

# SKKD 162, SKKE 162



## SEMIPACK<sup>®</sup> 2

### Rectifier Diode Modules

SKKD 162

SKKE 162

#### Features

- Heat transfer through aluminium oxide ceramic isolated metal baseplate
- Hard soldered joints for high reliability
- UL recognized, file no. E 63 532

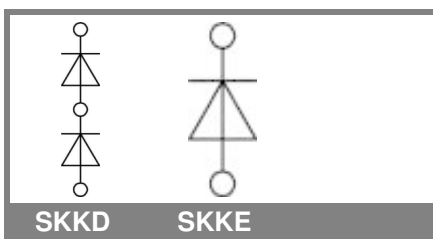
#### Typical Applications\*

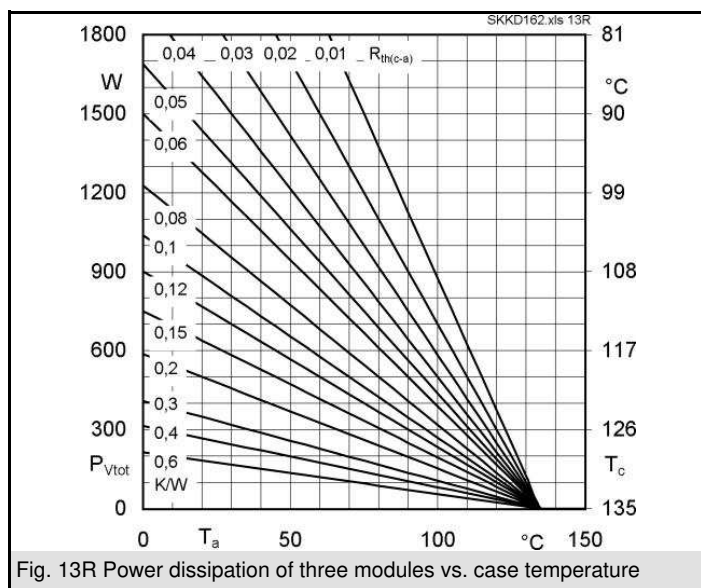
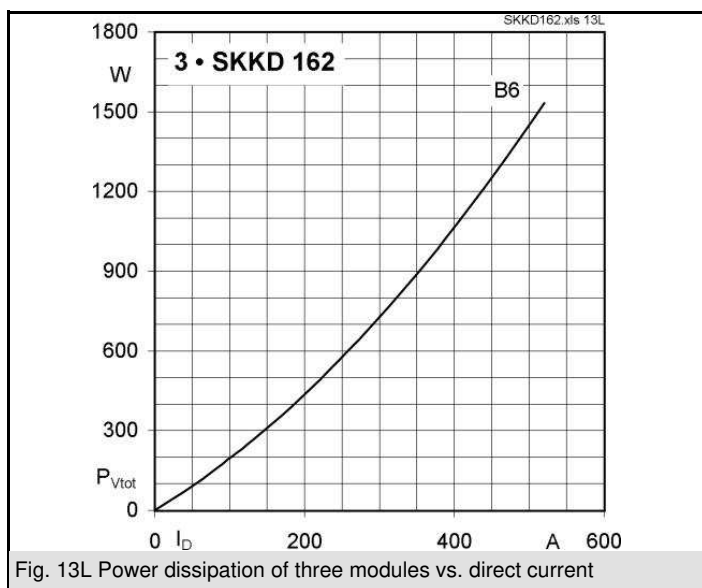
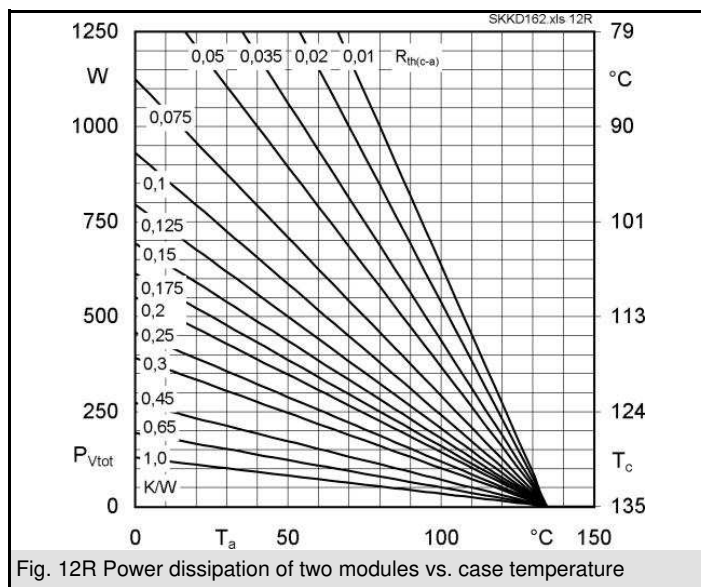
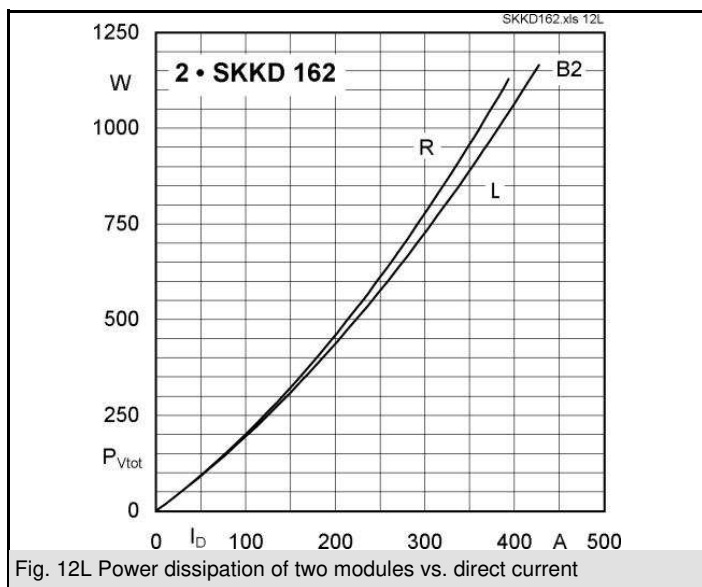
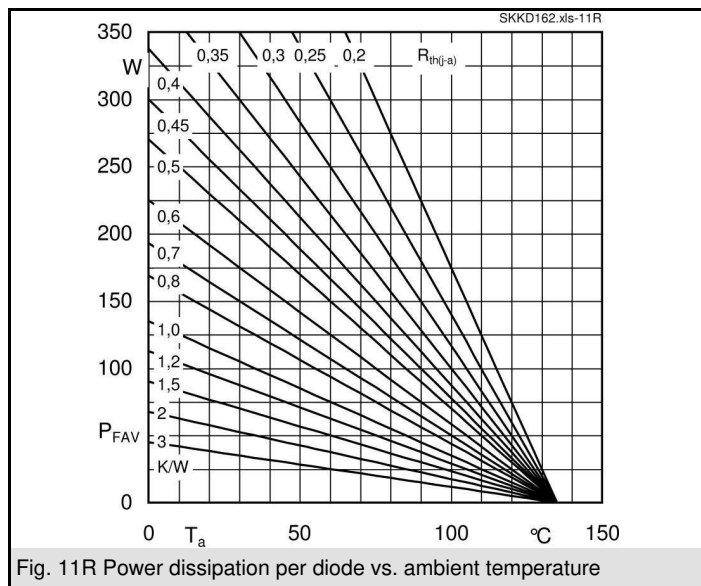
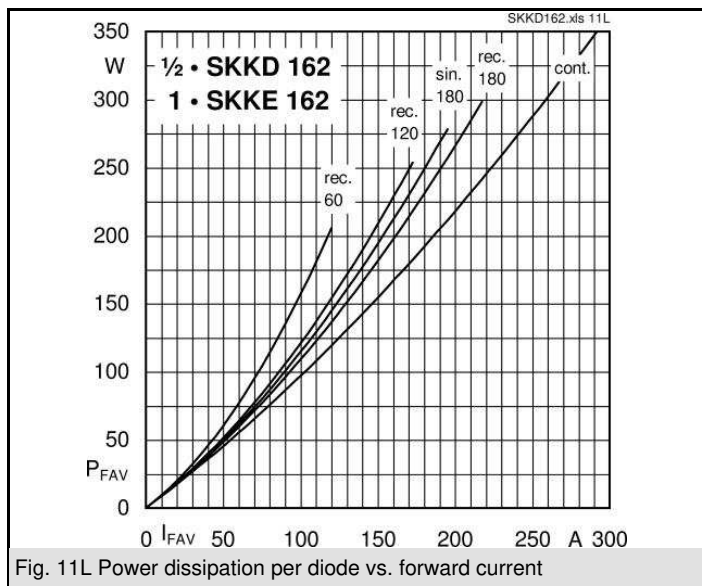
- Non-controllable rectifiers for AC/AC converters
- Line rectifiers for transistorized AC motor controllers
- Field supply for DC motors

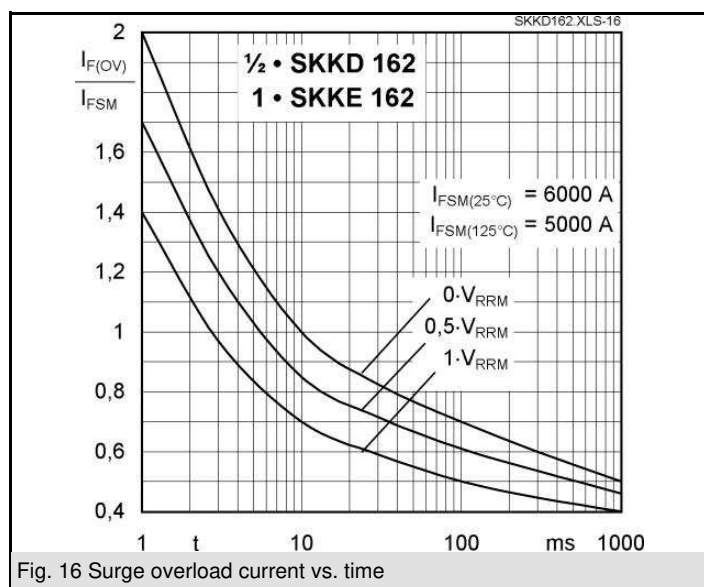
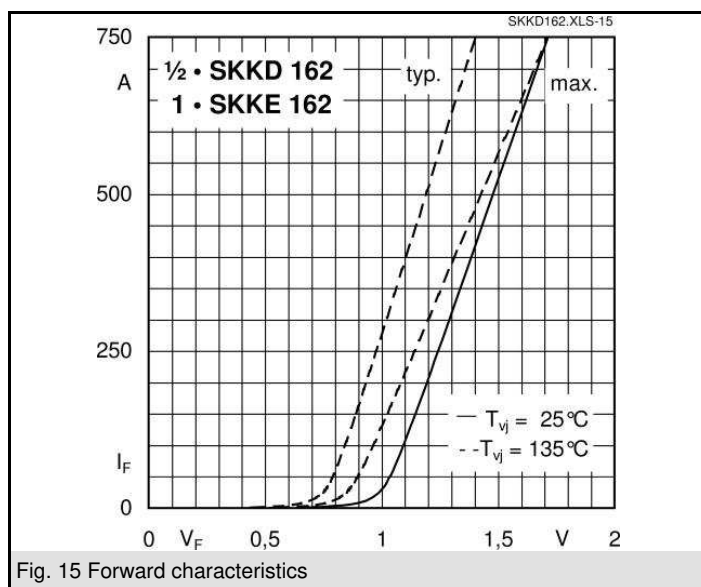
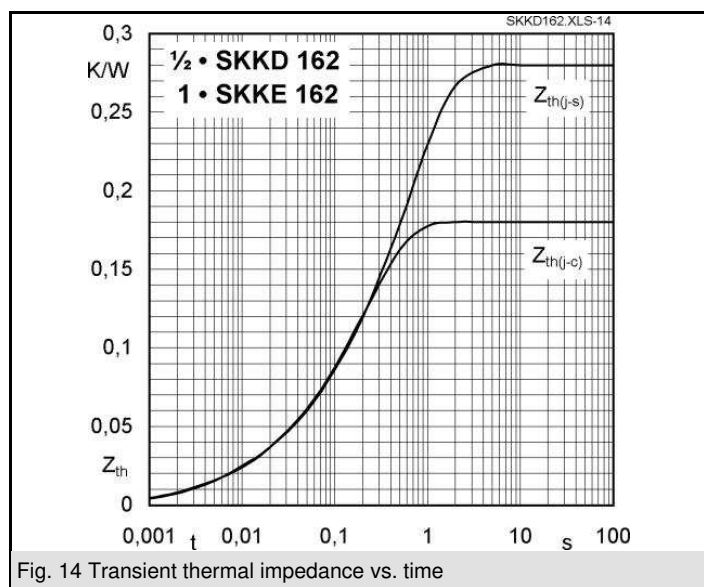
<sup>1)</sup> SKKD types only

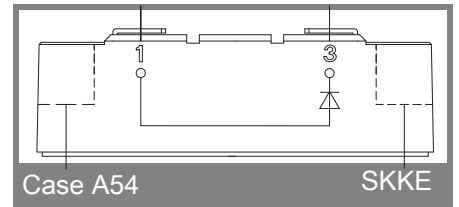
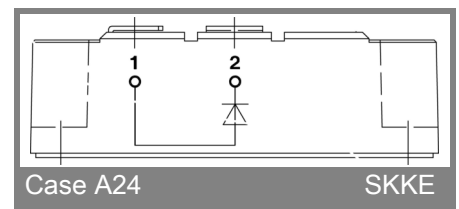
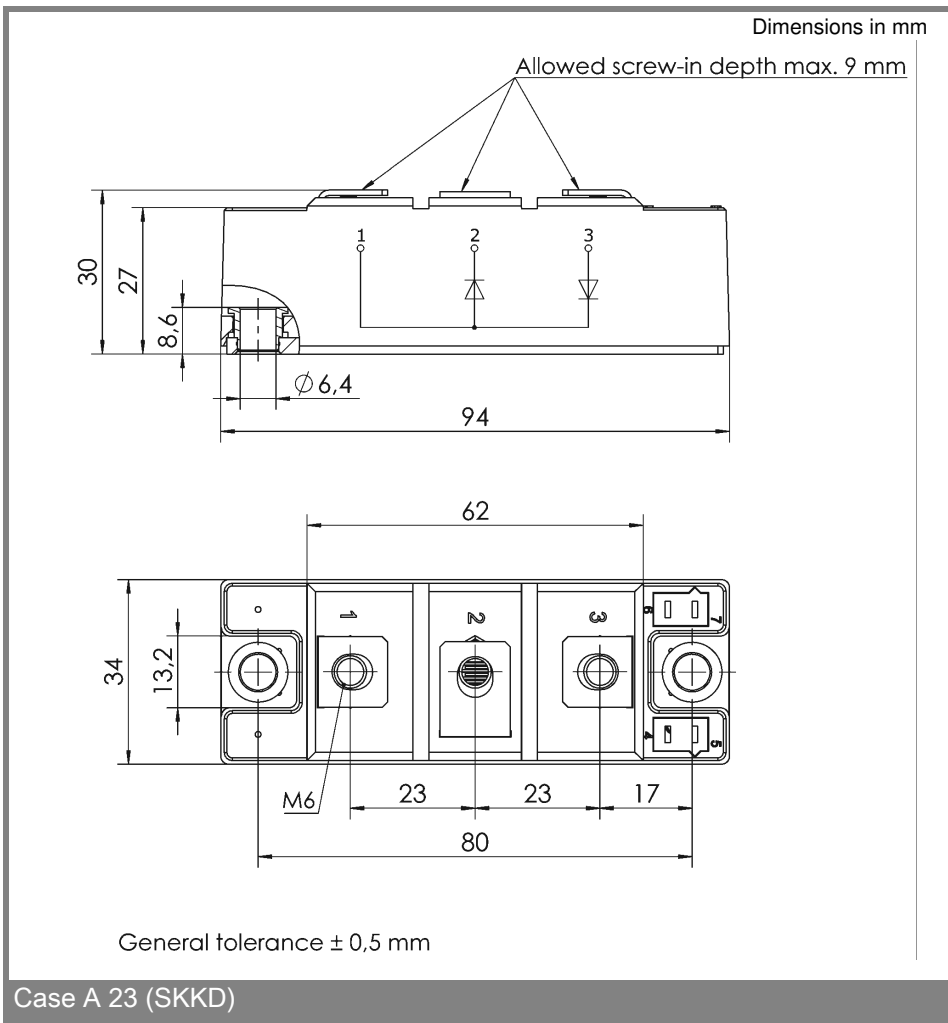
| $V_{RSM}$<br>V | $V_{RRM}$<br>V | $I_{FRMS} = 310$ A (maximum value for continuous operation)<br>$I_{FAV} = 160$ A (sin. 180; $T_c = 95$ °C) |               |  |
|----------------|----------------|--|---------------|--|
| 900            | 800            | SKKD 162/08  | SKKE 162/08   |  |
| 1300           | 1200           | SKKD 162/12  | SKKE 162/12   |  |
| 1500           | 1400           | SKKD 162/14  | SKKE 162/14   |  |
| 1700           | 1600           | SKKD 162/16  | SKKE 162/16   |  |
| 1900           | 1800           | SKKD 162/18  | SKKE 162/18   |  |
| 2100           | 2000           | SKKD 162/20H4  |               |  |
| 2300           | 2200           | SKKD 162/22H4  | SKKE 162/22H4 |  |

| Symbol        | Conditions                                      | Values         | Units            |
|---------------|---|----------------|------------------|
| $I_{FAV}$     | sin. 180; $T_c = 85$ (100) °C                   | 195 (150)      | A                |
| $I_D$         | P3/180; $T_a = 45$ °C; B2 / B6                  | 90 / 115       | A                |
|               | P3/180F; $T_a = 35$ °C; B2 / B6                 | 210 / 260      | A                |
| $I_{FSM}$     | $T_{vj} = 25$ °C; 10 ms                         | 6000           | A                |
|               | $T_{vj} = 125$ °C; 10 ms                        | 5000           | A                |
| $i^2t$        | $T_{vj} = 25$ °C; 8,3 ... 10 ms                 | 180000         | A <sup>2</sup> s |
|               | $T_{vj} = 125$ °C; 8,3 ... 10 ms                | 125000         | A <sup>2</sup> s |
| $V_F$         | $T_{vj} = 25$ °C; $I_F = 500$ A                 | max. 1,5       | V                |
| $V_{(TO)}$    | $T_{vj} = 135$ °C                               | max. 0,85      | V                |
| $r_T$         | $T_{vj} = 135$ °C                               | max. 1,2       | mΩ               |
| $I_{RD}$      | $T_{vj} = 135$ °C; $V_{RD} = V_{RRM}$           | max. 9         | mA               |
| $R_{th(j-c)}$ | per diode / per module <sup>1)</sup>            | 0,18 / 0,09    | K/W              |
| $R_{th(c-s)}$ | per diode / per module <sup>1)</sup>            | 0,1 / 0,05     | K/W              |
| $T_{vj}$      |   | - 40 ... + 135 | °C               |
| $T_{stg}$     |   | - 40 ... + 135 | °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                                    | 5 ± 15 %       | Nm               |
| $a$           |   | 5 * 9,81       | m/s <sup>2</sup> |
| $m$           | approx.   | 165            | g                |
| Case          | SKKD  | A 23           |                  |
|               | SKKE  | A 24           |                  |
|               | SKKE H4   | A 54           |                  |









This is an electrostatic discharge sensitive device (ESDS) due to international standard IEC 61340.

#### \*IMPORTANT INFORMATION AND WARNINGS

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