

## SKKD 700

V <sub>RSM</sub> V	V <sub>RRM</sub> V	I <sub>FRMS</sub> (maximum values for continuous operation)
		1100 A
		I <sub>FAV</sub> (sin. 180; T <sub>case</sub> = 100 °C)
		700 A
900	800	<b>SKKD 700/08</b>
1300	1200	<b>SKKD 700/12</b>
1500	1400	<b>SKKD 700/14</b>
1700	1600	<b>SKKD 700/16</b>
1900	1800	<b>SKKD 700/18</b>
2100	2000	<b>SKKD 700/20</b>
2300	2200	<b>SKKD 700/22</b>

## SEMIPACK® 5 Rectifier Diode Modules

### SKKD 700



Symbol	Conditions	SKKD 700	Units
I <sub>FAV</sub>	sin. 180; T <sub>case</sub> = 100 °C	700	A
I <sub>FSM</sub>	T <sub>vj</sub> = 25 °C; 10 ms	25 000	A
i <sup>2</sup> t	T <sub>vj</sub> = 150 °C; 10 ms	22 000	A
	T <sub>vj</sub> = 25 °C; 8,3 ... 10 ms	3 125 000	A <sup>2</sup> s
	T <sub>vj</sub> = 150 °C; 8,3 ... 10 ms	2 420 000	A <sup>2</sup> s
I <sub>RD</sub>	T <sub>vjmax.</sub> ; V <sub>RD</sub> = V <sub>RRM</sub>	20	mA
V <sub>F</sub>	T <sub>vj</sub> = 25 °C; I <sub>F</sub> = 2000 A	max. 1,3	V
V <sub>(TO)</sub>	T <sub>vj</sub> = 150 °C	0,75	V
r <sub>T</sub>	T <sub>vj</sub> = 150 °C	0,2	mΩ
R <sub>thjc</sub>	cont. sin. 180 rec. 120	0,062 / 0,031 0,065 / 0,0325 0,070 / 0,035 0,02 / 0,01 – 40 ... + 150 – 40 ... + 130	°C/W °C/W °C/W °C/W °C °C
R <sub>thch</sub>	per thyristor / per module	0,062 / 0,031 0,065 / 0,0325 0,070 / 0,035 0,02 / 0,01 – 40 ... + 150 – 40 ... + 130	°C/W °C/W °C/W °C/W °C °C
T <sub>vj</sub>			
T <sub>stg</sub>			
V <sub>isol</sub>	a. c. 50 Hz; r.m.s.; 1 s/1 min to heatsink (M6)	3600/3000	V~
M <sub>1</sub>	SI units	5 ± 15 % <sup>1)</sup>	Nm
	US units	44 ± 15 % <sup>1)</sup>	lb.in.
M <sub>2</sub>	to terminals (M10)	12 ± 15 % <sup>2)</sup>	Nm
	SI units	106 ± 15 % <sup>2)</sup>	lb.in.
a	US units	5 · 9,81	m/s <sup>2</sup>
w	approx.	1420	g
Case		A 75 a	

### Features

- Heat transfer through aluminium nitride ceramic isolated metal baseplate
- Precious metal pressure contacts for high reliability
- UL recognized, file no. E 63 532

### Typical Applications

- Uncontrolled rectifiers for AC/AC converters
- Line rectifiers for transistorized AC motor controllers

<sup>1)</sup> See the assembly instructions

<sup>2)</sup> The screws must be lubricated

## SKKD 700

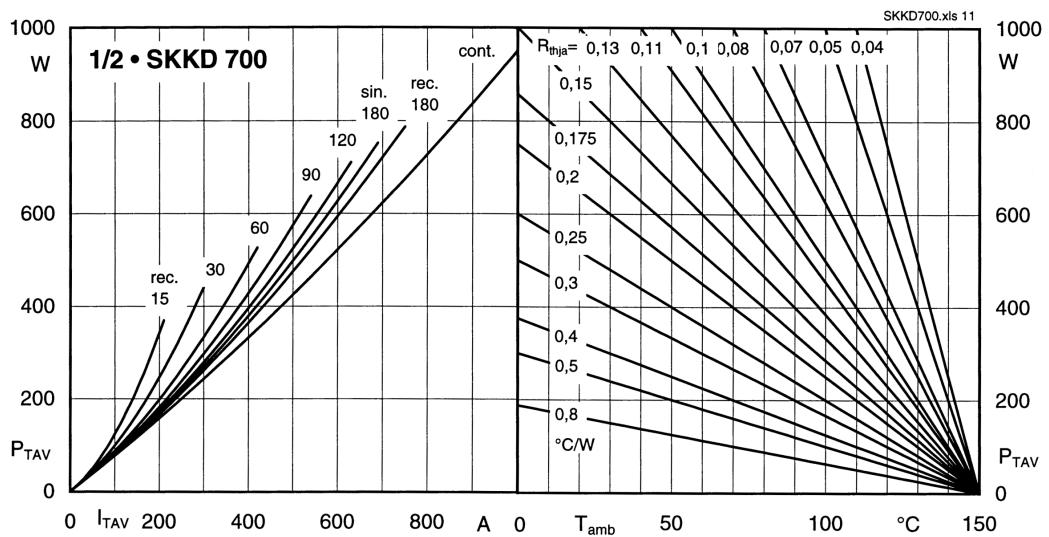


Fig. 11 Power dissipation per diodes vs. forward current and ambient temperature

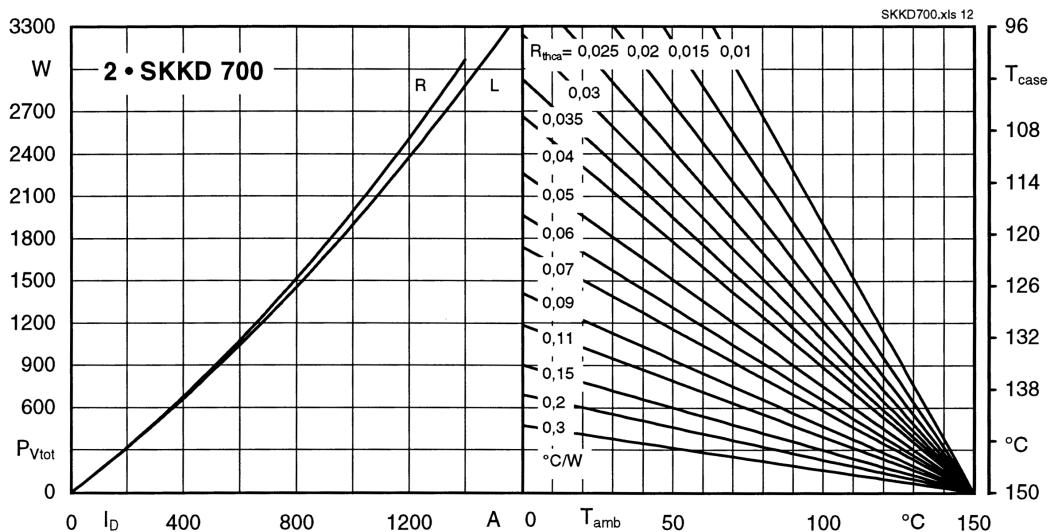


Fig. 12 Power dissipation of two modules vs. direct current and case temperature

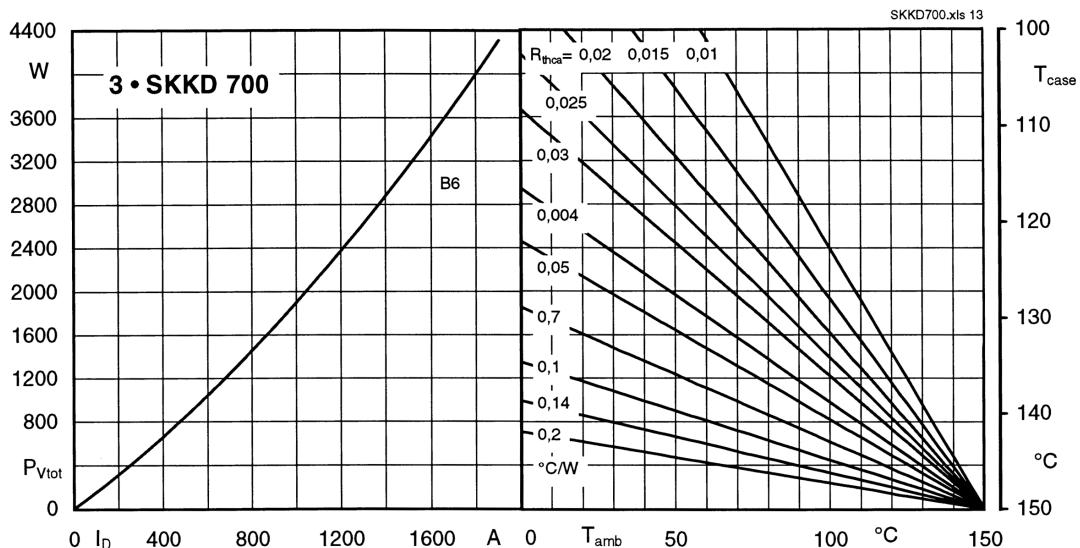


Fig. 13 Power dissipation of three modules vs. direct current and case temperature

## SKKD 700

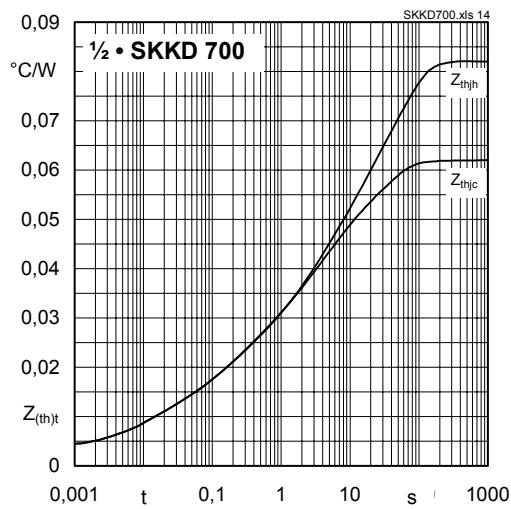


Fig. 14 Transient thermal impedance vs. time

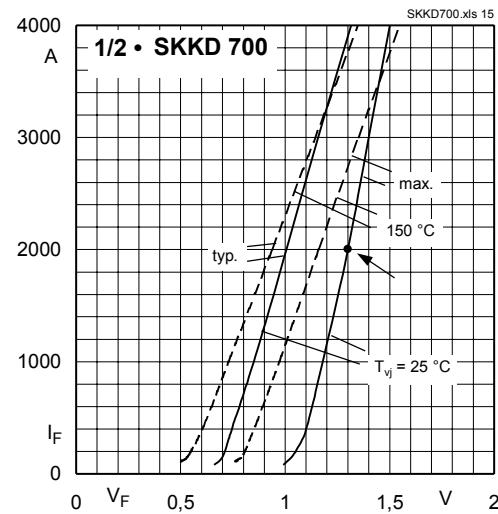


Fig. 15 Forward characteristics

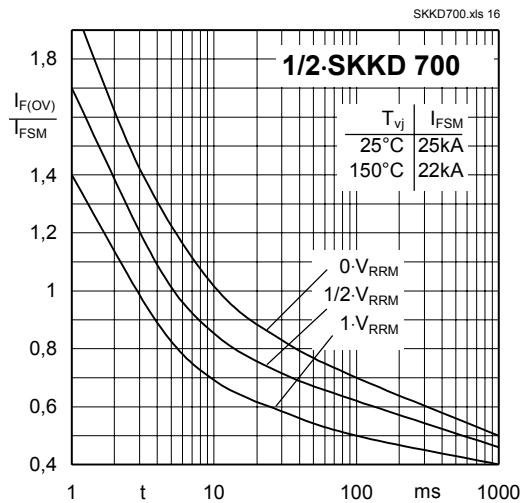


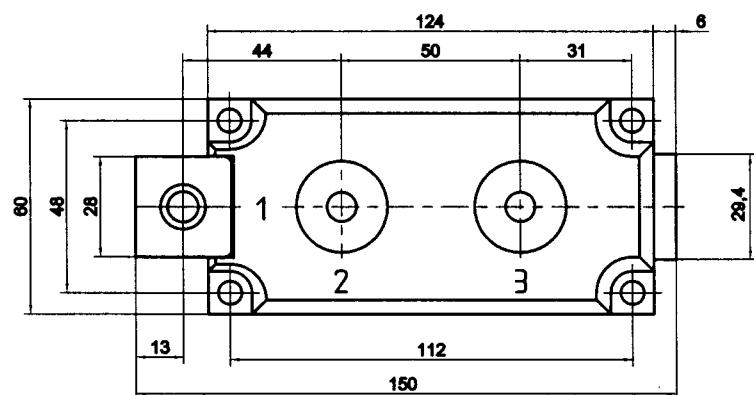
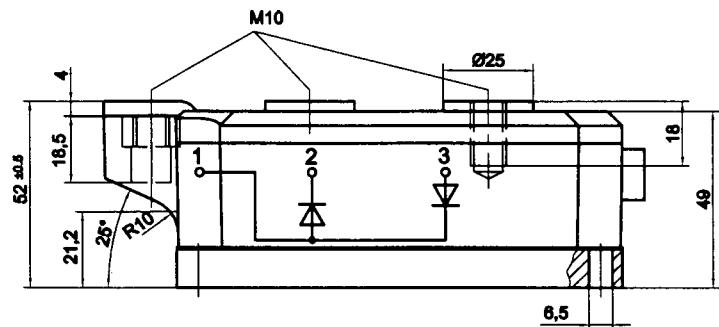
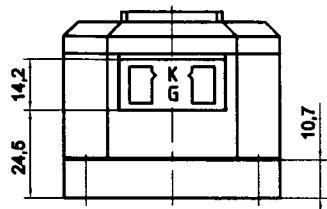
Fig. 16 Surge overload current vs. time

# SKKD 700

## SKKD 700

Case A 75 a  
SEMIPACK® 5

UL recognition, file no. E 63 532



Dimensions in mm

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