

SKMD 202E, SKND 202E



SEMIPACK[®] 2

Ultrafast Epitaxial Diode Modules

SKND 202E

SKMD 202E

Features

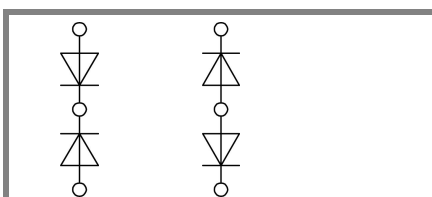
- Isolated metal baseplate
- Very short recovery times
- Low switching losses
- Up to 300 V peak inverse voltage
- SKMD common cathode
SKND common anode
- UL recognized, file no. E 63 532

Typical Applications

- Switched mode power converters
- Inverse diode for transistors in AC and DC motor controls
- Uninterruptible power supplies (UPS)

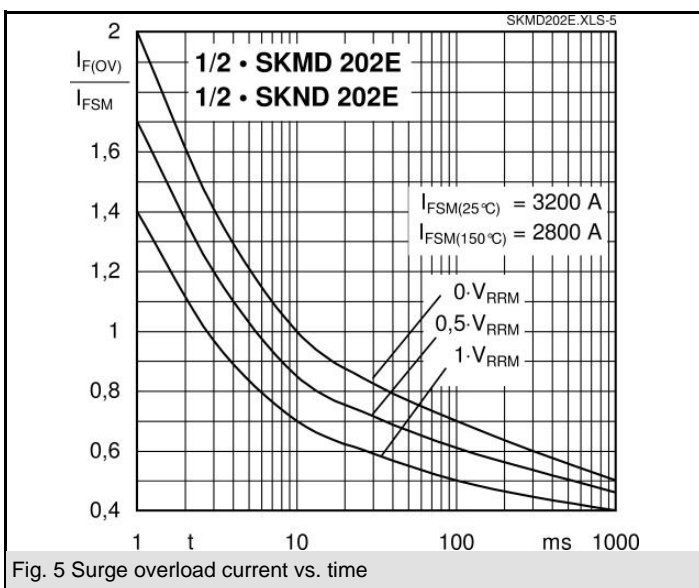
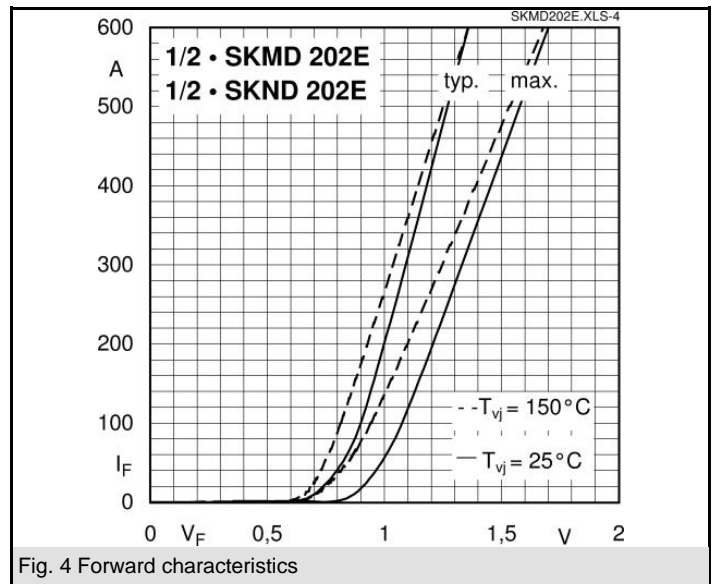
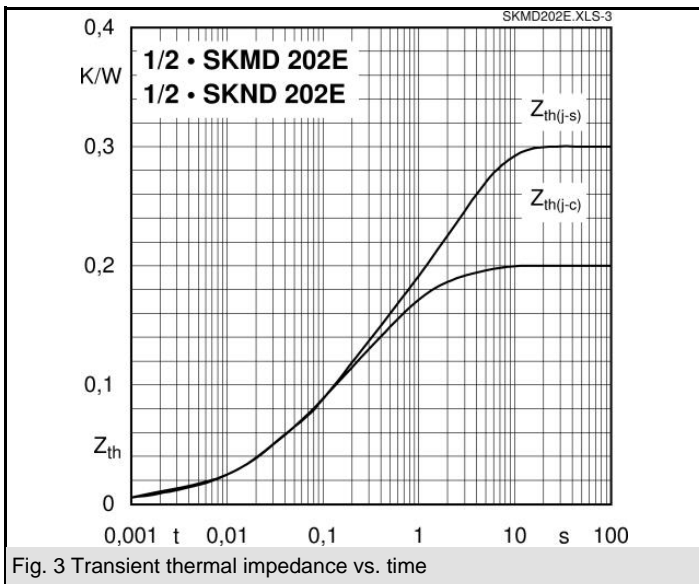
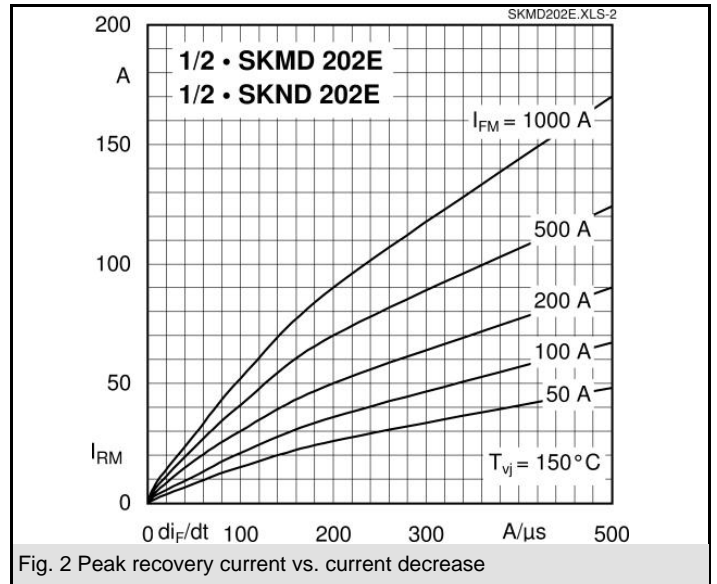
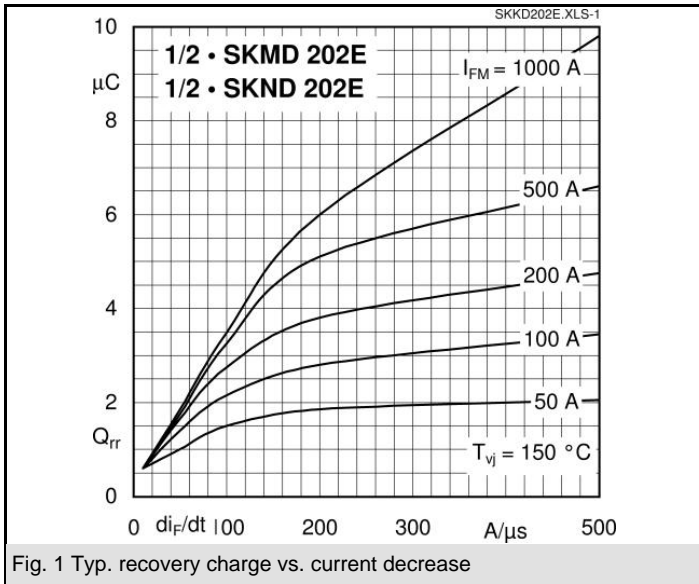
| V_{RSM} V | V_{RRM} V | $I_{FRMS} = 325$ A (maximum value for continuous operation) $I_{FAV} = 202$ A (sin. 180, 50 Hz; $T_c = 87$ °C) | |
|----------------|----------------|---|-------------|
| 200 | 200 | SKMD 202E02 | SKND 202E02 |
| 300 | 300 | SKMD 202E03 | SKND 202E03 |

| Symbol | Conditions | Values | Units |
|---------------|---|----------------|--------------------------------------|
| I_{FAV} | sin. 180; $T_c = 85$ (100) °C | 208 (156) | A |
| I_{FSM} | $T_{vj} = 25$ °C; 10 ms $T_{vj} = 150$ °C; 10 ms | 3200 2800 | A A |
| i^2t | $T_{vj} = 25$ °C; 8,3 ... 10 ms $T_{vj} = 150$ °C; 8,3 ... 10 ms | 51000 39000 | A ² s A ² s |
| V_F | $T_{vj} = 25$ °C; $I_F = 500$ A | max. 1,65 | V |
| $V_{(TO)}$ | $T_{vj} = 150$ °C | max. 0,8 | V |
| r_T | $T_{vj} = 150$ °C | max. 1,5 | mΩ |
| I_{RD} | $T_{vj} = 25$ °C; $V_{RD} = V_{RRM}$ | max. 2 | mA |
| I_{RD} | $T_{vj} = 130$ °C; $V_{RD} = V_{RRM}$ | max. 100 | mA |
| Q_{rr} | $T_{vj} = 150$ °C, $I_F = 50$ A, | 2 | μC |
| I_{RM} | $-di/dt = 100$ A/μs, $V_R = 100$ V | 16 | A |
| t_{rr} | | - | ns |
| E_{rr} | | - | mJ |
| $R_{th(j-c)}$ | per diode / per module | 0,2 / 0,1 | K/W |
| $R_{th(c-s)}$ | per diode / per module | 0,1 / 0,05 | K/W |
| T_{vj} | | - 40 ... + 150 | °C |
| T_{stg} | | - 40 ... + 125 | °C |
| V_{isol} | a. c. 50 Hz; r.m.s.; 1 s / 1 min. | 3000 / 2500 | V~ |
| M_s | to heatsink | 5 ± 15 % | Nm |
| M_t | to terminals | 5 ± 15 % | Nm |
| a | | 5 * 9,81 | m/s ² |
| m | approx. | 250 | g |
| Case | SKMD SKND | A 51 A 52 | |

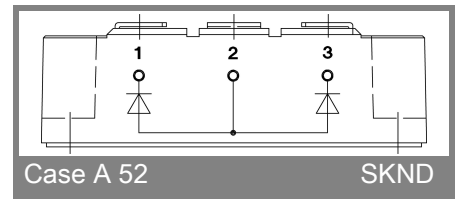
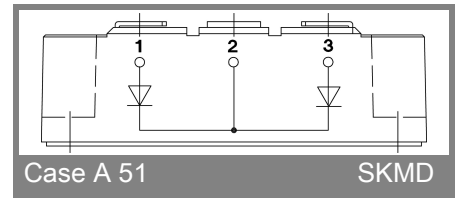
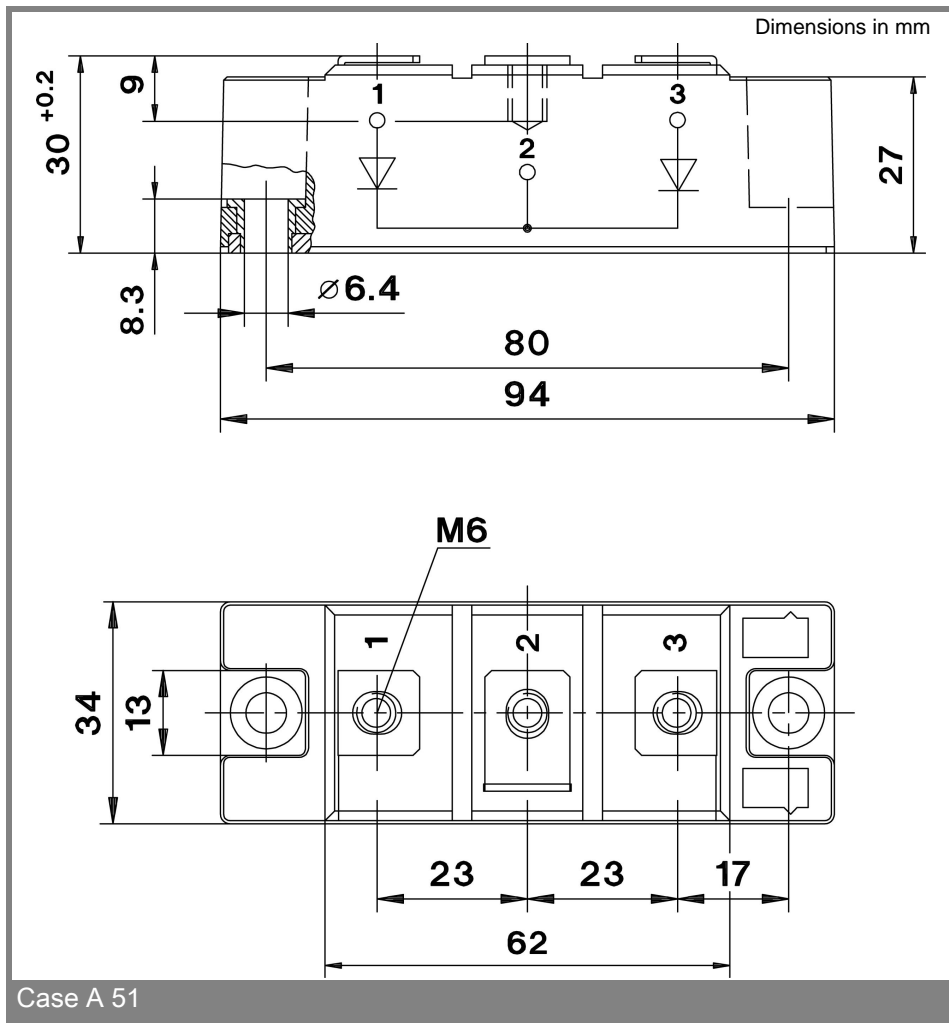


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