

SEMIPACK[®] 5

Thyristor / Diode Modules

SKKT 500 SKKH 500

Features

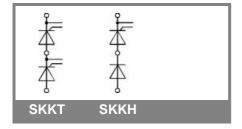
- Heat transfer through aluminium nitride ceramic isolated metal baseplate
- Precious metal pressure contacts for high reliability
- UL recognized, file no. E 63 532

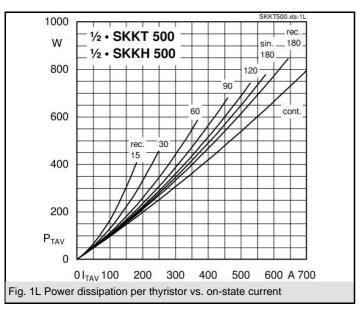
Typical Applications

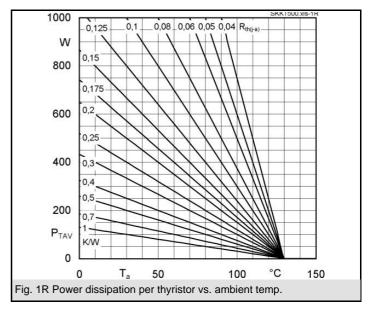
- · AC motor softstarters
- Input converters for AC inverter drives
- DC motor control (e. g. for michine tools)
- Temperature control (e. g. for ovens, chemical processes)
- Professional light dimming (studios, theaters)
- 1) See the assembly instructions
- 2) The screws must be lubricated

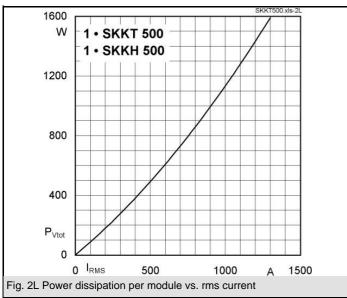
V _{RSM}	V_{RRM}, V_{DRM}	I _{TRMS} = 920 A (maximum value for continuous operation)		
V	V	I _{TAV} = 500 A (sin. 180; T _c = 89 °C)		
900	800	SKKT 500/08E	SKKH 500/08E	
1300	1200	SKKT 500/12E	SKKH 500/12E	
1500	1400	SKKT 500/14E	SKKH 500/14E	
1700	1600	SKKT 500/16E	SKKH 500/16E	
1900	1800	SKKT 500/18E	SKKH 500/18E	

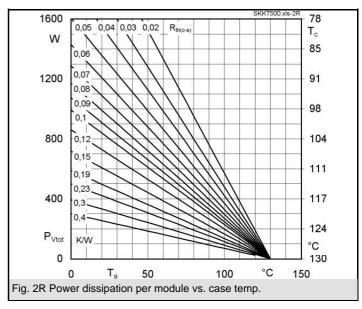
Symbol	Conditions	Values	Units
I _{TAV}	sin. 180; T _c = 85 (100) °C;	540 (390)	Α
I _D	P16/200F; T _a = 35 °C; B2 / B6	665 / 845	Α
I _{RMS}	P16/300F; T _a = 35 °C; W1 / W3	850 / 3 * 670	Α
I _{TSM}	T _{vi} = 25 °C; 10 ms	17000	Α
	$T_{vj} = 130 ^{\circ}\text{C}; 10 \text{ms}$	15000	Α
i²t	T _{vj} = 25 °C; 8,3 10 ms	1445000	A²s
	T _{vj} = 130 °C; 8,3 10 ms	1125000	A²s
V_T	T _{vj} = 25 °C; I _T = 1700 A	max. 1,5	V
$V_{T(TO)}$	$T_{vj} = 130 ^{\circ}C$	max. 0,925	V
r _T	T _{vj} = 130 °C	max. 0,27	mΩ
I_{DD} ; I_{RD}	T_{vj} = 130 °C; V_{RD} = V_{RRM} ; V_{DD} = V_{DRM}	max. 100	mA
t_{gd}	$T_{vj} = 25 \text{ °C}; I_G = 1 \text{ A}; di_G/dt = 1 \text{ A/µs}$	1	μs
t _{gr}	$V_{D} = 0.67 * V_{DRM}$	2	μs
(di/dt) _{cr}	T _{vj} = 130 °C	max. 200	A/µs
(dv/dt) _{cr}	T _{vj} = 130 °C	max. 1000	V/µs
t _q	$T_{vj} = 130 ^{\circ}C$	100 200	μs
I _H	$T_{vj} = 25 ^{\circ}\text{C}$; typ. / max.	150 / 500	mA
IL	T_{vj} = 25 °C; R_G = 33 Ω ; typ. / max.	300 / 2000	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. 200	mA
V_{GD}	$T_{vj} = 130 ^{\circ}\text{C}; \text{d.c.}$	max. 0,25	V
I_{GD}	T_{vj} = 130 °C; d.c.	max. 10	mA
$R_{th(j-c)}$	cont.; per thyristor / per module	0,062 / 0,031	K/W
R _{th(j-c)}	sin. 180; per thyristor / per module	0,065 / 0,032	K/W
R _{th(j-c)}	rec. 120; per thyristor / per module	0,07 / 0,035	K/W
R _{th(c-s)}	per thyristor / per module	0,02 / 0,01	K/W
T_{vj}		- 40 + 130	°C
T _{stg}		- 40 + 130	°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	12 ± 15 % ²⁾	Nm
а		5 * 9,81	m/s²
m	approx.	1420	g
Case	SKKT	A 60 a	
	SKKH	A 66 a	

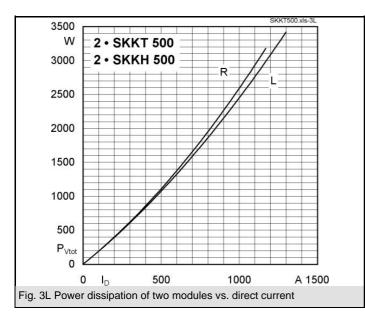


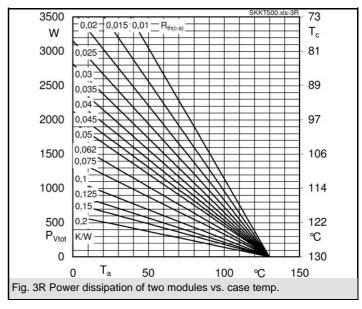


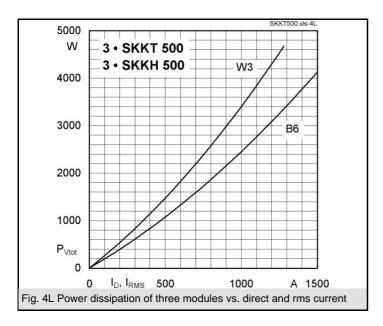


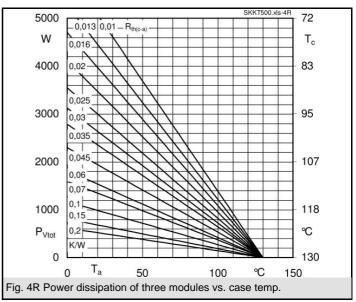


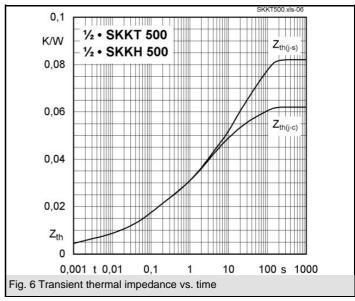


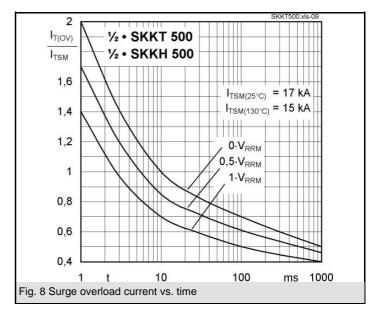


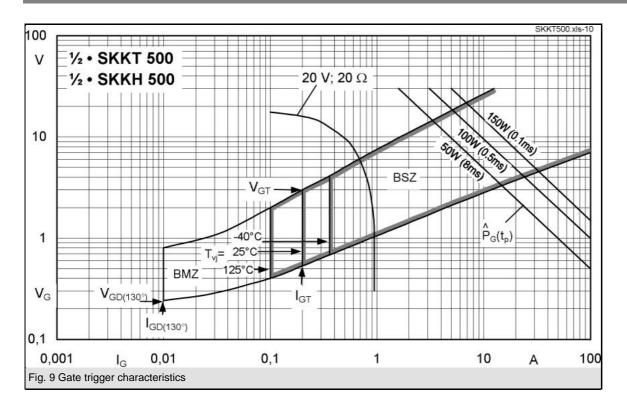


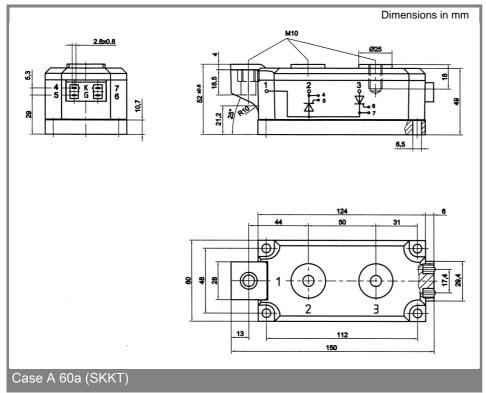


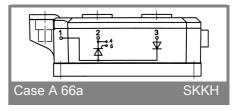












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