

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

$I_{F(AV)}$ 970 A
 V_{RRM} 5600~6500 V
 I_{FSM} 16.5 kA
 I^2t 1361 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 =100°C | 150 | | | 970 | A |
| V_{RRM} | Repetitive peak reverse voltage | tp=10ms | | 150 | 5600 | | 6500 | V |
| I_{RRM} | Repetitive peak current | At V_{RRM} | | 150 | | | 100 | mA |
| I_{FSM} | Surge forward current | 10ms half sine wave | | 150 | | | 16.5 | kA |
| I^2t | I^2t for fusing coordination | $V_R=0.6V_{RRM}$ | | | | | | 1361 |
| V_{FO} | Threshold voltage | | | 150 | | | 0.91 | V |
| r_F | Forward slope resistance | | | | | | | 0.60 |
| V_{FM} | Peak forward voltage | $I_{FM}=1500A, F=26kN$ | | 150 | | | 2.15 | V |
| Q_{rr} | Recovery charge | $I_{FM}=2000A, tp=2000\mu s,$ $di/dt=-5A/\mu s, V_R=50V$ | | | | | 3500 | μC |
| $R_{th(j-c)}$ | Thermal resistance Junction to case | DC· double side cooled | | | | | 0.022 | °C /W |
| $R_{th(c-h)}$ | Thermal resistance case to heatsink | Clamping force 26kN | | | | | 0.005 | |
| F_m | Mounting force | | | | 19 | | 26 | kN |
| T_{stg} | Stored temperature | | | | -40 | | 160 | °C |
| W_t | Weight | | | | | | 440 | g |
| Outline | P52 | | | | | | | |

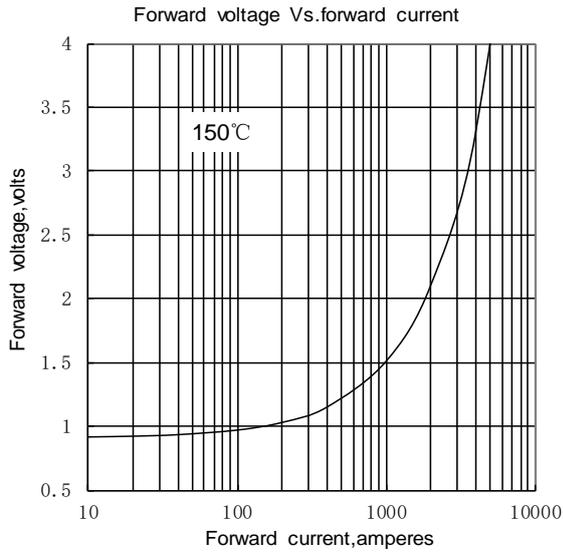


Fig.1

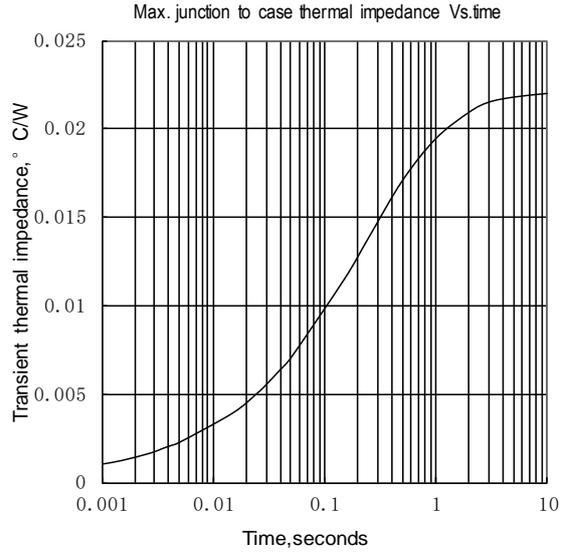


Fig.2

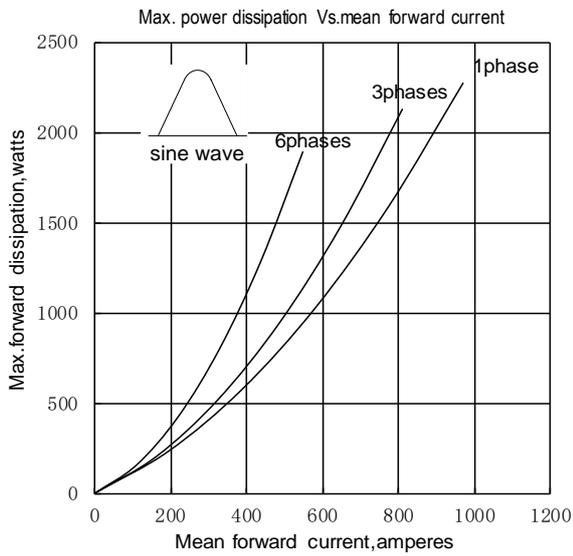


Fig.3

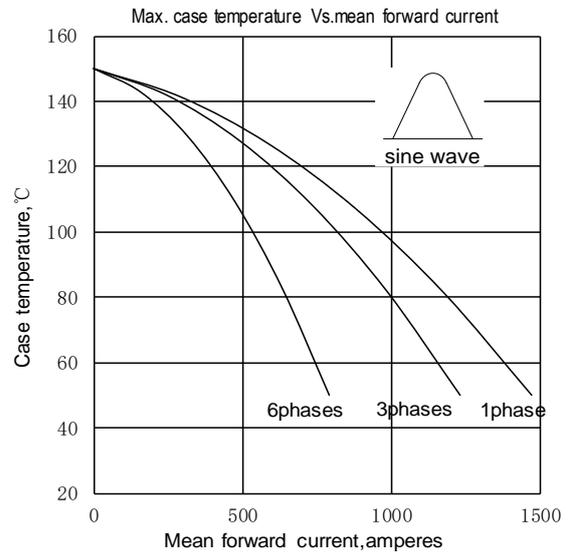


Fig.4

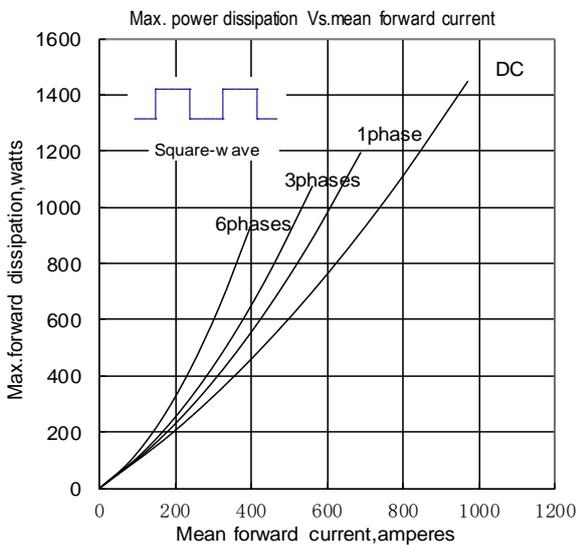


Fig.5

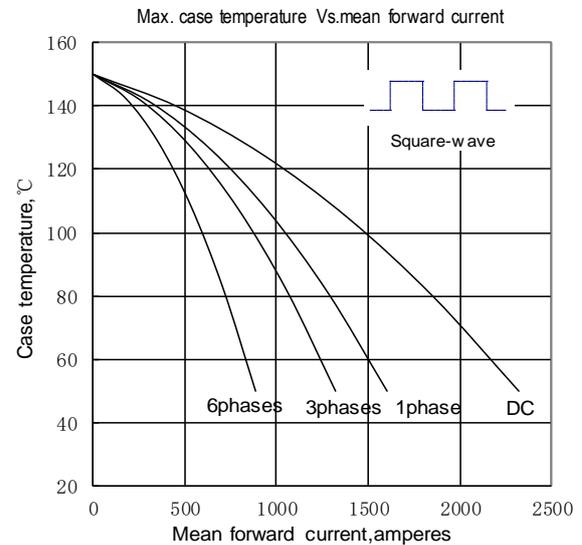


Fig.6

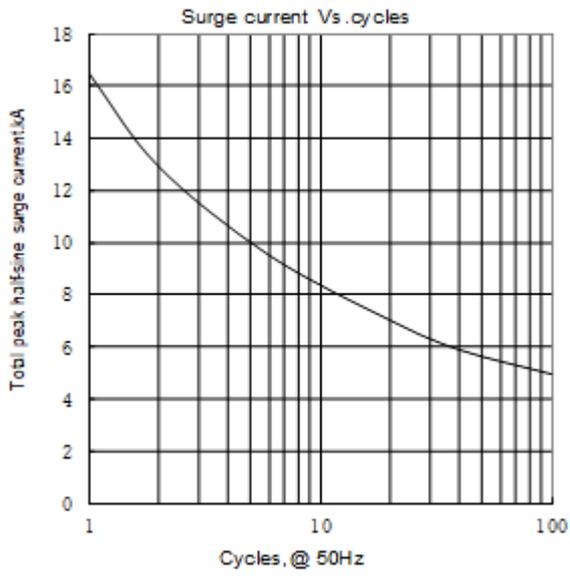
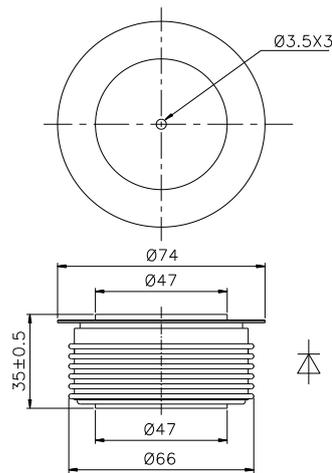


Fig.7



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