SKKT 273; SKKH 273



SEMIPACK[®] 3

Thyristor / Diode Modules

SKKT 273 SKKH 273

Features

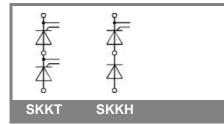
- Industrial standard package
- Electrically insulated base plate
- Heat transfer through aluminum
- oxide ceramic insulated metal base plate
- Chip soldered on direct copper bonded Al₂O₃ ceramic
- Thyristor with center gate
- UL recognition applied for file no. E63532

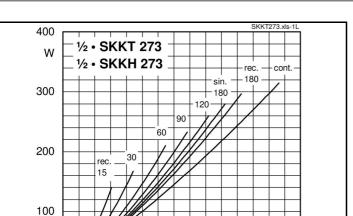
Typical Applications*

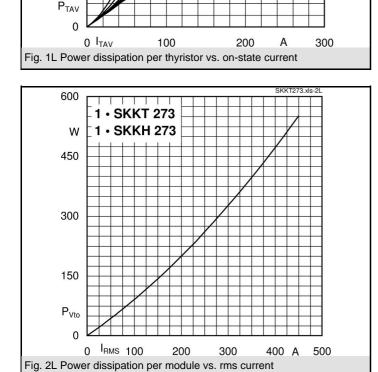
- DC motor control
 (e. g. for machine tools)
- Temperature control (e. g. for ovens, chemical processes)
- Professional light dimming (studios, theaters)
- 1) See the assembly instructions

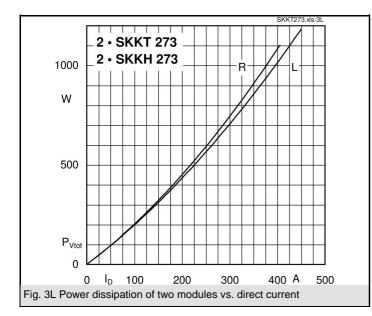
V _{RSM}	V_{RRM}, V_{DRM}	I _{TRMS} = 450 A (maximum value for continuous operation)		
V	V	I _{TAV} = 273 A (sin. 180; T _c = 85 °C)		
1300	1200	SKKT 273/12E	SKKH 273/12E	
1700	1600	SKKT 273/16E	SKKH 273/16E	
1900	1800	SKKT 273/18E	SKKH 273/18E	

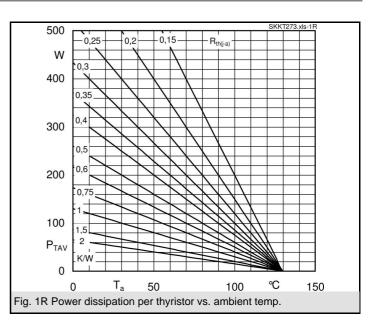
Symbol	Conditions	Values	Units
I _{TAV}	sin. 180; T _c = 85 (100) °C;	273 (202)	А
I _{TSM}	T _{vi} = 25 °C; 10 ms	9000	А
	T _{vj} = 130 °C; 10 ms	8000	А
i²t	T _{vj} = 25 °C; 8,3 10 ms	405000	A²s
	T _{vj} = 130 °C; 8,3 10 ms	320000	A²s
V _T	T _{vi} = 25 °C; I _T = 750 A	max. 1,6	V
V _{T(TO)}	T _{vi} = 130 °C	max. 0,9	V
r _T	$T_{vi} = 130 \ ^{\circ}C$	max. 0,92	mΩ
I _{DD} ; I _{RD}	$T_{vj} = 130 \text{ °C}; V_{RD} = V_{RRM}; V_{DD} = V_{DRM}$	max. 100	mA
t _{gd}	T _{vi} = 25 °C; I _G = 1 A; di _G /dt = 1 A/µs	1	μs
t _{gr}	$V_{\rm D} = 0.67 * V_{\rm DRM}$	2	μs
(di/dt) _{cr}	T _{vi} = 130 °C	max. 130	A/µs
(dv/dt) _{cr}	$T_{vi}^{3} = 130 \ ^{\circ}C$	max. 1000	V/µs
t _q	$T_{vi}^{(1)} = 130 \ ^{\circ}C$, typ.	150	μs
I _H	$T_{vi}^{,j}$ = 25 °C; typ. / max.	150 / 500	mA
IL .	T _{vi} = 25 °C; R _G = 33 Ω; typ. / max.	300 / 2000	mA
V _{GT}	T _{vi} = 25 °C; d.c.	min. 2	V
I _{GT}	T _{vi} = 25 °C; d.c.	min. 150	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	0,104 / 0,052	K/W
R _{th(j-c)}	sin. 180; per thyristor / per module	0,108 / 0,054	K/W
R _{th(j-c)}	rec. 120; per thyristor / per module	0,122 / 0,061	K/W
R _{th(c-s)}	per thyristor / per module	0,08 / 0,04	K/W
T _{vi}		- 40 + 130	°C
T _{stg}		- 40 + 125	°C
V _{isol}	a. c. 50 Hz; r.m.s.; 1 s / 1 min.	3600 / 3000	V~
Ms	to heatsink	5 ± 15 % ¹⁾	Nm
Mt	to terminals	9 ± 15 %	Nm
a		5 * 9,81	m/s²
m	approx.	410	g
Case	SKKT	A 43a	
	SKKH	A 56a	

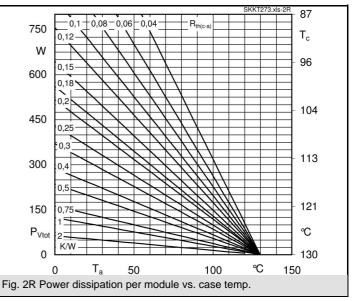


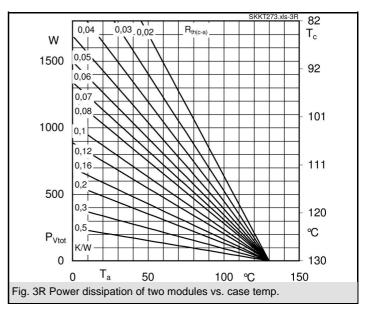




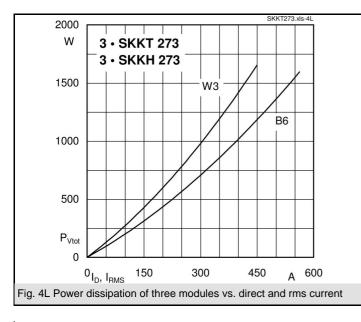


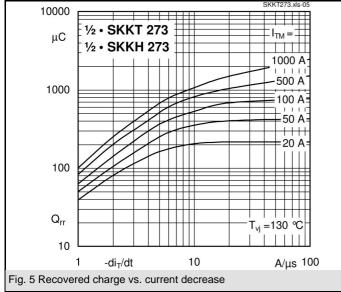


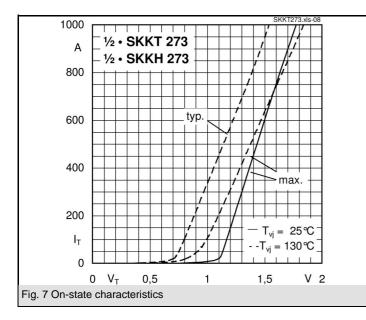


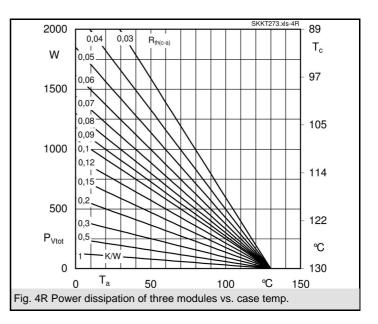


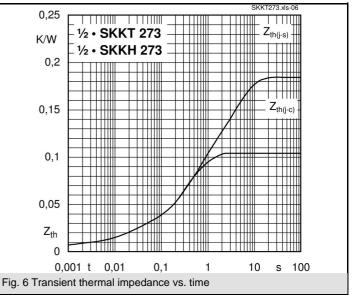
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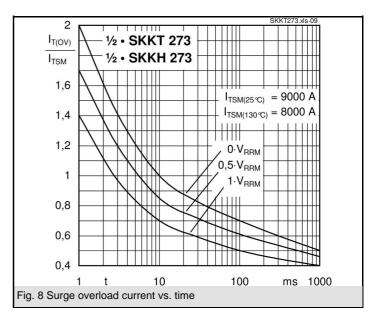


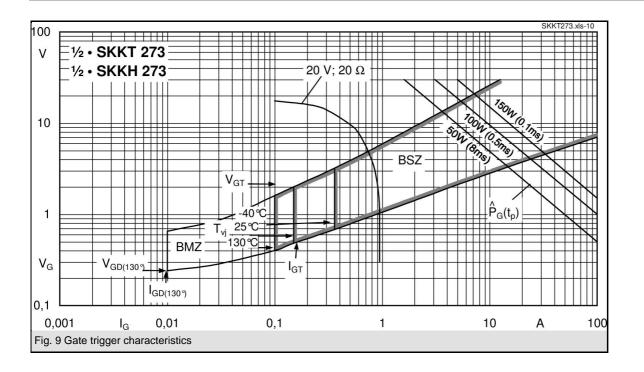


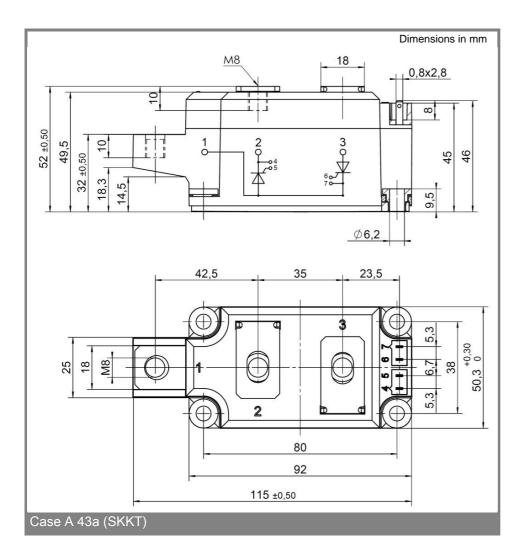




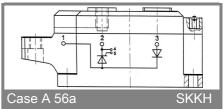








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* The specifications of our components may not be considered as an assurance of component characteristics. Components have to be tested for the respective application. Adjustments may be necessary. The use of SEMIKRON products in life support appliances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