

SKR 2F50



Stud Diode

Fast Recovery Rectifier Diode

SKR 2F50

Features

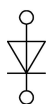
- Small recovered charge
- Soft recovery
- Up to 1000 V reverse voltage
- Hermetic metal case with glass insulator
- Threaded stud ISO M6 or 1/4-28 UNF
- SKR: cathode to stud

Typical Applications

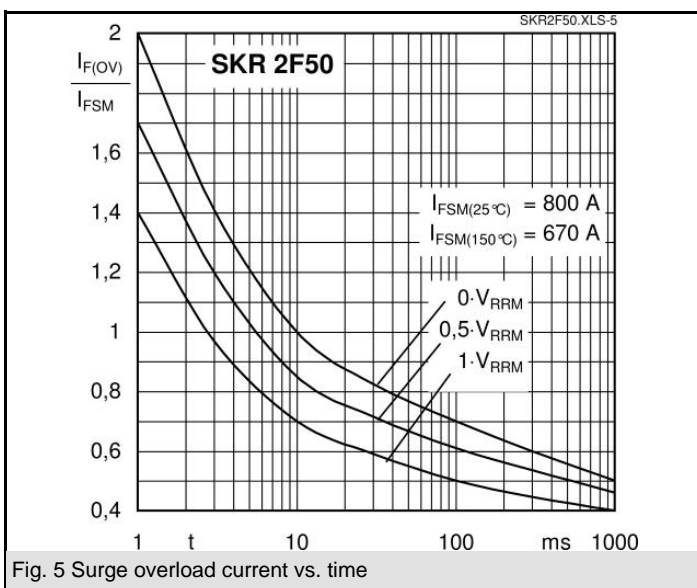
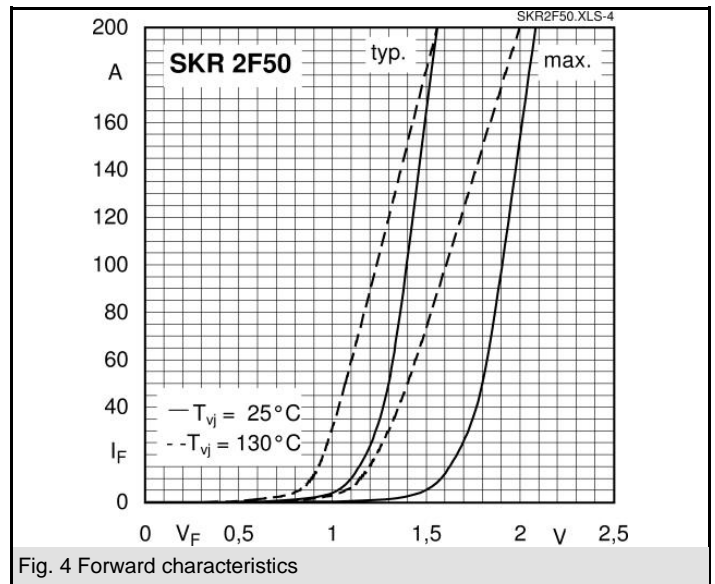
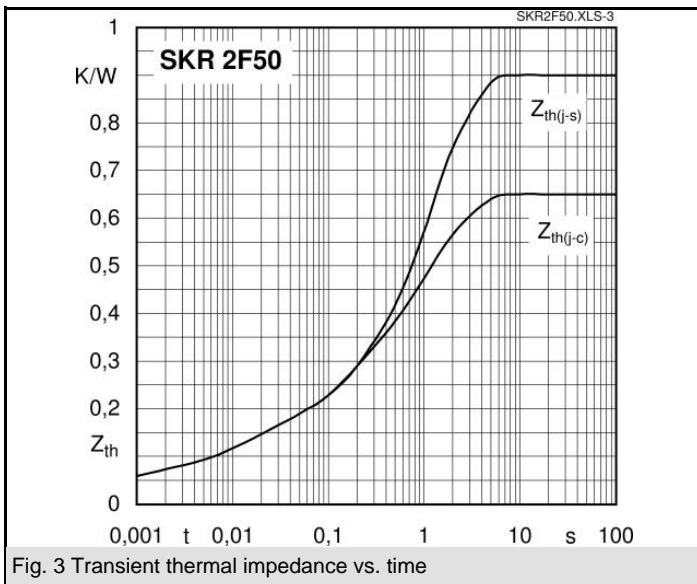
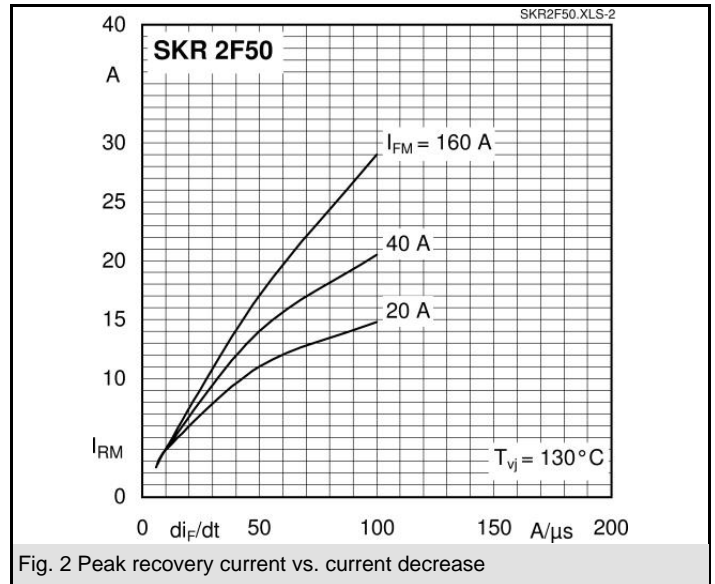
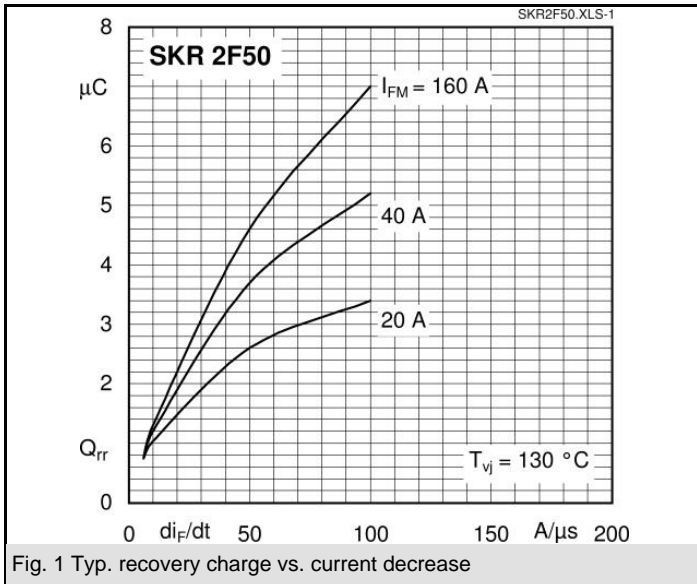
- Inverse diode for power transistor, GTO thyristor, asymmetric thyristor
- SMPS, inverters, choppers
- For severe ambient conditions

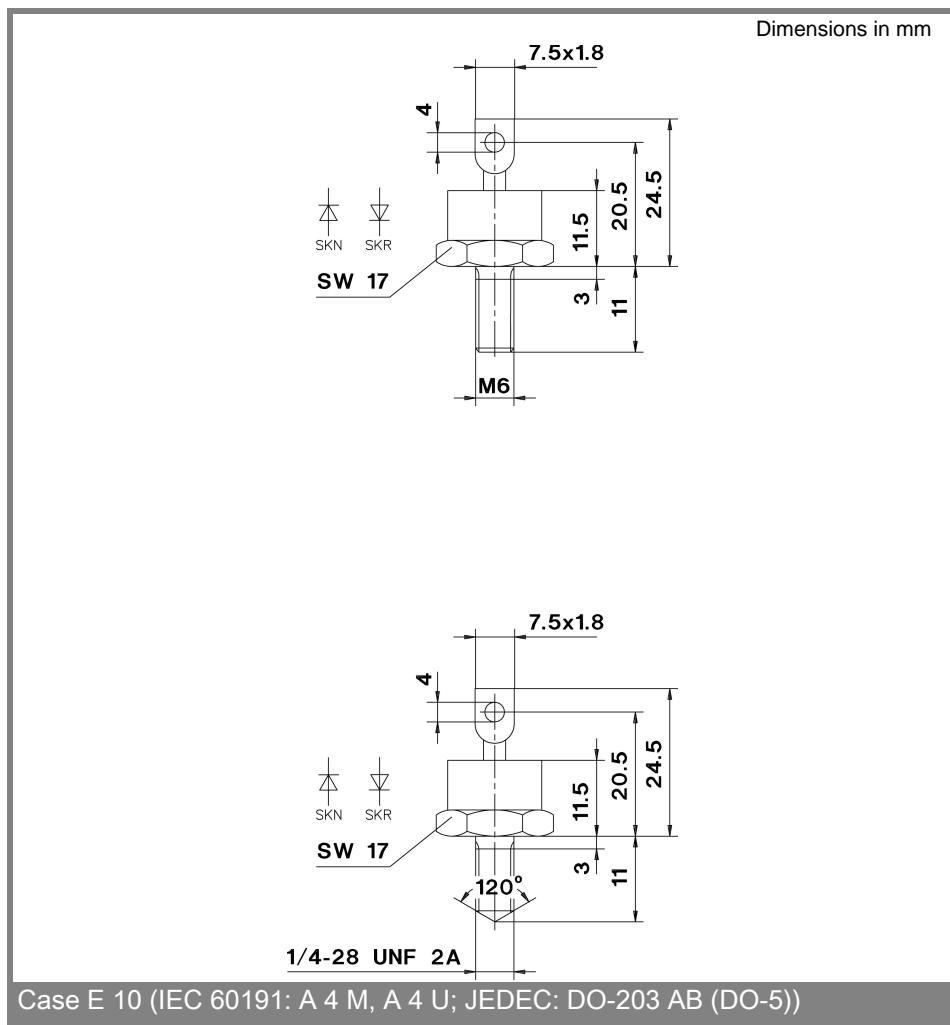
| V_{RSM} V | V_{RRM} V | $I_{FRMS} = 100$ A (maximum value for continuous operation) $I_{FAV} = 50$ A (sin. 180; 5000 Hz; $T_c = 95$ °C) | |
|----------------|----------------|--|--|
| 400 | 400 | SKR 2F50/04 | |
| 400 | 400 | SKR 2F50/04UNF | |
| 600 | 600 | SKR 2F50/06 | |
| 600 | 600 | SKR 2F50/06UNF | |
| 800 | 800 | SKR 2F50/08 | |
| 800 | 800 | SKR 2F50/08UNF | |
| 1000 | 1000 | SKR 2F50/10 | |
| 1000 | 1000 | SKR 2F50/10UNF | |

| Symbol | Conditions | Values | Units |
|---------------|---------------------------------------|----------------|------------------|
| I_{FAV} | sin. 180; $T_c = 85$ (100) °C | 57 (46) | A |
| I_{FAV} | K3; $T_a = 45$ °C; sin. 180; 5000 Hz | 17 | |
| I_{FSM} | $T_{vj} = 25$ °C; 10 ms | 800 | A |
| | $T_{vj} = 150$ °C; 10 ms | 670 | A |
| i^2t | $T_{vj} = 25$ °C; 8,3 ... 10 ms | 3200 | A ² s |
| | $T_{vj} = 150$ °C; 8,3 ... 10 ms | 2200 | A ² s |
| V_F | $T_{vj} = 25$ °C; $I_F = 50$ A | max. 1,8 | V |
| $V_{(TO)}$ | $T_{vj} = 150$ °C | 1,2 | V |
| r_T | $T_{vj} = 150$ °C | 4 | mΩ |
| I_{RD} | $T_{vj} = 25$ °C; $V_{RD} = V_{RRM}$ | max. 0,4 | mA |
| I_{RD} | $T_{vj} = 130$ °C; $V_{RD} = V_{RRM}$ | max. 50 | mA |
| Q_{rr} | $T_{vj} = 130$ °C; $I_F = 100$ A, | 3 | μC |
| I_{RM} | $-di/dt = 30$ A/μs; $V_R = 30$ V | 10 | A |
| t_{rr} | | 600 | ns |
| E_{rr} | | - | mJ |
| $R_{th(j-c)}$ | | 0,65 | K/W |
| $R_{th(c-s)}$ | | 0,25 | K/W |
| T_{vj} | | - 40 ... + 150 | °C |
| T_{stg} | | - 55 ... + 150 | °C |
| V_{isol} | | - | V~ |
| M_s | to heatsink | 2,5 | Nm |
| a | | 5 * 9,81 | m/s ² |
| m | approx. | 20 | g |
| Case | | E 10 | |



SKR





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