# **SKKT 122, SKKH 122**



# SEMIPACK<sup>®</sup> 2

### Thyristor / Diode Modules

**SKKT 122 SKKH 122** 

#### **Features**

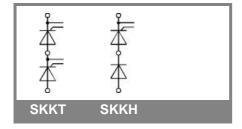
- Heat transfer through aluminium oxide ceramic isolated metal baseplate
- Hard soldered joints for high reliability
- UL recognized, file no. E 63 532

#### **Typical Applications**

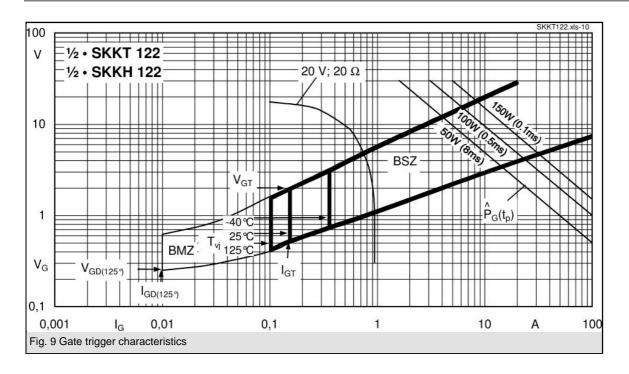
- DC motor control (e. g. for machine tools)
- Softstarter
- Temperature control (e. g. for ovens, chemical processes)
- Professional light dimming (studios, theaters)
- 1) See the assembly instructions

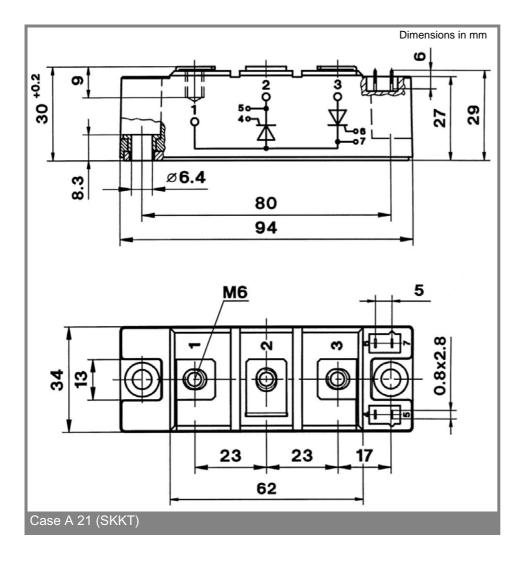
V <sub>RSM</sub>	V <sub>RRM</sub> , V <sub>DRM</sub>	I <sub>TRMS</sub> = 195 A (maximum value for continuous operation)		
V	V	I <sub>TAV</sub> = 122 A (sin. 180; T <sub>c</sub> = 88 °C)		
900	800	SKKT 122/08E	SKKH 122/08E	
1300	1200	SKKT 122/12E	SKKH 122/12E	
1500	1400	SKKT 122/14E	SKKH 122/14E	
1700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

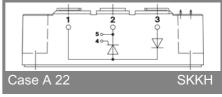
Symbol	Conditions	Values	Units
I <sub>TAV</sub>	sin. 180; T <sub>c</sub> = 85 (100) °C	129 (92 )	Α
$I_D$	P3/180; T <sub>a</sub> = 45 °C; B2 / B6	82 / 105	Α
	P3/180F; T <sub>a</sub> = 35 °C; B2 / B6	170 /200	Α
$I_{RMS}$	P3/180F; T <sub>a</sub> = 35 °C; W1 / W3	235 / 3 * 160	Α
I <sub>TSM</sub>	T <sub>vj</sub> = 25 °C; 10 ms	3600	А
	T <sub>vj</sub> = 125 °C; 10 ms	3200	Α
i²t	T <sub>vj</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>	$T_{vj} = 25  ^{\circ}\text{C}; I_{T} = 360  \text{A}$	max. 1,55	V
$V_{T(TO)}$	T <sub>vj</sub> = 125 °C	max. 0,85	V
r <sub>T</sub>	T <sub>vj</sub> = 125 °C	max. 2	mΩ
$I_{DD}$ ; $I_{RD}$	$T_{vj} = 125 \text{ °C}; V_{RD} = V_{RRM}; V_{DD} = V_{DRM}$	max. 40	mA
t <sub>gd</sub>	$T_{vj} = 25 \text{ °C; } I_G = 1 \text{ A; } di_G/dt = 1 \text{ A/}\mu\text{s}$	1	μs
$t_{gr}$	$V_{\rm D} = 0.67 * V_{\rm DRM}$	2	μs
(di/dt) <sub>cr</sub>	T <sub>vi</sub> = 125 °C	max. 200	A/µs
(dv/dt) <sub>cr</sub>	T <sub>vj</sub> = 125 °C	max. 1000	V/µs
$t_q$	T <sub>vi</sub> = 125 °C	120	μs
I <sub>H</sub>	$T_{vj}$ = 25 °C; typ. / max.	100 / 300	mA
$I_{L}$	$T_{vj}$ = 25 °C; $R_G$ = 33 $\Omega$ ; typ. / max.	200 / 500	mA
V <sub>GT</sub>	T <sub>vj</sub> = 25 °C; d.c.	min. 2	V
$I_{GT}$	$T_{vj} = 25 ^{\circ}\text{C}; \text{d.c.}$	min. 150	mA
$V_{GD}$	$T_{vj} = 125 ^{\circ}\text{C}; \text{d.c.}$	max. 0,25	V
$I_{GD}$	$T_{vj}$ = 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
$R_{th(j-c)}$	rec.120; per thyristor / per module	0,22 / 0,11	K/W
$R_{th(c-s)}$	per thyristor / per module	0,13 / 0,065	K/W
$T_{vj}$		- 40 + 125	°C
$T_{stg}$		- 40 + 125	°C
V <sub>isol</sub>	a. c. 50 Hz; r.m.s.; 1 s / 1 min.	3600 / 3000	V~
$M_s$	to heatsink	5 ± 15 % <sup>1)</sup>	Nm
$M_t$	to terminal	5 ± 15 %	Nm
а		5 * 9,81	m/s²
m	approx.	165	g
Case	SKKT	A 21	
	SKKH	A 22	



# **SKKT 122, SKKH 122**







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