



Features :

- Isolated mounting base 4000V~
- Pressure contact technology with Increased power cycling capability
- Space and weight saving

Typical Applications

- Various rectifiers
- DC supply for PWM inverter

| V _{RRM} | Type & Outline |
|------------------|-----------------|
| 3800V | MDx800-38-412F3 |
| 4000V | MDx800-40-412F3 |
| 4200V | MDx800-42-412F3 |
| 4400V | MDx800-44-412F3 |

MDx stands for any type of **MDC, MDA, MDK**

| SYMBOL | CHARACTERISTIC | TEST CONDITIONS | T _J (°C) | VALUE | | | UNIT |
|----------------------|--|---|---------------------|-------|------|-------|----------------------------------|
| | | | | Min | Type | Max | |
| I _{F(AV)} | Mean forward current | 180° half sine wave 50Hz Single side cooled, T _c =85°C | 150 | | | 800 | A |
| I _{F(AV)} | Mean forward current | 180° half sine wave 50Hz Single side cooled, T _c =100°C | | | | 665 | A |
| I _{F(RMS)} | RMS forward current | 180° half sine wave 50Hz Single side cooled, T _c =85°C | 150 | | | 1256 | A |
| I _{RRM} | Repetitive peak current | at V _{RRM} | 150 | | | 100 | mA |
| I _{FSM} | Surge forward current | 10ms half sine wave V _R =60%V _{RRM} | 150 | | | 23.0 | kA |
| I ² t | I ² t for fusing coordination | | | | | 2645 | 10 ³ A ² s |
| V _{FO} | Threshold voltage | | 150 | | | 0.90 | V |
| r _F | Forward slope resistance | | | | | 0.36 | mΩ |
| V _{FM} | Peak forward voltage | I _{FM} =2400A | 25 | | | 1.75 | V |
| R _{th(j-c)} | Thermal resistance Junction to case | Single side cooled per chip | | | | 0.050 | °C /W |
| R _{th(c-h)} | Thermal resistance case to heatsink | Single side cooled per chip | | | | 0.016 | °C /W |
| V _{iso} | Isolation voltage | 50Hz, R.M.S, t=1min, I _{iso} :1mA(MAX) | | 4000 | | | V |
| F _m | Terminal connection torque(M12) | | | | 14.0 | | N·m |
| | Mounting torque(M8) | | | | 12.0 | | N·m |
| T _{vj} | Junction temperature | | | -40 | | 150 | °C |
| T _{stg} | Stored temperature | | | -40 | | 125 | °C |
| W _t | Weight | | | | 3660 | | g |
| Outline | 412F3 | | | | | | |

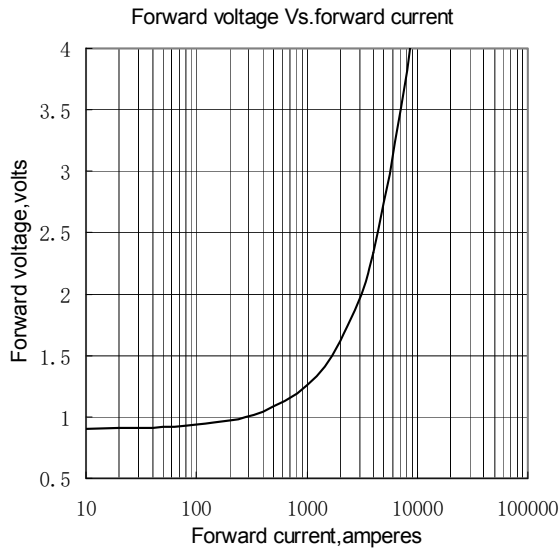


Fig1

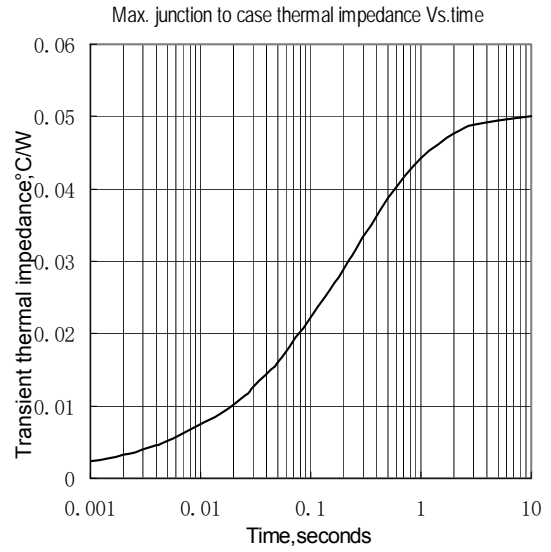


Fig2

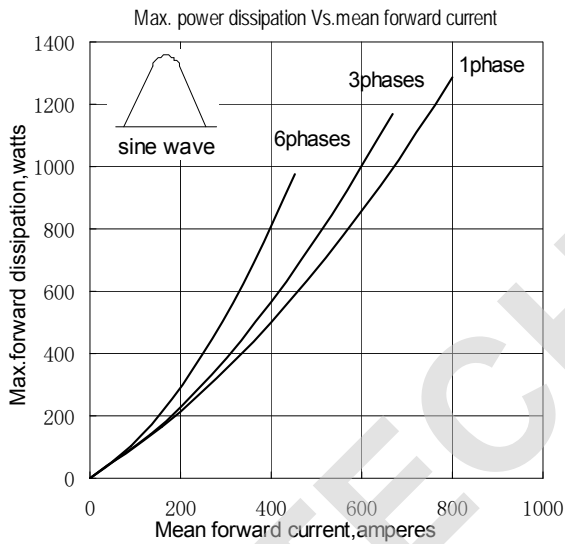


Fig3

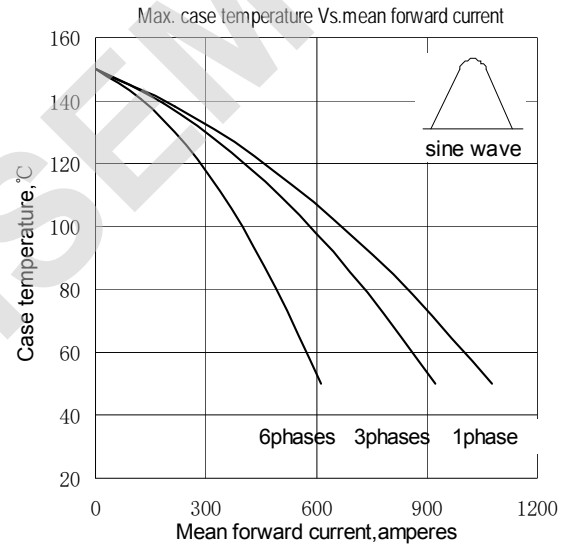


Fig4

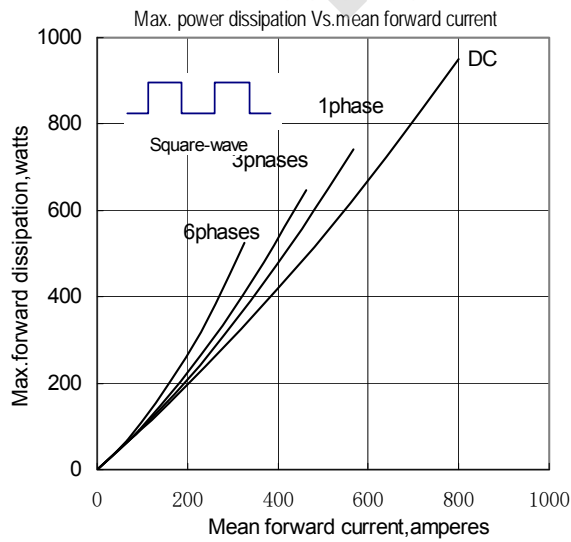


Fig5

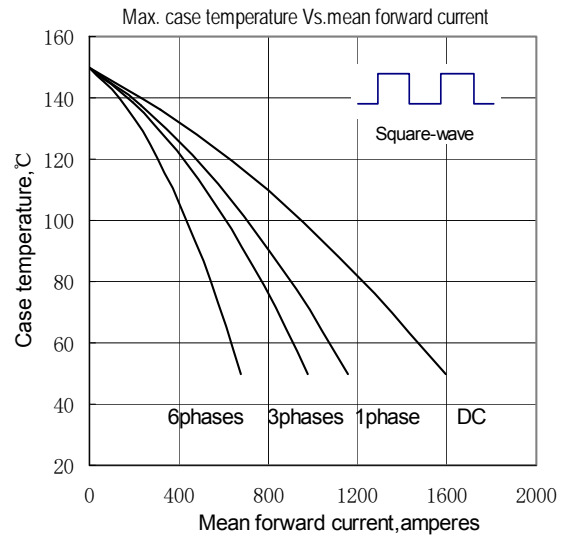


Fig6

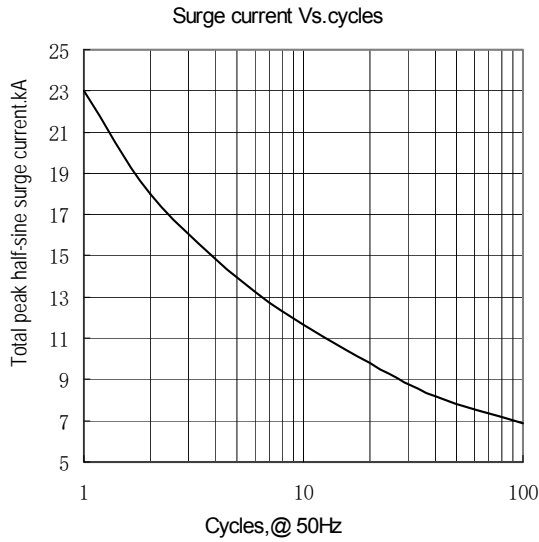


Fig7

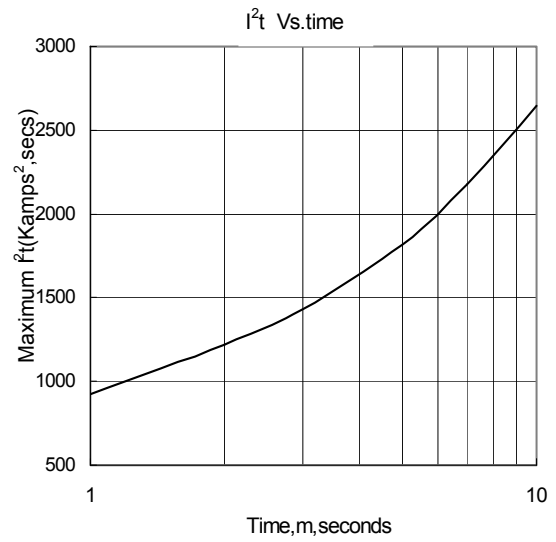
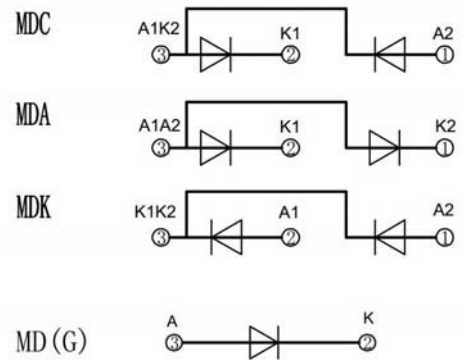
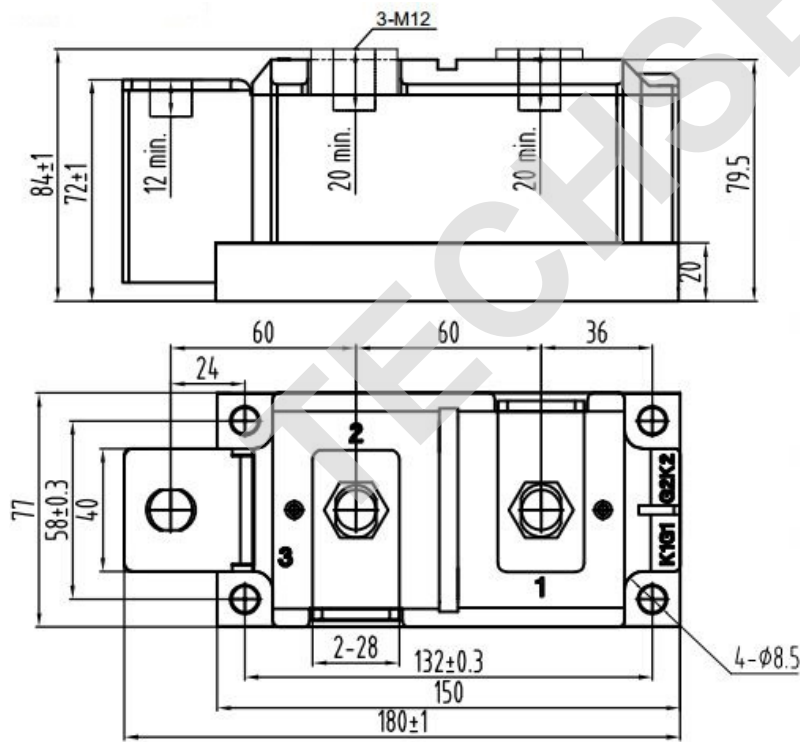


Fig8

Outline:



Unmarked dimensional tolerance: ±0.5mm

TECHSEM reserves the right to change specifications without notice.