V_{RSM} V_{RRM} V	I_{FRMS} (maximum values for continuous operation) 320 A I_{FAV} (sin. 180; T_{case} = 85 °C; 50 Hz 170 A
1100	**SKKD 170 F 11**
1200	**SKKD 170 F 12**

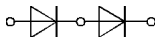
Symbol	Conditions		SKKD 170 F	Units
I_{FAV}	sin. 180; T_{case} = 85 °C		170	A
	T_{case} = 65 °C		205	A
I_{FSM}	T_{vj} = 25 °C; 10 ms		2 500	A
	T_{vj} = 150 °C; 10 ms		2 300	A
i^2t	T_{vj} = 25 °C; 8,3 ... 10 ms		34 650	A^2s
	T_{vj} = 150 °C; 8,3 ... 10 ms		26 450	A^2s
I_{RM}	T_{vj} = 25 °C	I_F = 170 A	70	A
	T_{vj} = 150 °C	di/dt = 500 A/µs	80	A
t_{rr}	T_{vj} = 25 °C	V_R = 600 V	typ. 200	ns
I_R	T_{vj} = 25 °C; V_R = V_{RRM}		1	mA
	T_{vj} = 150 °C; V_R = V_{RRM}		60	mA
V_F	T_{vj} = 25 °C; I_F = 170 A		2,0	V
	T_{vj} = 150 °C; I_F = 170 A		1,8	V
$V_{(TO)}$	T_{vj} = 150 °C		1,2	V
r_T	T_{vj} = 150 °C		3,5	mΩ
R_{thjc}	per diode / per module		0,14 / 0,07	°C/W
R_{thch}	per diode / per module		0,1 / 0,05	°C/W
T_{vj}			– 40 ... + 150	°C
T_{stg}			– 40 ... + 125	°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	for terminals	SI units	5 ± 15 %	Nm
		US units	44 ± 15 %	lb. in
w	approx.		250	g
Case	→ page B 2 – 28		A 53	

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

SEMIPACK® 2 Fast Diode [1] Modules

SKKD 170 F

Preliminary Data



SKKD

Features

- Very soft recovery over the whole current range
- Very short recovery times
- Low switching losses
- Up to 1200 V peak inverse voltage
- Heat transfer through ceramic isolated metal baseplate
- UL recognized, file no. E63 532

Typical Applications

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

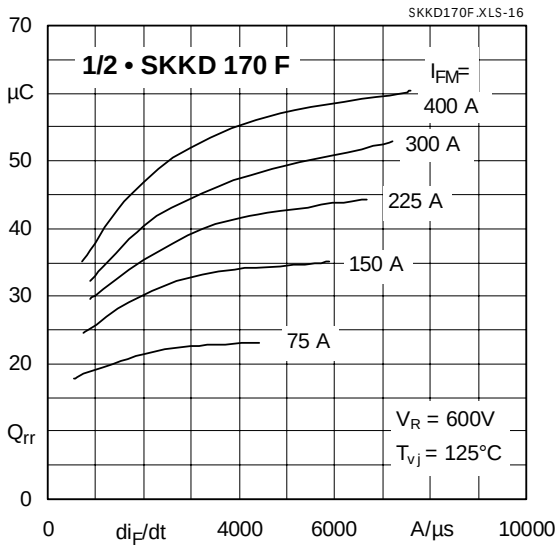


Fig. 16 Typ. recovered charge vs. current decrease

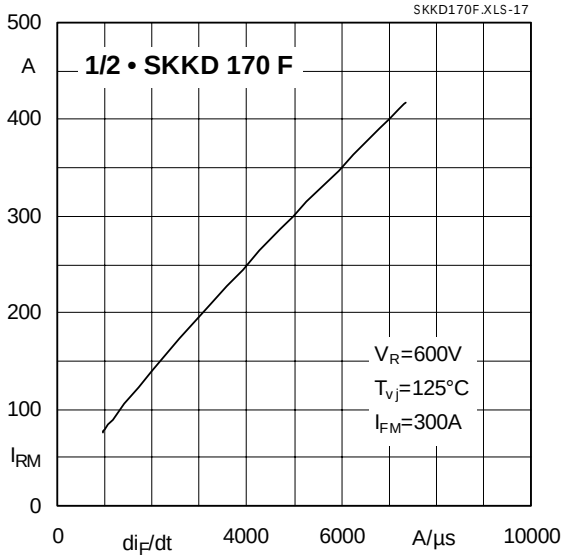


Fig. 17 Typ. peak recovery current vs. current decrease

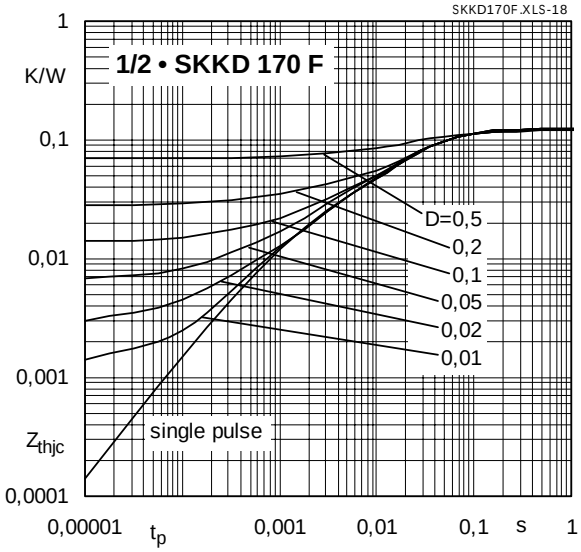


Fig. 18 Transient thermal impedance vs. time

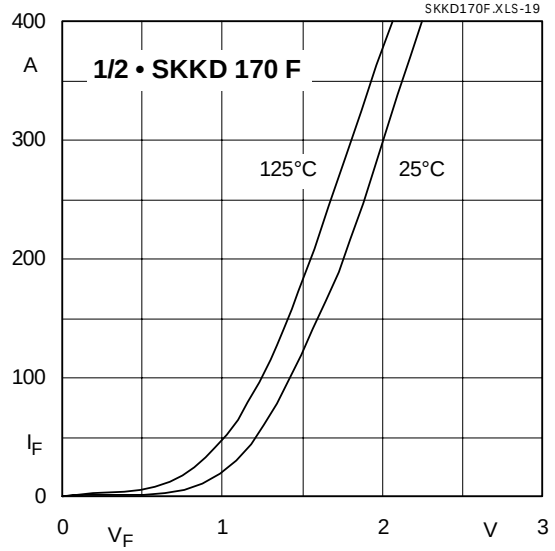


Fig. 19 Typ. forward characteristics

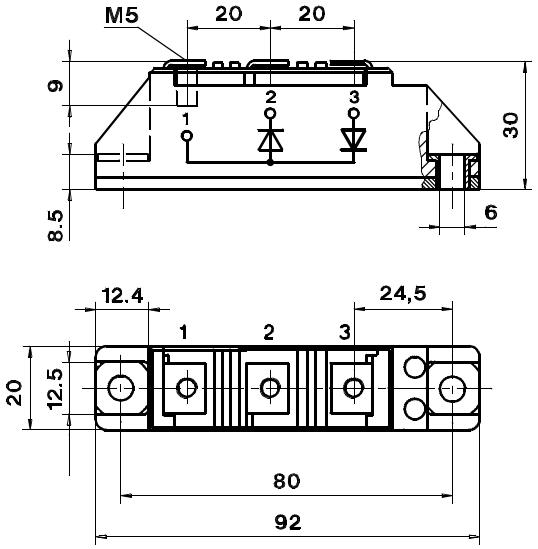
SKKD 105 F, 115 F

Case A 10

IEC 192-2: A 77 A
JEDEC: TO-240 AA

SEMIPACK® 1

UL recognized, file no. E 63 532

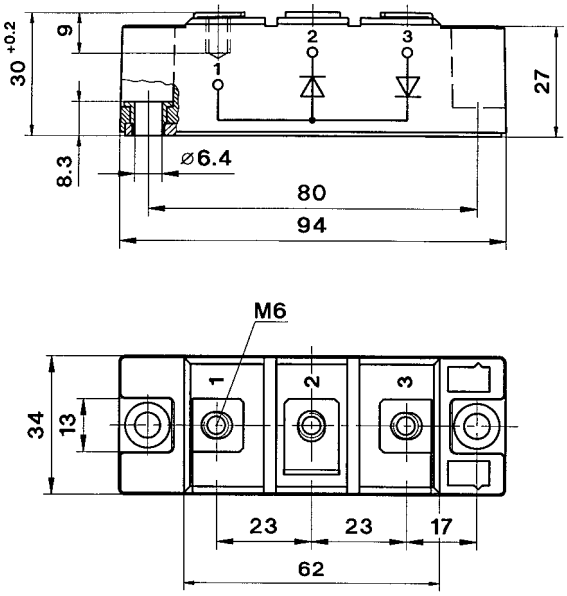


SKKD 60 F, 75 F

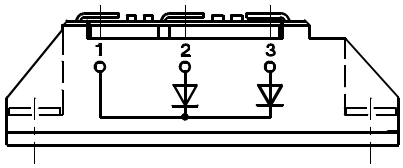
Case A 23

SEMIPACK® 2

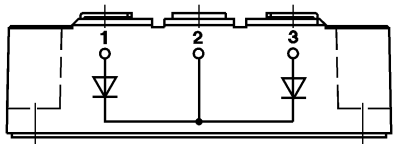
UL recognized, file no. E 63 532



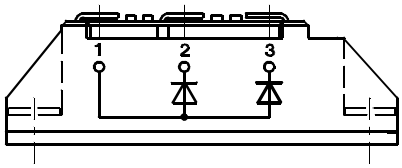
SKMD 105 F
Case A 33



SKMD 150 F, 202 E
Case A 51

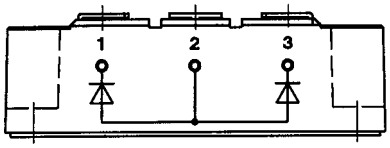


SKND 105 F
Case A 37

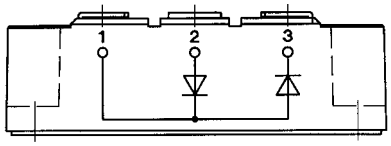


Dimensions in mm

SKND 150 F, 202 E
Case A 52



SKKD 150 F, 170 F
Case A 53



Dimensions in mm

