

SKKE 310F



SEMIPACK® 2

Fast Diode Module

SKKE 310F

Features

- CAL (controlled axial lifetime) technology, patent No. DE 43 10 44
- Heat transfer through ceramic isolated metal baseplate
- Very short recovery times
- Soft recovery
- Low switching losses

Typical Applications*

- Self-commutated inverters
- DC choppers
- AC motor speed control
- Inductive heating
- Uninterruptible power supplies
- Electronic welders
- General power switching applications

| | | | |
|----------------|----------------|--|--|
| V_{RSM} V | V_{RRM} V | $I_{FRMS} = 455$ A (maximum value for continuous operation) $I_{FAV} = 310$ A (sin. 180; 50Hz; $T_c = 84$ °C) | |
| 1200 | 1200 | SKKE 310F12 | |

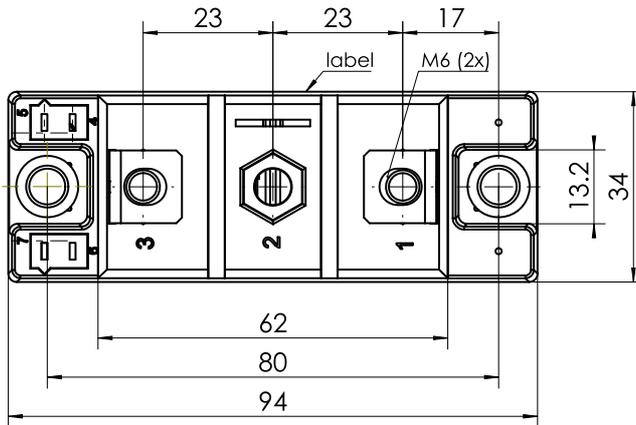
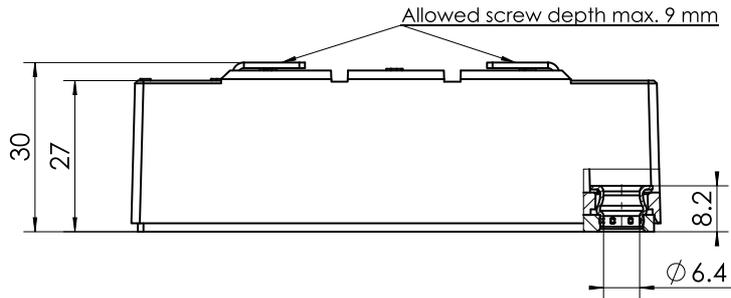
| Symbol | Conditions | Values | Units |
|---------------|---------------------------------------|--------------|------------------|
| I_{FAV} | sin. 180; $T_c = 85$ (100) °C | 308 (260) | A |
| I_{FSM} | $T_{vj} = 25$ °C; 10 ms | 6500 | A |
| | $T_{vj} = 150$ °C; 10 ms | 5500 | A |
| i^2t | $T_{vj} = 25$ °C; 8,3 ... 10 ms | 211000 | A ² s |
| | $T_{vj} = 150$ °C; 8,3 ... 10 ms | 151000 | A ² s |
| V_F | $T_{vj} = 25$ °C; $I_F = 400$ A | max. 2,1 | V |
| $V_{(TO)}$ | $T_{vj} = 150$ °C | max. 1,2 | V |
| r_T | $T_{vj} = 150$ °C | max. 1,9 | mΩ |
| I_{RD} | $T_{vj} = 25$ °C; $V_{RD} = V_{RRM}$ | max. 2 | mA |
| I_{RD} | $T_{vj} = 150$ °C; $V_{RD} = V_{RRM}$ | max. 60 | mA |
| Q_{rr} | $T_{vj} = 125$ °C, $I_F = 400$ A, | 58 | μC |
| I_{RM} | -di/dt = 4000 A/μs, $V_R = 600$ V | 400 | A |
| t_{rr} | | 370 | ns |
| E_{rr} | | 22 | mJ |
| $R_{th(j-c)}$ | | 0,08 | K/W |
| $R_{th(c-s)}$ | | 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. | 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. | 250 | g |
| Case | | A 54 | |



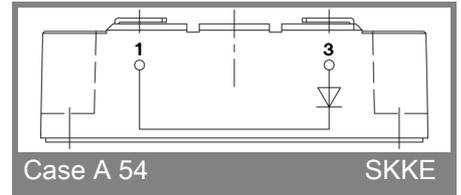
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Dimensions in mm
General tolerance ± 0.5 mm



SEMPACK 2



Case A 54

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IMPORTANT INFORMATION AND WARNINGS

This is an electrostatic discharge sensitive device (ESDS) according to international standard IEC 61340.

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