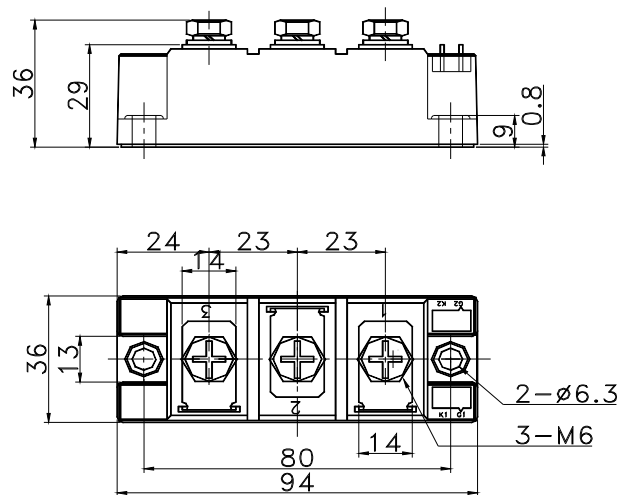
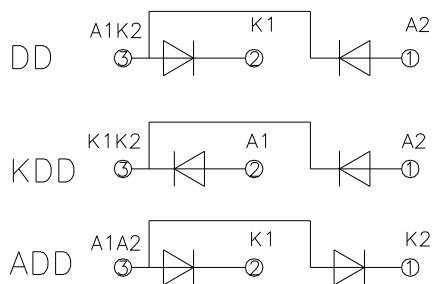


DD160 ADD160 KDD160

| 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> =100°C                   | 150                 |       |      | 160   | A                                |
| I <sub>F(RMS)</sub>  | RMS forward current                        | Single side cooled, T <sub>C</sub> =100°C                                               | 150                 |       |      | 251   | A                                |
| V <sub>RRM</sub>     | Repetitive peak reverse voltage            | V <sub>RRM</sub> tp=10ms<br>V <sub>RSM</sub> = V <sub>DRM</sub> &V <sub>RRM</sub> +200V | 150                 | 600   |      | 1800  | V                                |
| I <sub>RRM</sub>     | Repetitive peak current                    | at V <sub>RRM</sub>                                                                     | 150                 |       |      | 12    | mA                               |
| I <sub>FSM</sub>     | Surge forward current                      | 10ms half sine wave                                                                     | 150                 |       |      | 6.00  | KA                               |
| I <sup>2</sup> t     | I <sup>2</sup> T for fusing coordination   | V <sub>R</sub> =0.6V <sub>RRM</sub>                                                     |                     |       |      | 184   | A <sup>2</sup> s*10 <sup>3</sup> |
| V <sub>FO</sub>      | Threshold voltage                          |                                                                                         | 150                 |       |      | 0.80  | V                                |
| r <sub>F</sub>       | Forward slop resistance                    |                                                                                         |                     |       |      | 1.35  | mΩ                               |
| V <sub>FM</sub>      | Peak forward voltage                       | I <sub>FM</sub> =480A                                                                   | 25                  |       |      | 1.56  | V                                |
| R <sub>th(j-c)</sub> | Thermal resistance<br>Junction to heatsink | At 180° sine Single side cooled                                                         |                     |       |      | 0.230 | °C /W                            |
| V <sub>iso</sub>     | Isolation voltage                          | 50Hz, R.M.S, t=1min, I <sub>iso</sub> :1mA(max)                                         |                     | 2500  |      |       | V                                |
| F <sub>m</sub>       | Terminal connection torque(M5)             |                                                                                         |                     |       | 3.0  |       | N·m                              |
|                      | Mounting torque(M6)                        |                                                                                         |                     |       | 3.0  |       | N·m                              |
| T <sub>stg</sub>     | Stored temperature                         |                                                                                         |                     | -40   |      | 125   | °C                               |
| W <sub>t</sub>       | Weight                                     |                                                                                         |                     |       | 320  |       | g                                |
| Outline              | 214F3                                      |                                                                                         |                     |       |      |       |                                  |

OUTLINE DRAWING & CIRCUIT DIAGRAM



Peak forward Voltage Vs. Peak forward Current

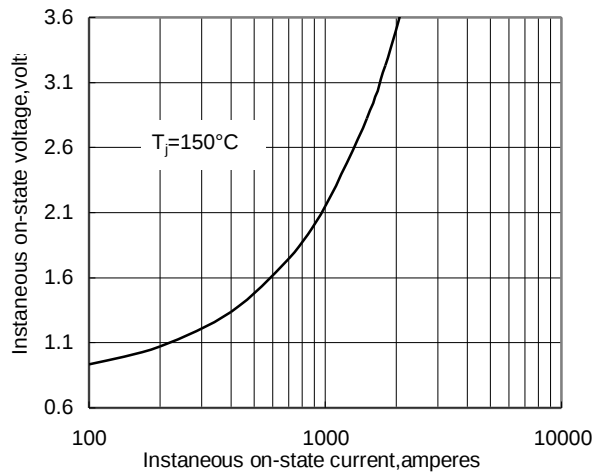


Fig.1

Max. junction To case Thermal Impedance Vs. Time

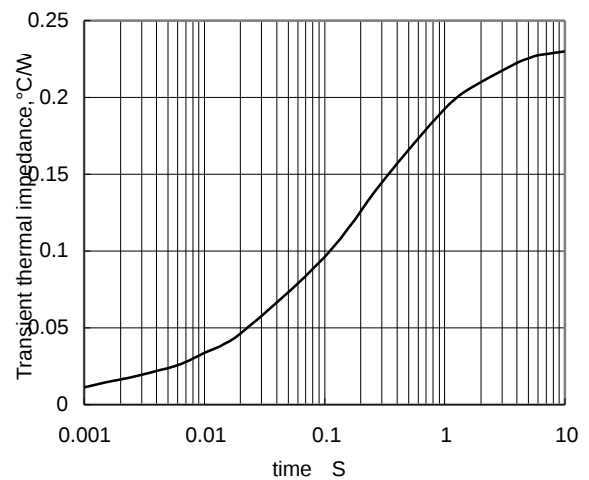


Fig.2

Max. Power Dissipation Vs. Mean forward Current

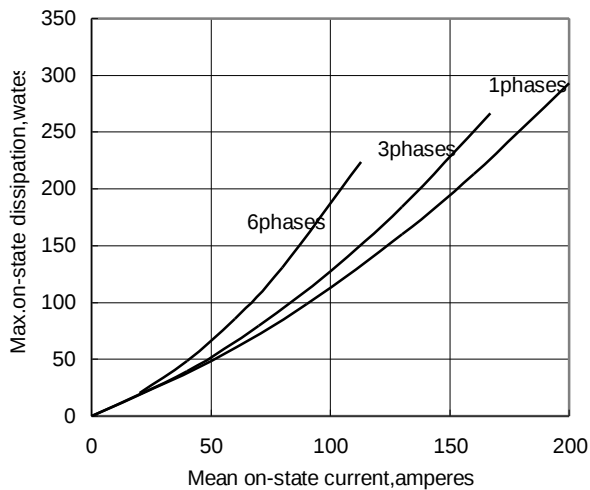


Fig.3

Max. case Temperature Vs. Mean forward Current

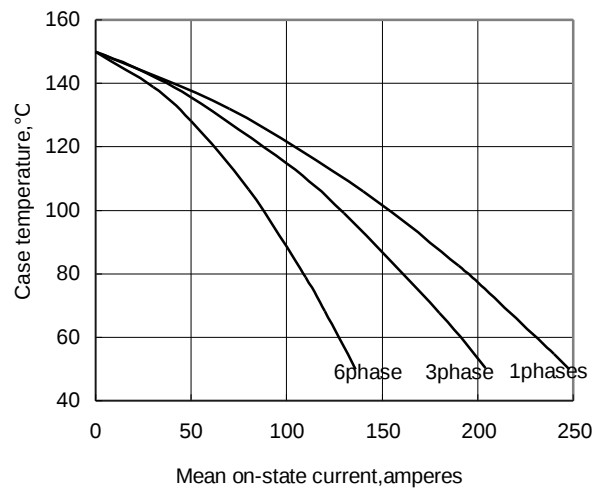


Fig.4

Max. Power Dissipation Vs. Mean forward Current

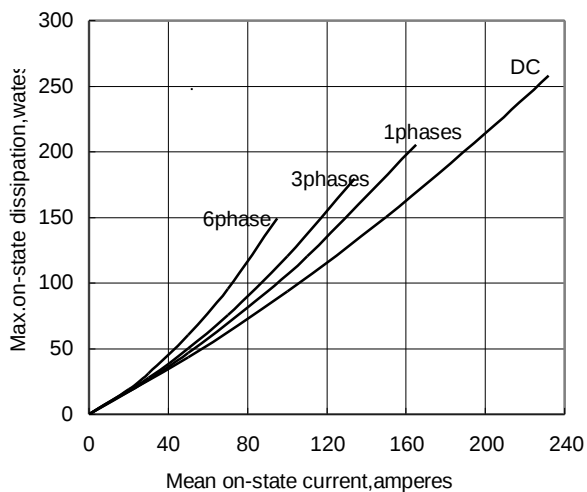


Fig.5

Max. case Temperature Vs. Mean forward Current

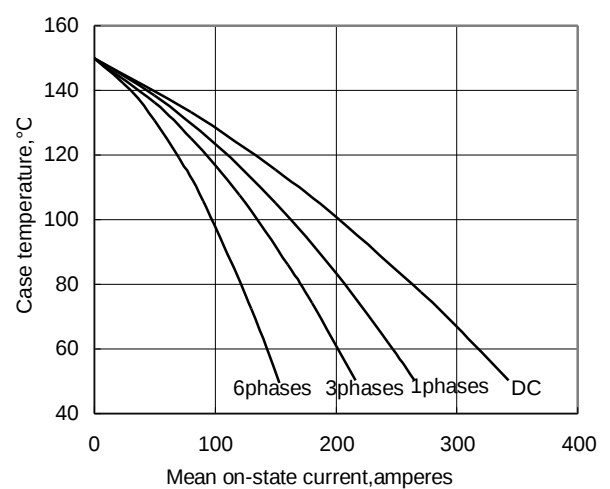


Fig.6