

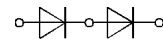
SKKD 700

V_{RSM}	V_{RRM}	I_{FRMS} (maximum values for continuous operation)
		I_{FAV} (sin. 180; $T_{case} = 100\text{ °C}$)
V	V	700 A
900	800	SKKD 700/08
1300	1200	SKKD 700/12
1500	1400	SKKD 700/14
1700	1600	SKKD 700/16
1900	1800	SKKD 700/18
2100	2000	SKKD 700/20
2300	2200	SKKD 700/22

SEMIPACK® 5 Rectifier Diode Modules

SKKD 700

Preliminary Data



SKKD

Symbol	Conditions	SKKD 700	Units
I_{FAV}	sin. 180; $T_{case} = 100\text{ °C}$	700	A
i^2t	$T_{vj} = 25\text{ °C}; 10\text{ ms}$	25 000	A
	$T_{vj} = 150\text{ °C}; 10\text{ ms}$	22 000	A
	$T_{vj} = 25\text{ °C}; 8,3 \dots 10\text{ ms}$	3 125 000	A ² s
	$T_{vj} = 150\text{ °C}; 8,3 \dots 10\text{ ms}$	2 420 000	A ² s
I_{RD}	$T_{vjmax.}; V_{RD} = V_{RRM}$	20	mA
V_F	$T_{vj} = 25\text{ °C}; I_F = 2000\text{ A}$	max. 1,3	V
$V_{(TO)}$	$T_{vj} = 150\text{ °C}$	0,75	V
r_T	$T_{vj} = 150\text{ °C}$	0,2	mΩ
R_{thjc}	sin. 180 per diode / per module	0,065 / 0,0325	°C/W
R_{thch}		0,02 / 0,01	°C/W
T_{vj}		- 40 ... + 150	°C
T_{stg}		- 40 ... + 130	°C
V_{isol}	a. c. 50 Hz; r.m.s.; 1 s/1 min	3600/3000	V~
M_1	to heatsink (M6)	SI units	$5 \pm 15\%$ ¹⁾
		US units	$44 \pm 15\%$ ¹⁾
M_2	to terminals (M10)	SI units	$12 \pm 15\%$ ²⁾
		US units	$106 \pm 15\%$ ²⁾
a		$5 \cdot 9,81$	m/s ²
w	approx.	1420	g
Case		A 75	

Features

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

Typical Applications

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

¹⁾ See the assembly instructions
²⁾ The screws must be lubricated

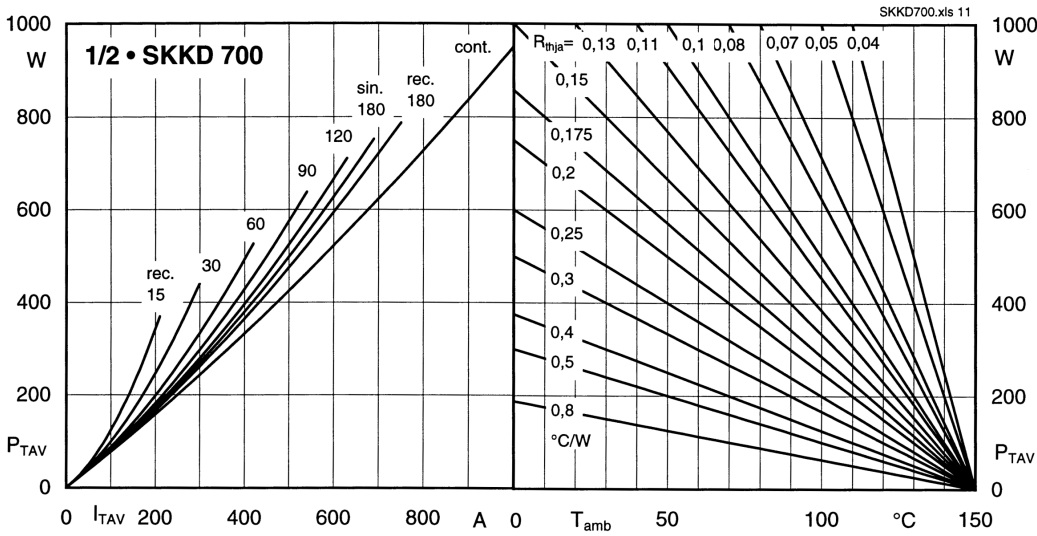


Fig. 11 Power dissipation per diodes vs. forward current and ambient temperature

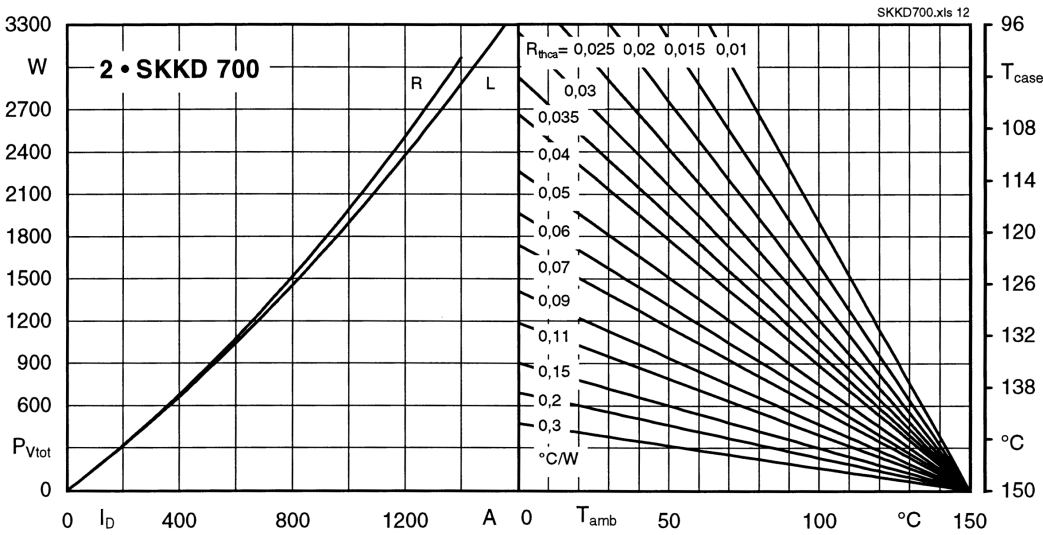


Fig. 12 Power dissipation of two modules vs. direct current and case temperature

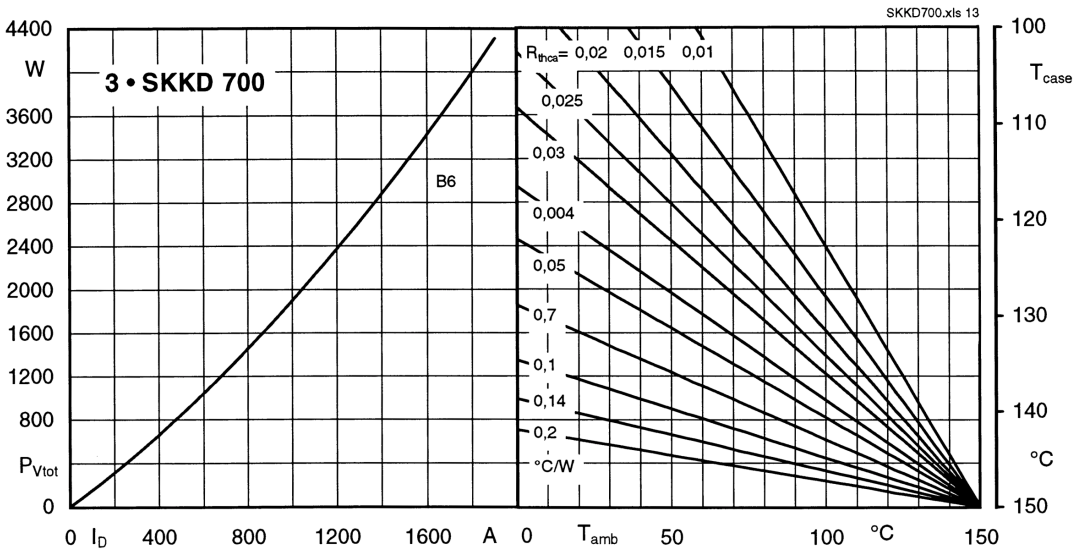


Fig. 13 Power dissipation of three modules vs. direct current and case temperature

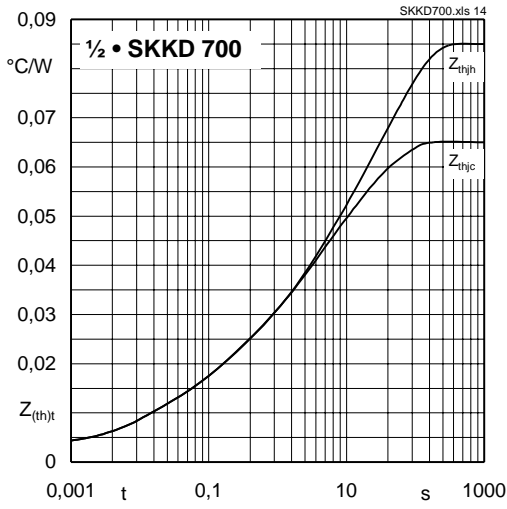


Fig. 14 Transient thermal impedance vs. time

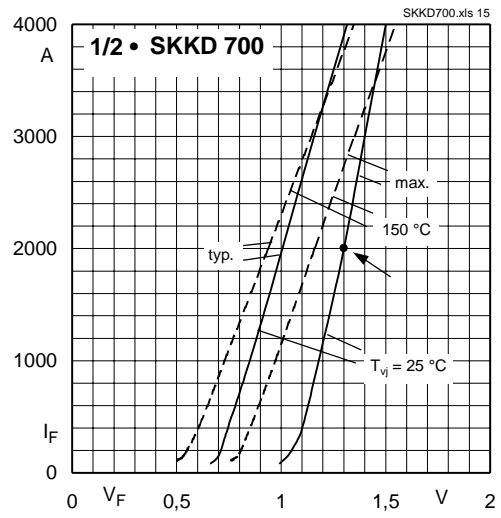


Fig. 15 Forward characteristics

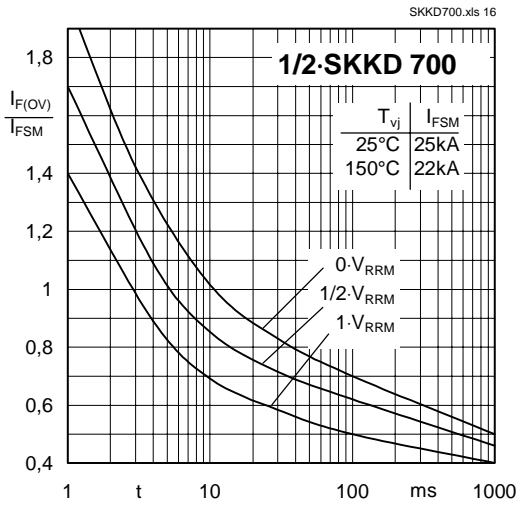


Fig. 16 Surge overload current vs. time

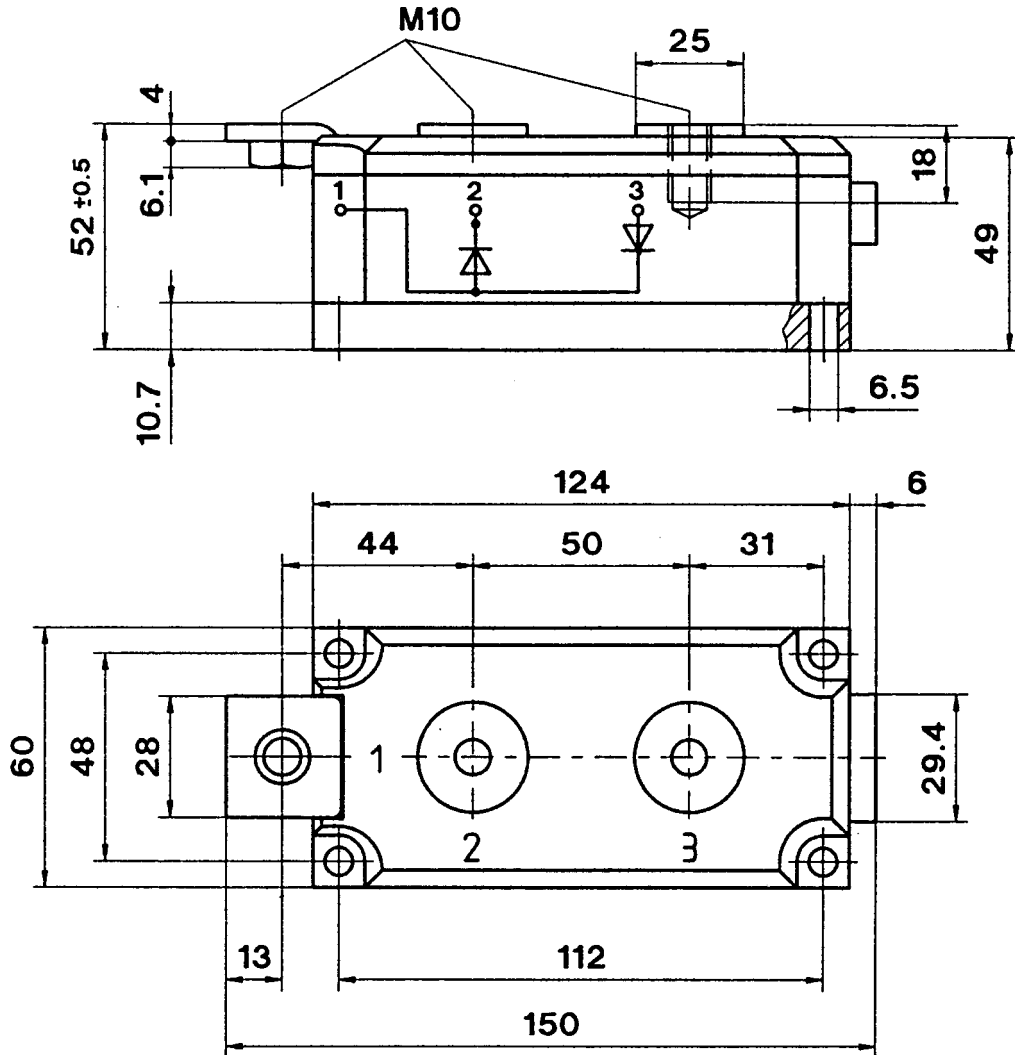
SKKD 700

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Case A 75

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UL recognition, file no. E 63 532



Dimensions in mm

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