

Features :

- Isolated mounting base 3000V~
- Pressure contact technology with Increased power cycling capability
- Space and weight saving

Typical Applications

- Various rectifiers
- DC supply for PWM inverter

| V_{RSM} | V_{RRM} | 品名 |
|-----------|-----------|-----------|
| 900V | 800V | Mx182D80 |
| 1100V | 1000V | Mx182D100 |
| 1300V | 1200V | Mx182D120 |
| 1500V | 1400V | Mx182D140 |
| 1700V | 1600V | Mx182D160 |
| 1900V | 1800V | Mx182D180 |

| SYMBOL | CHARACTERISTIC | TEST CONDITIONS | T_j (°C) | VALUE | | | UNIT |
|---------------|----------------------------------------|-------------------------------------------------------------------------|------------|-------|------|------|----------------------------------|
| | | | | Min. | Typ. | Max. | |
| $I_{F(AV)}$ | Mean forward current | 180° half sine wave 50Hz Single side cooled, $T_c=100^\circ\text{C}$ | 150 | | | 182 | A |
| I_F (RMS) | RMS forward current | | 150 | | | 286 | A |
| I_{RRM} | Repetitive peak current | at V_{RRM} | 150 | | | 12 | mA |
| I_{FSM} | Surge forward current | 10ms half sine wave $V_R=0.6V_{RRM}$ | 150 | | | 6.4 | kA |
| I^2t | I^2t for fusing coordination | | | | | 205 | $\text{A}^2\text{s} \times 10^3$ |
| V_{FO} | Threshold voltage | | 150 | | | 0.80 | V |
| r_F | Forward slope resistance | | | | | 0.96 | $\text{m}\Omega$ |
| V_{FM} | Peak forward voltage | $I_{FM}=550\text{A}$ | 25 | | | 1.43 | V |
| $R_{th(j-c)}$ | Thermal resistance Junction to case | D.C. Single side cooled per chip | | | | 0.22 | $^\circ\text{C}/\text{W}$ |
| $R_{th(c-h)}$ | Thermal resistance case to heatsink | D.C. Single side cooled per chip | | | | 0.08 | $^\circ\text{C}/\text{W}$ |
| V_{iso} | Isolation voltage | 50Hz,R.M.S., $t=1\text{min}$, $I_{iso}:1\text{mA(max)}$ | | 3000 | | | V |
| F_m | Terminal connection torque(M6) | | | 3.5 | | 5.0 | $\text{N}\cdot\text{m}$ |
| | Mounting torque(M6) | | | | 6.0 | | $\text{N}\cdot\text{m}$ |
| T_{vj} | Junction temperature | | | -40 | | 150 | $^\circ\text{C}$ |
| T_{stg} | Stored temperature | | | -40 | | 125 | $^\circ\text{C}$ |
| W_t | Weight | | | | 320 | | g |
| Outline | M02 | | | | | | |

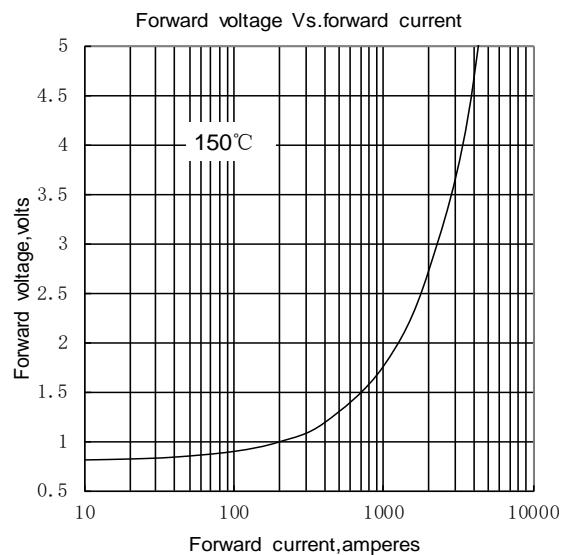


Fig.1

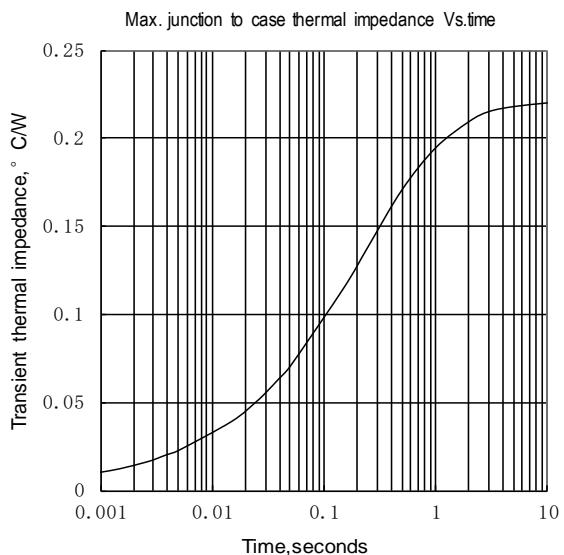


Fig.2

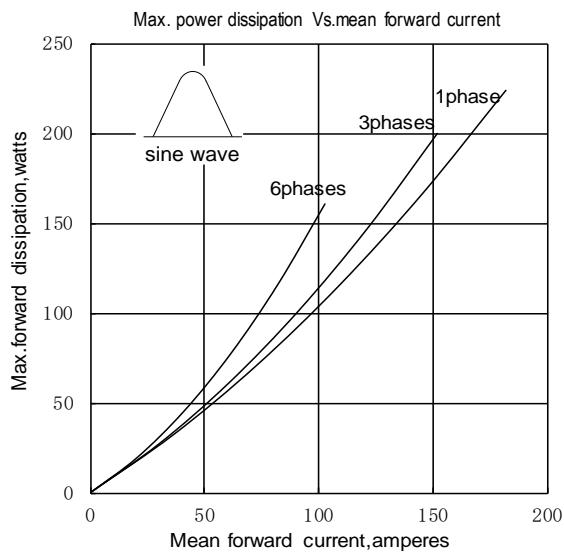


Fig.3

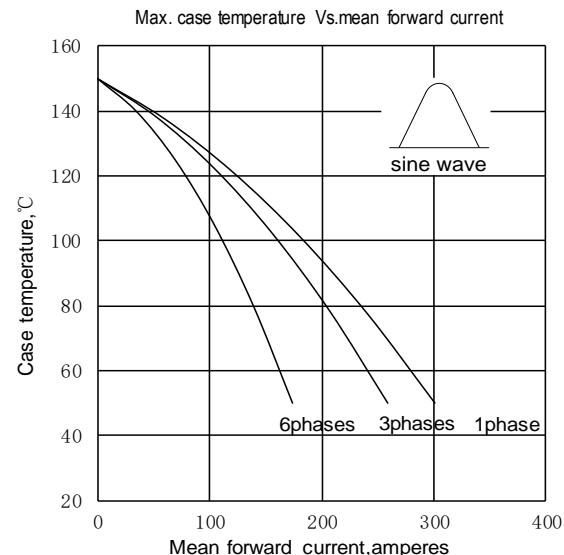


Fig.4

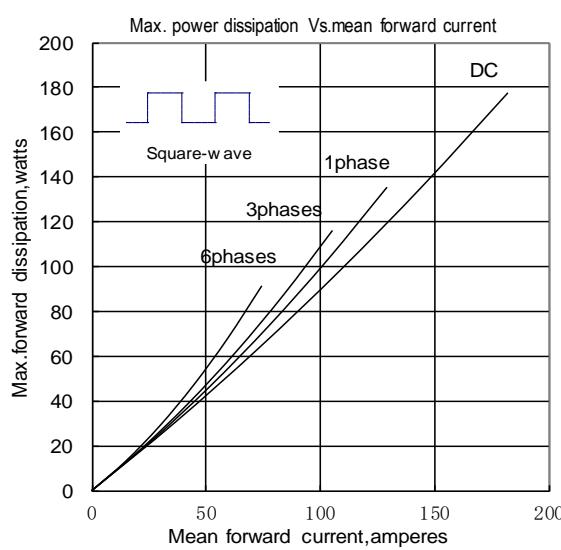


Fig.5

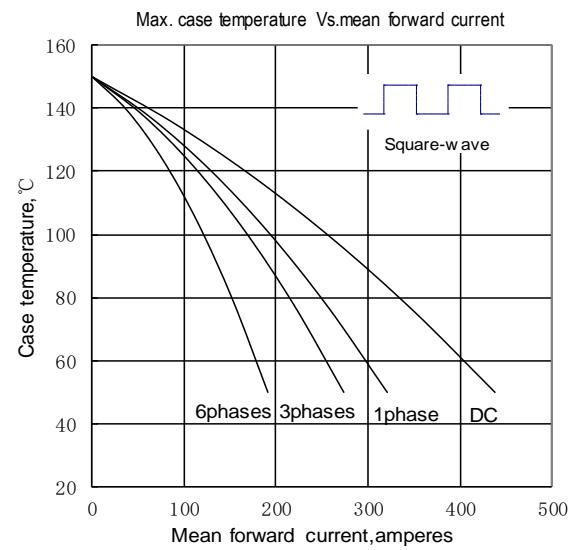


Fig.6

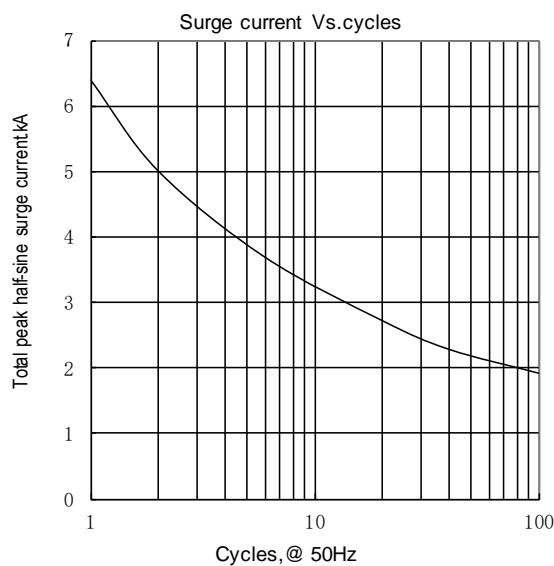
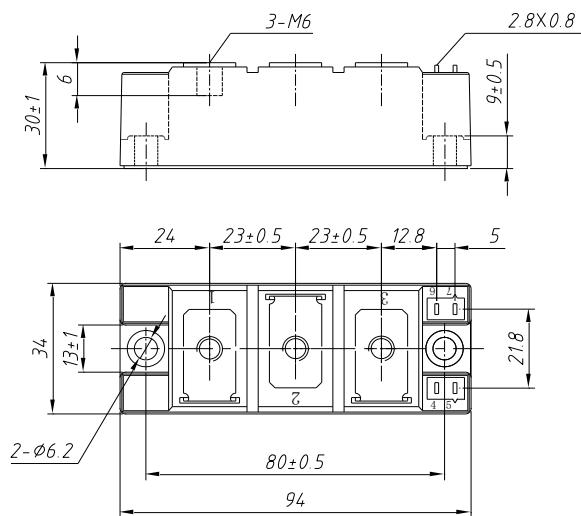
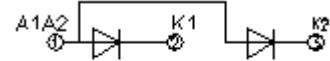


Fig.7

Unmarked dimensional tolerance : $\pm 0.5\text{mm}$

MR182D**



MC182D**

