

SEMIPACK[®] 1

Thyristor / Diode Modules

SKKT 92 SKKT 92B SKKH 92

Features

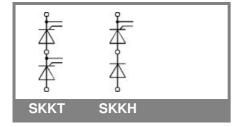
- Heat transfer through aluminium oxide ceramic isolated metal baseplate
- Hard soldered joints for high reliability
- UL recognized, file no. E 63 532

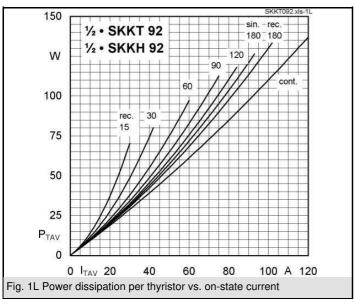
Typical Applications*

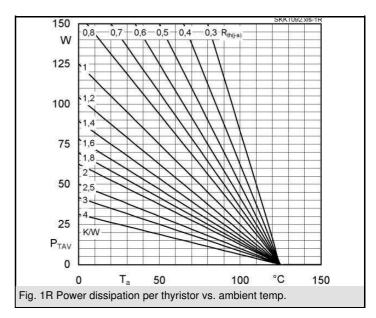
- DC motor control (e. g. for machine tools)
- AC motor soft starters
- Temperature control (e. g. for ovens, chemical processes)
- Professional light dimming (studios, theaters)
- 1) See the assembly instructions

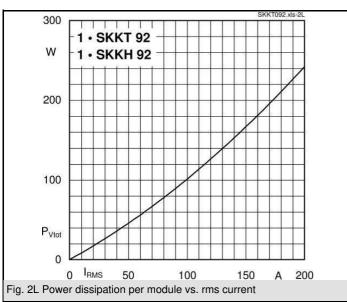
V_{RRM}, V_{DRM}	I _{TRMS} = 150 A (maximum value for continuous operation)		
V	I _{TAV} = 95 A (sin. 180; T _c = 85 °C)		
1200	SKKT 92/12 E	SKKT 92B12 E	SKKH 92/12 E
1600	SKKT 92/16 E	SKKT 92B16 E	SKKH 92/16 E
1800	SKKT 92/18 E	SKKT 92B18 E	SKKH 92/18 E
	V 1200 1600	V I _{TAV} = 1200 SKKT 92/12 E SKKT 92/16 E	V I _{TAV} = 95 A (sin. 180; T _c = 85 1200 SKKT 92/12 E SKKT 92B12 E 1600 SKKT 92/16 E SKKT 92B16 E

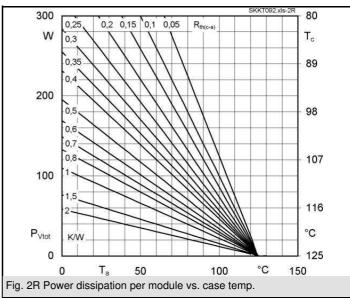
Symbol	Conditions	Values	Units
I_{TAV}	sin. 180; T _c = 85 (100) °C;	95 (68)	Α
I_D	P3/180; T _a = 45 °C; B2 / B6	70 / 85	Α
	P3/180F; T _a = 35 °C; B2 / B6	140 /175	Α
I _{RMS}	P3/180F; T _a = 35 °C; W1 / W3	190 / 3 * 135	Α
I _{TSM}	T _{vj} = 25 °C; 10 ms	2000	Α
	$T_{vj} = 125 ^{\circ}\text{C}; 10 \text{ms}$	1750	Α
i²t	T _{vj} = 25 °C; 8,3 10 ms	20000	A²s
	T _{vj} = 125 °C; 8,3 10 ms	15000	A²s
V_T	$T_{vj} = 25 ^{\circ}\text{C}; I_{T} = 300 \text{A}$	max. 1,65	V
$V_{T(TO)}$	T _{vj} = 125 °C	max. 0,9	V
r _T	$T_{vj} = 125 ^{\circ}\text{C}$	max. 2	mΩ
I_{DD} ; I_{RD}	T_{vj} = 125 °C; V_{RD} = V_{RRM} ; V_{DD} = V_{DRM}	max. 20	mA
t _{gd}	$T_{vj} = 25 \text{ °C; } I_G = 1 \text{ A; } di_G/dt = 1 \text{ A/}\mu\text{s}$	1	μs
t _{gr}	$V_{D} = 0.67 * V_{DRM}$	2	μs
(di/dt) _{cr}	T _{vi} = 125 °C	max. 150	A/µs
(dv/dt) _{cr}	T _{vi} = 125 °C	max. 1000	V/µs
t _q	$T_{vj} = 125 ^{\circ}\text{C}$,	100	μs
I _H	$T_{vj} = 25 ^{\circ}\text{C}$; typ. / max.	150 / 250	mA
IL	T_{vj} = 25 °C; R_G = 33 Ω ; typ. / max.	300 / 600	mA
V _{GT}	$T_{vj} = 25 ^{\circ}\text{C}; \text{d.c.}$	min. 3	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}	$T_{vj} = 125 ^{\circ}\text{C}; \text{d.c.}$	max. 6	mA
R _{th(j-c)}	cont.; per thyristor / per module	0,28 / 0,14	K/W
R _{th(j-c)}	sin. 180; per thyristor / per module	0,3 / 0,15	K/W
R _{th(j-c)}	rec. 120; per thyristor / per module	0,32 / 0,16	K/W
R _{th(c-s)}	per thyristor / per module	0,2 / 0,1	K/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 _s	to heatsink	5 ± 15 % ¹⁾	Nm
M _t	to terminals	3 ± 15 %	Nm
а		5 * 9,81	m/s²
m	approx.	95	g
Case	SKKT	A 46	
	SKKTB	A 48	
	SKKH	A 47	

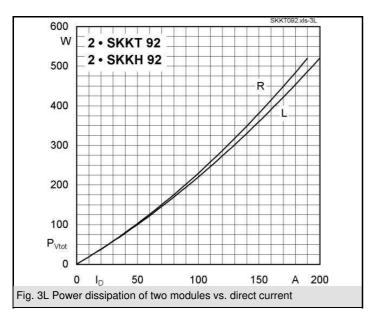


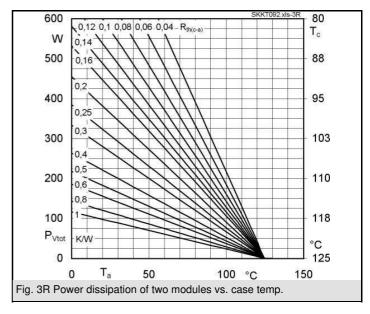


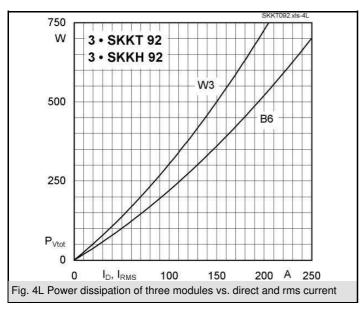


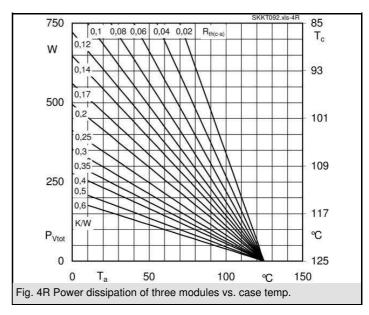


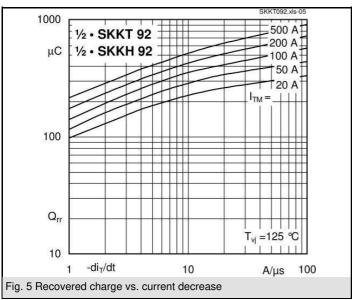


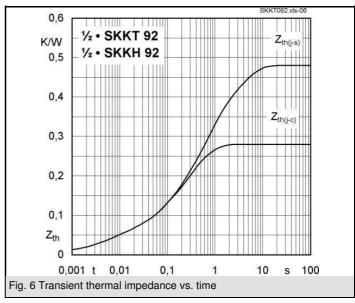


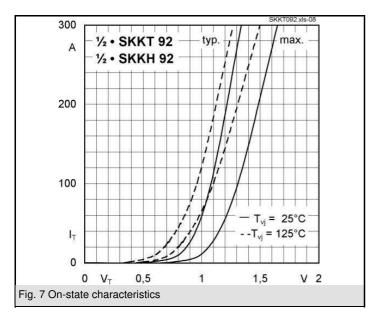


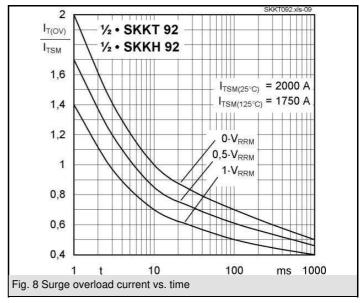


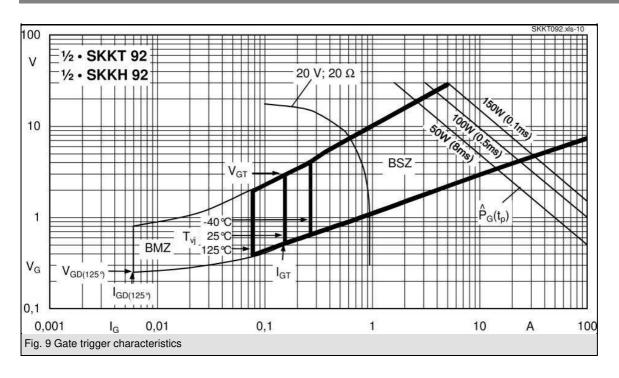


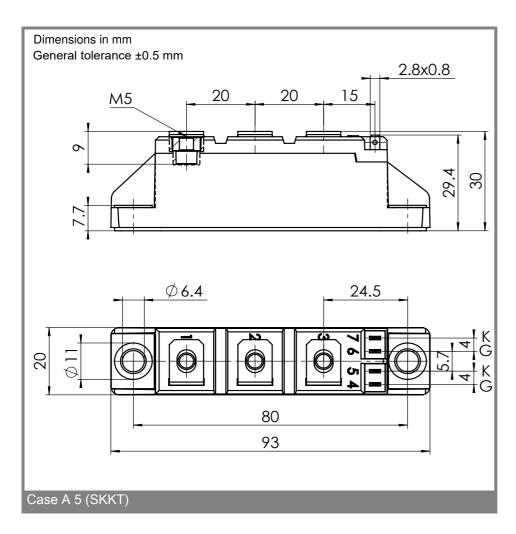


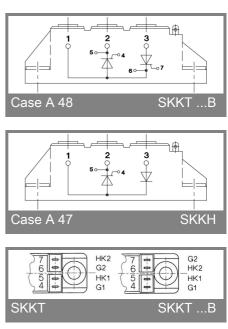












IMPORTANT INFORMATION AND WARNINGS

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

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