SKKT 106, SKKT 106B, SKKH 106



SEMIPACK® 1

Thyristor / Diode Modules

SKKT 106 SKKT 106B SKKH 106

Features

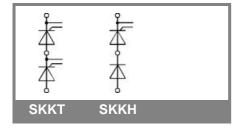
- Heat transfer through aluminium oxide ceramic isolated metal baseplate
- Hard soldered joints for high reliability
- UL recognized, file no. E 63 532

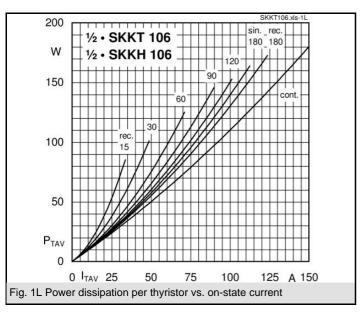
Typical Applications*

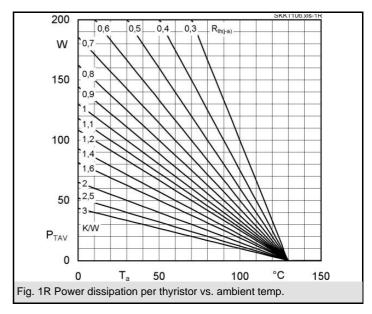
- DC motor control (e. g. for machine tools)
- · AC motor soft starters
- Temperature control (e. g. for ovens, chemical processes)
- Professional light dimming (studios, theaters)
- 1) See the assembly instructions

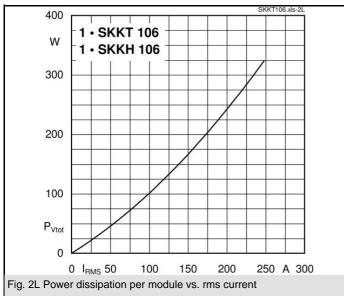
V _{RSM}	V _{RRM} , V _{DRM}	I _{TRMS} = 180 A (maximum value for continuous operation)		
V	V	I _{TAV} = 106 A (sin. 180; T _c = 85 °C)		
900	800	SKKT 106/08E	SKKT 106B08E	SKKH 106/08E
1300	1200	SKKT 106/12E	SKKT 106B12E	SKKH 106/12E
1500	1400	SKKT 106/14E	SKKT 106B14E	SKKH 106/14E
1700	1600	SKKT 106/16E	SKKT 106B16E	SKKH 106/16E
1900	1800	SKKT 106/18E	SKKT 106B18E	SKKH 106/18E

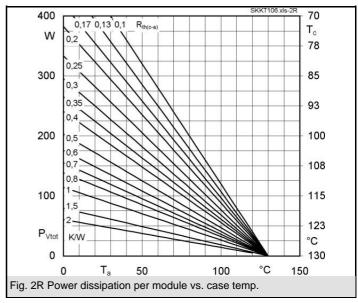
Symbol	Conditions	Values	Units
I _{TAV}	sin. 180; T _c = 85 (100) °C;	106 (78)	Α
I _D	P3/180F; T _a = 35 °C; B2 / B6	145 / 180	Α
	P16/200F; T _a = 35 °C; B2 / B6	190 /260	Α
I _{RMS}	P3/180F; T _a = 35 °C; W1 / W3	200 / 3 * 140	Α
I _{TSM}	T _{vi} = 25 °C; 10 ms	2250	Α
	T _{vi} = 130 °C; 10 ms	1900	Α
i²t	$T_{vj} = 25 ^{\circ}\text{C}; 8,3 \dots 10 \text{ms}$	25000	A²s
	T _{vj} = 130 °C; 8,3 10 ms	18000	A²s
V _T	T _{vi} = 25 °C; I _T = 300 A	max. 1,65	V
$V_{T(TO)}$	T _{vi} = 130 °C	max. 0,9	V
r _T	T _{vj} = 130 °C	max. 2	mΩ
I_{DD} ; I_{RD}	$T_{vj} = 130 \text{ °C}; V_{RD} = V_{RRM}, V_{DD} = V_{DRM}$	max. 20	mA
t _{gd}	$T_{vj} = 25 \text{ °C; } I_G = 1 \text{ A; } di_G/dt = 1 \text{ A/µs}$	1	μs
t _{gr}	$V_{\rm D} = 0.67 * V_{\rm DRM}$	2	μs
(di/dt) _{cr}	T _{vi} = 130 °C	max. 150	A/µs
(dv/dt) _{cr}	T _{vi} = 130 °C	max. 1000	V/µs
t _q	$T_{vi} = 130 ^{\circ}\text{C}$	100	μs
I _H	$T_{vj} = 25 ^{\circ}\text{C}$; typ. / max.	150 / 250	mA
I_L	T_{vj} = 25 °C; R_G = 33 Ω ; typ. / max.	300 / 600	mA
V _{GT}	T _{vi} = 25 °C; d.c.	min. 3	V
I_{GT}	$T_{vj} = 25 ^{\circ}\text{C}; \text{d.c.}$	min. 150	mA
V_{GD}	$T_{vj} = 130 ^{\circ}\text{C}; \text{d.c.}$	max. 0,25	V
I_{GD}	$T_{vj} = 130 ^{\circ}\text{C}; \text{d.c.}$	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 + 130	°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 terminal	3 ± 15 %	Nm
а		5 * 9,81	m/s²
m	approx.	95	g
Case	SKKT	A 46	
	SKKTB	A 48	
	SKKH	A 47	

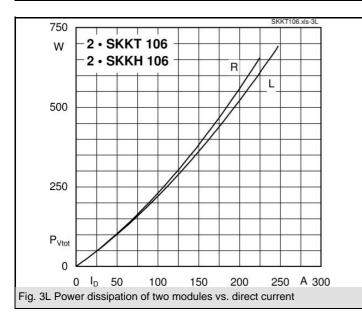


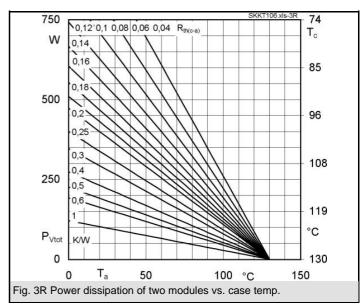




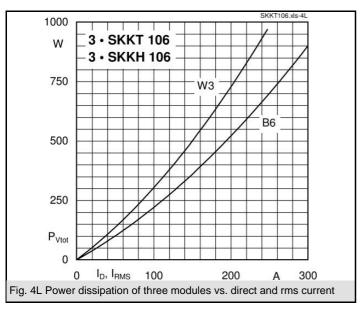


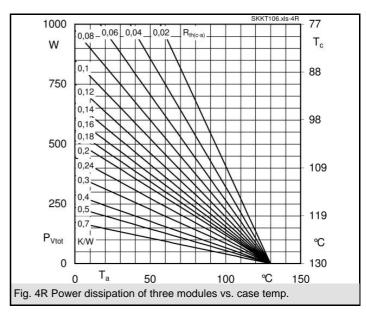


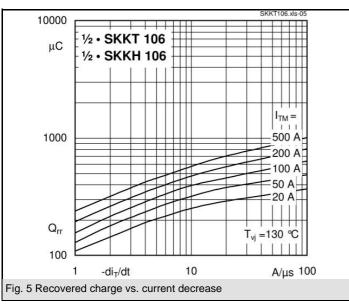


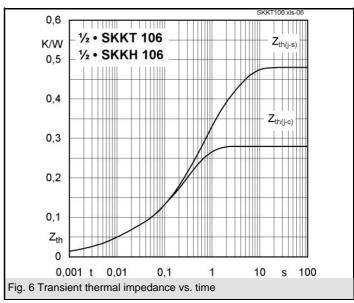


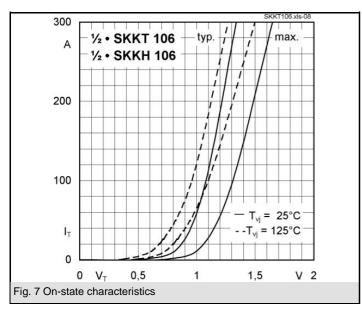
SKKT 106, SKKT 106B, SKKH 106

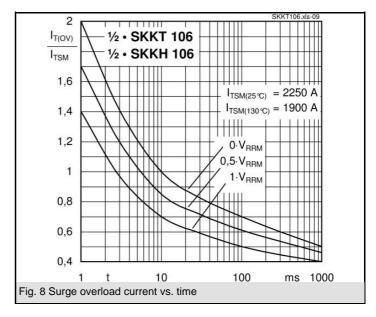


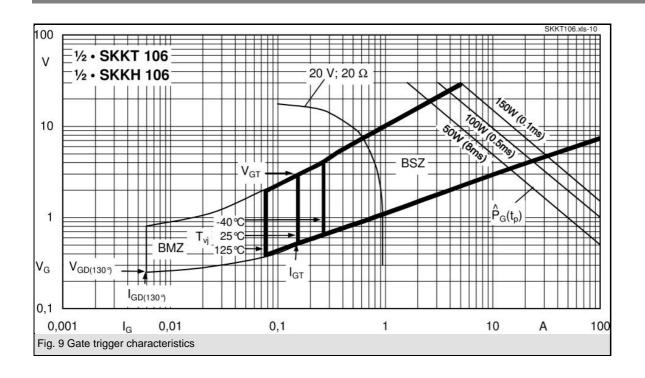


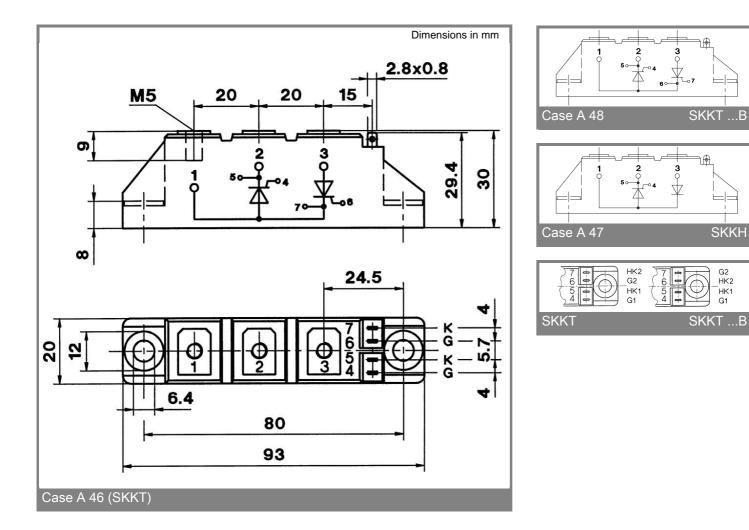












^{*} The specifications of our components may not be considered as an assurance of component characteristics. Components have to be tested for the respective application. Adjustments may be necessary. The use of SEMIKRON products in life support appliances and systems is subject to prior specification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

G2 HK2