SKKT 106, SKKT 106B, SKKH 106



SEMIPACK[®] 1

Thyristor / Diode Modules

SKKT 106 SKKT 106B SKKH 106

Features

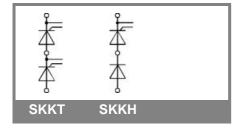
- Heat transfer through aluminium oxide ceramic isolated metal baseplate
- Hard soldered joints for high reliability
- UL recognized, file no. E 63 532

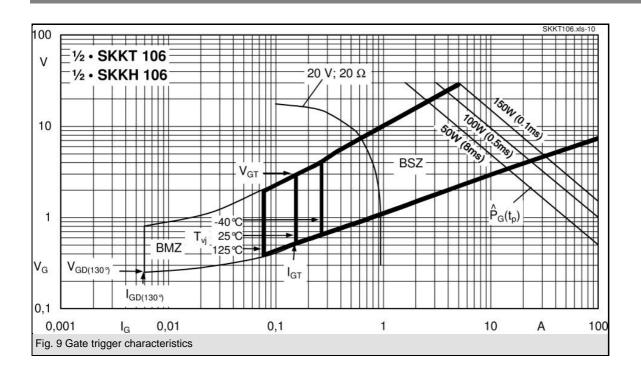
Typical Applications

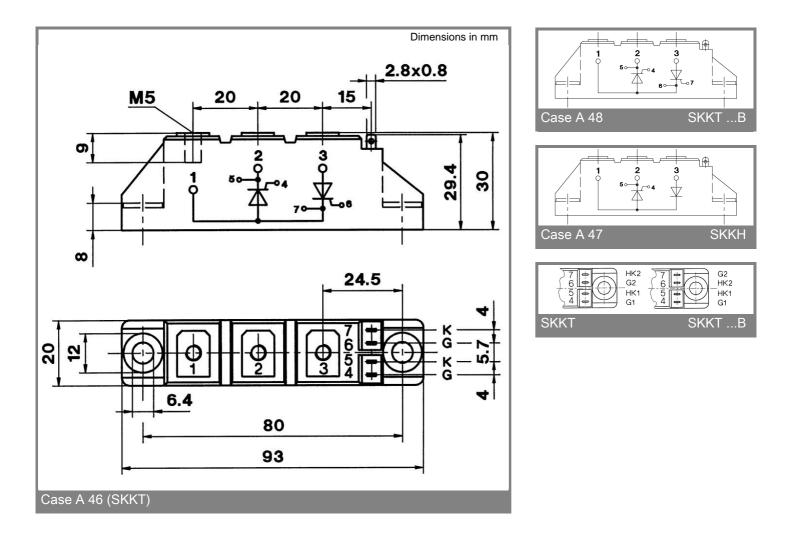
- DC motor control (e. g. for machine tools)
- · AC motor soft starters
- Temperature control (e. g. for ovens, chemical processes)
- Professional light dimming (studios, theaters)
- 1) See the assembly instructions

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 _{vj} = 25 °C; 10 ms	2250	Α
	T_{vj} = 130 °C; 10 ms	1900	Α
i²t	T _{vj} = 25 °C; 8,3 10 ms	25000	A²s
	T _{vj} = 130 °C; 8,3 10 ms	18000	A²s
V_T	$T_{vj} = 25 ^{\circ}\text{C}; I_T = 300 \text{A}$	max. 1,65	V
$V_{T(TO)}$	T _{vj} = 130 °C	max. 0,9	V
r_T	T _{vj} = 130 °C	max. 2	mΩ
$I_{DD}; I_{RD}$	T_{vj} = 130 °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 _{vj} = 130 °C	max. 150	A/µs
(dv/dt) _{cr}	T _{vj} = 130 °C	max. 1000	V/µs
t_q	$T_{vj} = 130 ^{\circ}\text{C}$	100	μs
I _H	T_{vj} = 25 °C; typ. / max.	150 / 250	mA
I_{L}	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}	$T_{vj} = 130 ^{\circ}\text{C}; \text{d.c.}$	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	1
	SKKH	A 47	







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