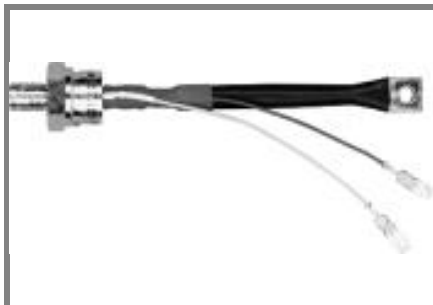


SKT 250



Stud Thyristor

Line Thyristor

SKT 250

Features

- Hermetic metal case with glass insulator
- Threaded stud ISO M24x1,5
- High i^2t and I_{TSM} values for easy fusing
- International standard case

Typical Applications

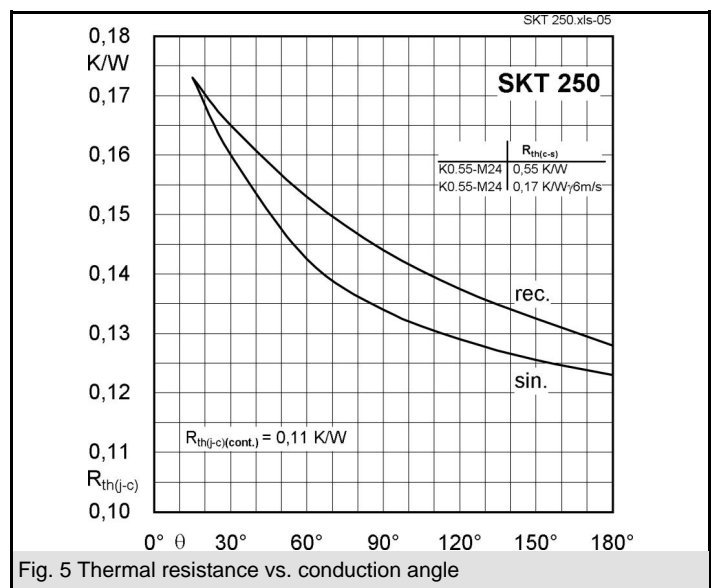
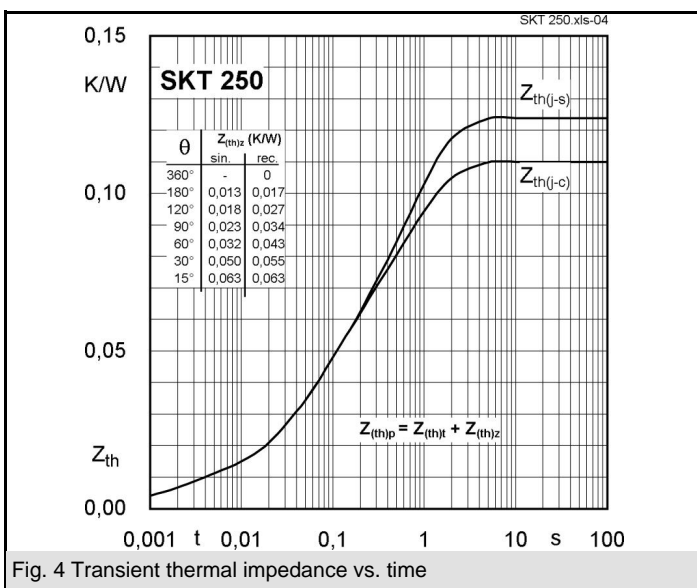
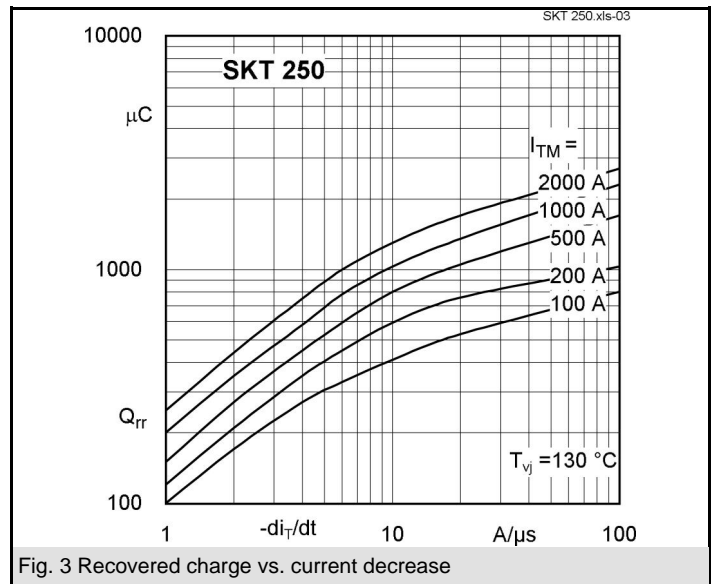
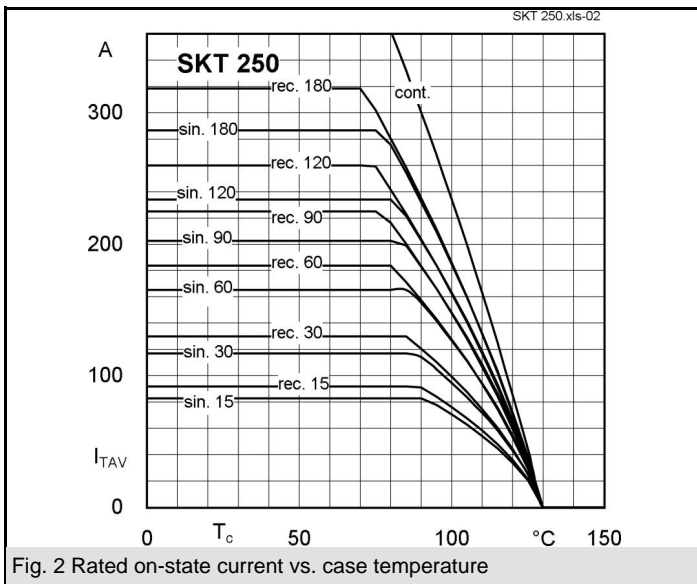
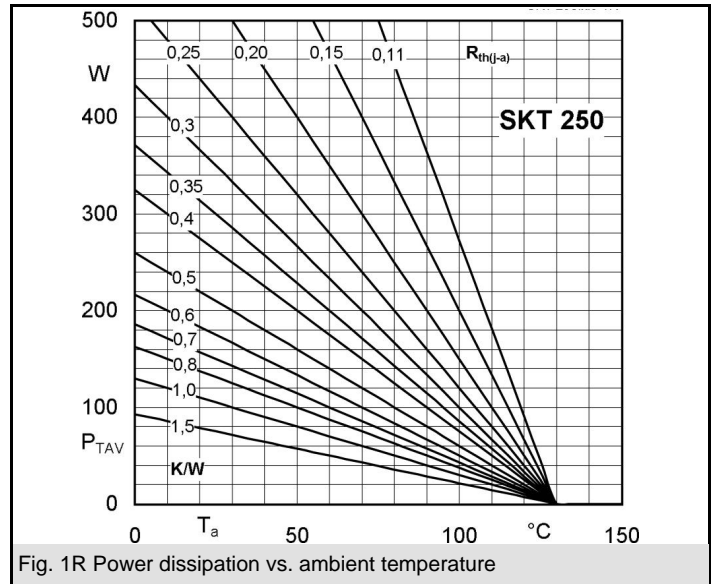
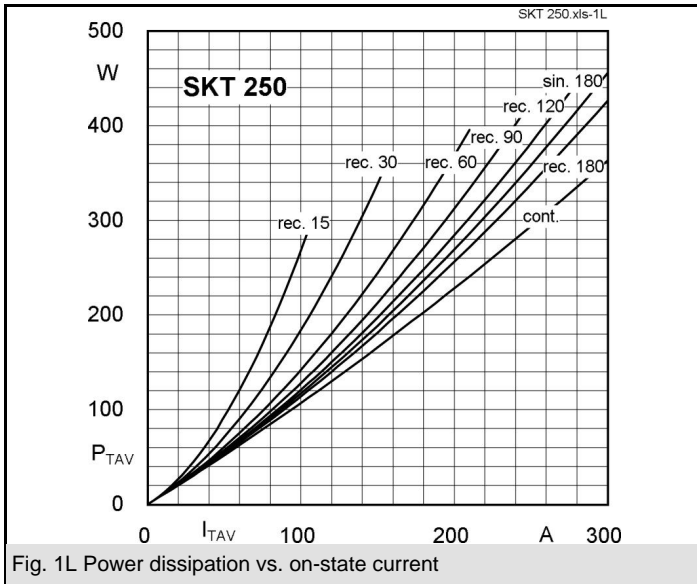
- DC motor control (e. g. for machine tools)
- Controlled rectifiers (e. g. for battery charging)
- AC controllers (e. g. for temperature control)
- Recommended snubber network e. g. for $V_{VRMS} \leq 400$ V:
 $R = 33 \Omega / 32$ W, $C = 0,47 \mu F$

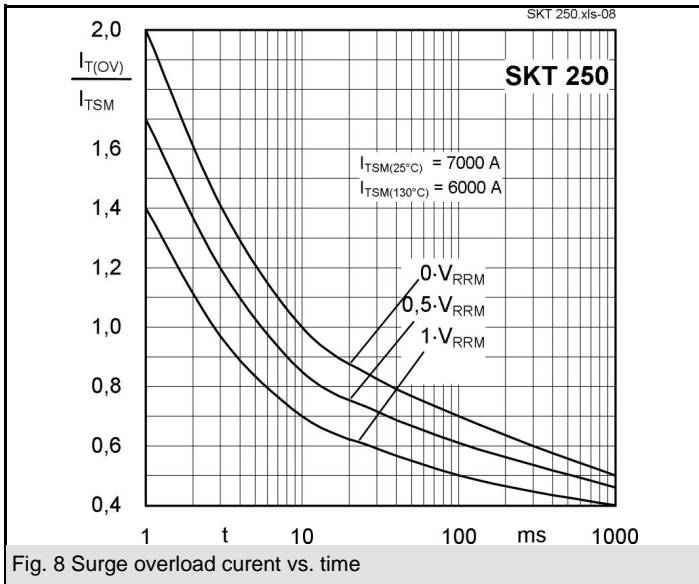
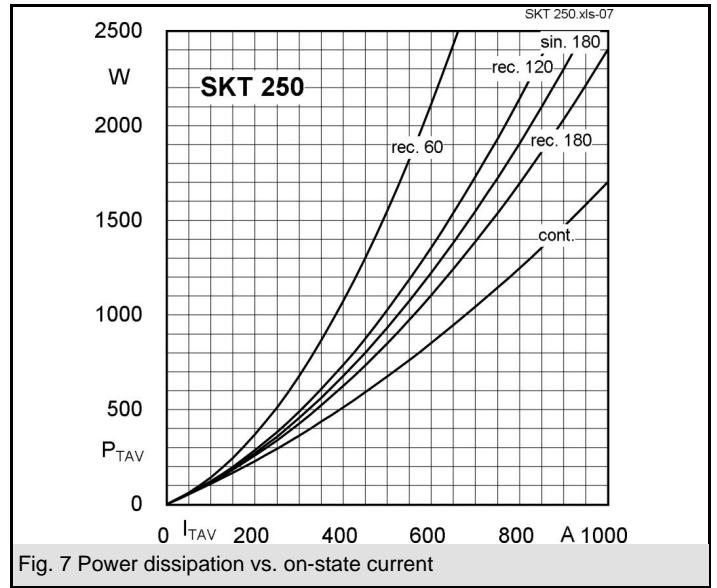
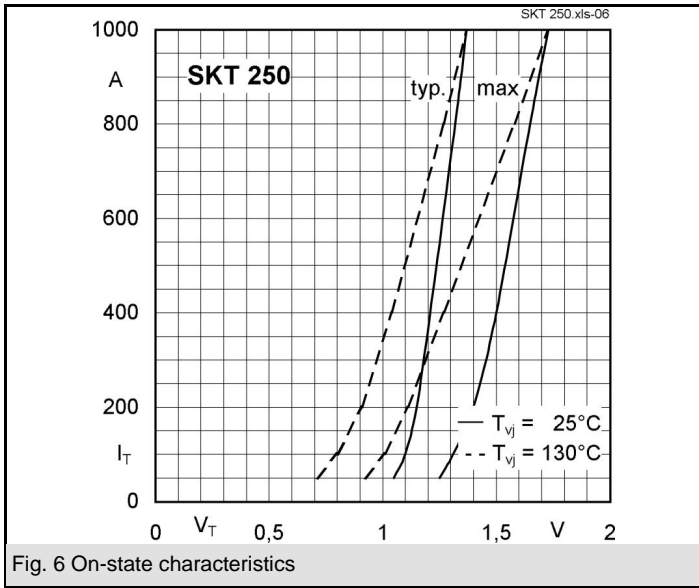
| V_{RSM} V | V_{RRM}, V_{DRM} V | $I_{TRMS} = 450$ A (maximum value for continuous operation) $I_{TAV} = 250$ A (sin. 180; $T_c = 85$ °C) | |
|----------------|-------------------------|--|--|
| 500 | 400 | SKT 250/04D | |
| 900 | 800 | SKT 250/08D | |
| 1300 | 1200 | SKT 250/12E | |
| 1500 | 1400 | SKT 250/14E | |
| 1700 | 1600 | SKT 250/16E | |

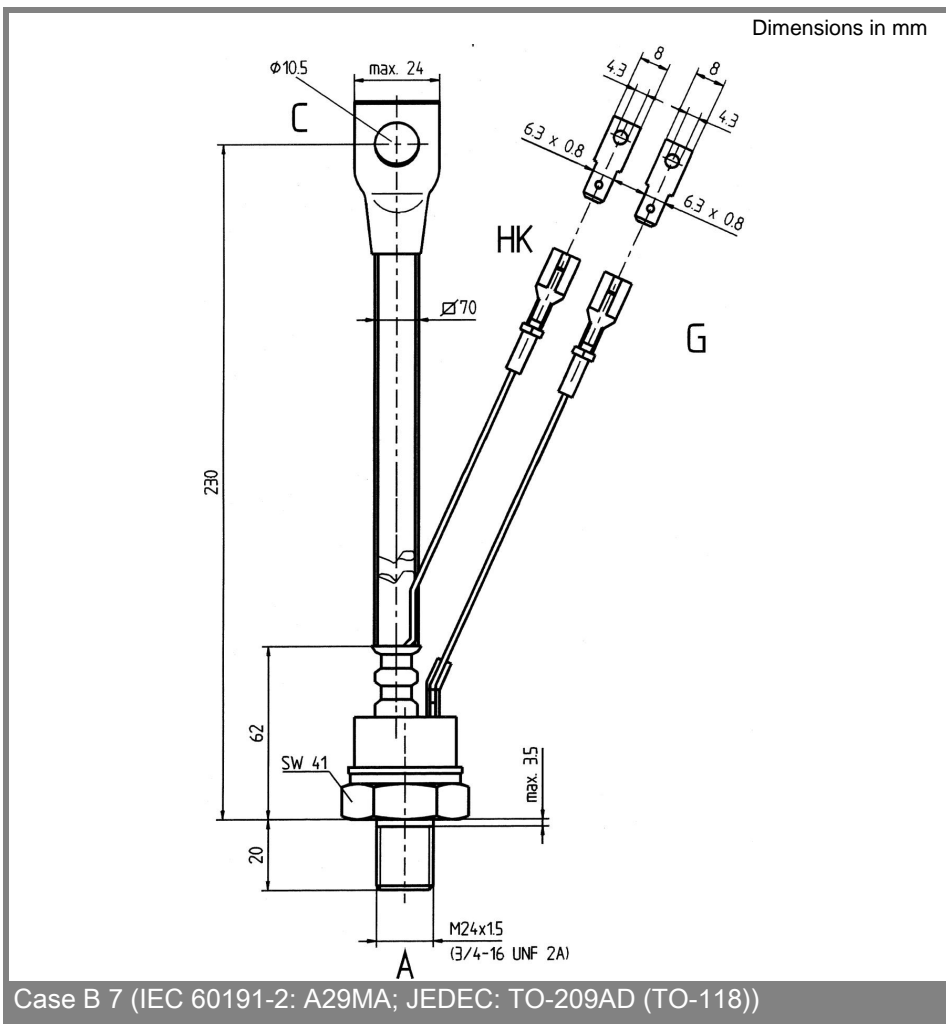
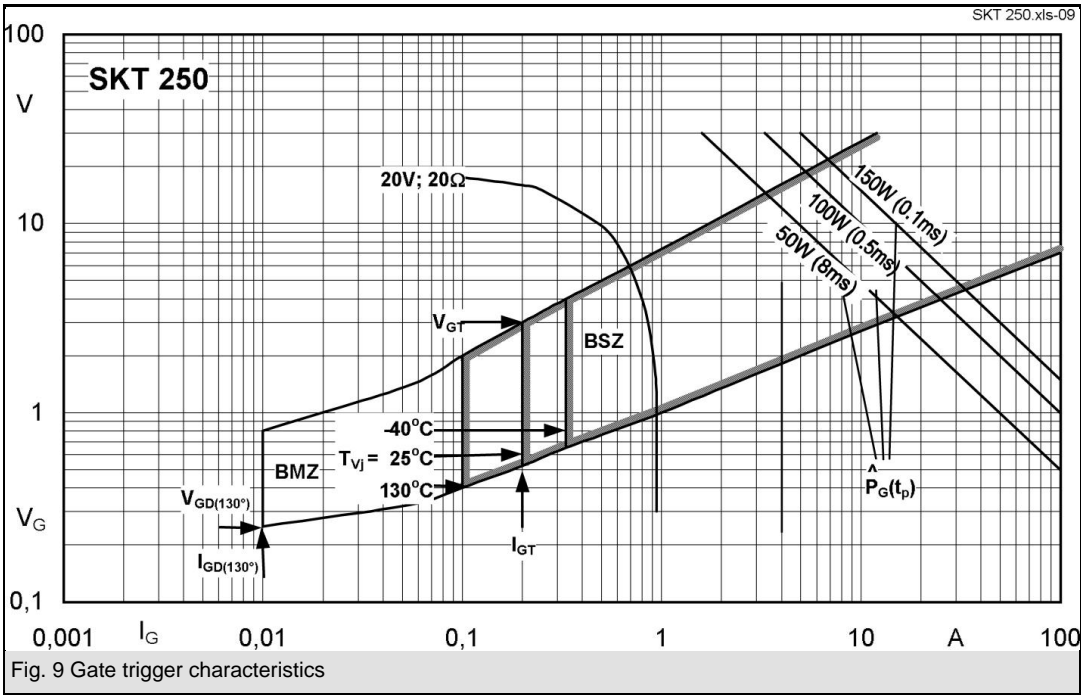
| Symbol | Conditions | Values | Units |
|------------------|---|-----------------|------------------|
| I_{TAV} | sin. 180; $T_c = 100$ (85) °C | 185 (250) | A |
| I_D | K0,55; $T_a = 45$ °C; B2 / B6 | 240 / 330 | A |
| | K0,55F; $T_a = 35$ °C; B2 / B5 | 490 / 675 | A |
| I_{RMS} | K0,55; $T_a = 45$ °C; W1C | 265 | A |
| I_{TSM} | $T_{vj} = 25$ °C; 10 ms | 7000 | A |
| | $T_{vj} = 130$ °C; 10 ms | 6000 | A |
| i^2t | $T_{vj} = 25$ °C; 8,35 ... 10 ms | 245000 | A ² s |
| | $T_{vj} = 130$ °C; 8,35 ... 10 ms | 180000 | A ² s |
| V_T | $T_{vj} = 25$ °C; $I_T = 800$ A | max. 1,65 | V |
| $V_{T(TO)}$ | $T_{vj} = 130$ °C | 1 | V |
| r_T | $T_{vj} = 130$ °C | 0,7 | mΩ |
| $I_{DD}; I_{RD}$ | $T_{vj} = 130$ °C; $V_{RD} = V_{RRM}; V_{DD} = V_{DRM}$ | max. 50 | mA |
| t_{gd} | $T_{vj} = 25$ °C; $I_G = 1$ A; $di_G/dt = 1$ A/μs | 1 | μs |
| t_{gr} | $V_D = 0,67 * V_{DRM}$ | 2 | μs |
| $(di/dt)_{cr}$ | $T_{vj} = 130$ °C | max. 100 | A/μs |
| $(dv/dt)_{cr}$ | $T_{vj} = 130$ °C; SKT ...D / SKT ...E | max. 500 / 1000 | V/μs |
| t_q | $T_{vj} = 130$ °C | 50 ... 150 | μs |
| I_H | $T_{vj} = 25$ °C; typ. / max. | 150 / 250 | mA |
| I_L | $T_{vj} = 25$ °C $R_G = 33 \Omega$; typ. / max. | 300 / 600 | mA |
| V_{GT} | $T_{vj} = 25$ °C; d.c. | min. 3 | V |
| I_{GT} | $T_{vj} = 25$ °C; d.c. | min. 200 | mA |
| V_{GD} | $T_{vj} = 130$ °C; d.c. | max. 0,25 | V |
| I_{GD} | $T_{vj} = 130$ °C; d.c. | max. 10 | mA |
| $R_{th(j-c)}$ | cont. | 0,11 | K/W |
| $R_{th(j-c)}$ | sin. 180 | 0,123 | K/W |
| $R_{th(j-c)}$ | rec. 120 | 0,137 | K/W |
| $R_{th(c-s)}$ | | 0,015 | K/W |
| T_{vj} | | - 40 ... + 130 | °C |
| T_{stg} | | - 55 ... + 150 | °C |
| V_{isol} | | - | V~ |
| M_s | to heatsink | 60 | Nm |
| a | | 5 * 9,81 | m/s ² |
| m | approx. | 450 | g |
| Case | | B 7 | |



SKT







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