

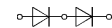
V_{RSM} V_{RRM}	I_{FRMS} (maximum values for continuous operation) 110 A
V	I_{FAV} (sin. 180; $T_{case} = 85\text{ °C}$; 50 Hz) 58 A
1100	SKKD 75 F 11
1200	SKKD 75 F 12

SEMIKRON® 2 Fast Diode¹⁾ Modules

SKKD 75 F

Preliminary data

Symbol	Conditions	SKKD 75 F	Units
I_{FAV}	sin. 180; $T_{case} = 65\text{ °C}$	70	A
I_{FSM}	$T_{vj} = 25\text{ °C}$; 10 ms $T_{vj} = 150\text{ °C}$; 10 ms	1 000 900	A A
i^2t	$T_{vj} = 25\text{ °C}$; 8,3 ... 10 ms $T_{vj} = 150\text{ °C}$; 8,3 ... 10 ms	5 000 4 000	$A^2\text{ s}$ $A^2\text{ s}$
I_{RM} t_{rr} Q_{rr} I_R	$T_{vj} = 25\text{ °C}$ $T_{vj} = 150\text{ °C}$ $T_{vj} = 25\text{ °C}$ $T_{vj} = 150\text{ °C}$ $T_{vj} = 25\text{ °C}$; $V_R = V_{RRM}$ $T_{vj} = 150\text{ °C}$; $V_R = V_{RRM}$	$I_F = 75\text{ A}$ $di/dt = 500\text{ A}/\mu\text{s}$ $V_R = 600\text{ V}$ typ. 150 23 0,4 20	A A ns μC mA mA
V_F	$T_{vj} = 25\text{ °C}$; $I_F = 75\text{ A}$ $T_{vj} = 150\text{ °C}$; $I_F = 75\text{ A}$	2,2 2,0	V V
$V_{(TO)}$	$T_{vj} = 150\text{ °C}$	1,2	V
r_T	$T_{vj} = 150\text{ °C}$	11	m Ω
R_{thjc} R_{thch} T_{vj} T_{stg}	per diode per module – 40 ... +150 – 40 ... +150	0,4 0,2 0,05 – 40 ... +150 – 40 ... +150	$^{\circ}\text{C}/\text{W}$ $^{\circ}\text{C}/\text{W}$ $^{\circ}\text{C}$ $^{\circ}\text{C}$
V_{isol}	a. c. 50 Hz; r.m.s; 1 min	4000	V~
M_1	to heatsink SI units US units	$5 \pm 15\%$ $44 \pm 15\%$	Nm lb. in
M_2	for terminals SI units US units	$5 \pm 15\%$ $44 \pm 15\%$	Nm lb. in
w	approx.	250	g
Case		A 23	



SKKD

Features

- Soft recovery
- 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. E 63532

Typical Applications

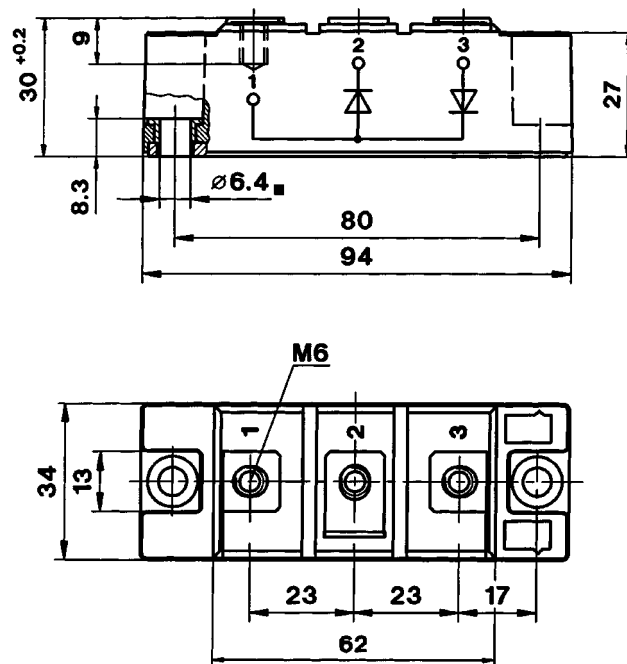
- Self-commutated inverters
- DC choppers
- AC motor speed control
- Inductive heating
- Uninterruptible power supplies
- Electronic welders
- General power switching applications

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

SKKD 75 F

Case A 23

SEMIPACK® 2



Dimensions in mm