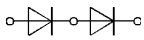
V_{RSM} V_{RRM} V	I_{FRMS} (maximum values for continuous operation) 110 A I_{FAV} (sin. 180; T_{case} = 65 °C; 50 Hz) 70 A
1600	**SKKD 60 F 16**
1700	**SKKD 60 F 17**

Symbol	Conditions	SKKD 60 F	Units
I_{FAV}	sin. 180; T_{case} = 85 °C T_{case} = 65 °C	58 70	A A
I_{FSM}	T_{vj} = 25 °C; 10 ms T_{vj} = 150 °C; 10 ms	1 000 900	A A
i^2t	T_{vj} = 25 °C; 8,3...10 ms T_{vj} = 150 °C; 8,3...10 ms	5 000 4 000	A^2 s A^2 s
I_{RM} t_{rr} Q_{rr} I_R	T_{vj} = 25 °C T_{vj} = 150 °C T_{vj} = 25 °C T_{vj} = 150 °C T_{vj} = 25 °C; $V_R = V_{RRM}$ T_{vj} = 125 °C; $V_R = V_{RRM}$	I_F = 60 A di/dt=500 A/µs V_R = 1200 V 50 75 typ. 220 35 0,4 25	A A ns µC mA mA
V_F	T_{vj} = 25 °C; I_F = 100 A	2,7	V
$V_{(TO)}$	T_{vj} = 150 °C	1,5	V
r_T	T_{vj} = 150 °C	9	mΩ
R_{thjc}	per diode / per module	0,4/0,2	°C/W
R_{thch}	per diode / per module	0,1/0,05	°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 M_2 w	to heatsink SI units US units to terminals SI units US units approx.	5 ± 15 % 44 ± 15 % 5 ± 15 % 44 ± 15 % 250	Nm lb. in Nm lb. in g
Case	→ page B 2 – 28	A 23	

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

SEMIPACK® 2
Fast Diode [1] Modules

SKKD 60 F



SKKD

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

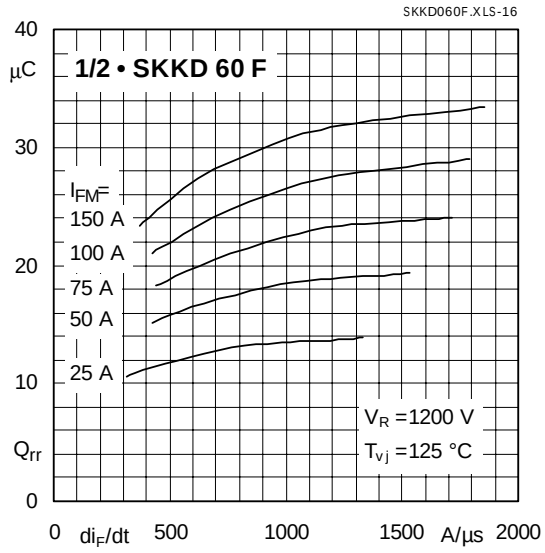


Fig. 16 Typ. recovered charge vs. current decrease

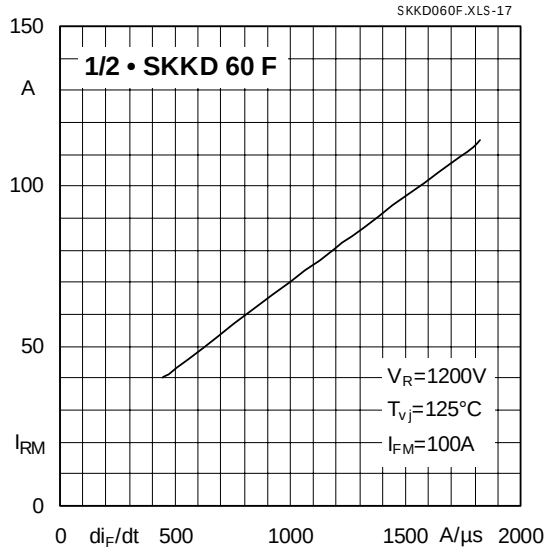


Fig. 17 Typ. peak recovery current vs. current decrease

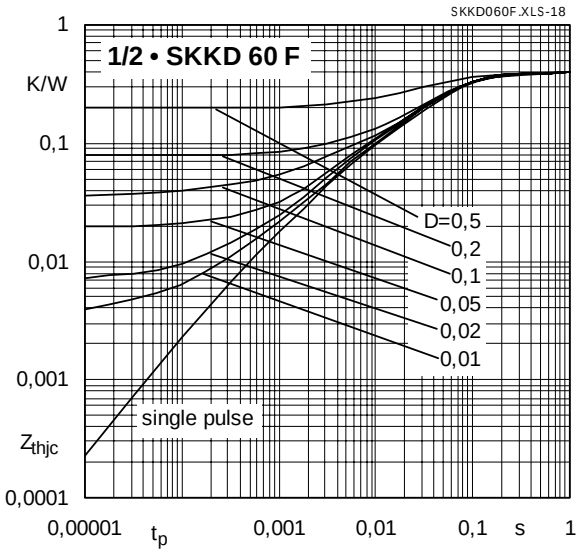


Fig. 18 Transient thermal impedance vs. time

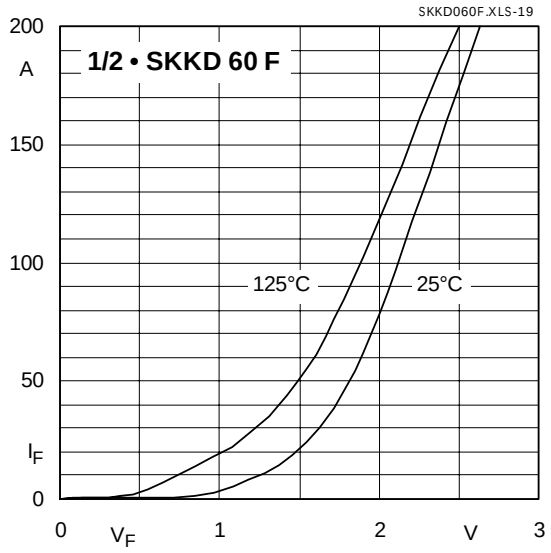


Fig. 19 Typ. forward characteristics

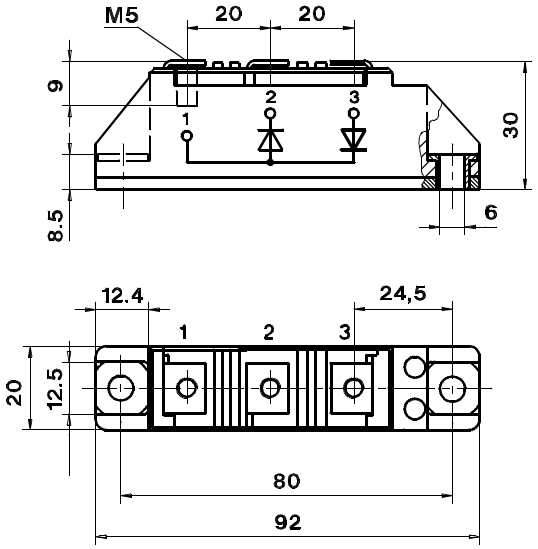
SKKD 105 F, 115 F

Case A 10

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

SEMIPACK® 1

UL recognized, file no. E 63 532

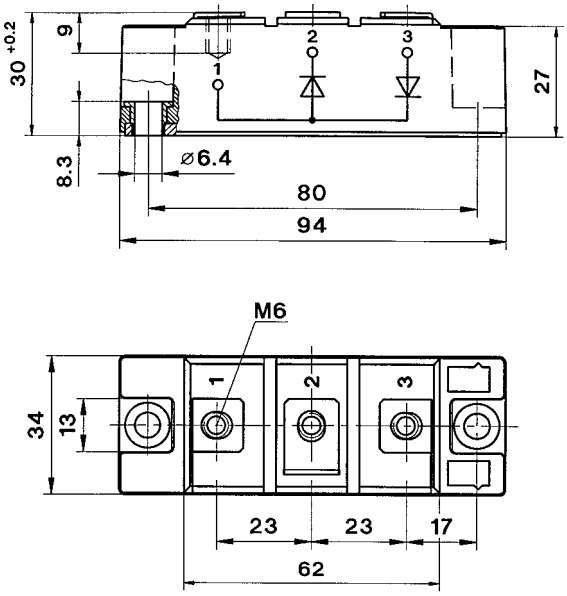


SKKD 60 F, 75 F

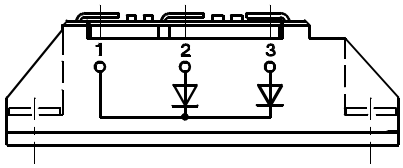
Case A 23

SEMIPACK® 2

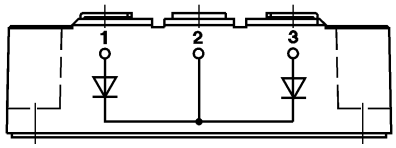
UL recognized, file no. E 63 532



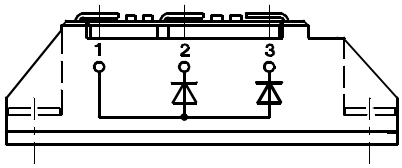
SKMD 105 F
Case A 33



SKMD 150 F, 202 E
Case A 51

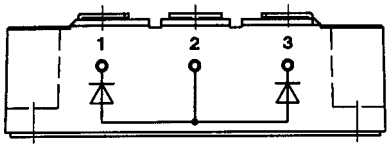


SKND 105 F
Case A 37

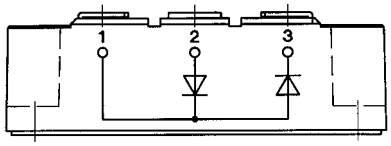


Dimensions in mm

SKND 150 F, 202 E
Case A 52



SKKD 150 F, 170 F
Case A 53



Dimensions in mm

