



Stud Diode

Avalanche Diode

SKNa 202

Publish Data

Features

- Avalanche type reverse characteristic
- Reverse voltages up to 5000 V
- Hermetic metal case with ceramic insulator and extra long creepage distances
- Threaded stud ISO M16 x 1,5
- Cooling via heatsinks
- SKN: Anode to stud

Typical Applications

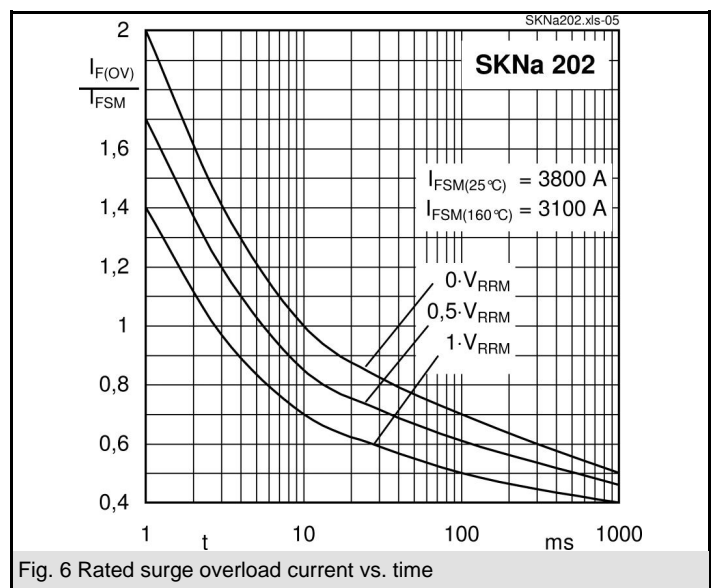
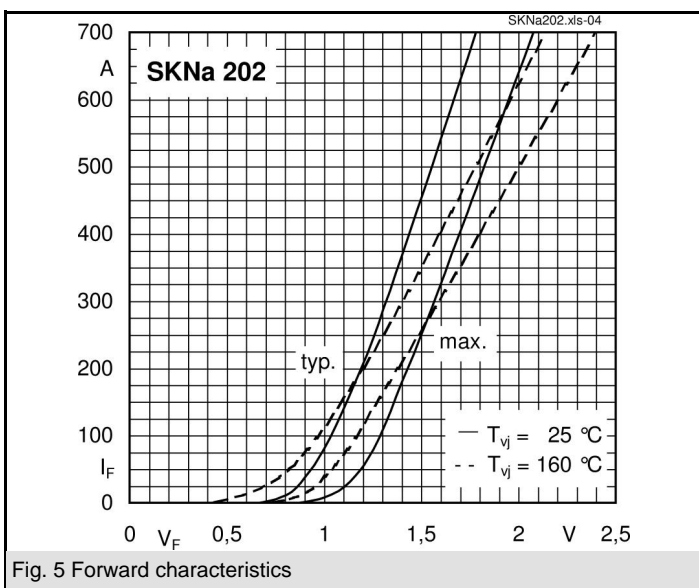
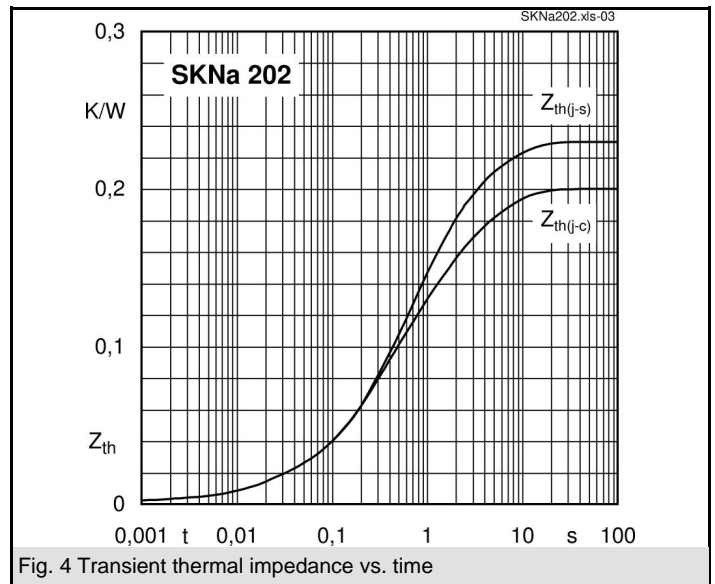
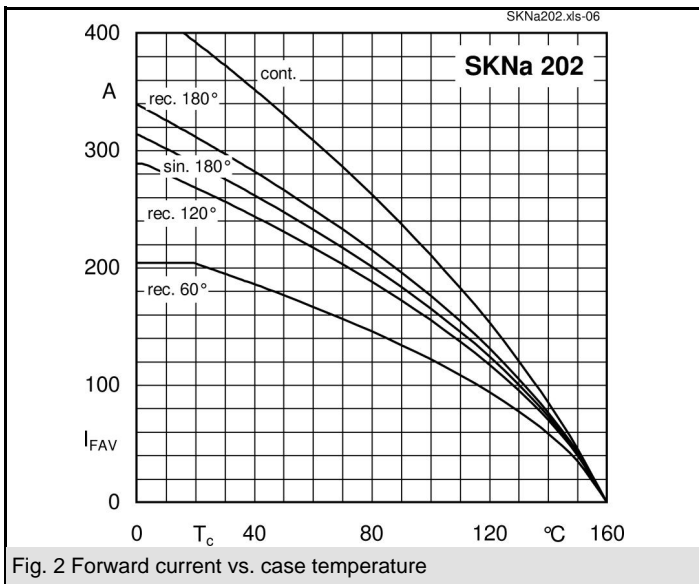
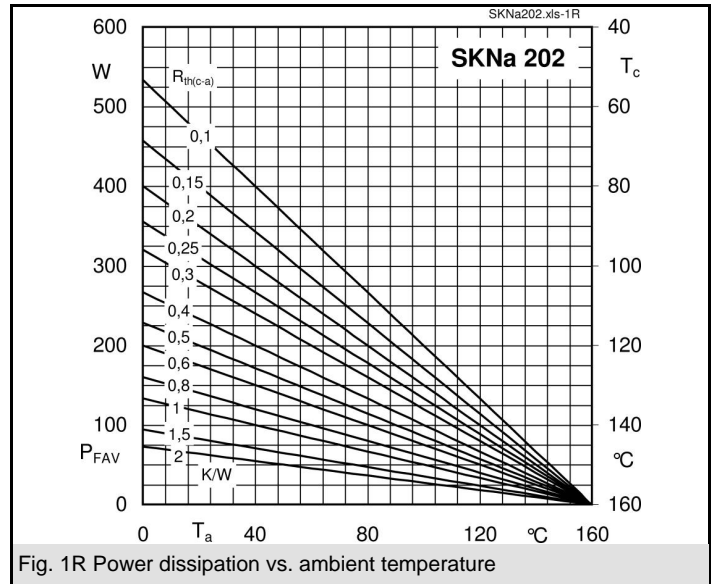
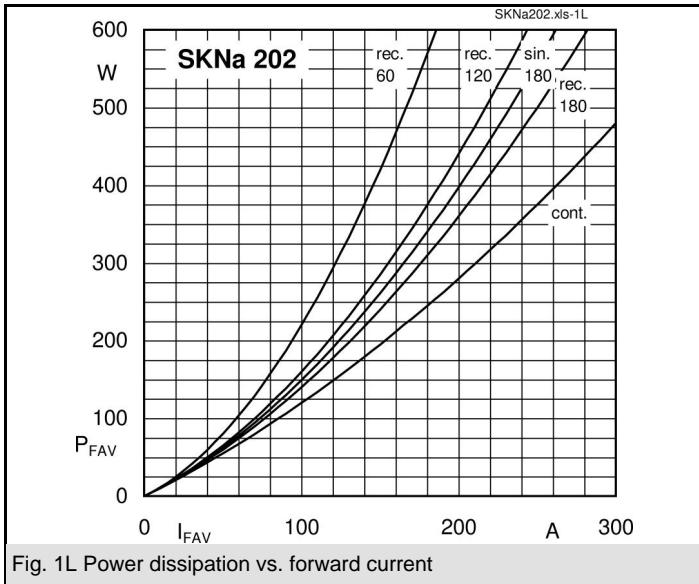
- High voltage rectifier diode for traction and heavy duty applications
- Series connections for high voltage applications
- Non-controllable and half-controllable rectifiers
- Free-wheeling diodes

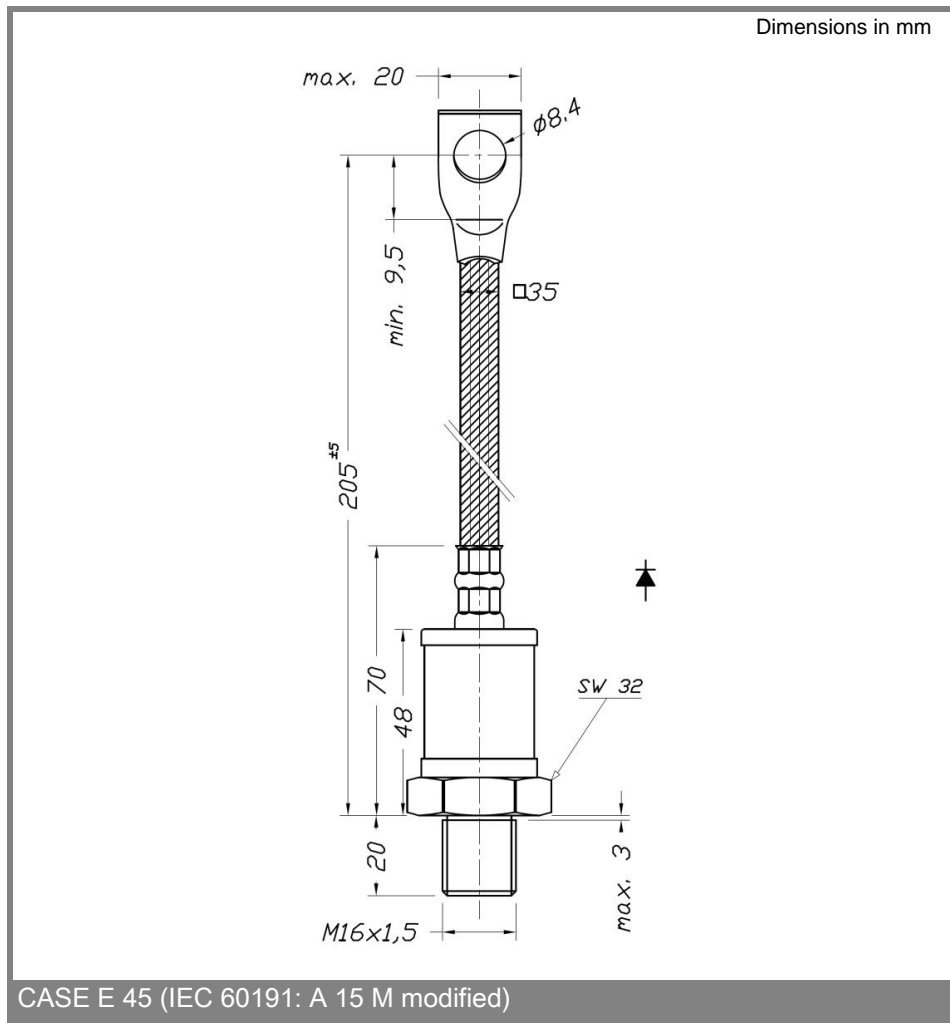
| $V_{(BR)min}$ | $I_{FRMS} = 500 \text{ A}$ (maximum value for continuous operation) | C_{max} | R_{min} |
|---------------|--|---------------|-----------|
| V | $I_{FAV} = 200 \text{ A}$ (sin. 180; $T_c = 80 \text{ }^\circ\text{C}$) | μF | Ω |
| 3600 | SKNa 202/36 | | |
| 4000 | SKNa 202/40 | | |
| 4200 | SKNa 202/42 | | |
| 4500 | SKNa 202/45 | | |
| 4600 | SKNa 202/46 | | |
| 4800 | SKNa 202/48 | | |
| 5000 | SKNa 202/50 | | |

| Symbol | Conditions | Values | Units |
|---------------|--|----------------|----------------------|
| I_{FAV} | sin. 180 ; $T_c = 80$ (100) $^\circ\text{C}$ | 200 (165) | A |
| I_D | K 0,55; $T_a = 45 \text{ }^\circ\text{C}$; B2 / B6 | 208 / 296 | A |
| | K 0,55F; $T_a = 35 \text{ }^\circ\text{C}$; B2 / B6 | 340 / 478 | A |
| I_{FSM} | $T_{vj} = 25 \text{ }^\circ\text{C}$; 10 ms | 3800 | A |
| | $T_{vj} = 160 \text{ }^\circ\text{C}$; 10 ms | 3100 | A |
| i^2t | $T_{vj} = 25 \text{ }^\circ\text{C}$; 8,3 ... 10 ms | 72000 | A^2s |
| | $T_{vj} = 160 \text{ }^\circ\text{C}$; 8,3 ... 10 ms | 48000 | A^2s |
| V_F | $T_{vj} = 25 \text{ }^\circ\text{C}$; $I_F = 600 \text{ A}$ | max. 1,95 | V |
| $V_{(TO)}$ | $T_{vj} = 150 \text{ }^\circ\text{C}$ | max. 1 | V |
| r_T | $T_{vj} = 150 \text{ }^\circ\text{C}$ | max. 2 | $\text{m}\Omega$ |
| I_{RD} | $T_{vj} = 25 \text{ }^\circ\text{C}$; $V_{RD} = V_{(BR)min}$ | max. 2000 | μA |
| | $T_{vj} = 160 \text{ }^\circ\text{C}$; $V_{RD} = V_{(BR)min}$ | max. 35 | mA |
| P_{RSM} | $T_{vj} = 160 \text{ }^\circ\text{C}$; $t_p = 10 \mu\text{s}$ | 60 | kW |
| $R_{th(j-c)}$ | | 0,2 | K/W |
| $R_{th(c-s)}$ | | 0,03 | K/W |
| T_{vj} | | - 40 ... + 160 | $^\circ\text{C}$ |
| T_{stg} | | - 40 ... + 160 | $^\circ\text{C}$ |
| V_{isol} | | - | V~ |
| M_s | to heatsink | 30 | Nm |
| | | 270 | lb.in. |
| a | | 5 * 9,81 | m/s^2 |
| m | approx. | 260 | g |
| Case | | E 45 | |



SKN





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