SEMIKRON

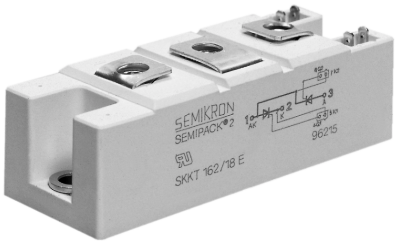
V_{RSM}	V_{RRM} V_{DRM}	$(dv/dt)_{cr}$	I_{TRMS} (maximum values for continuous operation) 195 A	
			I_{TAV} (sin. 180; T_{case} = 85 °C) 128 A	
V	V	V/µs		
900	800	500	**SKKT 122/08 D**	**SKKH 122/08 D**
1300	1200	1000	**SKKT 122/12 E**	**SKKH 122/12 E**
1500	1400	1000	**SKKT 122/14 E**	**SKKH 122/14 E**
1700	1600	1000	**SKKT 122/16 E**	**SKKH 122/16 E**
1900	1800	1000	**SKKT 122/18 E**	**SKKH 122/18 E**

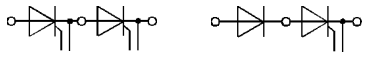
Symbol	Conditions		SKKT 122 SKKH 122	Units
I_{TAV}	sin. 180;	T_{case} = 88 °C	122	A
		T_{case} = 80 °C	140	A
I_D	B2/B6	T_{amb} = 45 °C; P 3/180	82 / 105	A
		T_{amb} = 35 °C; P 3/180F	170 / 200	A
		T_{amb} = 35 °C; P 16/200F	235 / 315	A
I_{RMS}	W1/W3	T_{amb} = 35 °C; P 3/180F	235 / 3 x 160	A
		T_{amb} = 35 °C; P 16/200F	295 / 3 x 245	A
I_{TSM}	T_{vj} = 25 °C; 10 ms		3 600	A
	T_{vj} = 125 °C; 10 ms		3 200	A
i^2t	T_{vj} = 25 °C; 8,3 ... 10 ms		64 800	A^2s
	T_{vj} = 125 °C; 8,3 ... 10 ms		51 200	A^2s
t_{gd}	T_{vj} = 25 °C	I_G = 1 A di_G/dt = 1 A/µs	1	µs
t_{gr}	V_D = 0,67 · V_{DRM}		2	µs
$(di/dt)_{cr}$	T_{vj} = 125 °C		200	A/µs
t_q	T_{vj} = 125 °C		typ. 120	µs
I_H	T_{vj} = 25 °C, typ./max.		100 / 300	mA
I_L	T_{vj} = 25 °C; R_G = 33 Ω; typ./max.		0,2 / 0,5	A
V_T	T_{vj} = 25 °C; I_T = 360 A		1,55	V
$V_{T(TO)}$	T_{vj} = 125 °C		0,85	V
r_T	T_{vj} = 125 °C		2,0	mΩ
I_{DD}; I_{RD}	T_{vj} = 125 °C; V_{DRM}; V_{RRM}		40	mA
V_{GT}	T_{vj} = 25 °C; d.c.		2	V
I_{GT}	T_{vj} = 25 °C; d.c.		150	mA
V_{GD}	T_{vj} = 125 °C; d.c.		0,25	V
I_{GD}	T_{vj} = 125 °C; d.c.		10	mA
R_{thjc}	cont.	per thyristor / per module	0,2 / 0,1	°C/W
	sin. 180		0,21 / 0,105	°C/W
	rec. 120		0,22 / 0,11	°C/W
R_{thch}			0,13 / 0,065	°C/W
T_{vj}			– 40 ... + 125	°C
T_{stg}			– 40 ... + 125	°C
V_{isol}	a. c. 50 Hz; r.m.s; 1 s/1 min		3600 / 3000	V~
M_1	to heatsink	SI (US) units	5 (44 lb. in.) ± 15 %[1)]	Nm
M_2	to terminals		5 (44 lb. in.) ± 15 %	Nm
a			5 · 9,81	m/s^2
w	approx.		165	g
Case	→ page B 1 – 96		SKKT 122: A 21 SKKH 122: A 22	

[1)] See the assembly instructions

SEMIPACK® 2
Thyristor / Diode Modules

SKKT 122
SKKH 122





SKKT **SKKH**

Features

- Heat transfer through aluminium oxide ceramic isolated metal baseplate
- Hard soldered joints for high reliability
- UL recognized, file no. E 63 532

Typical Applications

- DC motor control (e.g. for machine tools)
- Softstarter
- Temperature control (e. g. for ovens, chemical processes)
- Professional light dimming (studios, theaters)

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This technical information specifies semiconductor devices but promises no characteristics. No warranty or guarantee expressed or implied is made regarding delivery, performance or suitability.

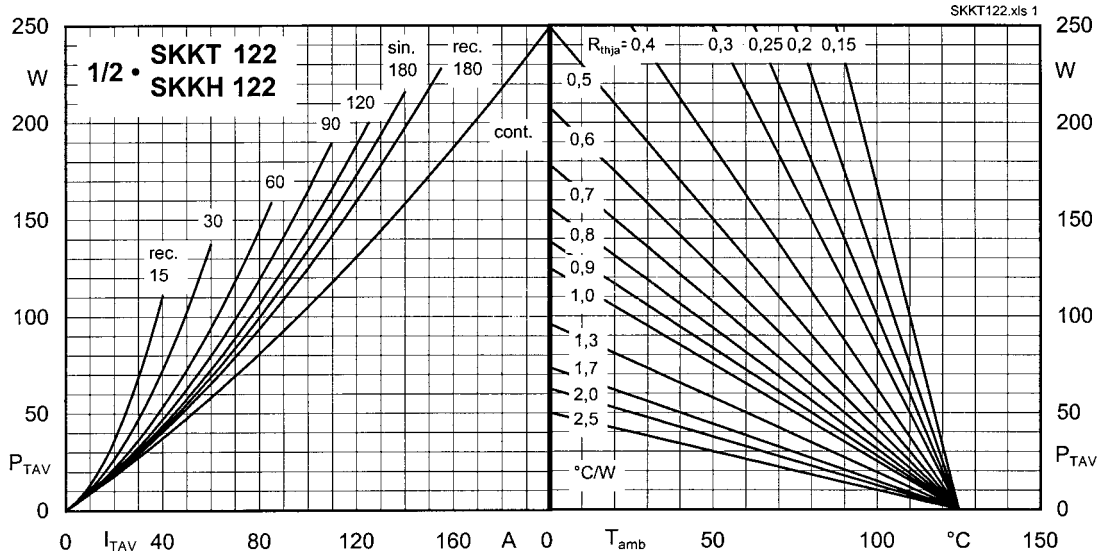

Fig. 1 Power dissipation per thyristor vs. on-state current and ambient temperature

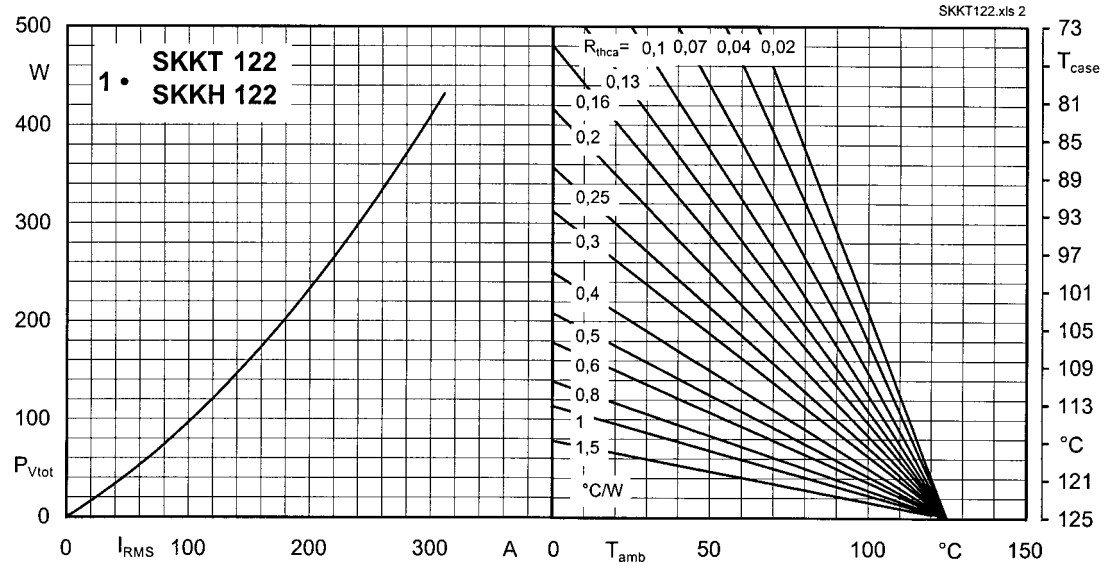

Fig. 2 Power dissipation per module vs. rms current and case temperature

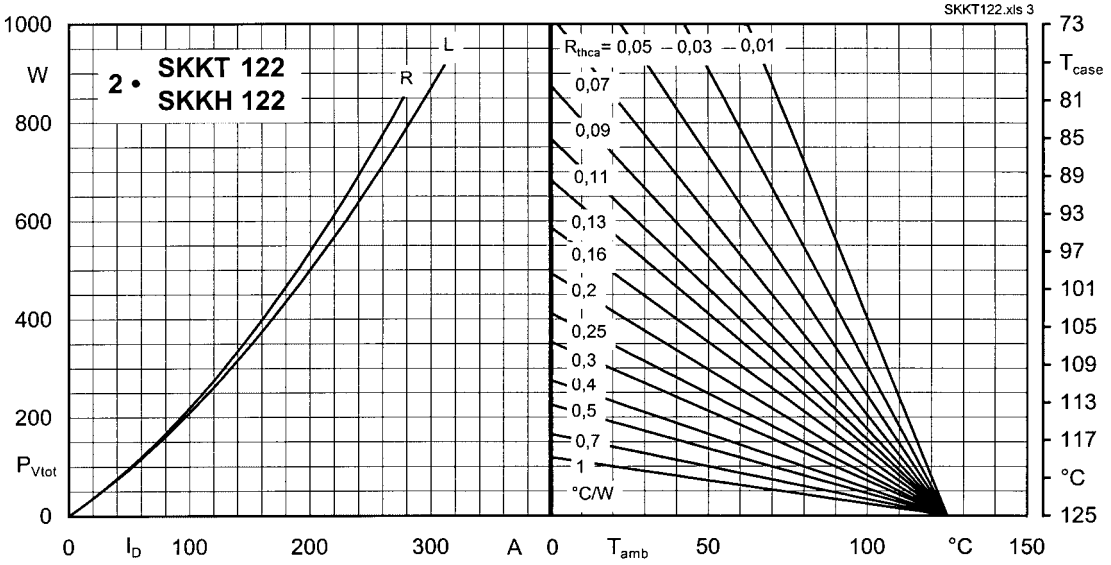

Fig. 3 Power dissipation of two module vs. direct current and case temperature

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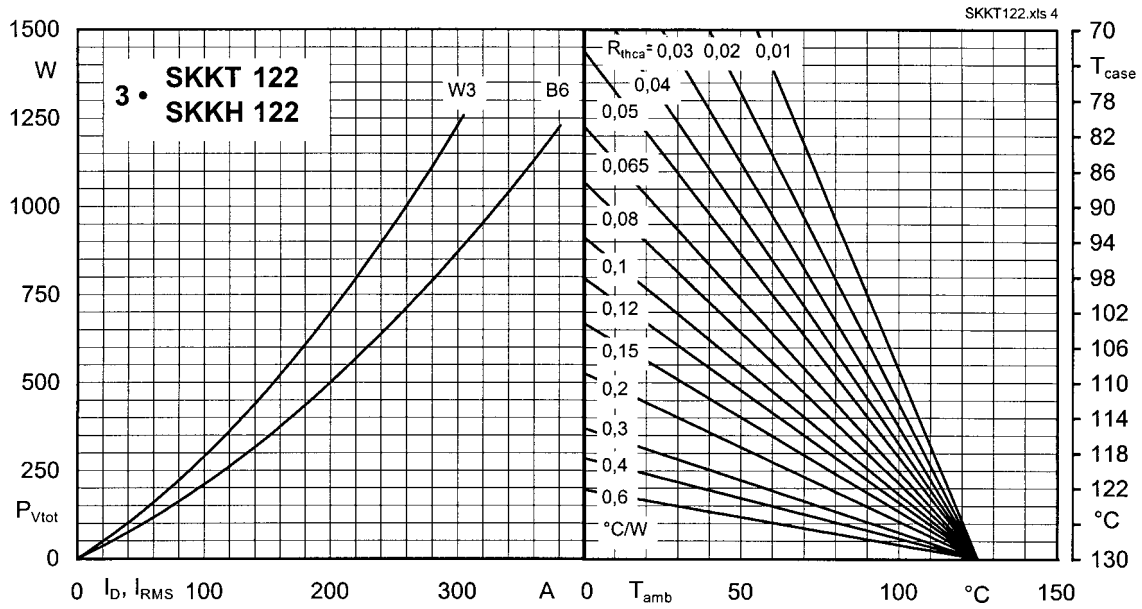

Fig. 4 Power dissipation of three modules vs. direct and rms current and case temperature

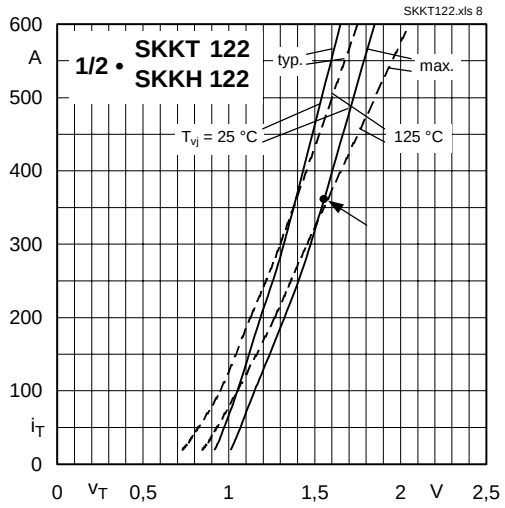

Fig. 8 On-state characteristics

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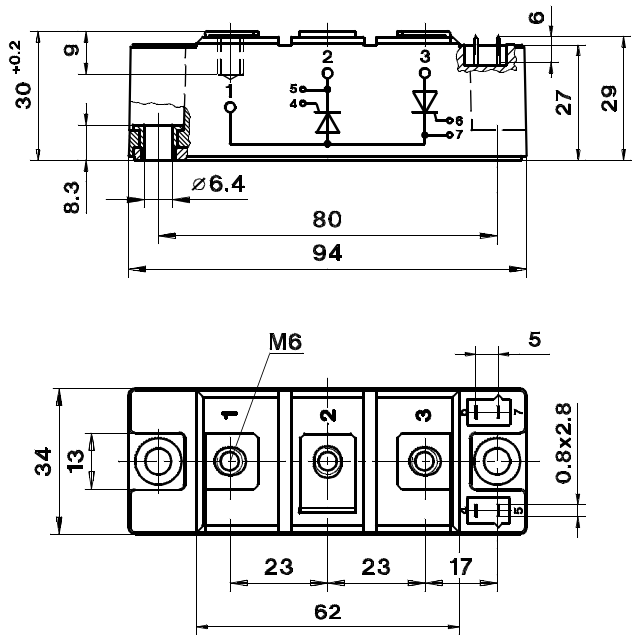
SKKT 122, 132, 162

Case A 21

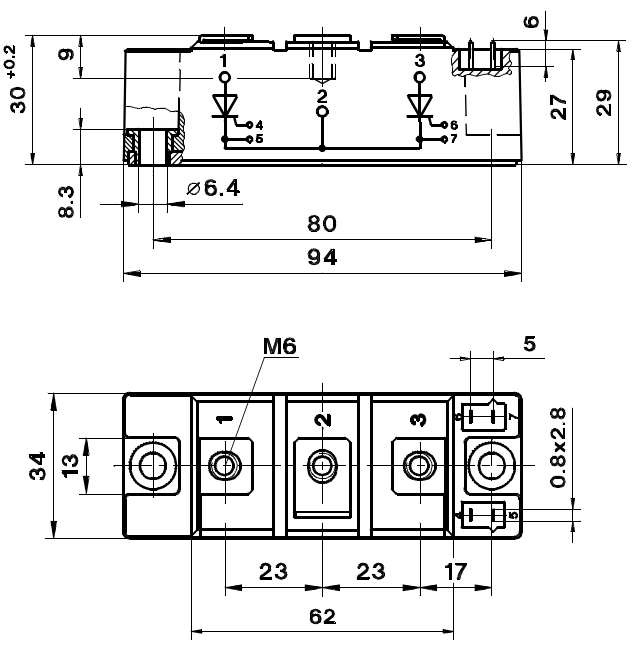
SEMIPACK® 2 UL recognized, file no. E 63 532



SKMT 132

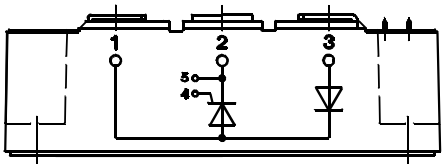
Case A 50

SEMIPACK® 2 UL recognized, file no. E 63 532



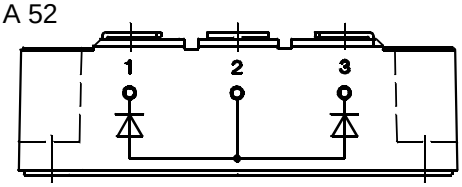
SKKH 122, 132, 162

Case A 22



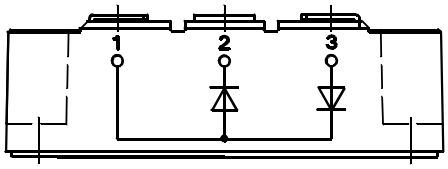
SKND 165

Case A 52



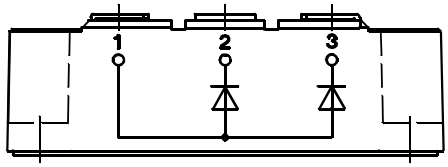
SKKD 162

Case A 23



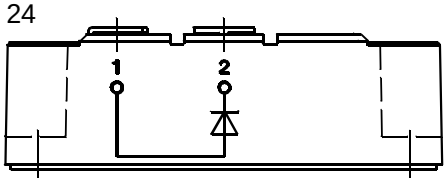
SKND 162

Case A 57



SKKE 162

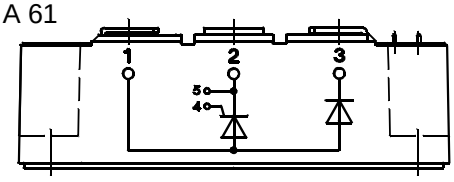
Case A 24



Dimensions in mm

SKNH 132

Case A 61



Dimensions in mm

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