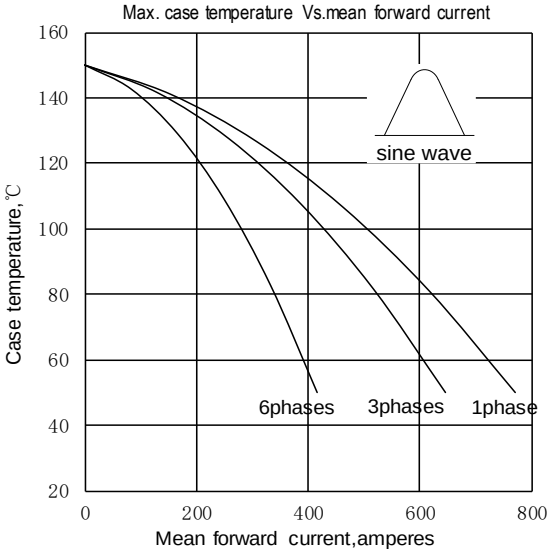


Fig.4

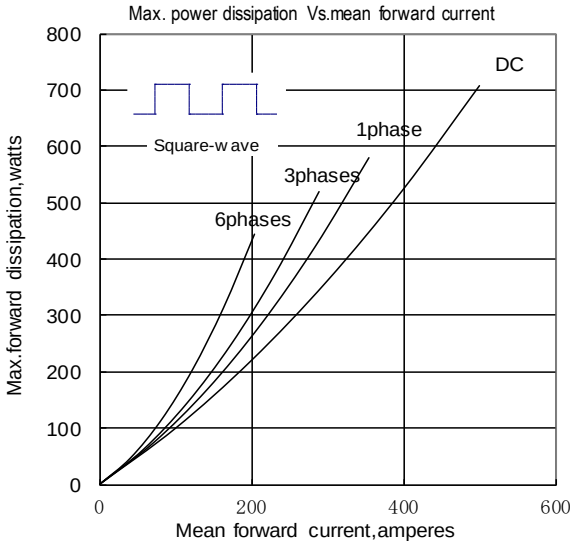


Fig.5

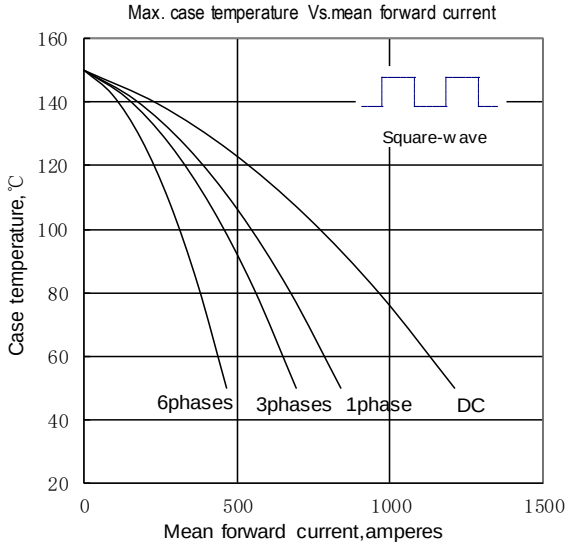


Fig.6

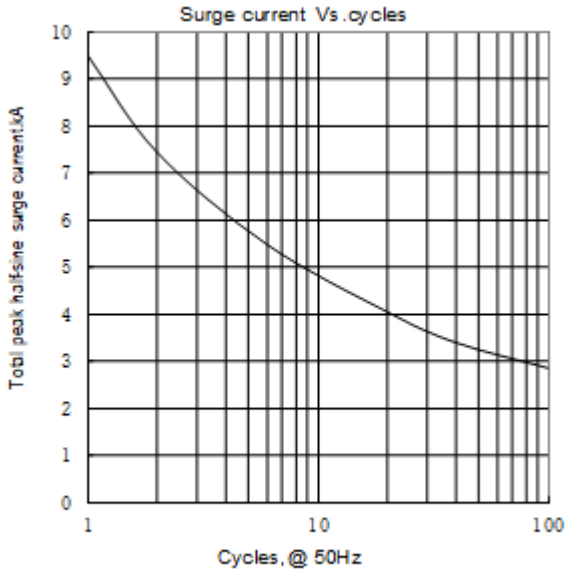


Fig.7