

SKKD 260



SEMIPACK® 3

Rectifier Diode Modules

SKKD 260

Features

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

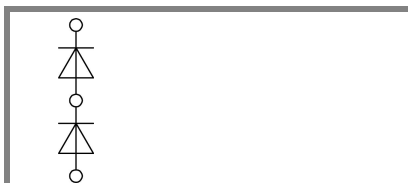
Typical Applications

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

1) The screws must be lubricated

| V_{RSM} V | V_{RRM} V | $I_{FRMS} = 410$ A (maximum value for continuous operation) $I_{FAV} = 260$ A (sin. 180; $T_c = 85$ °C) | | |
|----------------|----------------|--|--|--|
| 900 | 800 | SKKD 260/08 | | |
| 1300 | 1200 | SKKD 260/12 | | |
| 1700 | 1600 | SKKD 260/16 | | |
| 2100 | 2000 | SKKD 260/20H4 | | |
| 2300 | 2200 | SKKD 260/22H4 | | |

| Symbol | Conditions | Values | Units |
|---------------|---|------------------------|------------------|
| I_{FAV} | sin. 180; $T_c = 85$ (100) °C | 260 (185) | A |
| I_D | P3/180F; $T_a = 35$ °C; B2 / B6 | 280 / 320 | A |
| | P16/200F; $T_a = 35$ °C; B2 / B6 | 490 / 655 | A |
| I_{FSM} | $T_{vj} = 25$ °C; 10 ms | 11000 | A |
| | $T_{vj} = 130$ °C; 10 ms | 10000 | A |
| i^2t | $T_{vj} = 25$ °C; 8,3 ... 10 ms | 605000 | A ² s |
| | $T_{vj} = 130$ °C; 8,3 ... 10 ms | 500000 | A ² s |
| V_F | $T_{vj} = 25$ °C; $I_F = 750$ A | max. 1,25 | V |
| $V_{(TO)}$ | $T_{vj} = 130$ °C | max. 0,9 | V |
| r_T | $T_{vj} = 130$ °C | max. 0,37 | mΩ |
| I_{RD} | $T_{vj} = 130$ °C; $V_{RD} = V_{RRM}$ | max. 15 | mA |
| $R_{th(j-c)}$ | cont.; per diode / per module | 0,14 / 0,07 | K/W |
| | sin. 180; per diode / per module | 0,15 / 0,075 | K/W |
| $R_{th(c-s)}$ | per diode / per module | 0,04 / 0,02 | K/W |
| T_{vj} | | - 40 ... + 130 | °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 % ¹⁾ | Nm |
| a | | 5 * 9,81 | m/s ² |
| m | approx. | 600 | g |
| Case | | A 78b | |



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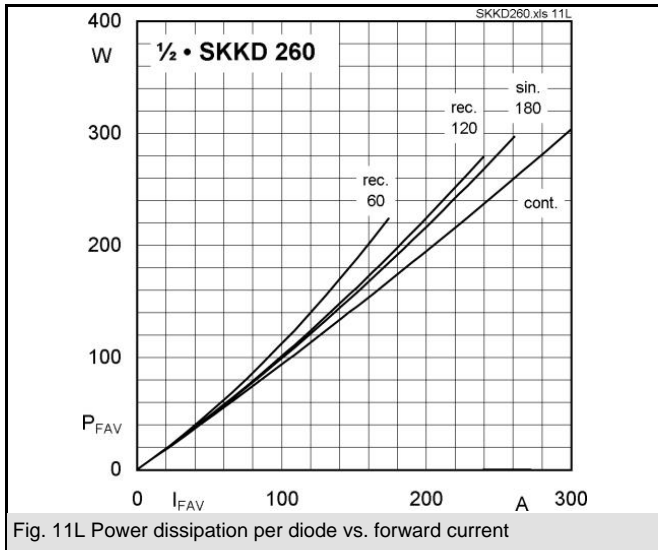


Fig. 11L Power dissipation per diode vs. forward current

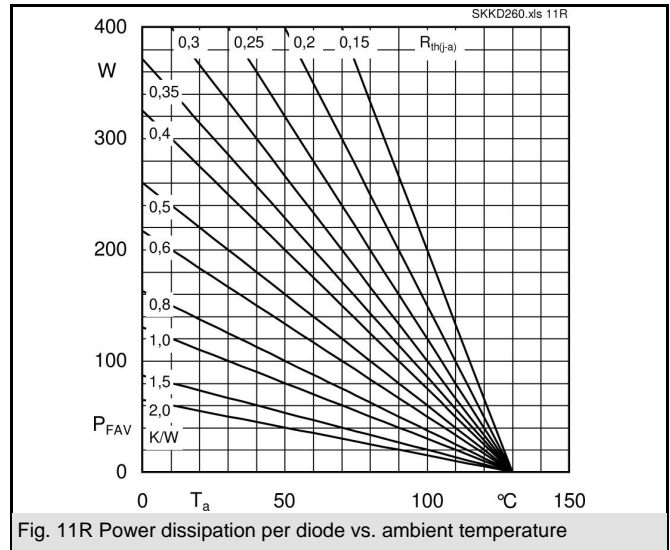


Fig. 11R Power dissipation per diode vs. ambient temperature

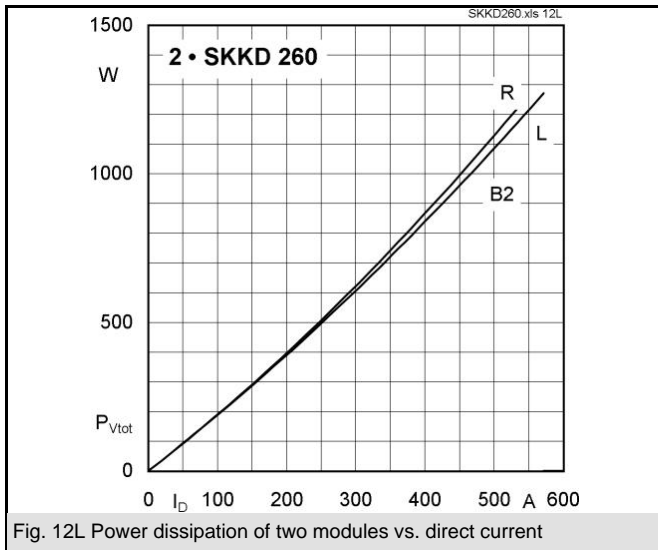


Fig. 12L Power dissipation of two modules vs. direct current

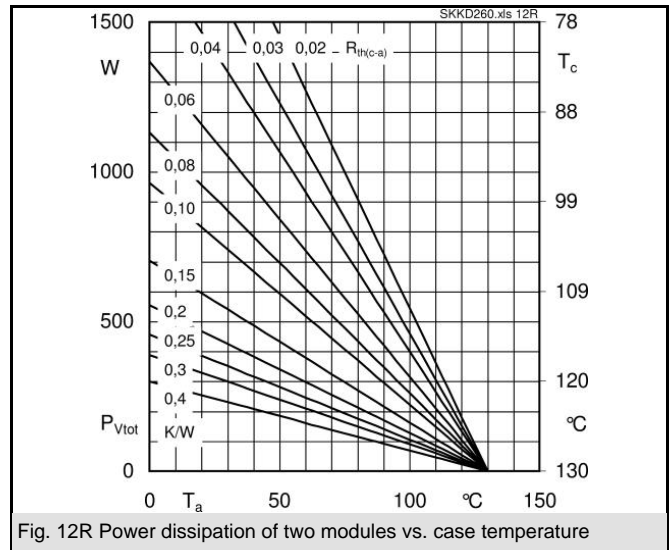


Fig. 12R Power dissipation of two modules vs. case temperature

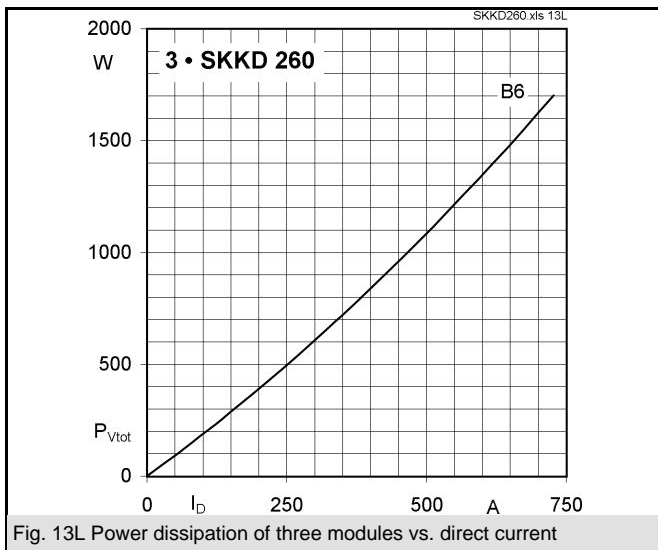


Fig. 13L Power dissipation of three modules vs. direct current

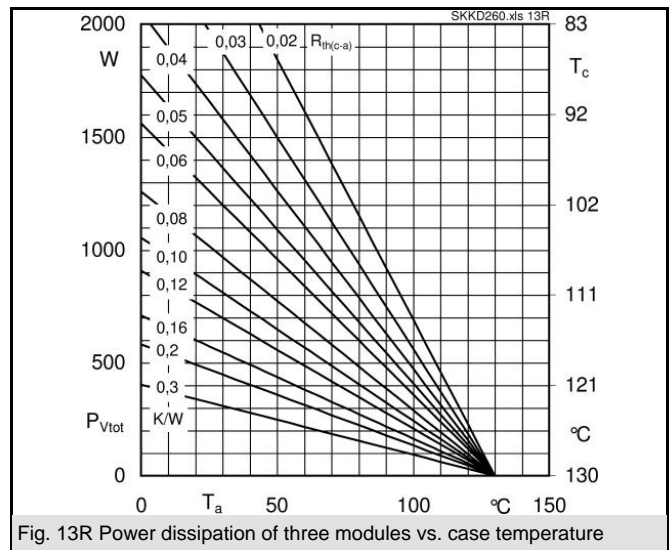


Fig. 13R Power dissipation of three modules vs. case temperature

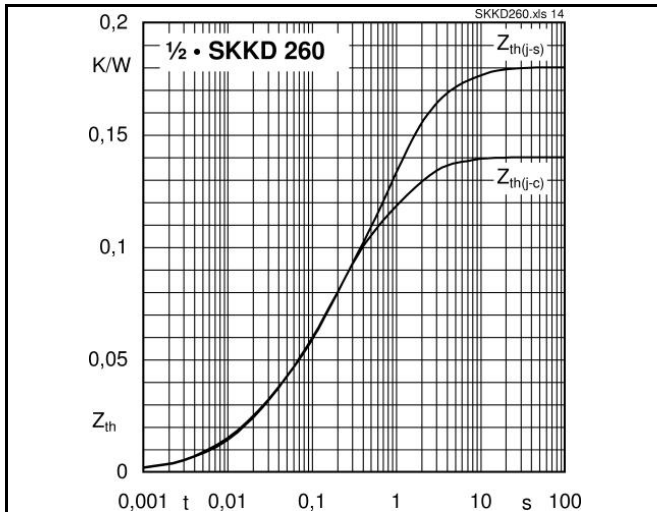


Fig. 14 Transient thermal impedance vs. time

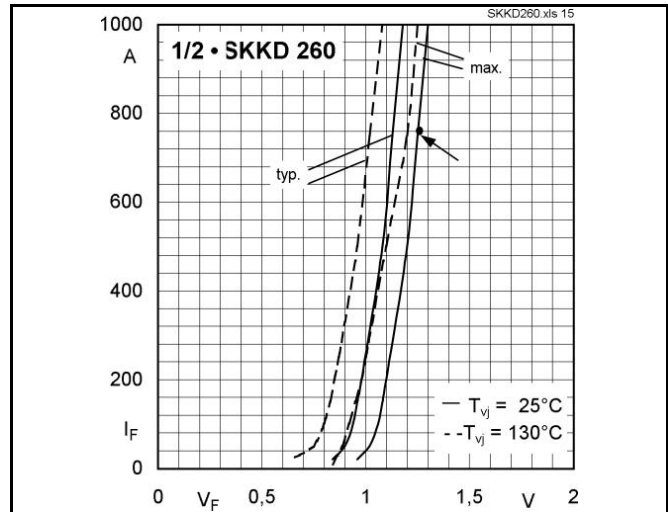


Fig. 15 Forward characteristics

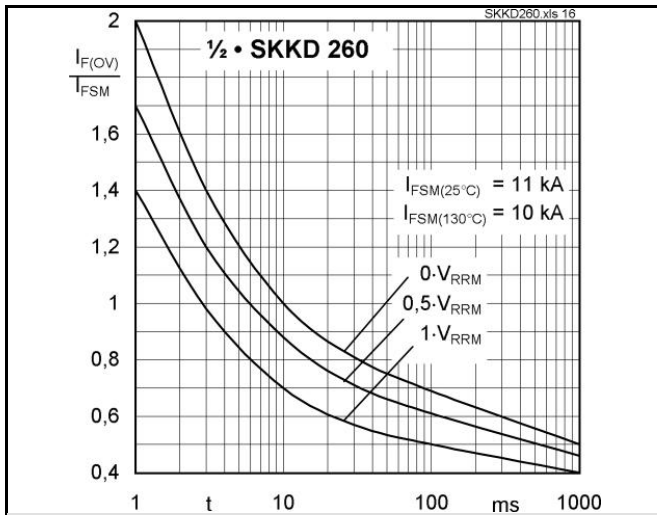
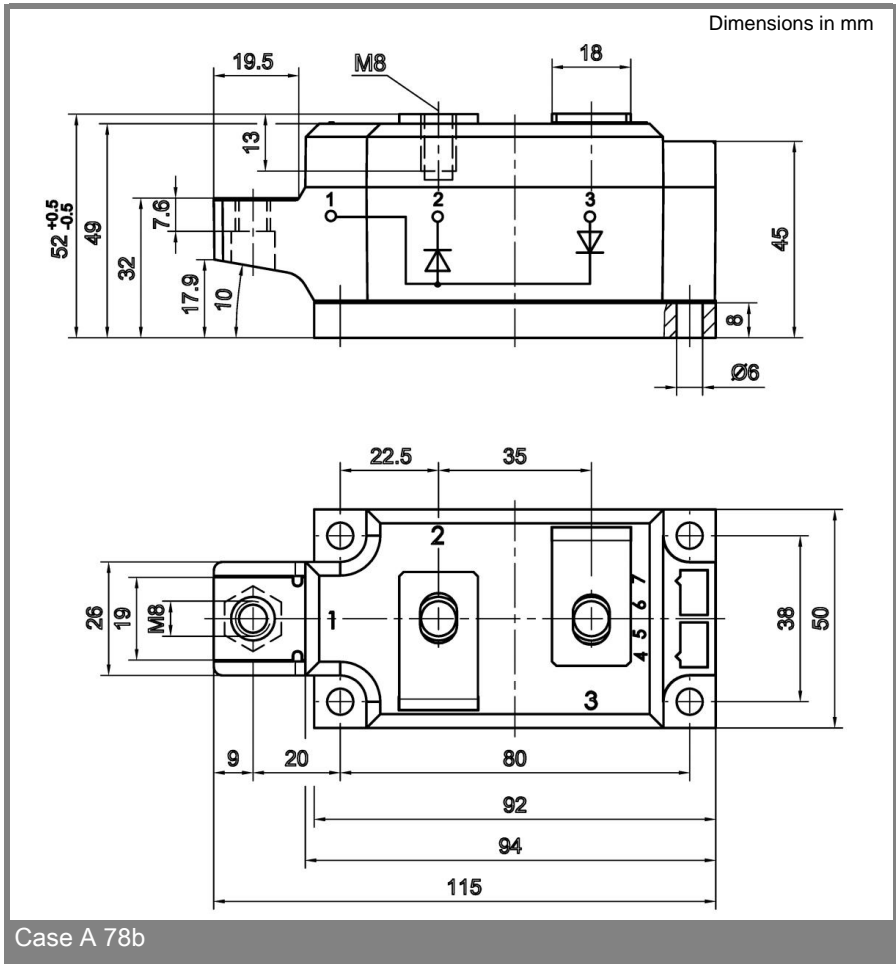


Fig. 16 Surge overload current vs. time



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