

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 _{RSM} | 品名 |
|------------------|------------------|-----------|
| 900V | 800V | Mx500D80 |
| 1100V | 1000V | Mx500D100 |
| 1300V | 1200V | Mx500D120 |
| 1500V | 1400V | Mx500D140 |
| 1700V | 1600V | Mx500D160 |
| 1900V | 1800V | Mx500D180 |

| 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°C | 150 | | | 500 | A |
| I _{F(RMS)} | RMS forward current | | 150 | | | 785 | A |
| I _{RRM} | Repetitive peak current | at V _{RRM} | 150 | | | 40 | mA |
| I _{FSM} | Surge forward current | 10ms half sine wave V _R =0.6V _{RRM} | 150 | | | 16.0 | kA |
| I ² t | I ² t for fusing coordination | | | | | 1280 | A ² s*10 ³ |
| V _{FO} | Threshold voltage | | 150 | | | 0.75 | V |
| r _F | Forward slope resistance | | | | | 0.30 | mΩ |
| V _{FM} | Peak forward voltage | I _{FM} =1500A | 25 | | | 1.32 | V |
| R _{th(j-c)} | Thermal resistance Junction to case | D.C. Single side cooled per chip | | | | 0.090 | °C/W |
| R _{th(c-h)} | Thermal resistance case to heatsink | D.C. Single side cooled per chip | | | | 0.024 | °C/W |
| V _{iso} | Isolation voltage | 50Hz,R.M.S,t=1min,I _{iso} :1mA(max) | | 3000 | | | V |
| F _m | Terminal connection torque(M10) | | | | 12.0 | | N·m |
| | Mounting torque(M6) | | | | 6.0 | | N·m |
| T _{vj} | Junction temperature | | | -40 | | 150 | °C |
| T _{stg} | Stored temperature | | | -40 | | 125 | °C |
| W _t | Weight | | | | 1540 | | g |
| Outline | M06 | | | | | | |

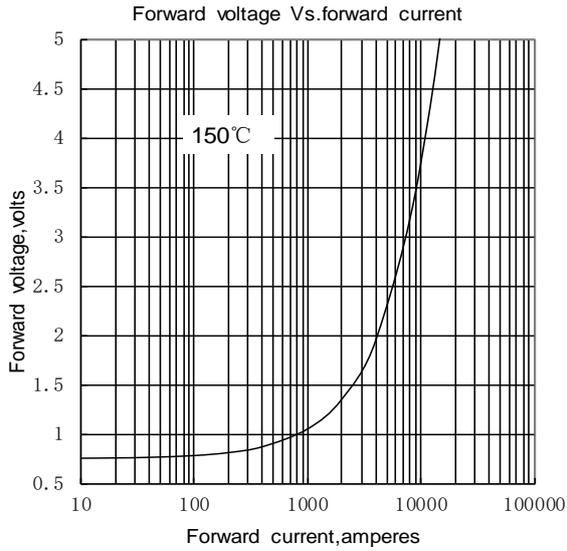


Fig.1

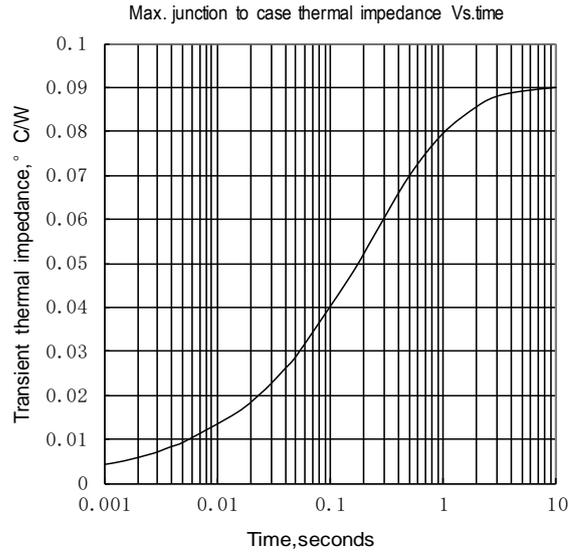


Fig.2

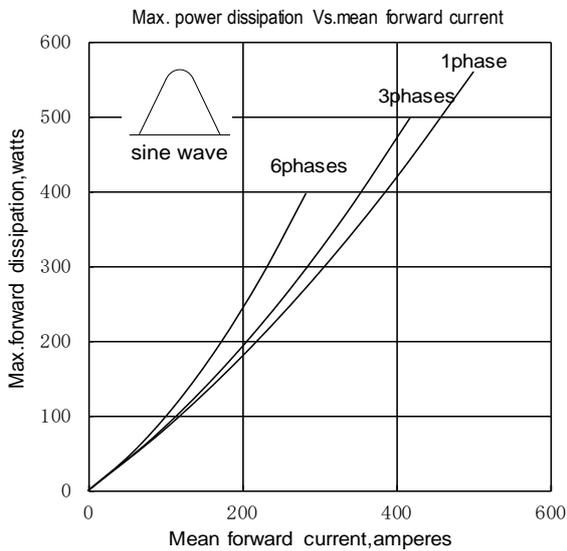


Fig.3

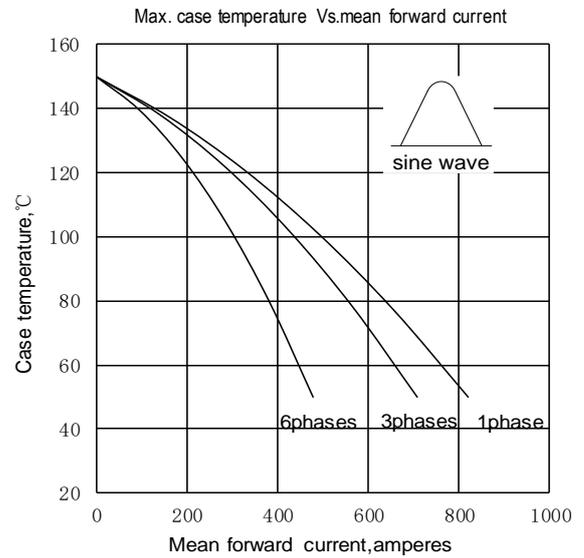


Fig.4

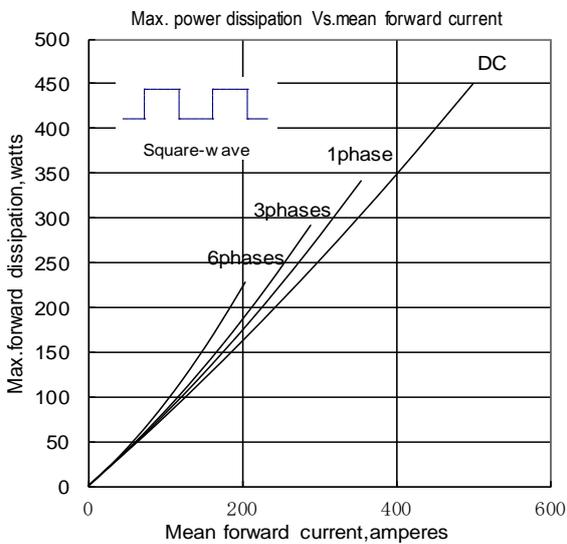


Fig.5

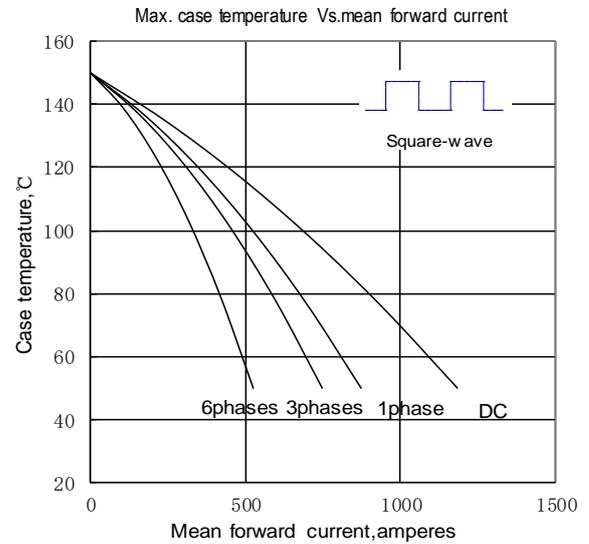


Fig.6

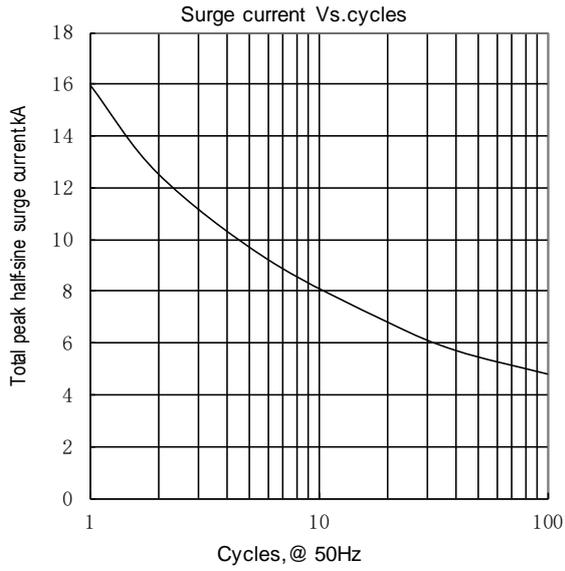
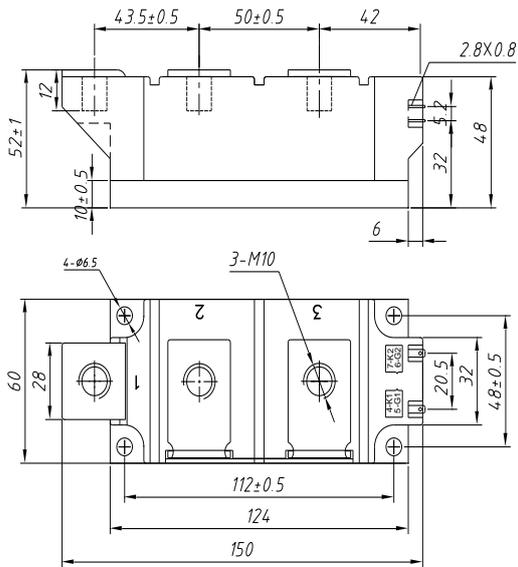
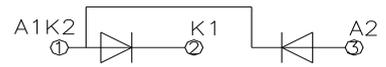


Fig.7

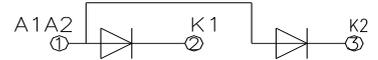


Unmarked dimensional tolerance : ±0.5mm

MD500D**



MR500D**



MC500D**

