**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 <sub>RRM</sub> | Type & Outline |       |       |
|------------------|----------------|-------|-------|
|                  | 2000V          | 2200V | 2500V |
| MDx800-20-411F3  |                |       |       |
| MDx800-22-411F3  |                |       |       |
| MDx800-25-411F3  |                |       |       |
| MD800-25-411F3G  |                |       |       |

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

| SYMBOL               | CHARACTERISTIC                           | TEST CONDITIONS  | T <sub>J</sub> (°C) | VALUE |      |       | UNIT                             |
|----------------------|--|--|---------------------|-------|------|-------|----------------------------------|
|                      |  |  |                     | Min   | Type | Max   |                                  |
| I <sub>F(AV)</sub>   | Mean forward current                     | 180° half sine wave 50Hz<br>Single side cooled, T <sub>C</sub> =60°C | 150                 |       |      | 800   | A                                |
| I <sub>F(RMS)</sub>  | RMS forward current                      |  |                     |       |      | 1256  | A                                |
| I <sub>RRM</sub>     | Repetitive peak current                  | at V <sub>RRM</sub>  | 150                 |       |      | 45    | mA                               |
| I <sub>FSM</sub>     | Surge forward current                    | V <sub>R</sub> =60%V <sub>RRM</sub> , t=10ms half sine,              | 150                 |       |      | 18.0  | kA                               |
| I <sup>2</sup> t     | I <sup>2</sup> t for fusing coordination |  |                     |       |      | 1620  | 10 <sup>3</sup> A <sup>2</sup> s |
| V <sub>FO</sub>      | Threshold voltage                        |  | 150                 |       |      | 0.88  | V                                |
| r <sub>F</sub>       | Forward slope resistance                 |  |                     |       |      | 0.30  | mΩ                               |
| V <sub>FM</sub>      | Peak forward voltage                     | I <sub>FM</sub> =2400A   | 25                  |       |      | 1.75  | V                                |
| R <sub>th(j-c)</sub> | Thermal resistance<br>Junction to case   | Single side cooled per chip  |                     |       |      | 0.075 | °C/W                             |
| R <sub>th(c-h)</sub> | Thermal resistance<br>case to heatsink   | Single side cooled per chip  |                     |       |      | 0.024 | °C/W                             |
| V <sub>iso</sub>     | Isolation voltage                        | 50Hz,R.M.S,t=1min,I <sub>iso</sub> :1mA(MAX)                         |                     | 3000  |      |       | V                                |
| F <sub>m</sub>       | Terminal connection torque(M12)          |  |                     | 12    |      | 16    | N·m                              |
|                      | Mounting torque(M8)                      |  |                     | 10    |      | 12    | N·m                              |
| T <sub>vj</sub>      | Junction temperature                     |  |                     | -40   |      | 150   | °C                               |
| T <sub>stg</sub>     | Stored temperature                       |  |                     | -40   |      | 125   | °C                               |
| W <sub>t</sub>       | Weight                                   |  |                     |       | 3230 |       | g                                |
| Outline              |  | 411F3  |                     |       |      |       |                                  |

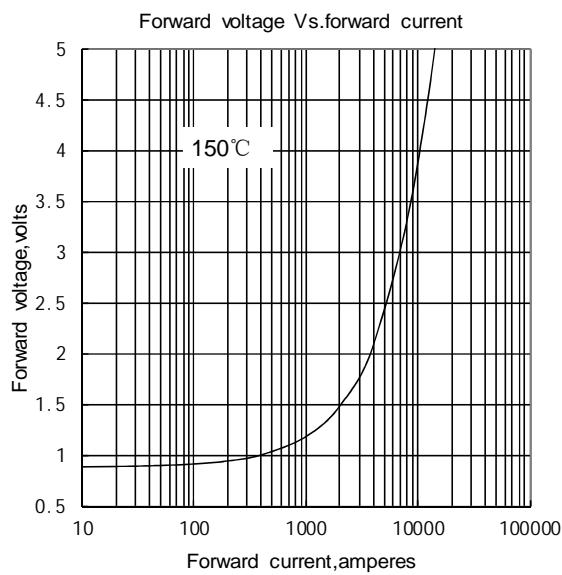


Fig.1

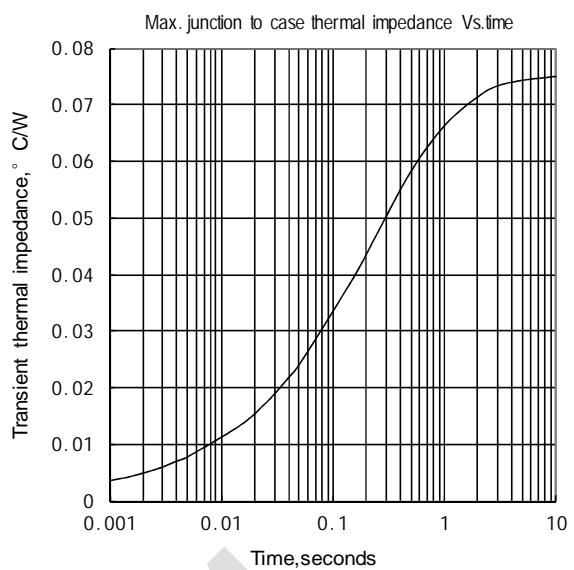


Fig.2

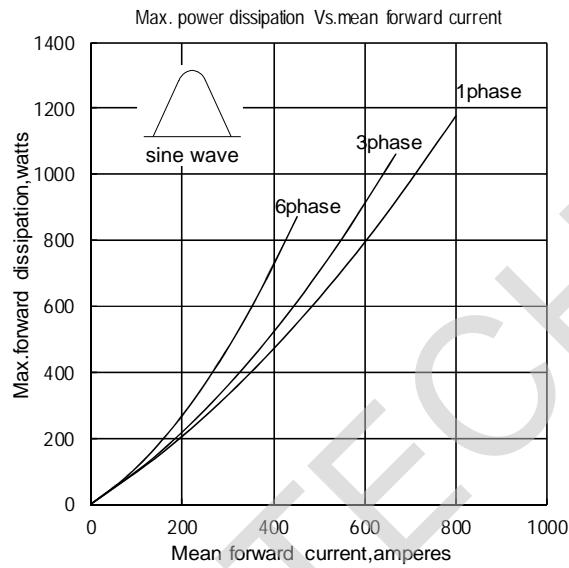


Fig.3

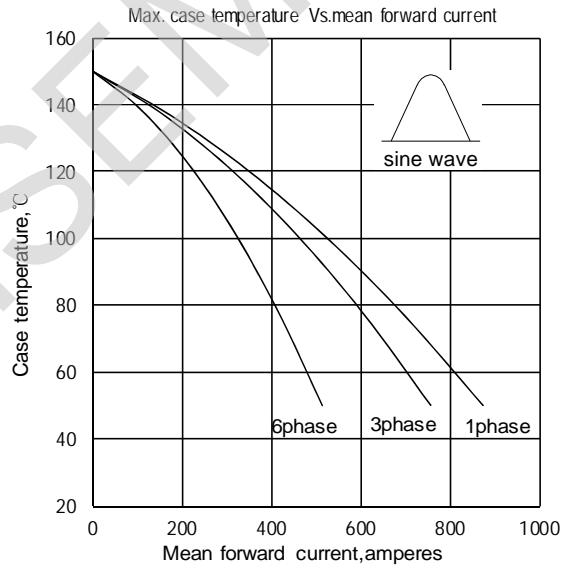


Fig.4

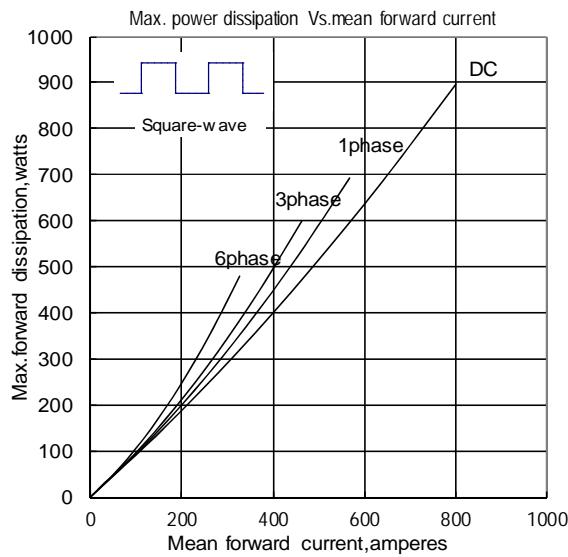


Fig.5

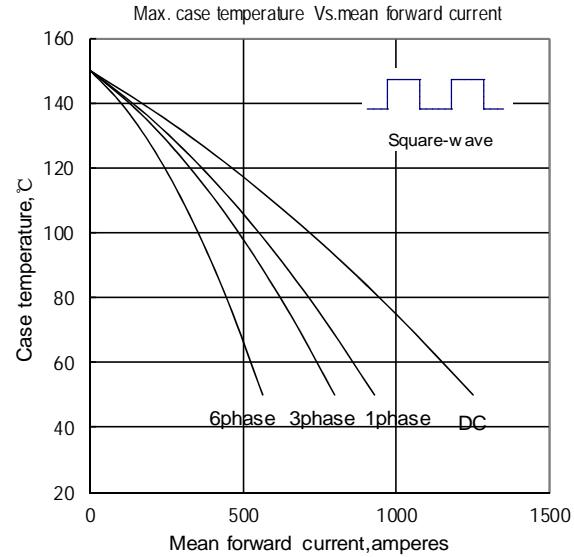


Fig.6

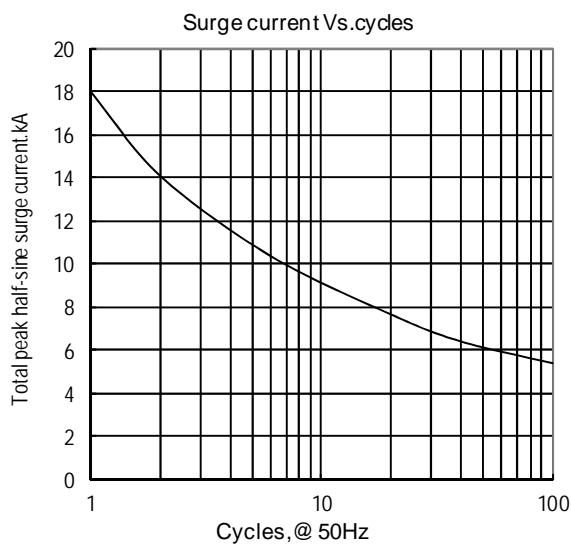


Fig.7

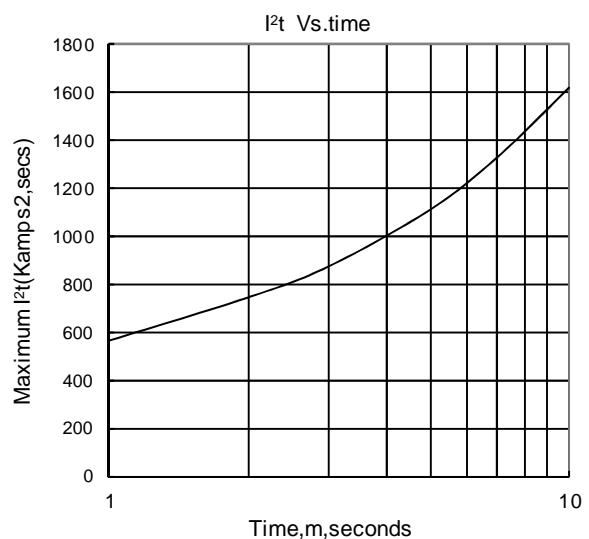
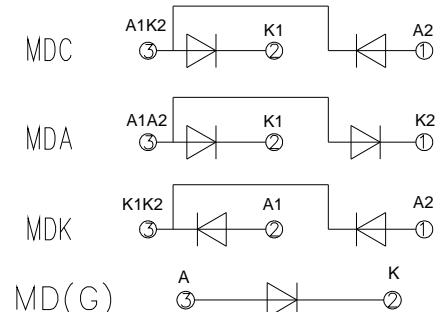
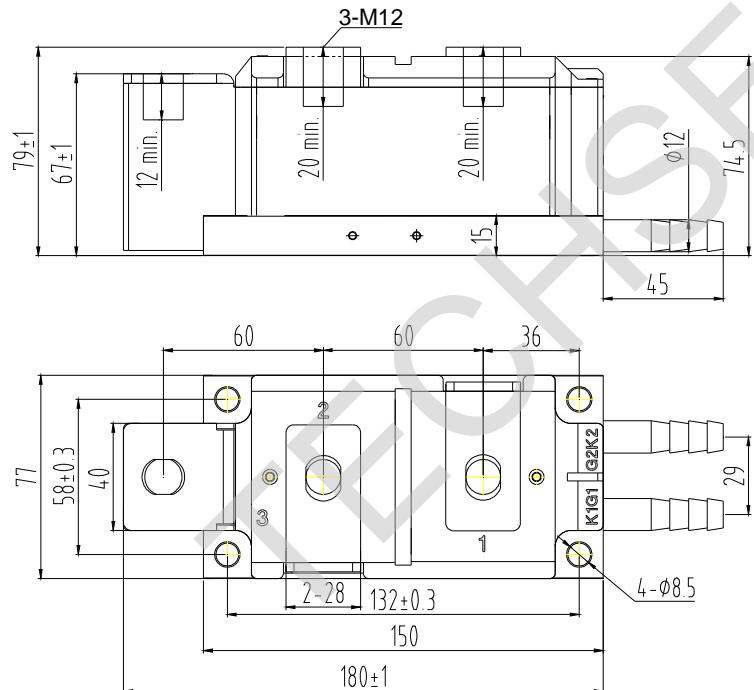


Fig.8

**Outline:**

Unmarked dimensional tolerance: ±0.5mm