| $V_{RSM}$<br>$V_{RRM}$<br><br>V | $I_{FRMS}$ (maximum values for continuous operation)<br>220 A<br>$I_{FAV}$ (sin. 180; $T_{case}$ = 65 °C; 50 Hz)<br>140 A |
|---|---|
| 1600 | **SKKE 120 F 16** |
| 1700 | **SKKE 120 F 17** |

| Symbol | Conditions | SKKE 120 F | Units |
|---|---|---|---|
| $I_{FAV}$ | sin. 180; $T_{case}$ = 85 °C | 116 | A |
| | $T_{case}$ = 65 °C | 140 | A |
| $I_{FSM}$ | $T_{vj}$ = 25 °C; 10 ms | 2 000 | A |
| | $T_{vj}$ = 150 °C; 10 ms | 1 800 | A |
| $i^2t$ | $T_{vj}$ = 25 °C; 8,3...10 ms | 20 000 | $A^2$ s |
| | $T_{vj}$ = 150 °C; 8,3...10 ms | 16 200 | $A^2$ s |
| $I_{RM}$ | $T_{vj}$ = 25 °C; $I_F$ = 120 A | 60 | A |
| | $T_{vj}$ = 150 °C; di/dt=500 A/µs | 90 | A |
| $t_{rr}$ | $T_{vj}$ = 25 °C; $V_R$ = 1200 V | typ. 250 | ns |
| $Q_{rr}$ | $T_{vj}$ = 150 °C | 55 | µC |
| $I_R$ | $T_{vj}$ = 25 °C; $V_R$ = $V_{RRM}$ | 0,4 | mA |
| | $T_{vj}$ = 125 °C; $V_R$ = $V_{RRM}$ | 50 | mA |
| $V_F$ | $T_{vj}$ = 25 °C; $I_F$ = 200 A | 2,7 | V |
| $V_{(TO)}$ | $T_{vj}$ = 150 °C | 1,5 | V |
| $r_T$ | $T_{vj}$ = 150 °C | 4,5 | mΩ |
| $R_{thjc}$ | | 0,2 | °C/W |
| $R_{thch}$ | | 0,05 | °C/W |
| $T_{vj}$ | | – 40 ... +150 | °C |
| $T_{stg}$ | | – 40 ... +150 | °C |
| $V_{isol}$ | a. c. 50 Hz; r.m.s; 1 min. | 4000 | V~ |
| $M_1$ | to heatsink SI units | 5 ± 15 % | Nm |
| | US units | 44 ± 15 % | lb. in |
| $M_2$ | to terminals SI units | 5 ± 15 % | Nm |
| | US units | 44 ± 15 % | lb. in |
| w | approx. | 250 | g |
| Case | → page B 2 - 46 | A 54 | |

[1] CAL (controlled axial lifetime) technology, patent No. DE 43 10 44

# SEMIPACK® 2
# Fast Diode [1] Modules
# SKKE 120 F

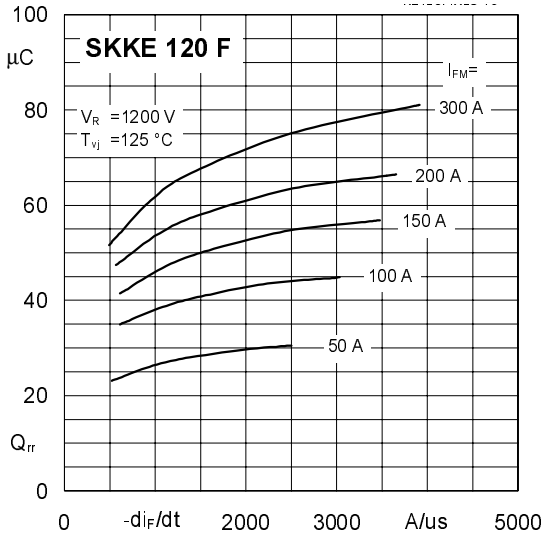

**SKKE**

### Features

- Heat transfer through ceramic isolated metal baseplate
- Very short recovery times
- Soft recovery
- Low switching losses
- Up to 1600 V peak inverse voltage
- UL recognized, file no. E 63532

### Typical Applications

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




ig. 16 Typ. recovered charge vs. current decrease

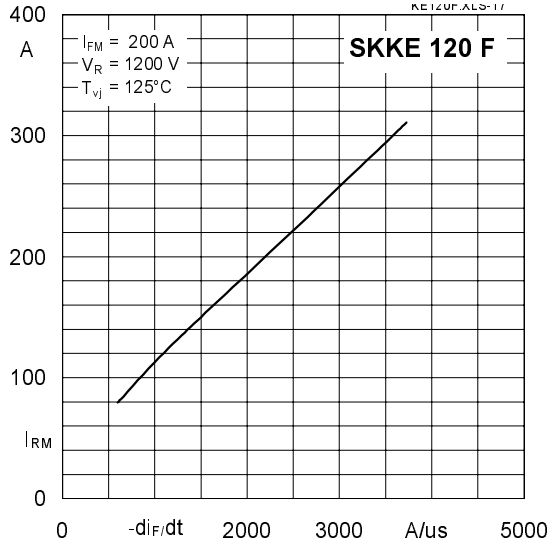
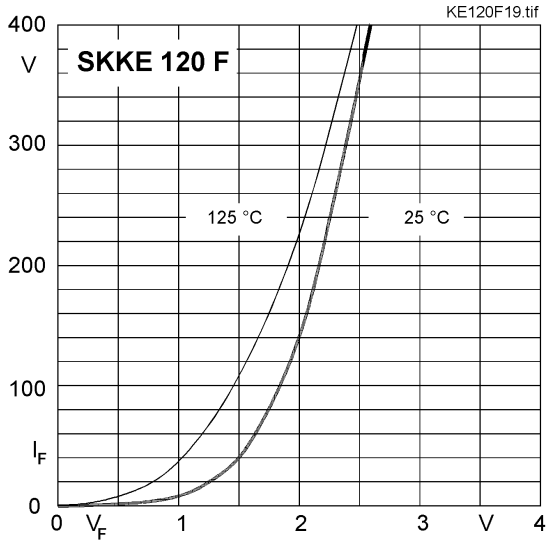



Fig. 17 Typ. peak recovery current vs. current decrease




ig. 19 Typ. forward characteristic

**SKKE 165 M**

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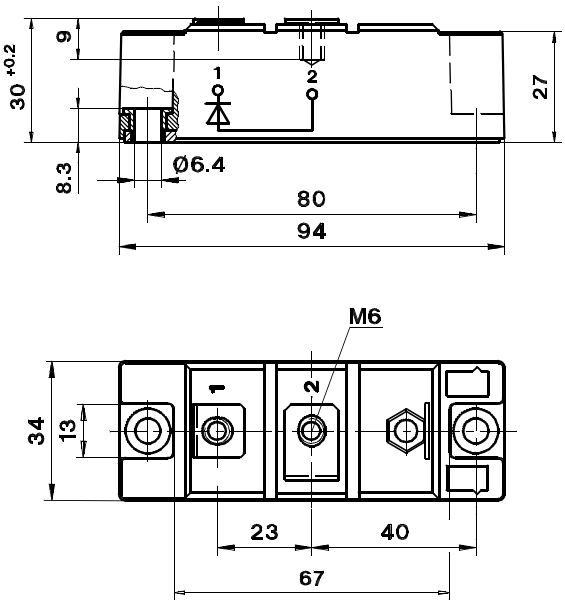


Dimensions in mm

**SKKE 120 F, 301 F**

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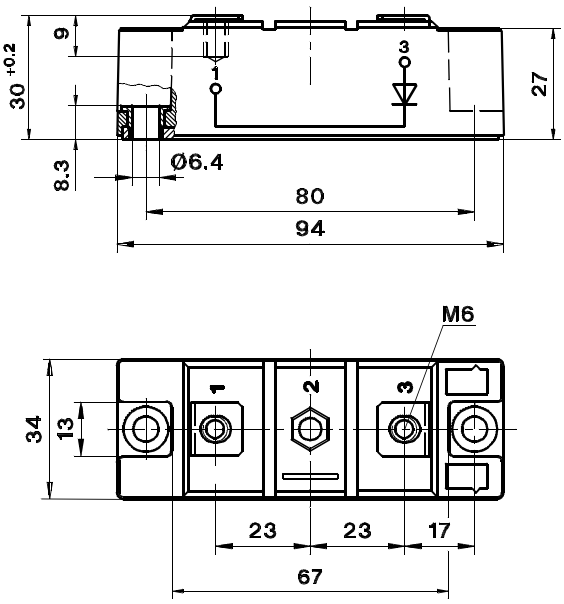


Dimensions in mm

 