

SKKE 120F



SEMIPACK[®] 2

Fast Diode Modules

SKKE 120F

Features

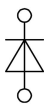
- CAL (controlled axial lifetime) chip technology, patent No. DE 43 10 44
- Heat transfer through ceramic isolated metal baseplate
- Very short recovery times
- Soft recovery
- Low switching losses
- UL recognized, file no. E 63 532

Typical Applications

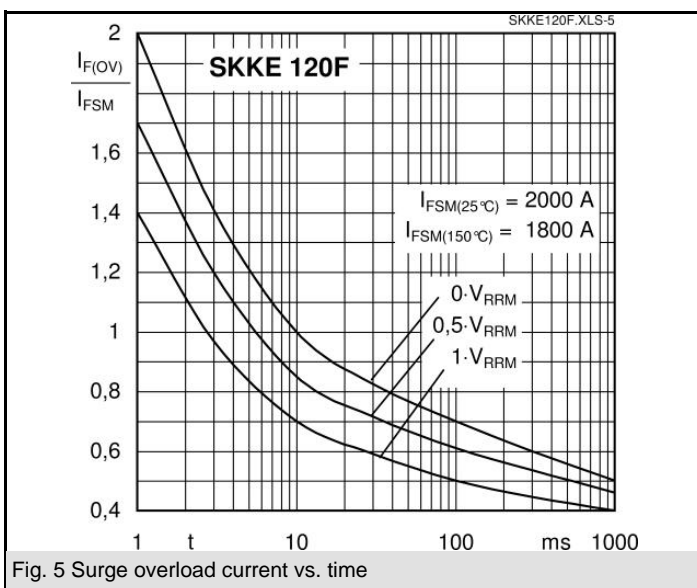
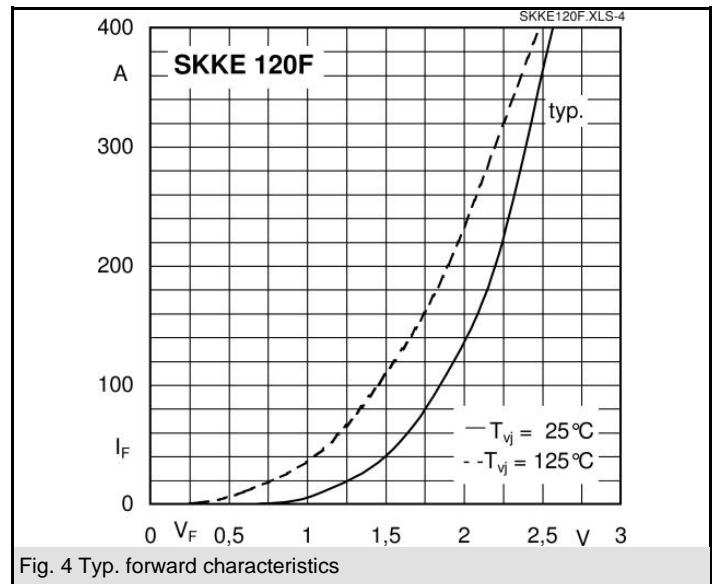
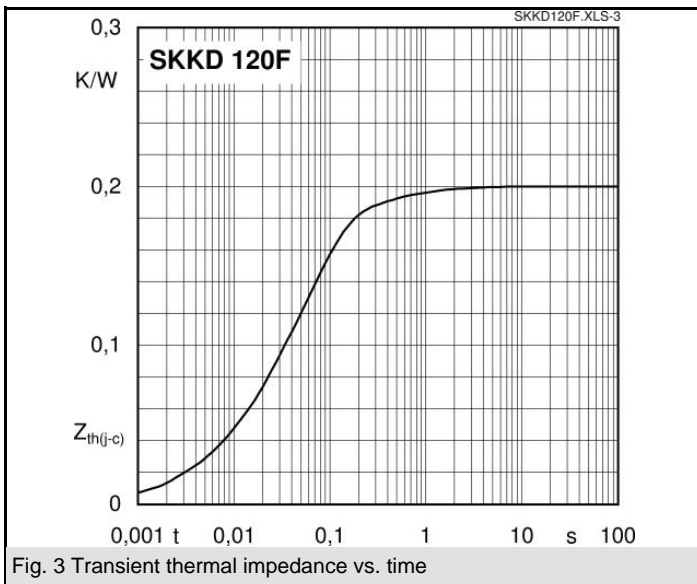
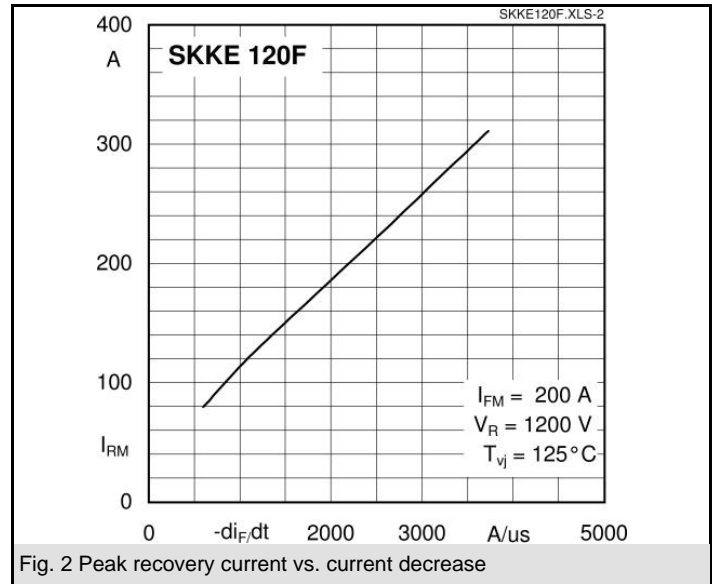
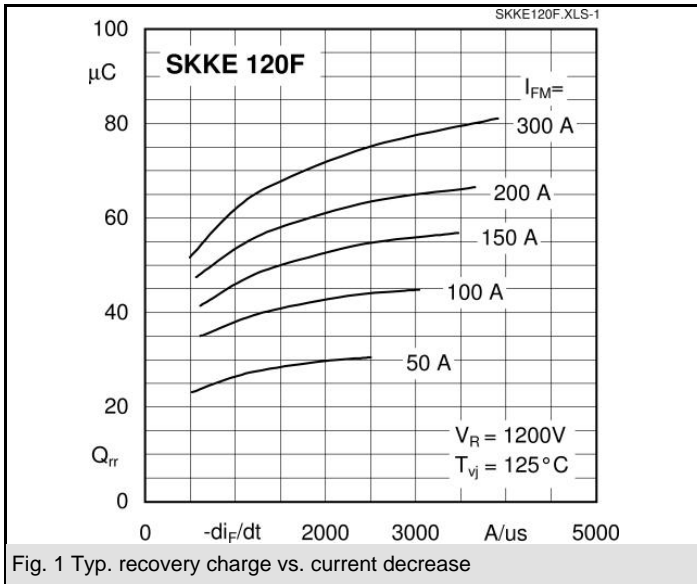
- Self-commutated inverters
- DC choppers
- AC motor speed control
- inductive heating
- Uninterruptible power supplies
- Electronic welders
- General power switching applications
- snubber and free wheeling circuits

| | | | |
|----------------|----------------|---|--|
| V_{RSM} V | V_{RRM} V | $I_{FRMS} = 220$ A (maximum value for continuous operation) $I_{FAV} = 120$ A (sin. 180; 50 Hz; $T_c = 82$ °C) | |
| 1700 | 1700 | SKKE 120F17 | |

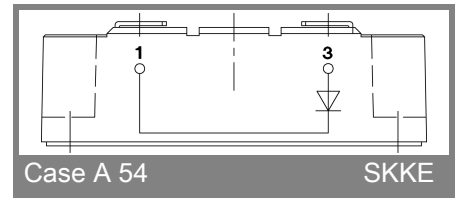
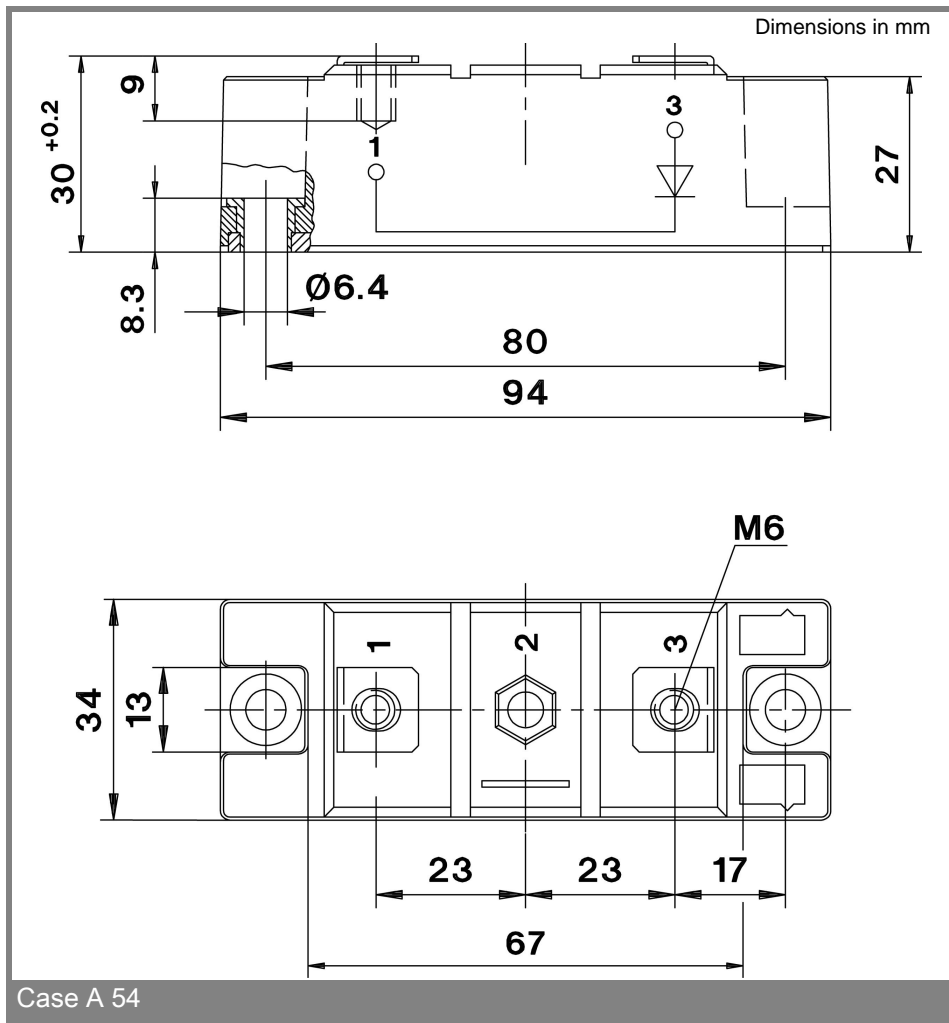
| Symbol | Conditions | Values | Units |
|---------------|---------------------------------------|----------------|------------------|
| I_{FAV} | sin. 180; $T_c = 85$ (100) °C | 116 (87) | A |
| I_{FSM} | $T_{vj} = 25$ °C; 10 ms | 2000 | A |
| | $T_{vj} = 150$ °C; 10 ms | 1800 | A |
| i^2t | $T_{vj} = 25$ °C; 8,3 ... 10 ms | 20000 | A ² s |
| | $T_{vj} = 150$ °C; 8,3 ... 10 ms | 16200 | A ² s |
| V_F | $T_{vj} = 25$ °C; $I_F = 200$ A | max. 2,7 | V |
| $V_{(TO)}$ | $T_{vj} = 150$ °C | max. 1,5 | V |
| r_T | $T_{vj} = 150$ °C | max. 4,5 | mΩ |
| I_{RD} | $T_{vj} = 25$ °C; $V_{RD} = V_{RRM}$ | max. 0,4 | mA |
| I_{RD} | $T_{vj} = 125$ °C; $V_{RD} = V_{RRM}$ | max. 50 | mA |
| Q_{rr} | $T_{vj} = 125$ °C, $I_F = 120$ A, | 41 | μC |
| I_{RM} | $-di/dt = 1000$ A/μs, $V_R = 1200$ V | 110 | A |
| t_{rr} | | 1020 | ns |
| E_{rr} | | 10 | mJ |
| $R_{th(j-c)}$ | | 0,2 | 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. | 4800 / 4000 | V~ |
| M_s | to heatsink | 5 ± 15 % | Nm |
| M_t | to terminals | 5 ± 15 % | Nm |
| a | | 5 * 9,81 | m/s ² |
| m | approx. | 160 | g |
| Case | | A 54 | |



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