V_{RSM} V_{RRM} V	I_{FRMS} (maximum values for continuous operation) 450 A I_{FAV} (sin. 180; T_{case} = 85 °C; 50 Hz 290 A
1600	**SKKE 330 F 16**
1700	**SKKE 330 F 17**

Symbol	Conditions	SKKE 330 F	Units
I_{FDC}	T_{case} = 66 °C	450	A
I_{FDC}	T_{amb} = 45 °C; R_{thha} = 0,05 °C/W	300	A
I_{FDC}	T_{amb} = 45 °C; R_{thha} = 0,15 °C/W (1/6 P16/300F)	200	A
I_{FSM}	T_{vj} = 25 °C; 10 ms	6 200	A
	T_{vj} = 150 °C; 10 ms	5 200	A
i^2t	T_{vj} = 25 °C; 8,3 ... 10 ms	192 000	A^2s
	T_{vj} = 150 °C; 8,3 ... 10 ms	135 000	A^2s
Q_{rr}	T_{vj} = 125 °C	92	µC
I_{RM}	I_F = 330 A	240	A
E_{off}	– di_F/dt = 2000 A/µs	10	mJ
t_{rr}	V_R = 600 V	typ. 1	µs
I_R	T_{vj} = 25 °C; V_R = V_{RRM}	2	mA
	T_{vj} = 150 °C; V_R = V_{RRM}	30	mA
V_F	T_{vj} = 25 °C; I_F = 330 A; max.	2,0	V
$V_{(TO)}$	T_{vj} = 150 °C	1,5	V
r_T	T_{vj} = 150 °C	1,9	mΩ
R_{thjc}	DC	0,079	°C/W
R_{thch}		0,038	°C/W
T_{vj}		– 40 ... + 150	°C
T_{stg}		– 40 ... + 130	°C
V_{isol}	a. c. 50 Hz; r.m.s; 1 min	4000	V~
M_1	to heatsink SI units (M6)	3 ... 5	Nm
	US units	27 ... 44	lb. in
M_2	to terminals SI units (M6)	2,5 ... 5	Nm
	US units	22 ... 44	lb. in
a		5 x 9,81	m/s^2
w		475	g
Case	SEMITRANS 4 → page B 2 – 52	A 68	

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

SEMIPACK® Fast Diode [1] Modules

SKKE 330 F

SKKE

Features

- Heat transfer through aluminium oxide DCB ceramic isolated metal baseplate
- Small recovered charge
- Fast & soft recovery CAL diodes [1]
- UL recognized, file no. E 63 532
- Creepage distance 20 mm
- Clearance 12 mm

Typical Applications

- Freewheeling diodes for IGBT
- Freewheeling diode for inductive loads
- Brake choppers
- Inverters and DC choppers
- AC motor control
- Boost choppers
- up to 20 kHz

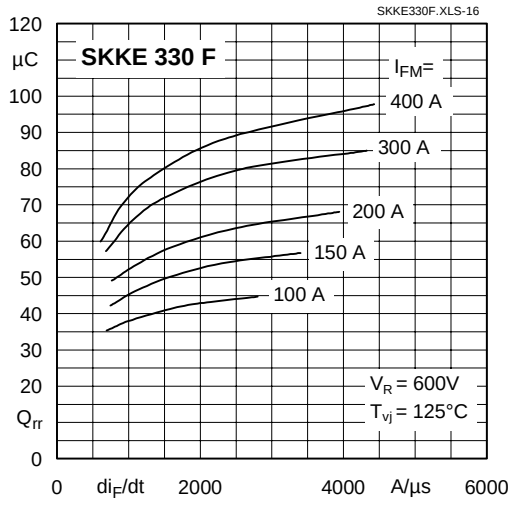

Fig. 16 Typ. recovered charge vs. current decrease

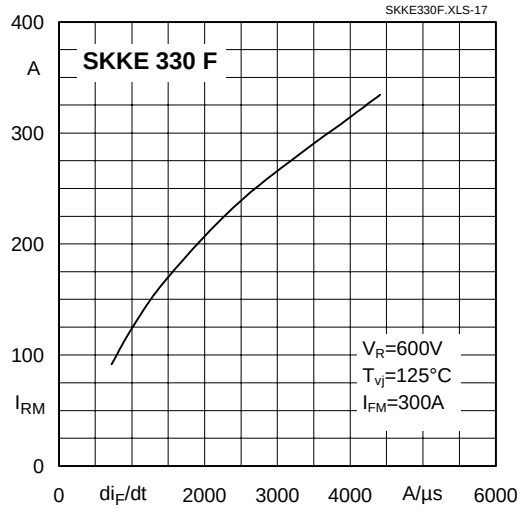

Fig. 17 Typ. peak recovery current vs. current decrease

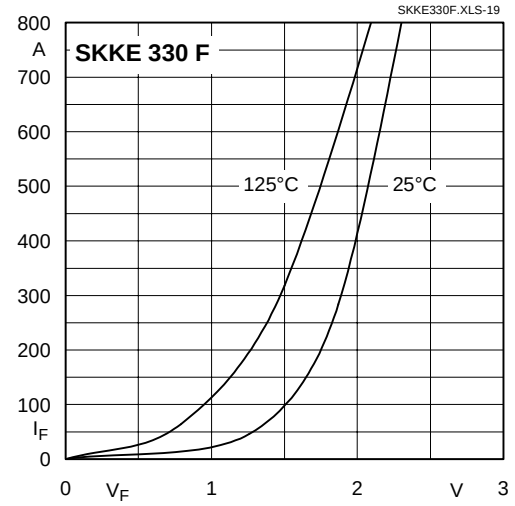

Fig. 19 Typ. forward characteristics

SKKE 330 F

SKKE 600 F

Case A 68

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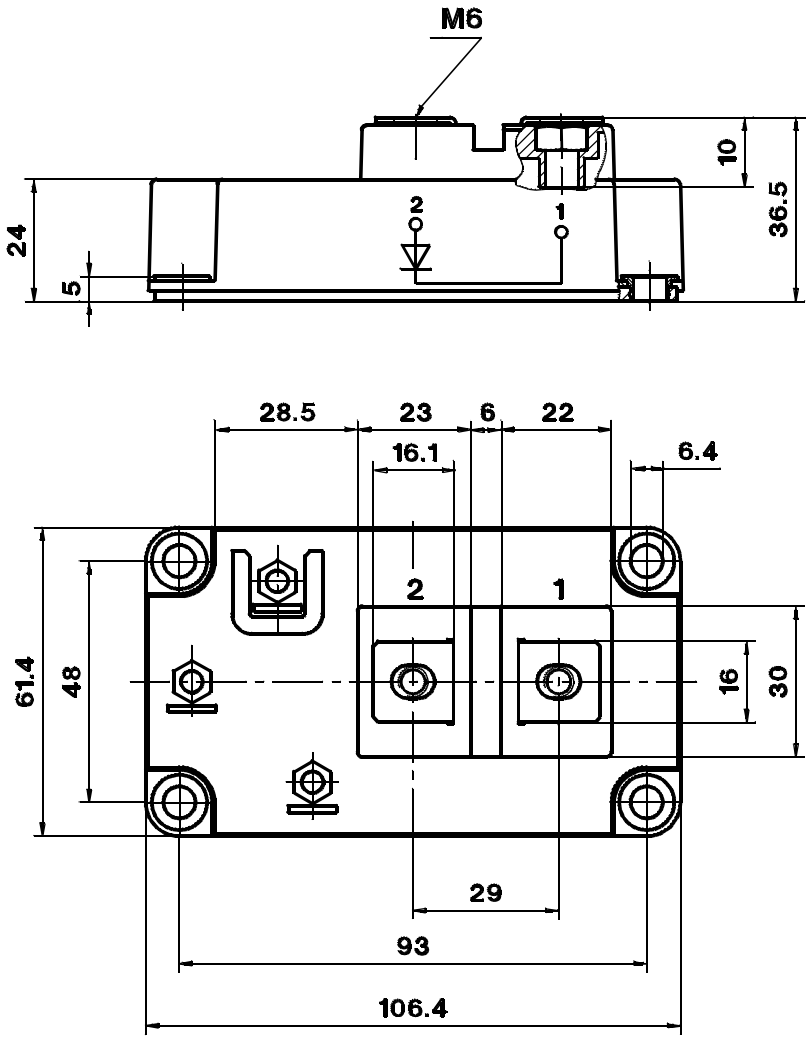

Dimensions in mm

