SKKT 460, SKKH 460



Thyristor / Diode Modules

SKKT 460 SKKH 460

Features

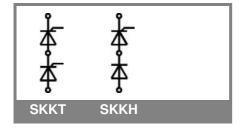
- Heat transfer through aluminium nitride ceramic insulated metal baseplate
- Precious metal pressure contacts for high reliability
- UL recognized, file no. E63532

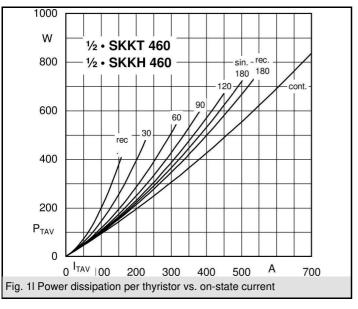
Typical Applications*

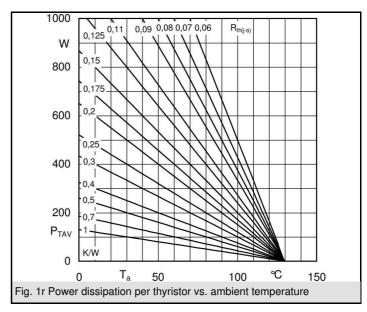
- · AC motor softstarters
- Input converters for AC inverter drives
- DC motor control (e.g. for machine tools)
- Temperature control (e.g. for ovens, chemical, processes)
- Professionals light dimming (studios, theaters)
- 1) see assembly instructions

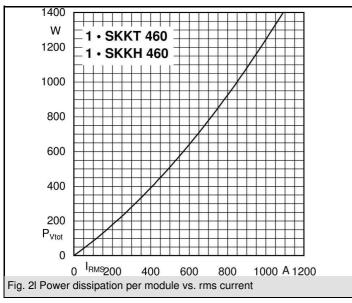
V _{RSM}	V_{RRM}, V_{DRM}	I _{TRMS} = 800 A (maximum value for continuous operation)		
V	V	I _{TAV} = 460 A (sin. 180; T _c = 85 °C)		
1700	1600	SKKT 460/16E	SKKH 460/16E	
2300	2200	SKKT 460/22E H4	SKKH 460/22E H4	

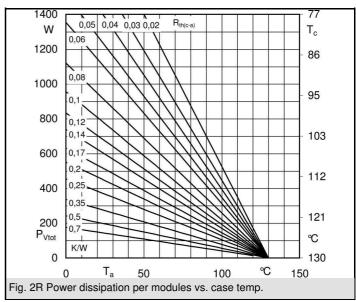
Symbol	Conditions	Values	Units
I _{TAV}	sin. 180; T _c = 85 (100) °C;	460 (335)	Α
I _{TSM}	T _{vi} = 25 °C; 10 ms	18000	Α
TOW	T_{vi}^{vj} = 130 °C; 10 ms	15500	Α
i²t	T _{vi} = 25 °C; 8,3 10 ms	1620000	A²s
	T _{vj} = 130 °C; 8,3 10 ms	1200000	A²s
V_T	T _{vi} = 25 °C; I _T = 1400 A	max. 1,6	V
$V_{T(TO)}$	T _{vi} = 130 °C	max. 0,88	V
r _T	T _{vi} = 130 °C	max. 0,45	mΩ
I_{DD} ; I_{RD}	$T_{vj} = 130 ^{\circ}\text{C}; V_{RD} = V_{RRM}; V_{DD} = V_{DRM}$	max. 240	mA
t _{gd}	$T_{vj} = 25 ^{\circ}\text{C}; I_{G} = 1 \text{A}; di_{G}/dt = 1 \text{A}/\mu\text{s}$	1	μs
t _{gr}	$V_{\rm D} = 0.67 * V_{\rm DRM}$	2	μs
(di/dt) _{cr}	T _{vj} = 130 °C	max. 250	A/µs
(dv/dt) _{cr}	$T_{vj} = 130 ^{\circ}\text{C}$	max. 1000	V/µs
t_q	$T_{vj} = 130 ^{\circ}\text{C}$,	100 200	μs
I _H	T_{vj} = 25 °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 °C; 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	0,072 / 0,035	K/W
R _{th(j-c)}	sin. 180°; per thyristor / per module	0,074 / 0,037	K/W
R _{th(j-c)}	rec. 120°; per thyristor / per module	0,078 / 0,039	K/W
$R_{th(c-s)}$	per thyristor / per module	0,02 / 0,01	K/W
T_{vj}		- 40 + 130	°C
T_{stg}		- 40 + 125	°C
V _{isol}	a.c. 50 Hz; r.m.s.; 1 s / 1 min.	3600 / 3000	V~
V _{isol}	a.c. 50 Hz; r.m.s.; 1 s / 1 min. for SKKH4	4800 / 4000	V~
M _s	to heatsink	5 ± 15% ¹⁾	Nm
M _t	to terminals	12 ± 15%	Nm
а		5 * 9,81	m/s²
m	approx.	1400	g
Case	SKKT	A 60b	
	SKKH	A 66b	

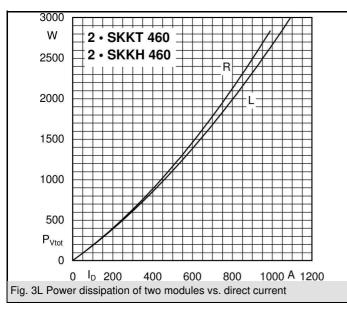


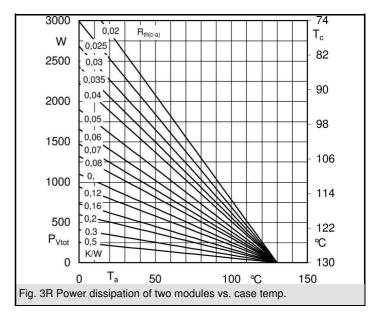




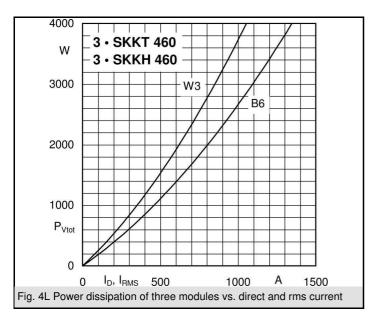


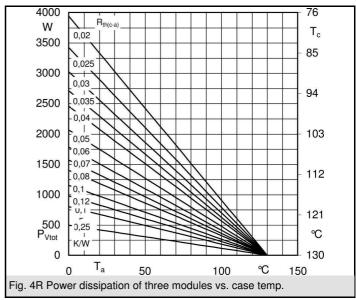


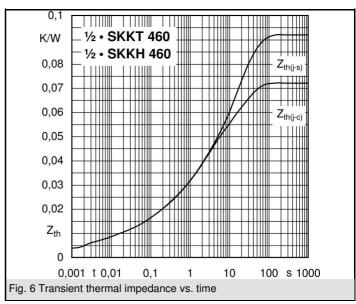


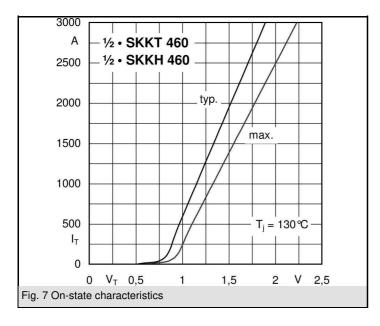


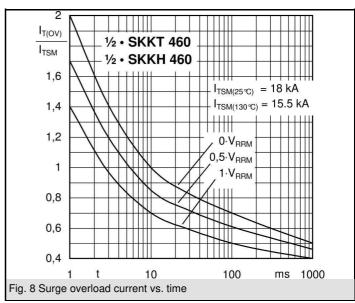
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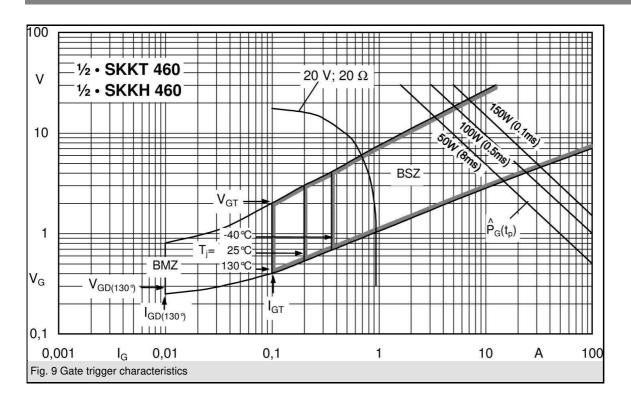


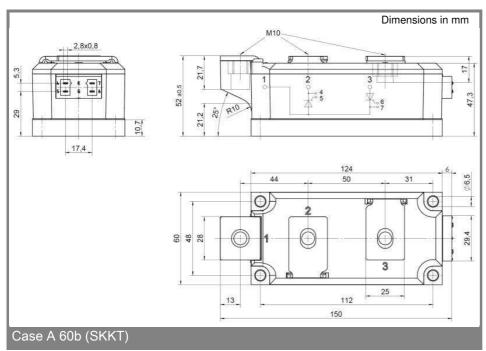


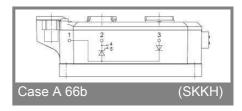












* The specifications of our components may not be considered as an assurance of component characteristics. Components have to be tested for the respective application. Adjustments may be necessary. The use of SEMIKRON products in life support appliances and systems is subject to prior specification and written approval by SEMIKRON. We therefore strongly recommend prior consultation of our staff.

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