

SKKT 460, SKKH 460



SEMIPACK® 5

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

2) screws must be lubricated

V_{RSM} V	V_{RRM}, V_{DRM} V	$I_{TRMS} = 800$ A (maximum value for continuous operation) $I_{TAV} = 460$ A (sin. 180; $T_c = 85$ °C)		
1700	1600	SKKT 460/16E	SKKH 460/16E	
2100	2000	SKKT 460/20E H4	SKKH 460/20E H4	
2300	2200	SKKT 460/22E H4	SKKH 460/22E H4	

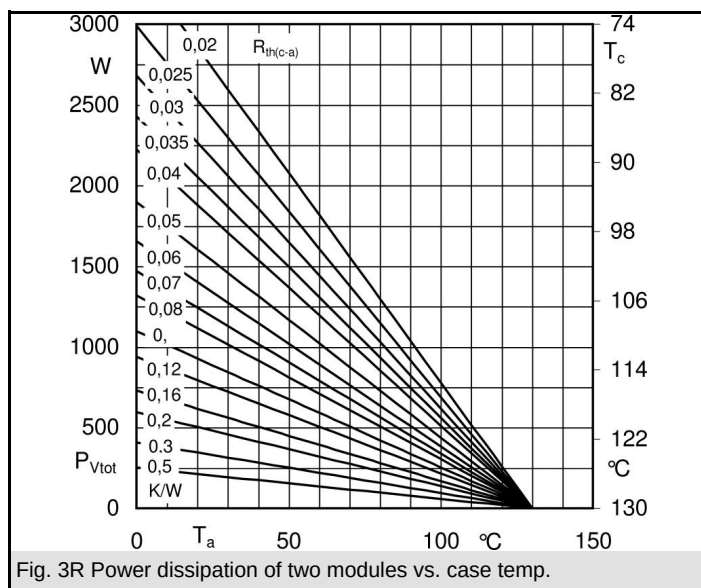
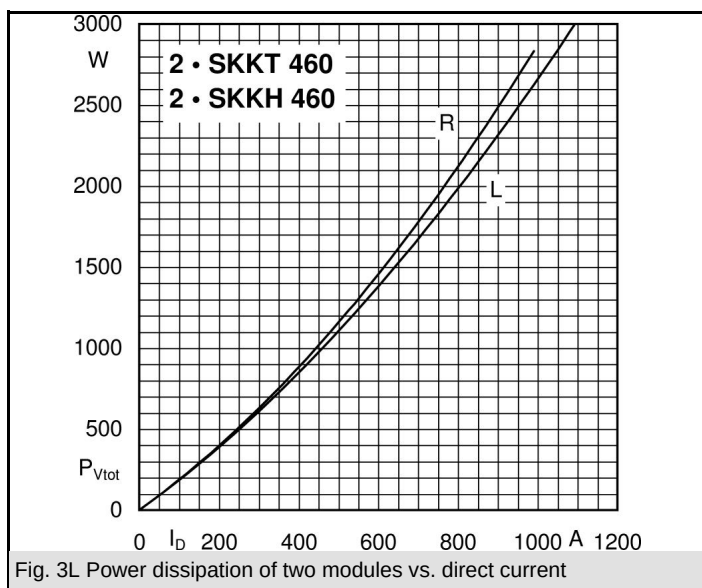
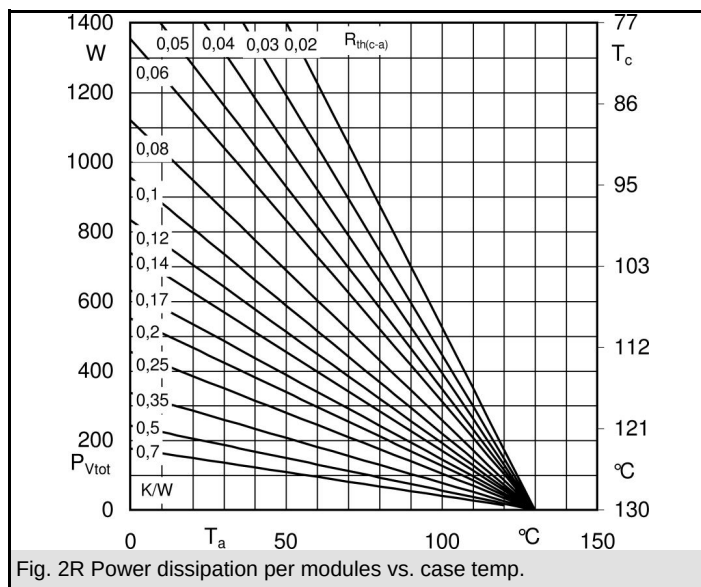
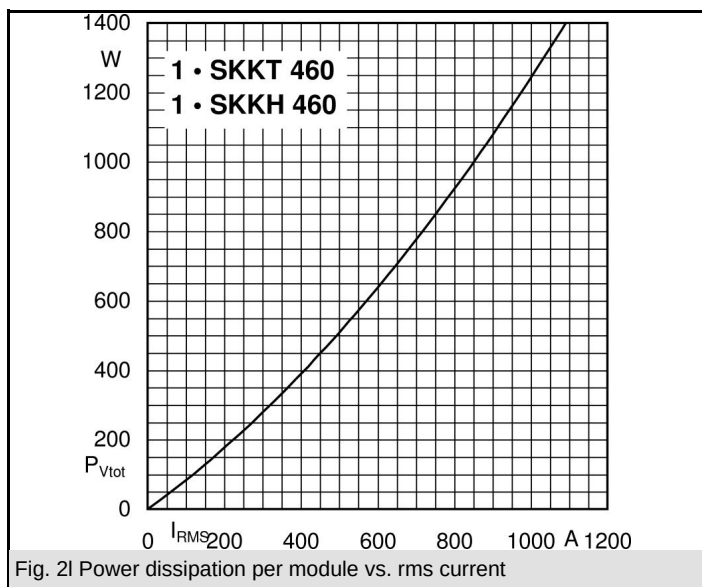
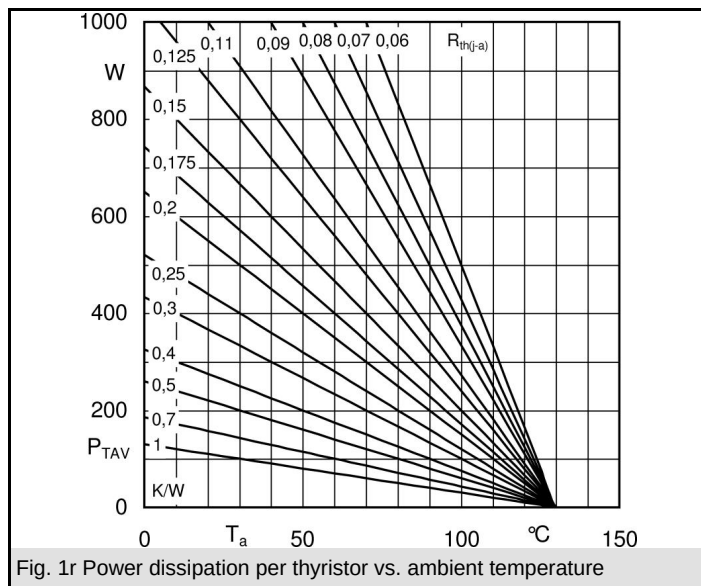
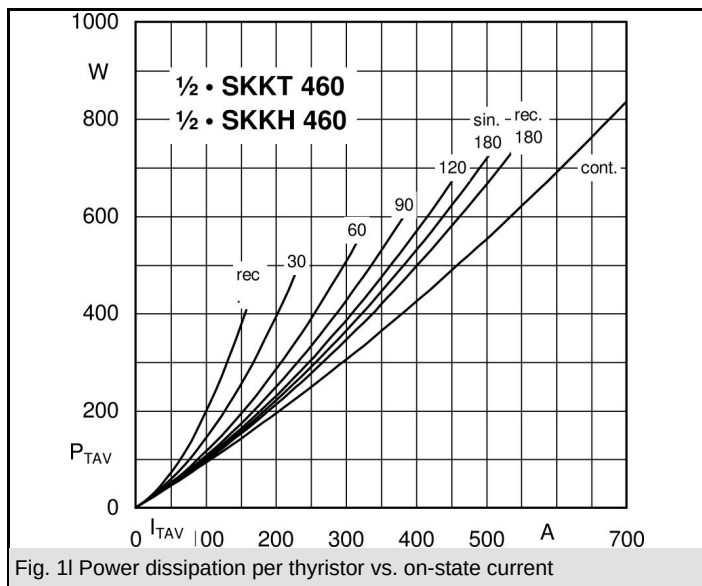
Symbol	Conditions	Values	Units
I_{TAV}	sin. 180; $T_c = 85$ (100) °C;	460 (335)	A
I_{TSM}	$T_{vj} = 25$ °C; 10 ms $T_{vj} = 130$ °C; 10 ms	18000 15500	A A
i^2t	$T_{vj} = 25$ °C; 8,3 .. 10 ms $T_{vj} = 130$ °C; 8,3 ... 10 ms	1620000 1200000	A²s A²s
V_T	$T_{vj} = 25$ °C; $I_T = 1400$ A	max. 1,6	V
$V_{T(TO)}$	$T_{vj} = 130$ °C	max. 0,88	V
r_T	$T_{vj} = 130$ °C	max. 0,45	mΩ
I_{DD}, I_{RD}	$T_{vj} = 130$ °C; $V_{RD} = V_{RRM}, V_{DD} = V_{DRM}$	max. 240	mA
t_{gd}	$T_{vj} = 25$ °C; $I_G = 1$ A; $di_G/dt = 1$ A/μs	1	μs
t_{gr}	$V_D = 0,67 \cdot V_{DRM}$	2	μs
$(di/dt)_{cr}$	$T_{vj} = 130$ °C	max. 250	A/μs
$(dv/dt)_{cr}$	$T_{vj} = 130$ °C	max. 1000	V/μs
t_q	$T_{vj} = 130$ °C	100 .. 200	μs
I_H	$T_{vj} = 25$ °C; typ. / max.	150 / 500	mA
I_L	$T_{vj} = 25$ °C; $R_G = 33$ Ω; typ. / max.	300 / 2000	mA
V_{GT}	$T_{vj} = 25$ °C; d.c.	min. 3	V
I_{GT}	$T_{vj} = 25$ °C; d.c.	min. 200	mA
V_{GD}	$T_{vj} = 130$ °C; 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 SKK...H4	4800 / 4000	V~
M_s	to heatsink	5 ± 15% ¹⁾	Nm
M_t	to terminals	12 ± 15% ²⁾	Nm
a		5 * 9,81	m/s²
m	approx.	1400	g
Case	SKKT SKKH	A 60b A 66b	

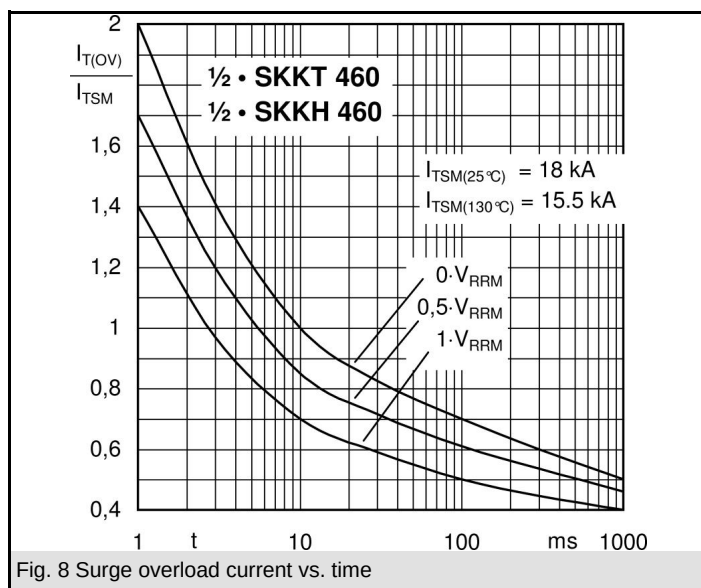
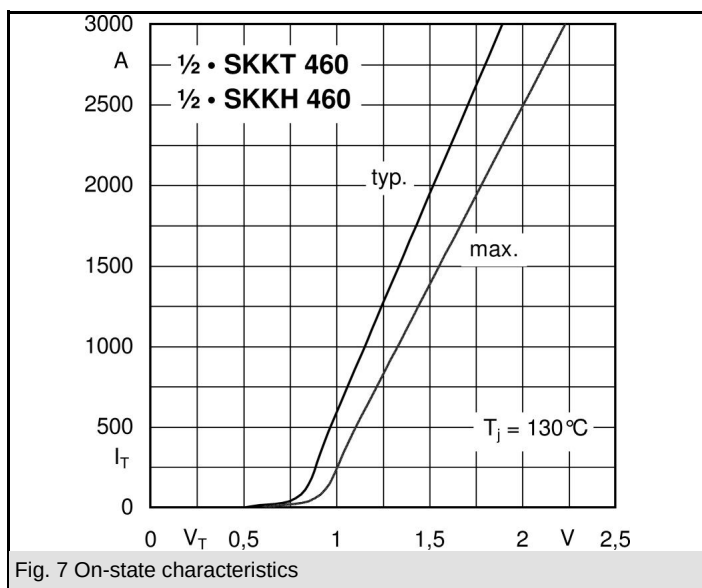
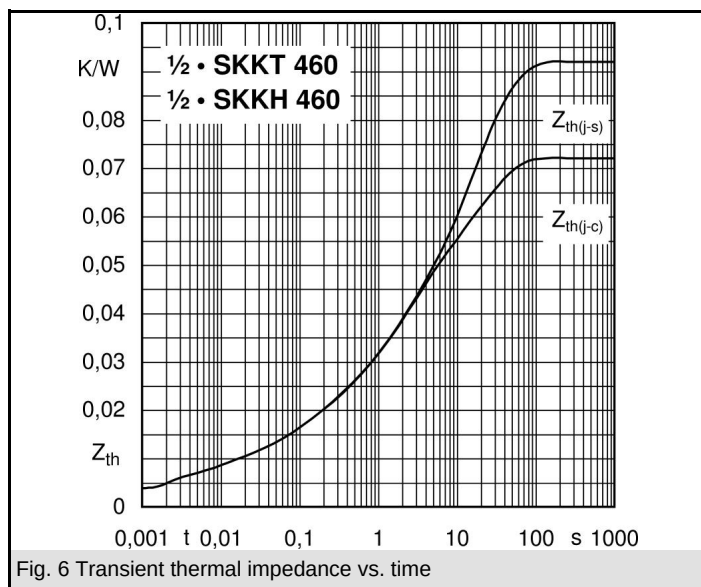
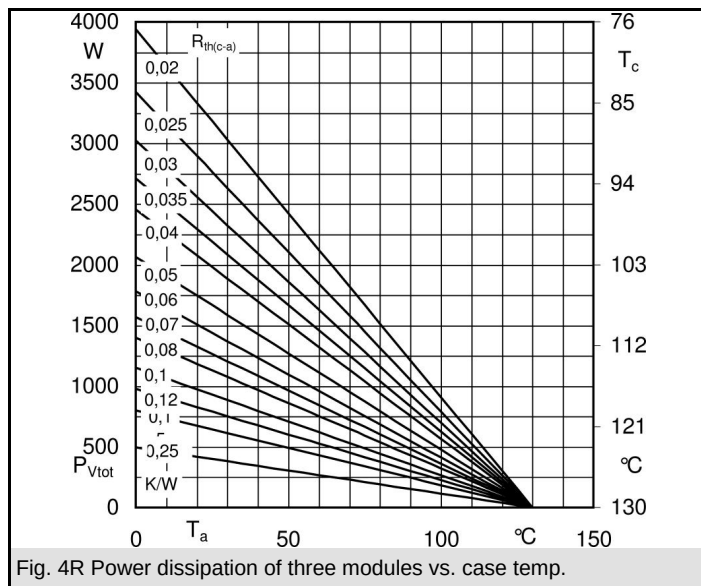
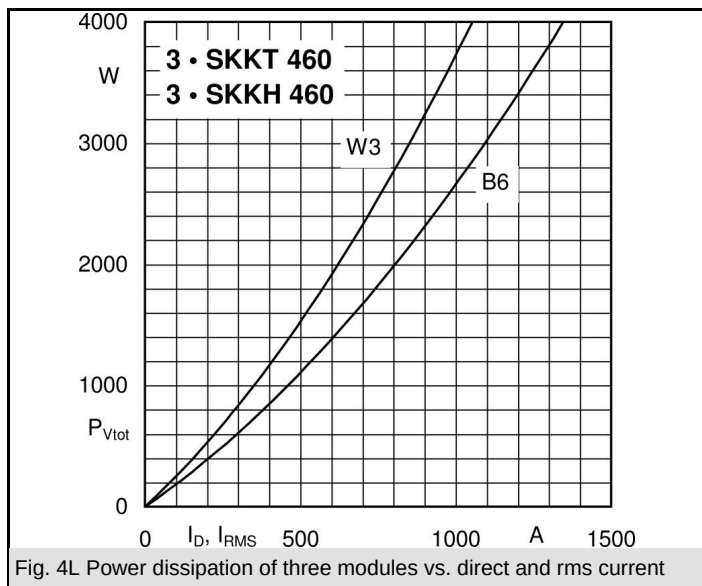


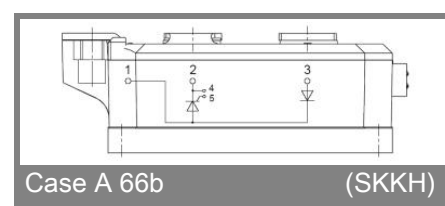
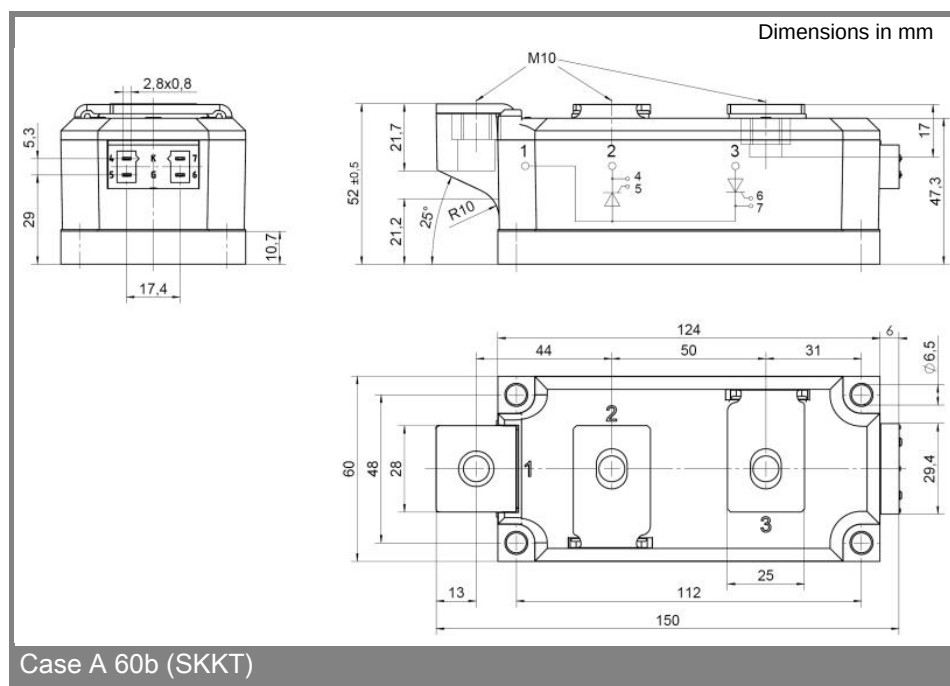
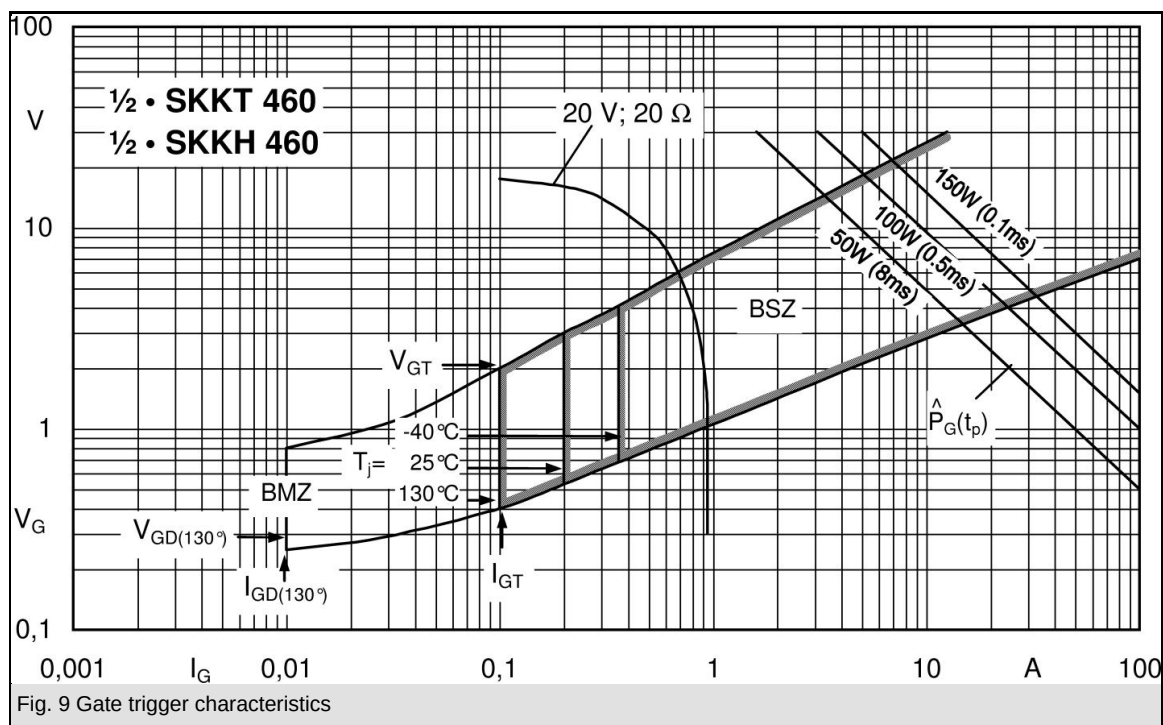
SKKT



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