

# SKKD 380



SEMIPACK® 3

## Rectifier Diode Modules

### SKKD 380

#### Features

- Heat transfer through aluminium nitride ceramic isolated metal baseplate
- Precise metal pressure contacts for high reliability
- UL recognized, file no. E 63 532

#### Typical Applications

- Uncontrolled rectifiers for AC/AC converters
- Line rectifiers for transistorized AC motor controllers
- Field supply for DC motors

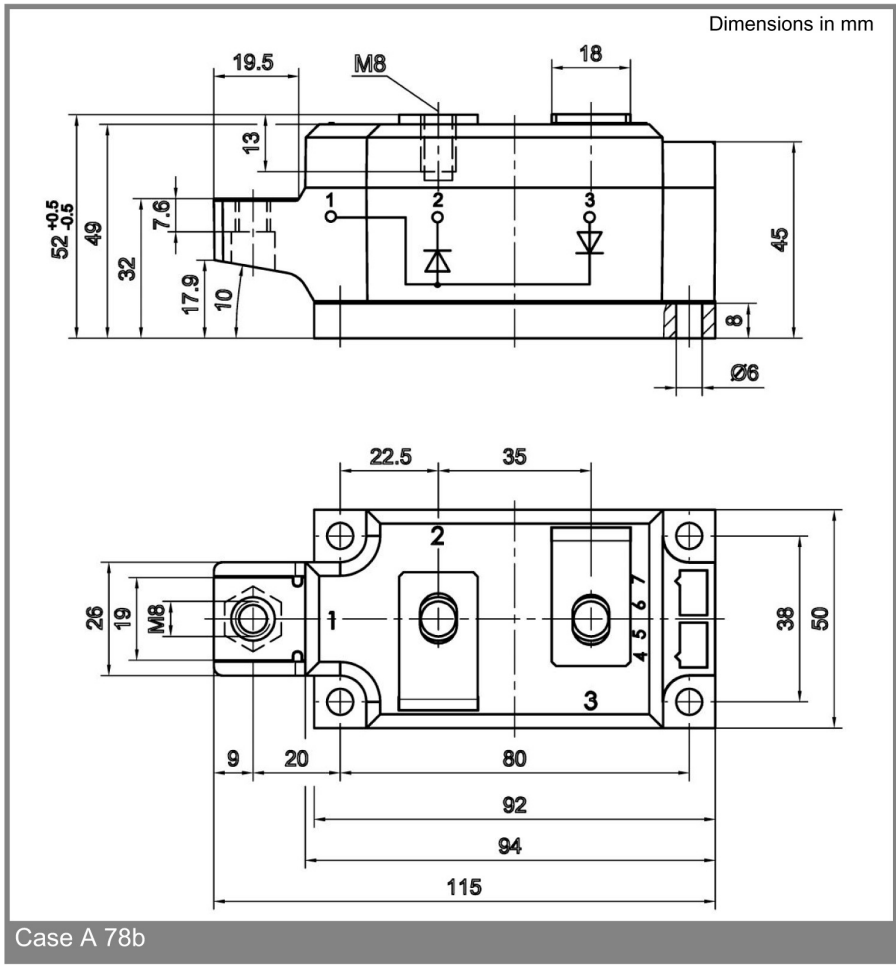
1) The screws must be lubricated

| $V_{RSM}$<br>V | $V_{RRM}$<br>V | $I_{FRMS} = 600$ A (maximum value for continuous operation)<br>$I_{FAV} = 380$ A (sin. 180; $T_c = 100$ °C) |  |  |
|----------------|----------------|---|--|--|
| 900            | 800            | SKKD 380/08   |  |  |
| 1300           | 1200           | SKKD 380/12   |  |  |
| 1700           | 1600           | SKKD 380/16   |  |  |
| 1900           | 1800           | SKKD 380/18   |  |  |
| 2100           | 2000           | SKKD 380/20H4   |  |  |
| 2300           | 2200           | SKKD 380/22H4   |  |  |

| Symbol        | Conditions  | Values                        | Units            |
|---------------|---|-------------------------------|------------------|
| $I_{FAV}$     | sin. 180; $T_c = 100$ °C  | 380                           | A                |
| $I_{FSM}$     | $T_{vj} = 25$ °C; 10 ms   | 11000                         | A                |
|               | $T_{vj} = 150$ °C; 10 ms  | 10000                         | A                |
| $i^2t$        | $T_{vj} = 25$ °C; 8,3 ... 10 ms                                 | 605000                        | A <sup>2</sup> s |
|               | $T_{vj} = 150$ °C; 8,3 ... 10 ms                                | 500000                        | A <sup>2</sup> s |
| $V_F$         | $T_{vj} = 25$ °C; $I_F = 1000$ A                                | max. 1,25                     | V                |
| $V_{(TO)}$    | $T_{vj} = 150$ °C   | max. 0,8                      | V                |
| $r_T$         | $T_{vj} = 150$ °C   | max. 0,35                     | mΩ               |
| $I_{RD}$      | $T_{vj} = 150$ °C; $V_{RD} = V_{RRM}$                           | max. 15                       | mA               |
| $R_{th(j-c)}$ | cont. per diode / per module<br>sin. 180 per diode / per module | 0,11 / 0,055<br>0,116 / 0,058 | K/W              |
| $R_{th(c-s)}$ | per diode / per module  | 0,04 / 0,02                   | K/W              |
| $T_{vj}$      |   | - 40 ... + 150                | °C               |
| $T_{stg}$     |   | - 40 ... + 130                | °C               |
| $V_{isol}$    | a. c. 50 Hz; r.m.s.; 1 s / 1 min.                               | 3600 / 3000                   | V~               |
| $V_{isol}$    | a. c. 50 Hz; r.m.s.; 1 s / 1 min. for SKK ...H4                 | 4800 / 4000                   | V~               |
| $M_s$         | to heatsink   | 5 ± 15 %                      | Nm               |
| $M_t$         | to terminals  | 9 ± 15 % <sup>1)</sup>        | Nm               |
| a             |   | 5 * 9,81                      | m/s <sup>2</sup> |
| m             | approx.   | 600                           | g                |
| Case          |   | A 78b                         |                  |



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