# SKKT 122, SKKH 122



## SEMIPACK<sup>®</sup> 2

Thyristor / Diode Modules

#### SKKT 122 SKKH 122

#### Features

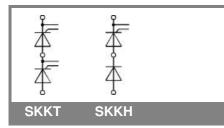
- Heat transfer through aluminium oxide ceramic isolated metal baseplate
- Hard soldered joints for high reliability
- UL recognized, file no. E 63 532

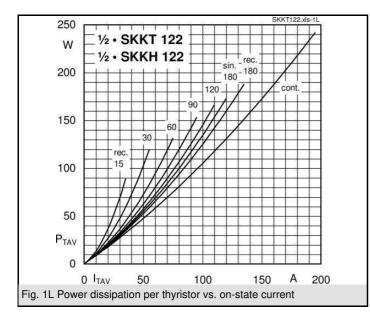
### **Typical Applications\***

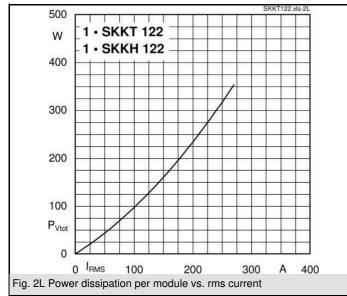
- DC motor control
  (e. g. for machine tools)
  Control
- Softstarter
- Temperature control (e. g. for ovens, chemical processes)
- Professional light dimming (studios, theaters)
- 1) See the assembly instructions

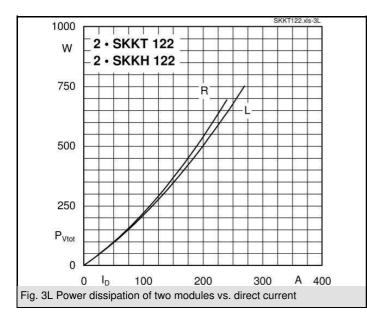
V <sub>RSM</sub>	V <sub>RRM</sub> , V <sub>DRM</sub>	I <sub>TRMS</sub> = 195 A (maximum value for continuous operation)		
V	V	I <sub>TAV</sub> = 122 A (sin. 180; T <sub>c</sub> = 88 °C)		
900	800	SKKT 122/08E	SKKH 122/08E	
1300	1200	SKKT 122/12E	SKKH 122/12E	
1500	1400	SKKT 122/14E	SKKH 122/14E	
1700	1600	SKKT 122/16E	SKKH 122/16E	
1900	1800	SKKT 122/18E	SKKH 122/18E	

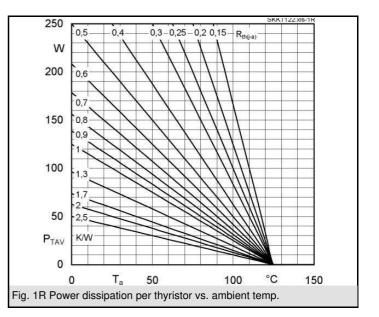
Symbol	Conditions	Values	Units
TAV	sin. 180; T <sub>c</sub> = 85 (100) °C;	129 (92 )	А
D	P3/180; T <sub>a</sub> = 45 °C; B2 / B6	82 / 105	А
	P3/180F; T <sub>a</sub> = 35 °C; B2 / B6	170 /200	А
RMS	P3/180F; T <sub>a</sub> = 35 °C; W1 / W3	235 / 3 * 160	А
TSM	T <sub>vi</sub> = 25 °C; 10 ms	3600	А
	T <sub>vi</sub> = 125 °C; 10 ms	3200	А
²t	T <sub>vi</sub> = 25 °C; 8,3 10 ms	64800	A²s
	T <sub>vj</sub> = 125 °C; 8,3 10 ms	51200	A²s
V <sub>T</sub>	$T_{vi} = 25 \text{ °C}; I_T = 360 \text{ A}$	max. 1,55	V
V <sub>T(TO)</sub>	$T_{vi} = 125 \text{ °C}$	max. 0,85	V
T	T <sub>vi</sub> = 125 °C	max. 2	mΩ
<sub>DD</sub> , I <sub>RD</sub>	$T_{vj}^{3}$ = 125 °C; $V_{RD}$ = $V_{RRM}$ ; $V_{DD}$ = $V_{DRM}$	max. 40	mA
gd	T <sub>vi</sub> = 25 °C; I <sub>G</sub> = 1 A; di <sub>G</sub> /dt = 1 A/μs	1	μs
gr	$V_{\rm D} = 0.67 * V_{\rm DRM}$	2	μs
(di/dt) <sub>cr</sub>	T <sub>vi</sub> = 125 °C	max. 200	A/µs
(dv/dt) <sub>cr</sub>	T <sub>vi</sub> = 125 °C	max. 1000	V/µs
q	$T_{vi}^{(j)} = 125 \ ^{\circ}C$ ,	120	μs
н	$T_{vi}^{i}$ = 25 °C; typ. / max.	100 / 300	mA
L	T <sub>vi</sub> = 25 °C; R <sub>G</sub> = 33 Ω; typ. / max.	200 / 500	mA
V <sub>GT</sub>	T <sub>vi</sub> = 25 °C; d.c.	min. 2	V
GT	$T_{vi}^{,j} = 25 \text{ °C; d.c.}$	min. 150	mA
V <sub>GD</sub>	T <sub>vi</sub> = 125 °C; d.c.	max. 0,25	V
GD	T <sub>vi</sub> = 125 °C; d.c.	max. 10	mA
R <sub>th(j-c)</sub>	cont.; per thyristor / per module	0,2 / 0,1	K/W
R <sub>th(j-c)</sub>	sin. 180; per thyristor / per module	0,21 / 0,105	K/W
R <sub>th(i-c)</sub>	rec.120; per thyristor / per module	0,22 / 0,11	K/W
R <sub>th(c-s)</sub>	per thyristor / per module	0,13 / 0,065	K/W
T <sub>vi</sub>		- 40 + 125	°C
T <sub>stg</sub>		- 40 + 125	°C
V <sub>isol</sub>	a. c. 50 Hz; r.m.s.; 1 s / 1 min.	3600 / 3000	V~
M <sub>s</sub>	to heatsink	5 ± 15 % <sup>1)</sup>	Nm
М <sub>t</sub>	to terminal	5 ± 15 %	Nm
a		5 * 9,81	m/s²
m	approx.	165	g
Case	SKKT	A 21	
	SKKH	A 22	

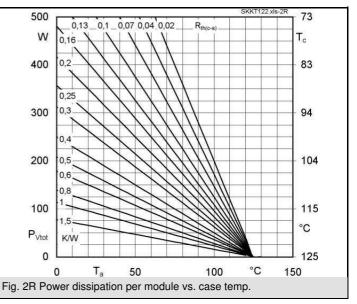


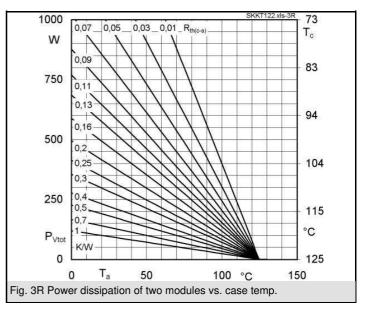




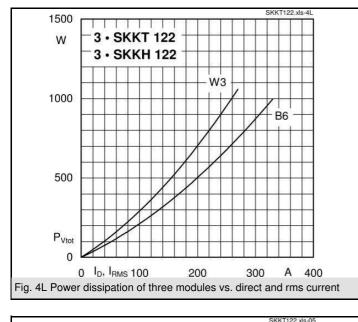


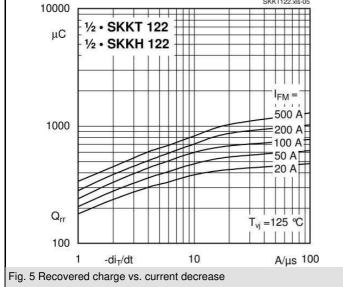


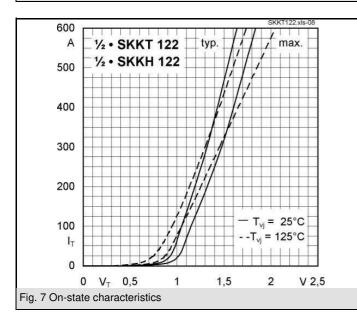


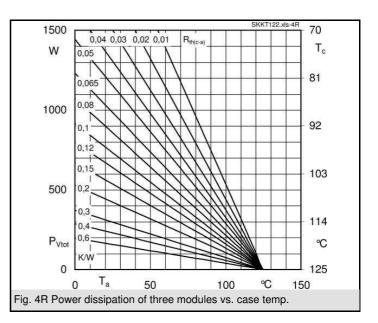


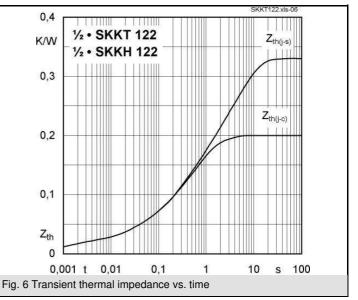
### SKKT 122, SKKH 122

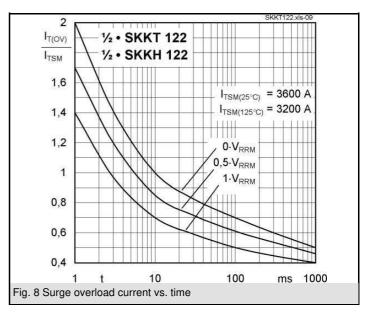


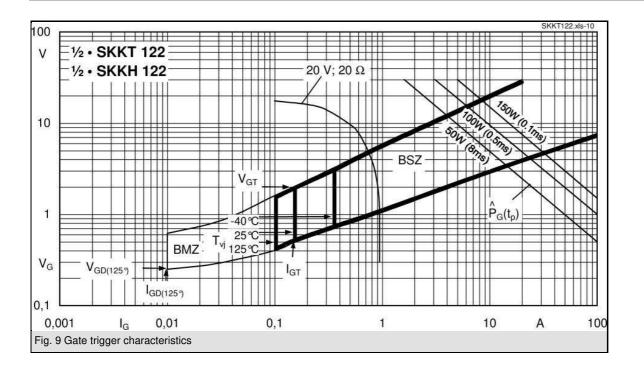


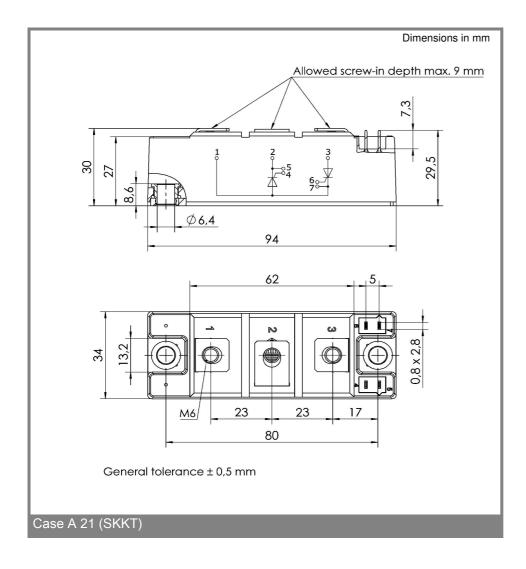


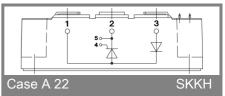












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This is an electrostatic discharge sensitive device (ESDS) due to international standard IEC 61340.

#### **\*IMPORTANT INFORMATION AND WARNINGS**

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