



SEMIPACK[®] 2

Rectifier Diode Modules

SKKD 212

Features

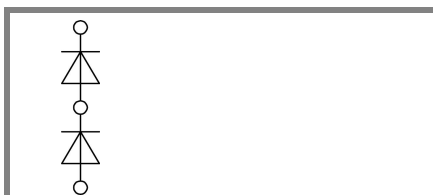
- Heat transfer through aluminium oxide ceramic isolated metal baseplate
- Hard soldered joints for high reliability

Typical Applications*

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

| V_{RSM} V | V_{RRM} V | $I_{FRMS} = 340$ A (maximum value for continuous operation) $I_{FAV} = 212$ A (sin. 180; $T_c = 85$ °C) | | |
|----------------|----------------|--|--|--|
| 1300 | 1200 | SKKD 212/12 | | |
| 1700 | 1600 | SKKD 212/16 | | |
| 1900 | 1800 | SKKD 212/18 | | |

| Symbol | Conditions | Values | Units |
|---------------|---------------------------------------|----------------|------------------|
| I_{FAV} | sin. 180; $T_c = 85$ (100) °C | 212 (165) | A |
| I_{FSM} | $T_{vj} = 25$ °C; 10 ms | 6600 | A |
| | $T_{vj} = 125$ °C; 10 ms | 5500 | A |
| i^2t | $T_{vj} = 25$ °C; 8,3 ... 10 ms | 217800 | A ² s |
| | $T_{vj} = 125$ °C; 8,3 ... 10 ms | 151250 | A ² s |
| V_F | $T_{vj} = 25$ °C; $I_F = 500$ A | max. 1,4 | V |
| $V_{(TO)}$ | $T_{vj} = 135$ °C | max. 0,75 | V |
| r_T | $T_{vj} = 135$ °C | max. 1,05 | mΩ |
| I_{RD} | $T_{vj} = 135$ °C; $V_{RD} = V_{RRM}$ | max. 9 | mA |
| $R_{th(j-c)}$ | per diode / per module | 0,18 / 0,09 | K/W |
| $R_{th(c-s)}$ | per diode / per module | 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~ |
| M_s | to heatsink | 5 ± 15 % | Nm |
| M_t | to terminals | 5 ± 15 % | Nm |
| a | | 5 * 9,81 | m/s ² |
| m | approx. | 165 | g |
| Case | SKKD | A 23 | |



SKKD

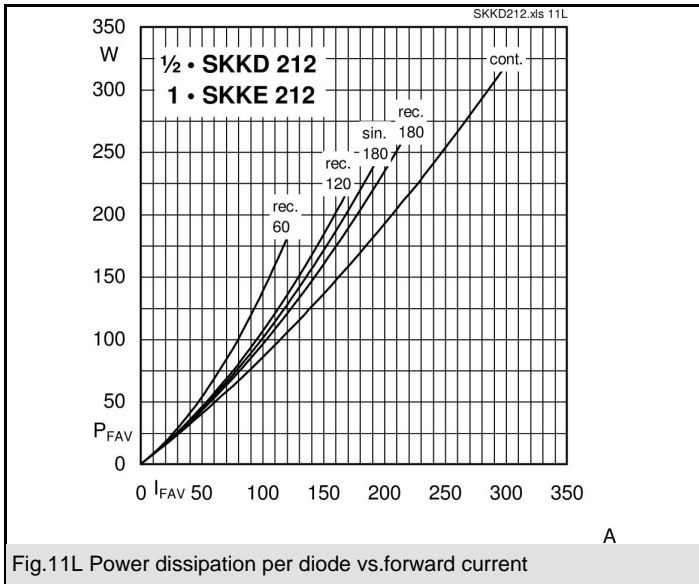


Fig.11L Power dissipation per diode vs. forward current

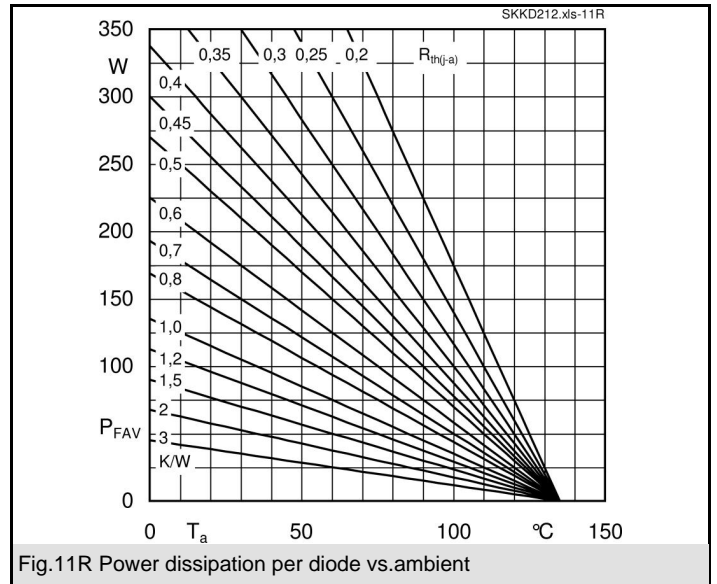


Fig.11R Power dissipation per diode vs. ambient

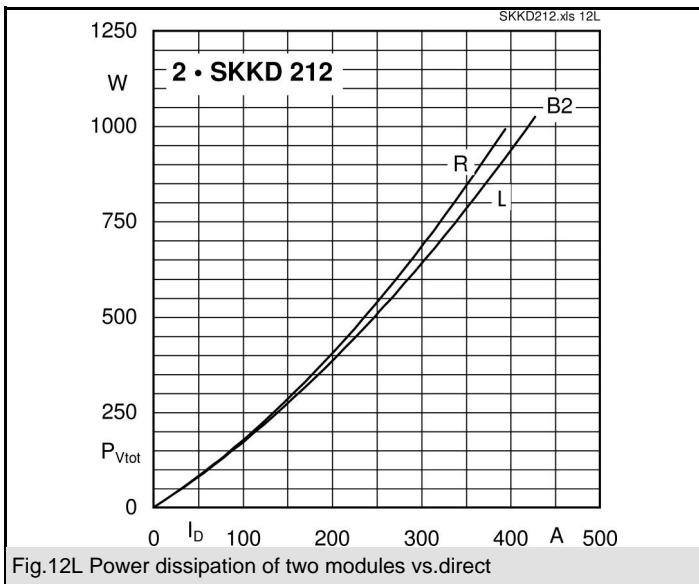


Fig.12L Power dissipation of two modules vs. direct

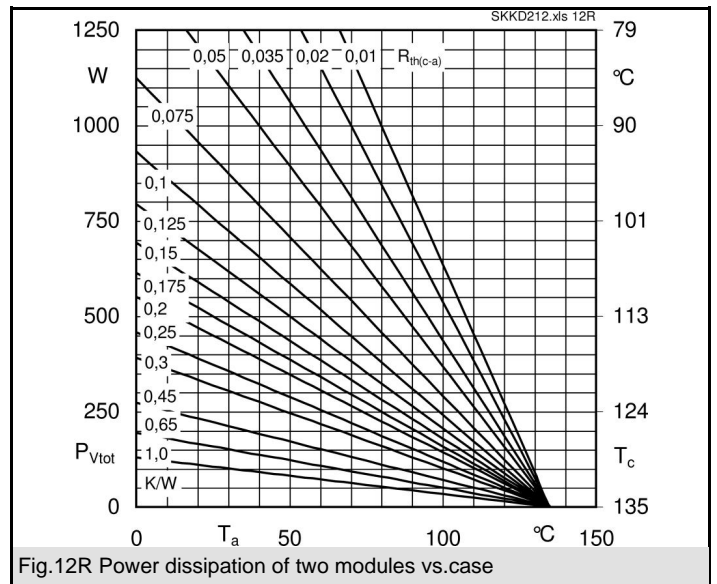


Fig.12R Power dissipation of two modules vs. case

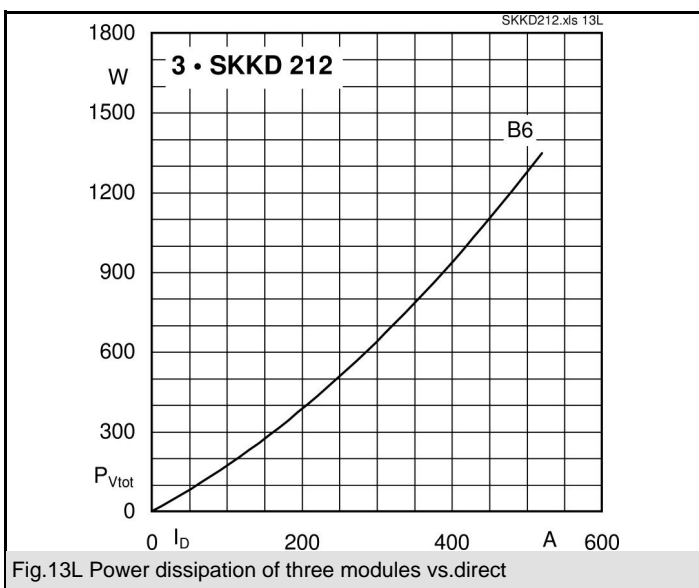


Fig.13L Power dissipation of three modules vs. direct

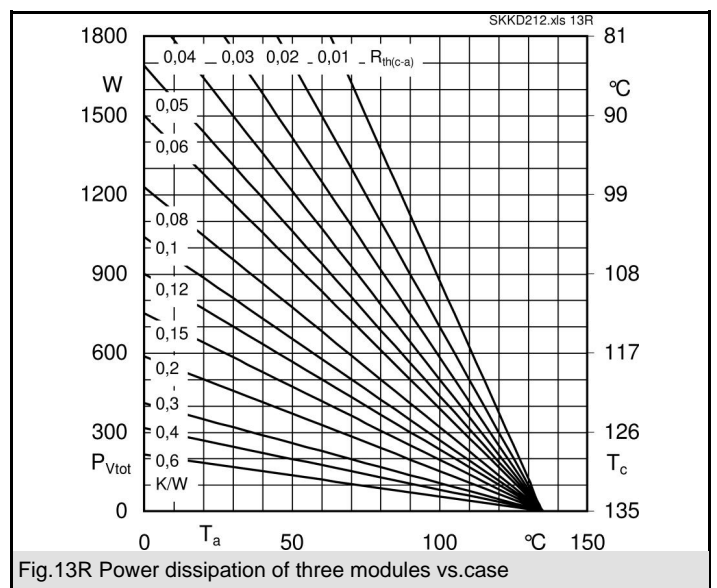
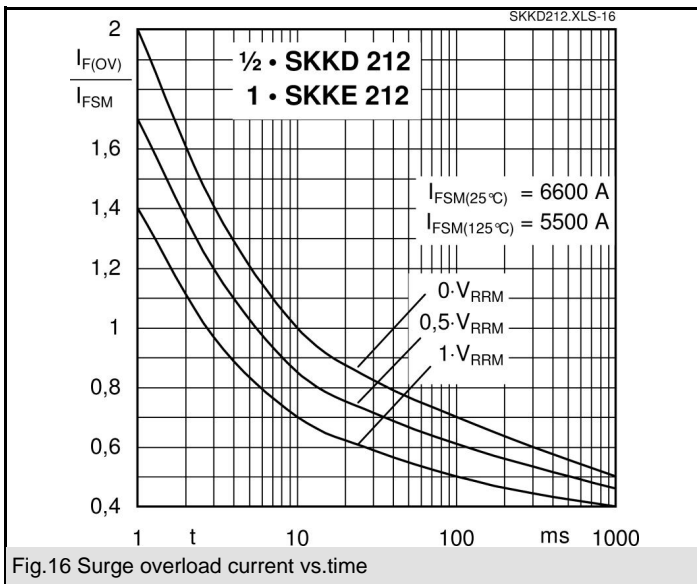
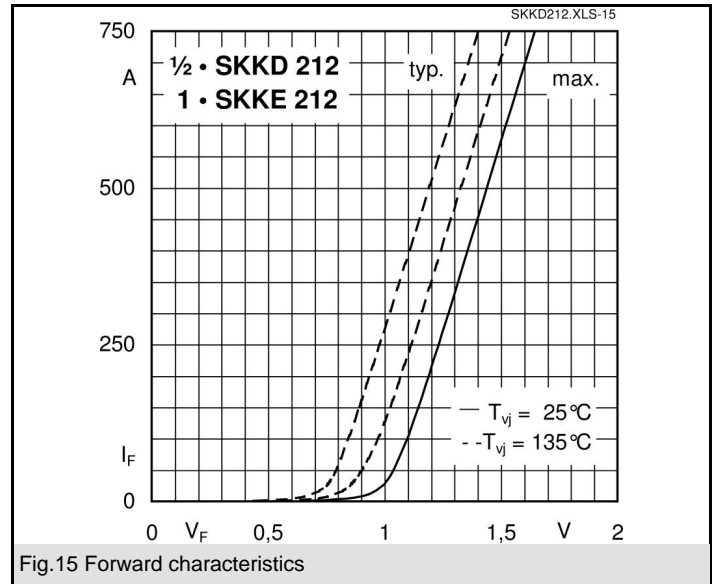
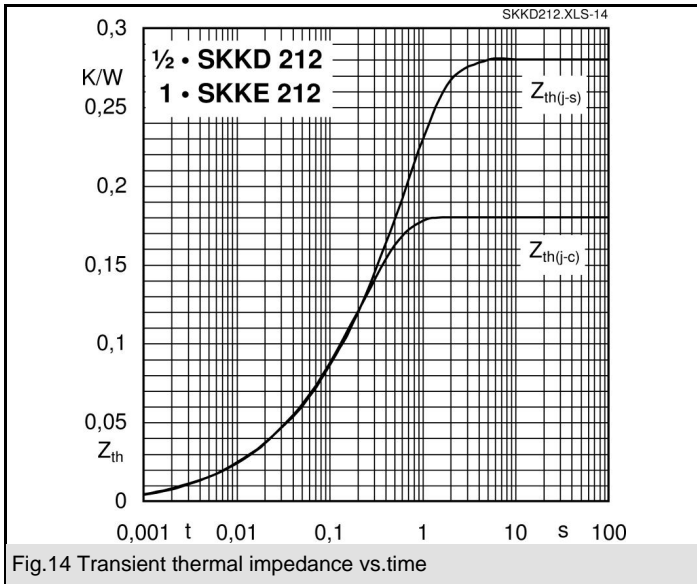
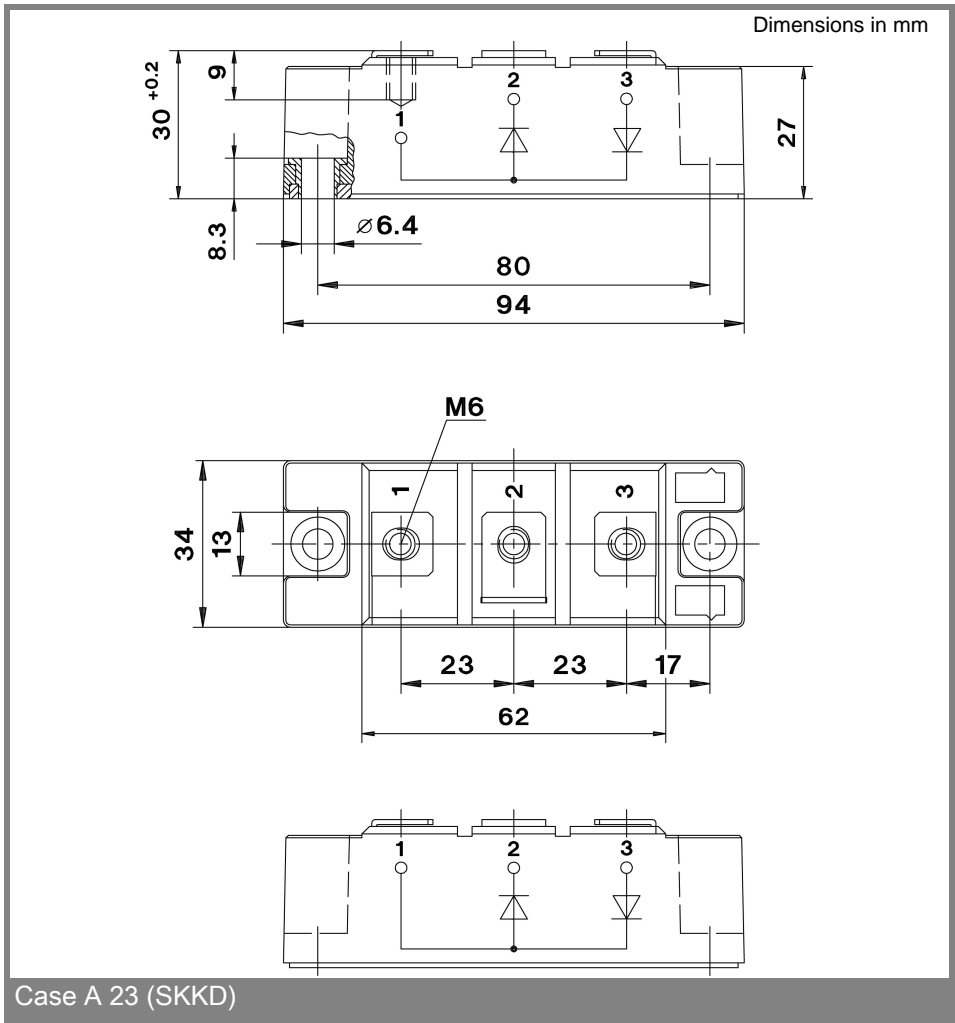


Fig.13R Power dissipation of three modules vs. case





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