



Rectifier Diode Modules

SKKE 1200

Features

- Precisious metal pressure contacts for high reliability
- UL recognized, file no. E 63 532

Typical Applications

- Rectifiers

| $V_{RSM}$<br>V | $V_{RRM}$<br>V | $I_{FRMS} = 2000$ A (maximum value for continuous operation)<br>$I_{FAV} = 1180$ A (sin. 180; $T_c = 100$ °C) |  |  |
|----------------|----------------|---------------------------------------------------------------------------------------------------------------|--|--|
| 1900           | 1800           | SKKE 1200/18 H4                                                                                               |  |  |
| 2200           | 2200           | SKKE 1200/22 H4                                                                                               |  |  |

| Symbol        | Conditions                            | Values                       | Units |
|---------------|---------------------------------------|------------------------------|-------|
| $I_{FAV}$     | sin. 180; $T_c = 100$ °C              | 1180                         | A     |
| $I_{FSM}$     | $T_{vj} = 25$ °C; 10 ms               | 45000                        | A     |
|               | $T_{vj} = 160$ °C; 10 ms              | 40000                        | A     |
| $i^2t$        | $T_{vj} = 25$ °C; 8,3 ... 10 ms       | 10125000                     | A²s   |
|               | $T_{vj} = 160$ °C; 8,3 ... 10 ms      | 8000000                      | A²s   |
| $V_F$         | $T_{vj} = 25$ °C; $I_F = 3000$ A      | max. 1,4                     | V     |
| $V_{(TO)}$    | $T_{vj} = 160$ °C                     | max. 0,72                    | V     |
| $r_T$         | $T_{vj} = 160$ °C                     | max. 0,19                    | mΩ    |
| $I_{RD}$      | $T_{vj} = 160$ °C; $V_{RD} = V_{RRM}$ | max. 60                      | mA    |
| $R_{th(j-c)}$ | cont.                                 | 0,0385                       | K/W   |
|               | sin. 180                              | 0,04                         | K/W   |
| $R_{th(c-s)}$ |                                       | 0,01                         | K/W   |
| $T_{vj}$      |                                       | - 40 ... + 160 <sup>1)</sup> | °C    |
| $T_{stg}$     |                                       | - 40 ... + 125               | °C    |
| $V_{isol}$    | a. c. 50 Hz; r.m.s.; 1 s / 1 min.     | 4800 / 4000                  | V~    |
| $M_s$         | to heatsink                           | 6 ± 15%                      | Nm    |
| $M_t$         | to terminals                          | 18 ± 15 %                    | Nm    |
| $a$           |                                       | 5 * 9,81                     | m/s²  |
| $m$           | approx.                               | 2150                         | g     |
| Case          |                                       | A82                          |       |



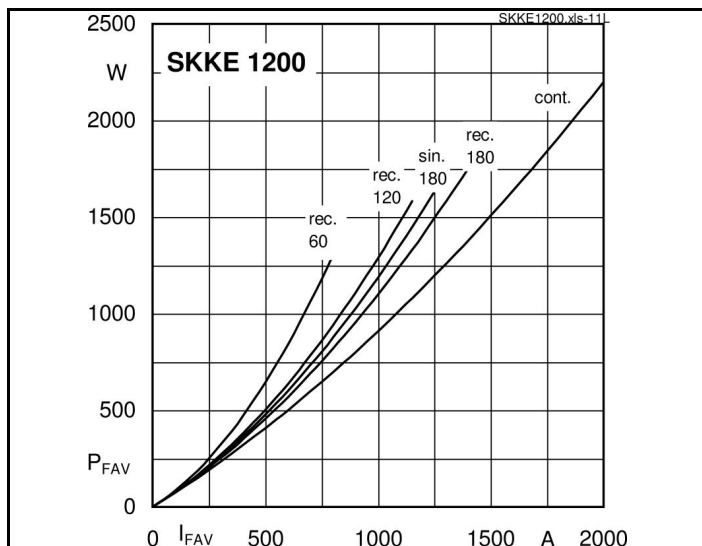


Fig. 11L Power dissipation per diode vs. forward current

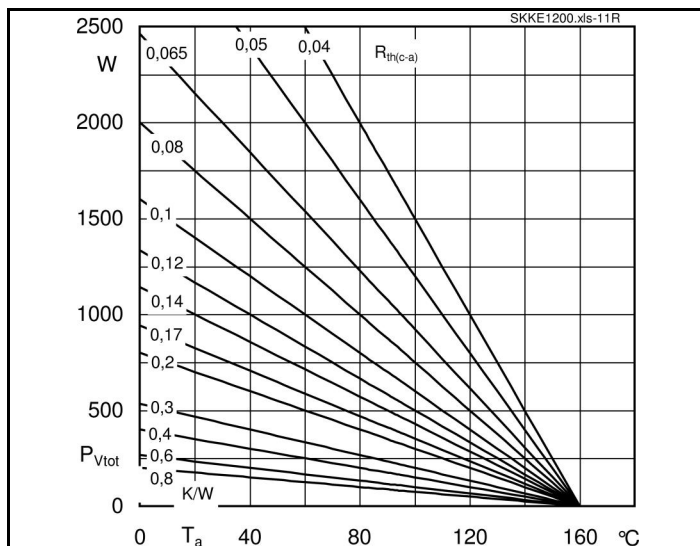


Fig. 11R Power dissipation per diode vs. ambient temperature

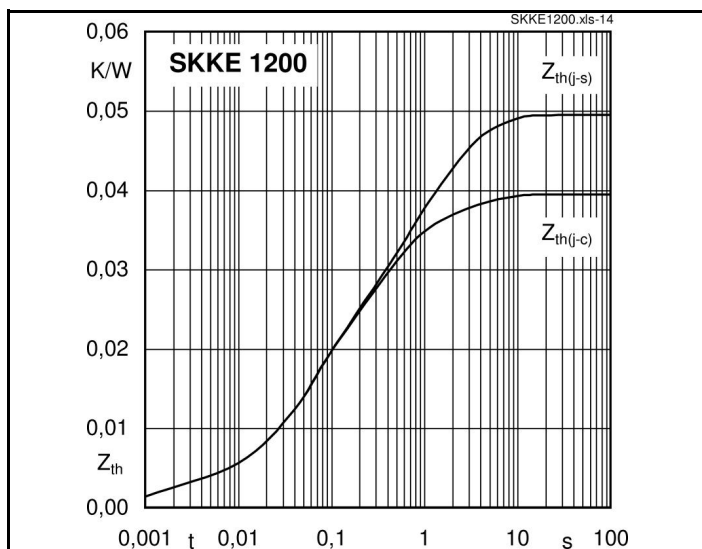


Fig. 14 Transient thermal impedance vs. time

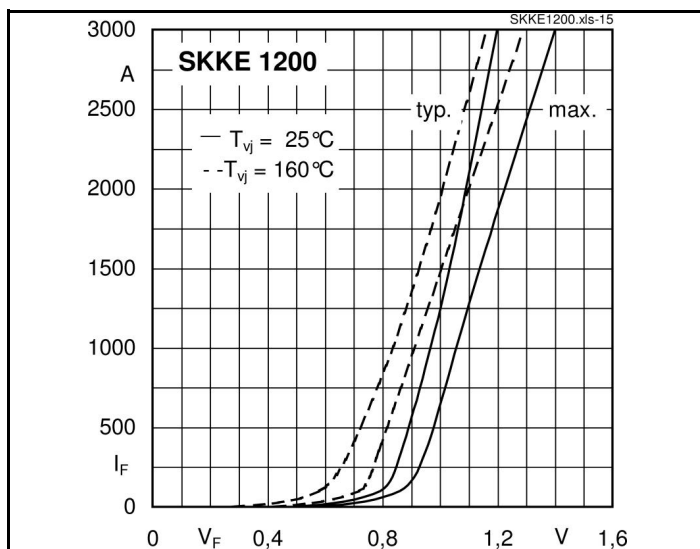


Fig. 15 Forward characteristics

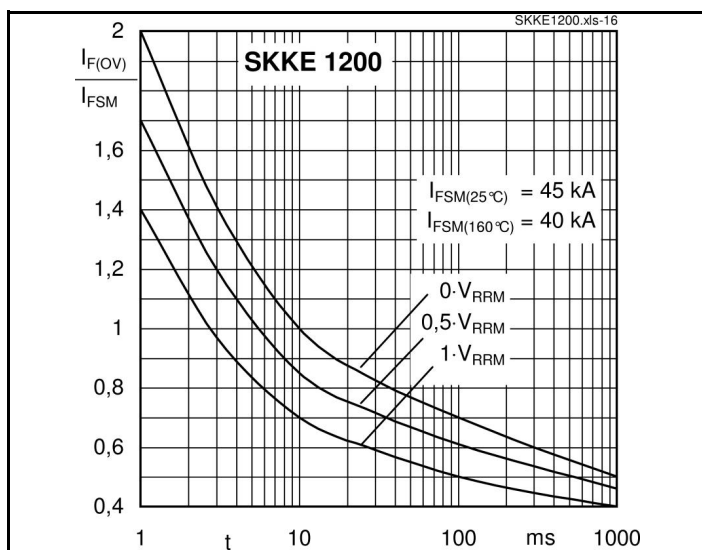
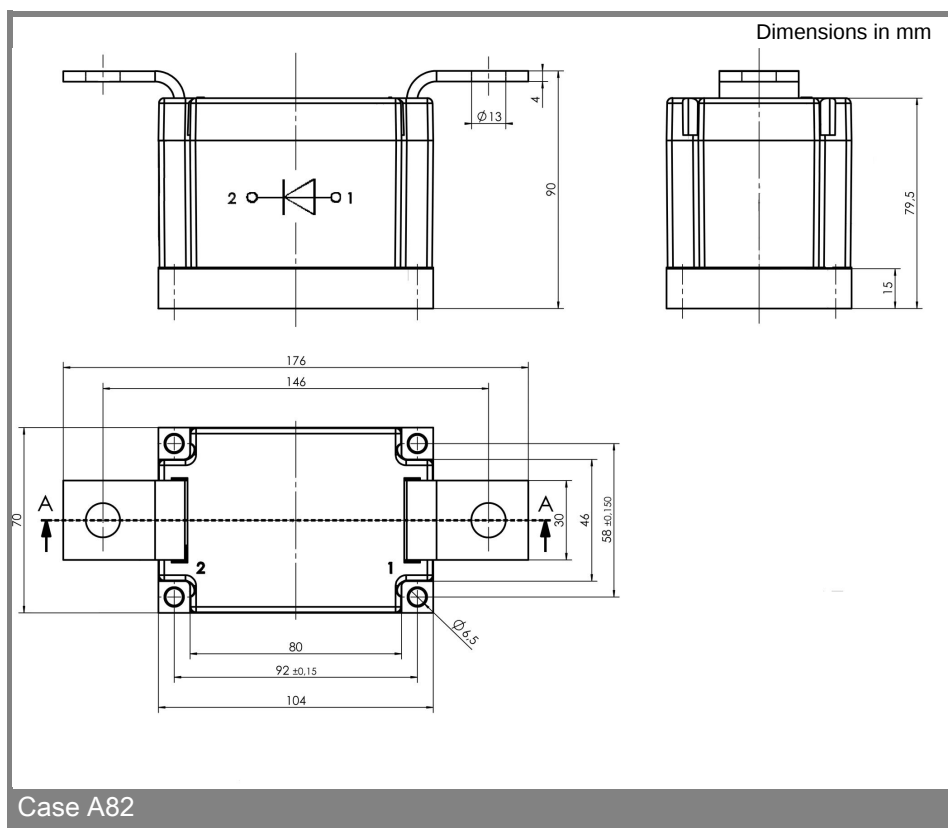


Fig. 16 Surge overload current vs. time



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