

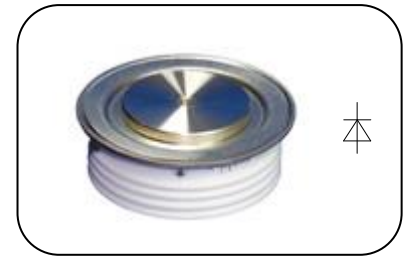
**Features**

- Low forward voltage drop
- High reverse voltage
- Hermetic metal cases with ceramic insulators

**Typical Applications**

- All purpose high power rectifier diodes
- High power resistance welding equipment
- Non-controllable and half-controllable

$I_{F(AV)}$       **1380 A**  
 $V_{RRM}$         **200~1000 V**  
 $I_{FSM}$          **11 kA**  
 $I^2t$              **605 10<sup>3</sup>A<sup>2</sup>S**



| SYMBOL        | CHARACTERISTIC                           | TEST CONDITIONS  | T <sub>J</sub> (°C) | VALUE |      |       | UNIT |
|---------------|--|--|---------------------|-------|------|-------|------|
|               |  |  |                     | Min   | Type | Max   |      |
| $I_{F(AV)}$   | Mean forward current                     | 180° half sine wave 50Hz<br>Double side cooled,<br>T <sub>C</sub> =85°C  | 190                 |       |      | 1380  | A    |
| $V_{RRM}$     | Repetitive peak reverse voltage          | tp=10ms  | 190                 | 200   |      | 1000  | V    |
| $I_{RRM}$     | Repetitive peak current                  | at V <sub>RRM</sub>  | 190                 |       |      | 30    | mA   |
| $I_{FSM}$     | Surge forward current                    | 10ms half sine wave  | 190                 |       |      | 11    | kA   |
| $I^2t$        | I <sup>2</sup> t for fusing coordination | V <sub>R</sub> =0.6V <sub>RRM</sub>                                      |                     |       |      |       | 605  |
| $V_{FO}$      | Threshold voltage                        |  | 190                 |       |      | 0.87  | V    |
| $r_F$         | Forward slope resistance                 |  |                     |       |      |       | 0.24 |
| $V_{FM}$      | Peak forward voltage                     | I <sub>FM</sub> =1200A, F=7.0kHz   | 190                 |       |      | 1.16  | V    |
| $Q_{rr}$      | Recovery charge                          | I <sub>FM</sub> =1000A, tp=1000μs, di/dt=-20A/μs,<br>V <sub>R</sub> =50V | 190                 |       | 1600 |       | μC   |
| $R_{th(j-c)}$ | Thermal resistance<br>Junction to case   | DC double side cooled<br>Clamping force 7.0kN                            |                     |       |      | 0.045 | °C/W |
| $R_{th(c-h)}$ | Thermal resistance<br>case to heat sink  |  |                     |       |      | 0.010 |      |
| $F_m$         | Mounting force                           |  |                     | 5.3   |      | 10    | kN   |
| $T_{stg}$     | Stored temperature                       |  |                     | -40   |      | 190   | °C   |
| $W_t$         | Weight                                   |  |                     |       | 80   |       | g    |
| Outline       | P33                                      |  |                     |       |      |       |      |

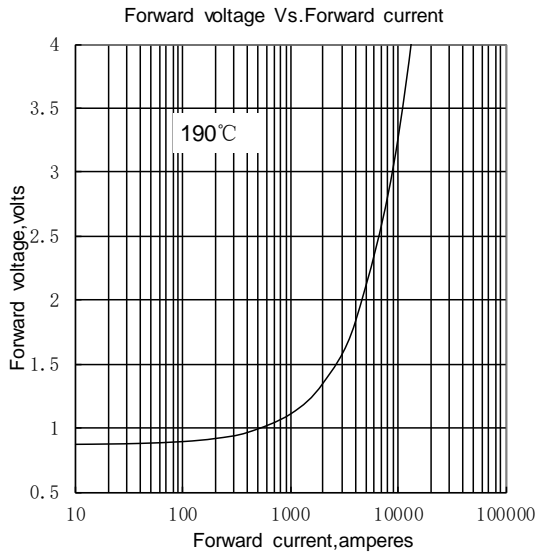


Fig.1

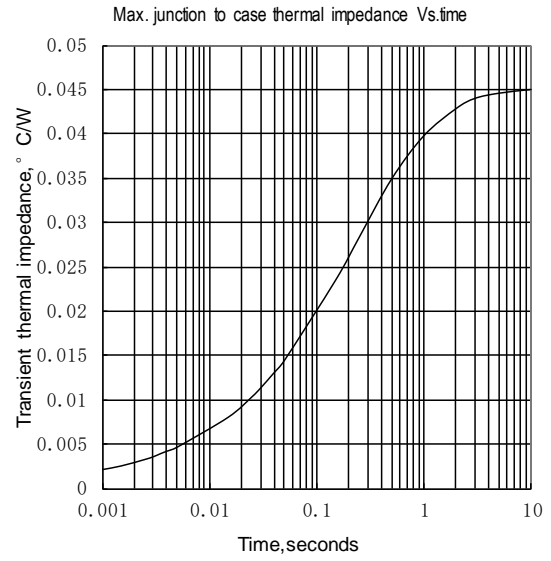


Fig.2

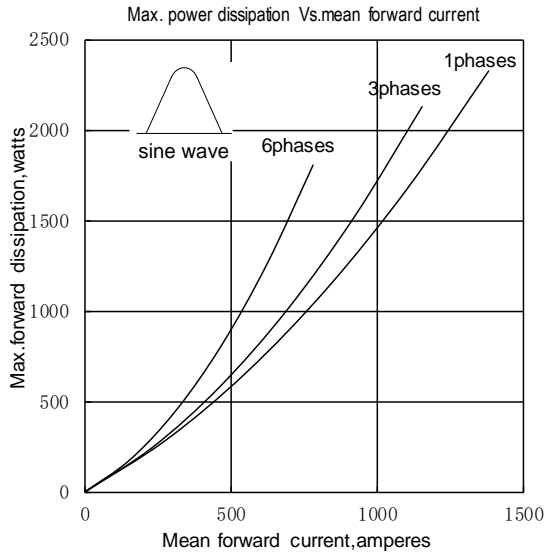


Fig.3

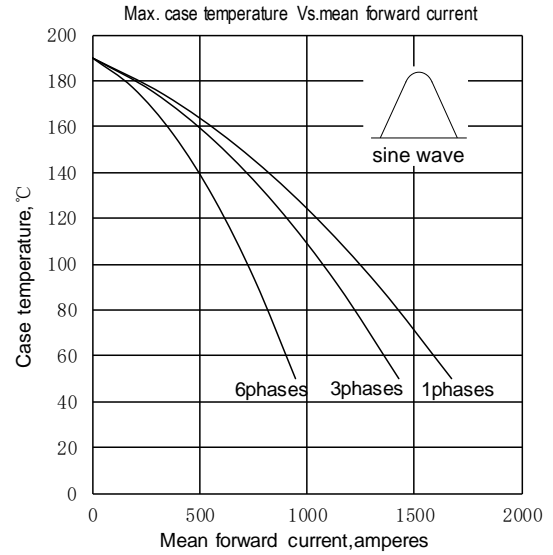


Fig.4

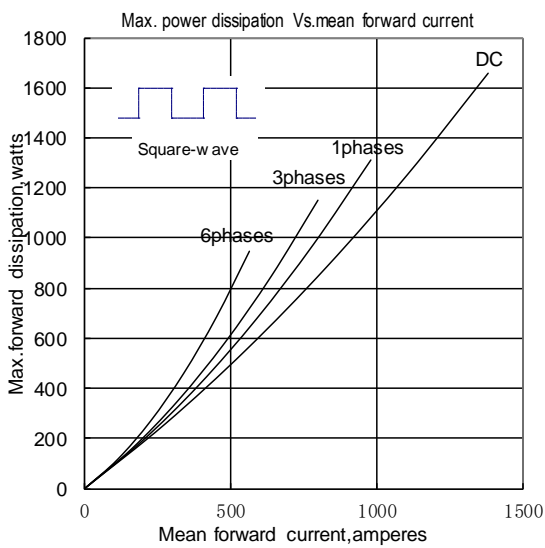


Fig.5

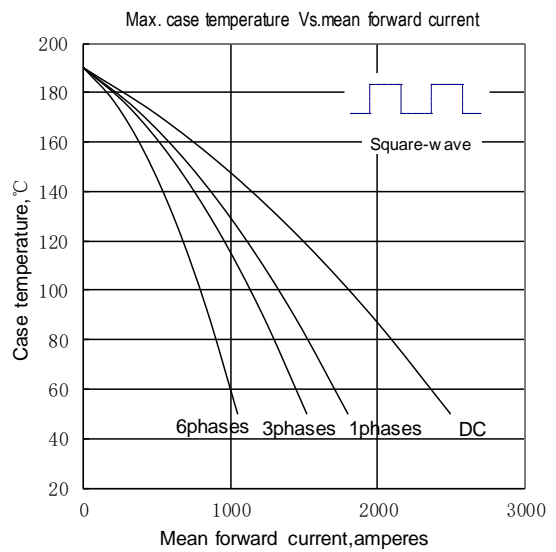


Fig.6

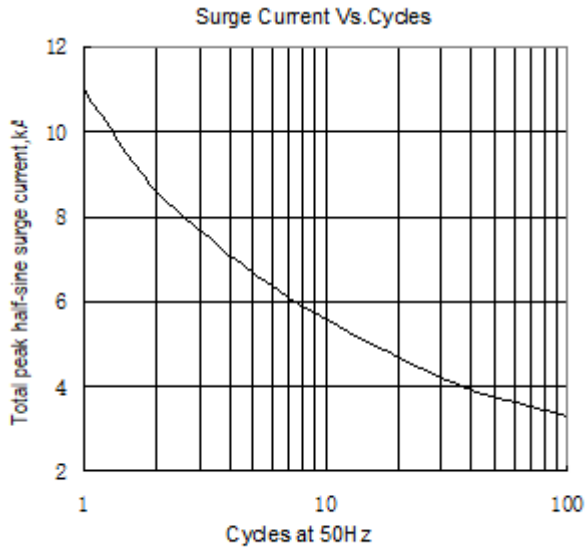
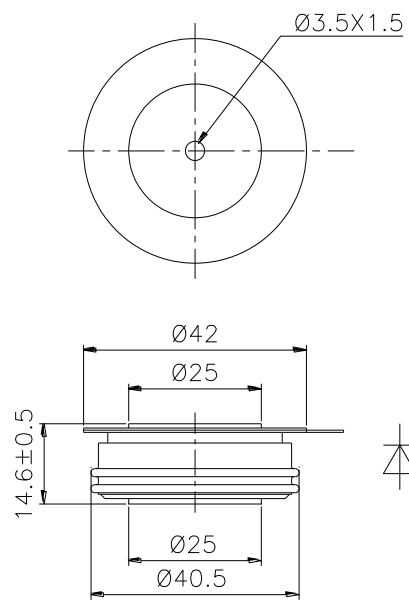


Fig.7



Nlps reserves the right to change specifications without notice.