SKKT 26, SKKH 26

SEMIPACK® 1

Thyristor / Diode Modules

SKKT 26

SKKH 26

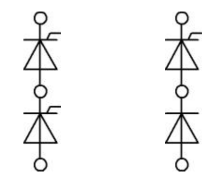
Features

- 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



SKKT **SKKH**

V_{RSM} V	V_{RRM}, V_{DRM} V	I_{TRMS} = 50 A (maximum value for continuous operation) I_{TAV} = 26 A (sin. 180; T_c = 84 °C)		
500	400		SKKH 26/04D	
700	600	SKKT 26/06E	SKKH 26/06D	
900	800	SKKT 26/08E	SKKH 26/08D	
1300	1200	SKKT 26/12E	SKKH 26/12E	
1500	1400	SKKT 26/14E	SKKH 26/14E	
1700	1600	SKKT 26/16E	SKKH 26/16E	
1900	1800	SKKT 26/18E		

Symbol	Conditions	Values	Units
I_{TAV}	sin. 180; T_c = 85 (100) °C;	25 (18)	A
I_D	P3/180; T_a = 45 °C; B2 / B6	38 / 50	A
	P3/180F; T_a = 35 °C; B2 / B6	60 /77	A
I_{RMS}	P3/180; T_a = 45 °C; W1 / W3	52 / 3 x 37	A
I_{TSM}	T_{vj} = 25 °C; 10 ms	550	A
	T_{vj} = 125 °C; 10 ms	480	A
i²t	T_{vj} = 25 °C; 8,3 ... 10 ms	1500	A²s
	T_{vj} = 125 °C; 8,3 ... 10 ms	1150	A²s
V_T	T_{vj} = 25 °C; I_T = 75 A	max. 1,8	V
$V_{T(TO)}$	T_{vj} = 125 °C	max. 0,9	V
r_T	T_{vj} = 125 °C	max. 12	mΩ
I_{DD}; I_{RD}	T_{vj} = 125 °C; $V_{RD} = V_{RRM}$; $V_{DD} = V_{DRM}$	max. 10	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 * V_{DRM}	1	µs
$(di/dt)_{cr}$	T_{vj} = 125 °C	max. 150	A/µs
$(dv/dt)_{cr}$	T_{vj} = 125 °C ; SKK ...D / SKK ...E	max. 500 / 1000	V/µs
t_q	T_{vj} = 125 °C ,	80	µs
I_H	T_{vj} = 25 °C; typ. / max.	100 / 200	mA
I_L	T_{vj} = 25 °C; R_G = 33 Ω; typ. / max.	250 / 400	mA
V_{GT}	T_{vj} = 25 °C; d.c.	min. 3	V
I_{GT}	T_{vj} = 25 °C; d.c.	min. 150	mA
V_{GD}	T_{vj} = 125 °C; d.c.	max. 0,25	V
I_{GD}	T_{vj} = 125 °C; d.c.	max. 5	mA
$R_{th(j-c)}$	cont.; per thyristor / per module	0,9 / 0,45	K/W
$R_{th(j-c)}$	sin. 180; per thyristor / per module	0,95 / 0,48	K/W
$R_{th(j-c)}$	rec. 120; per thyristor / per module	1 / 0,5	K/W
$R_{th(c-s)}$	per thyristor / per module	0,2 / 0,1	K/W
T_{vj}		- 40 ... + 125	°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 terminals	3 ± 15 %	Nm
a		5 * 9,81	m/s²
m	approx.	95	g
Case	SKKT	A 5	
	SKKH	A 6	

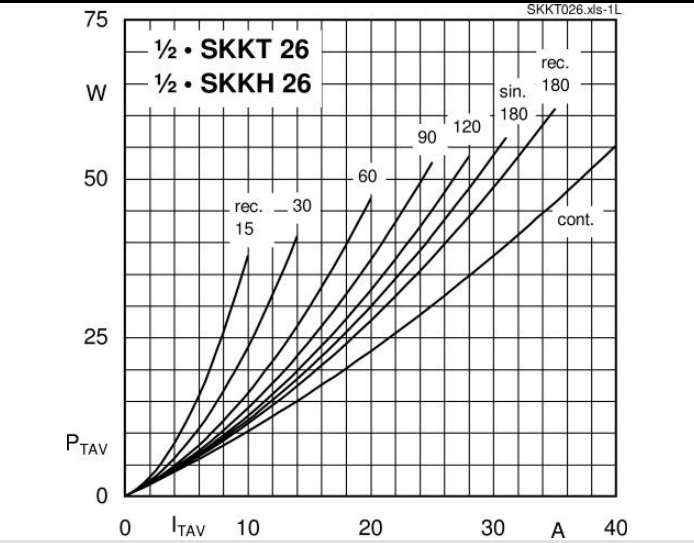


Fig. 1L Power dissipation per thyristor vs. on-state current

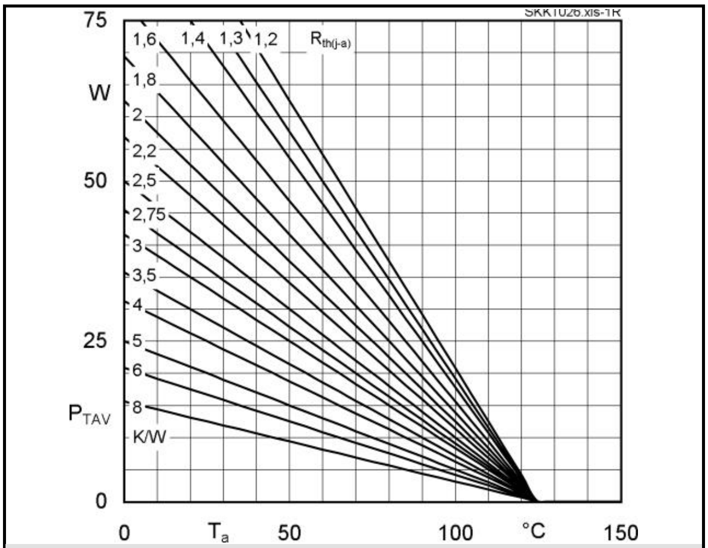


Fig. 1R Power dissipation per thyristor vs. ambient temp.

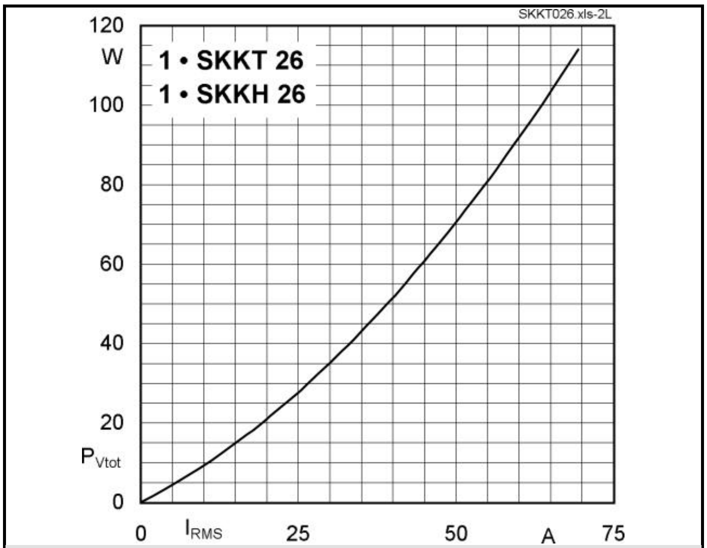


Fig. 2L Power dissipation per module vs. rms current

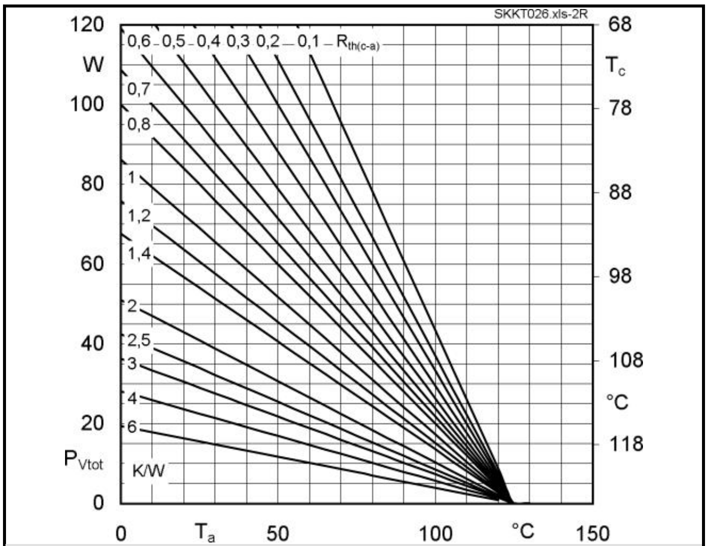


Fig. 2R Power dissipation per module vs. case temp.

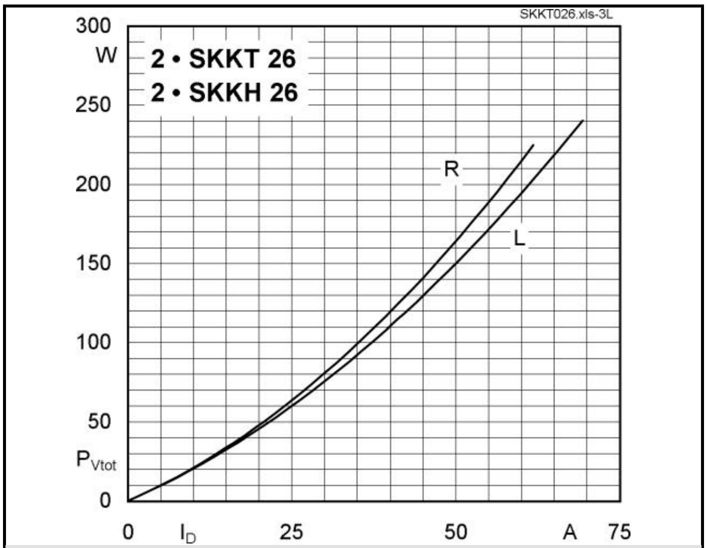


Fig. 3L Power dissipation of two modules vs. direct current

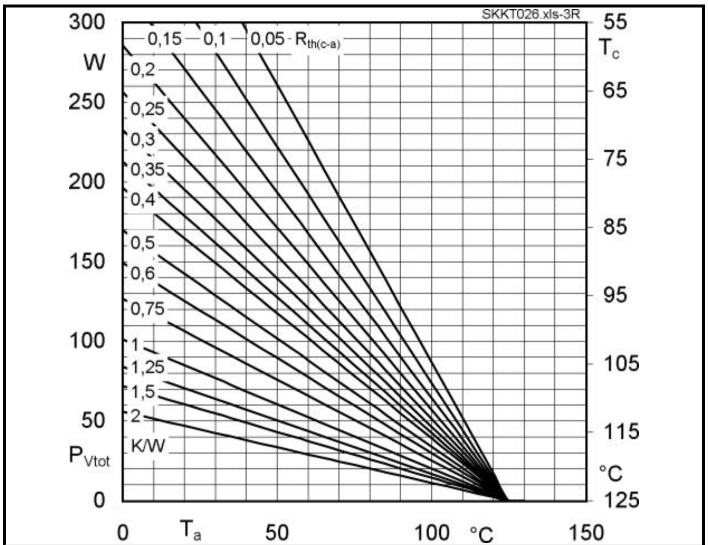


Fig. 3R Power dissipation of two modules vs. case temp.

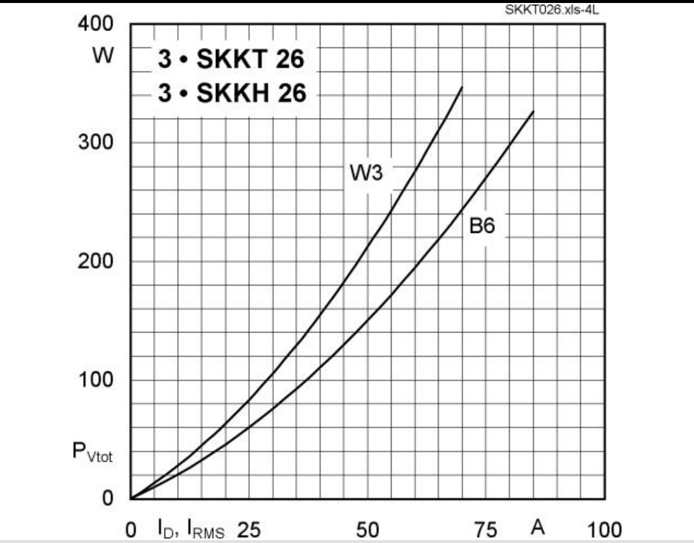


Fig. 4L Power dissipation of three modules vs. direct and rms current

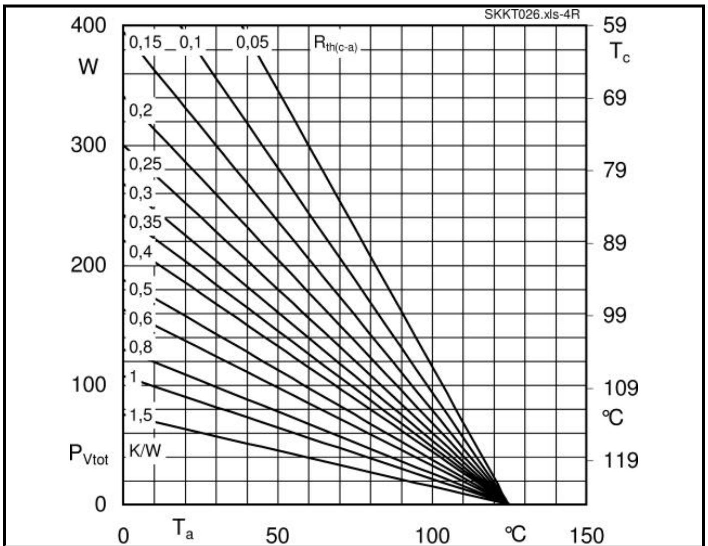


Fig. 4R Power dissipation of three modules vs. case temp.

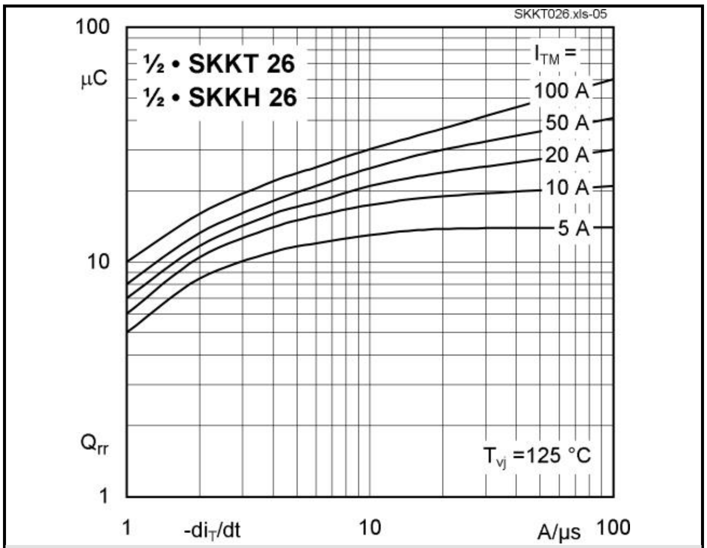


Fig. 5 Recovered charge vs. current decrease

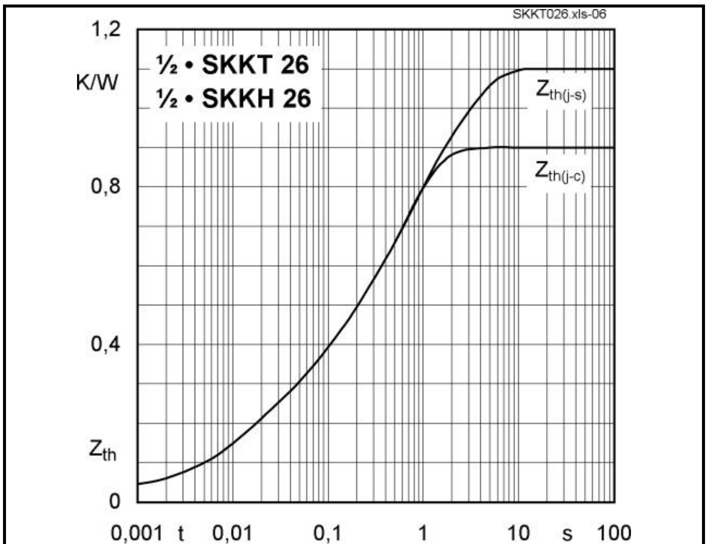


Fig. 6 Transient thermal impedance vs. time

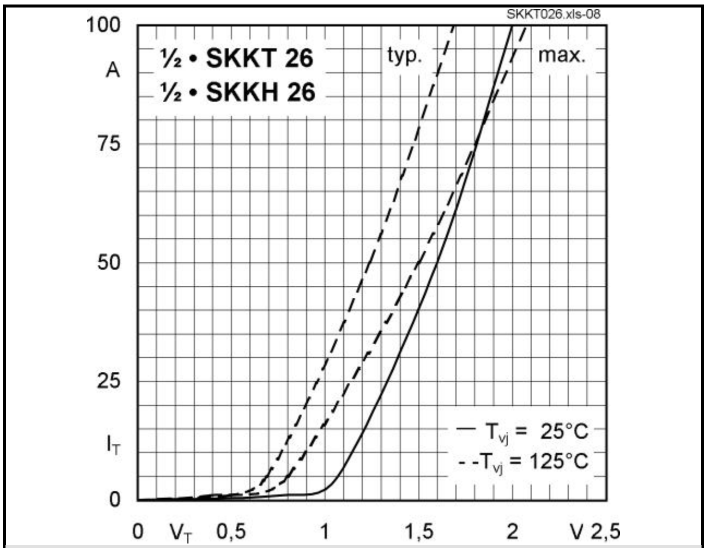


Fig. 7 On-state characteristics

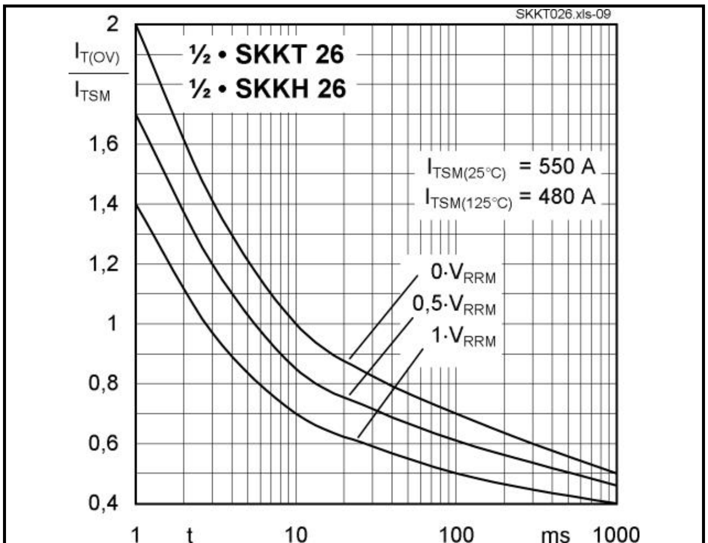


Fig. 8 Surge overload current vs. time

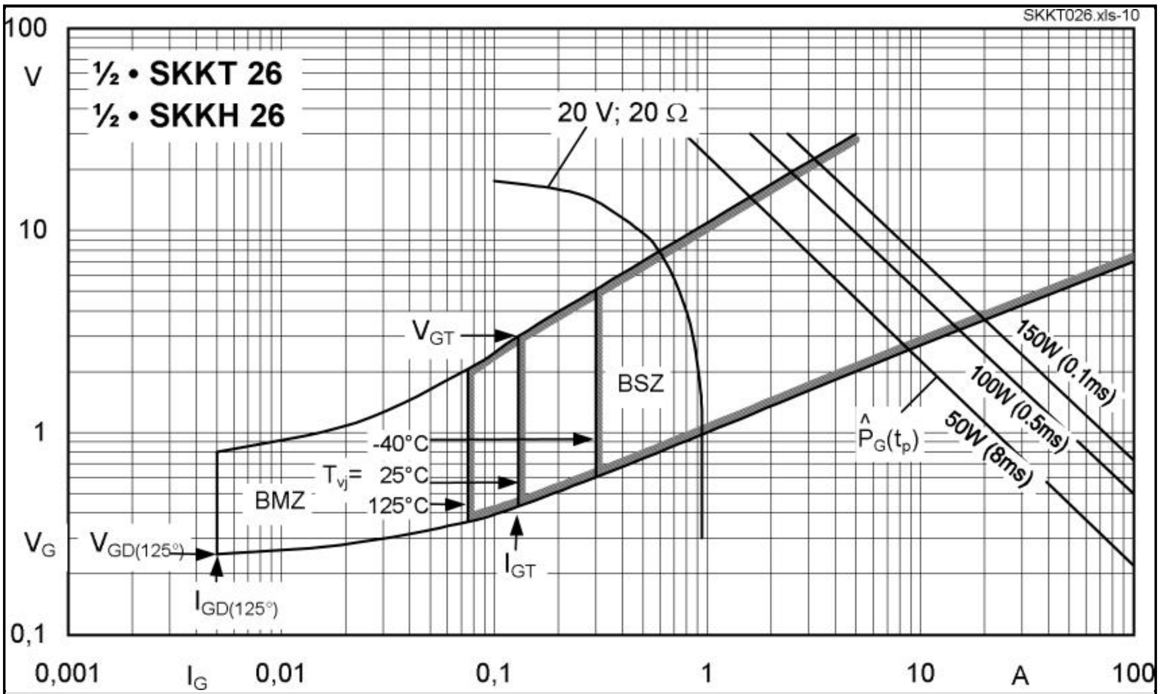
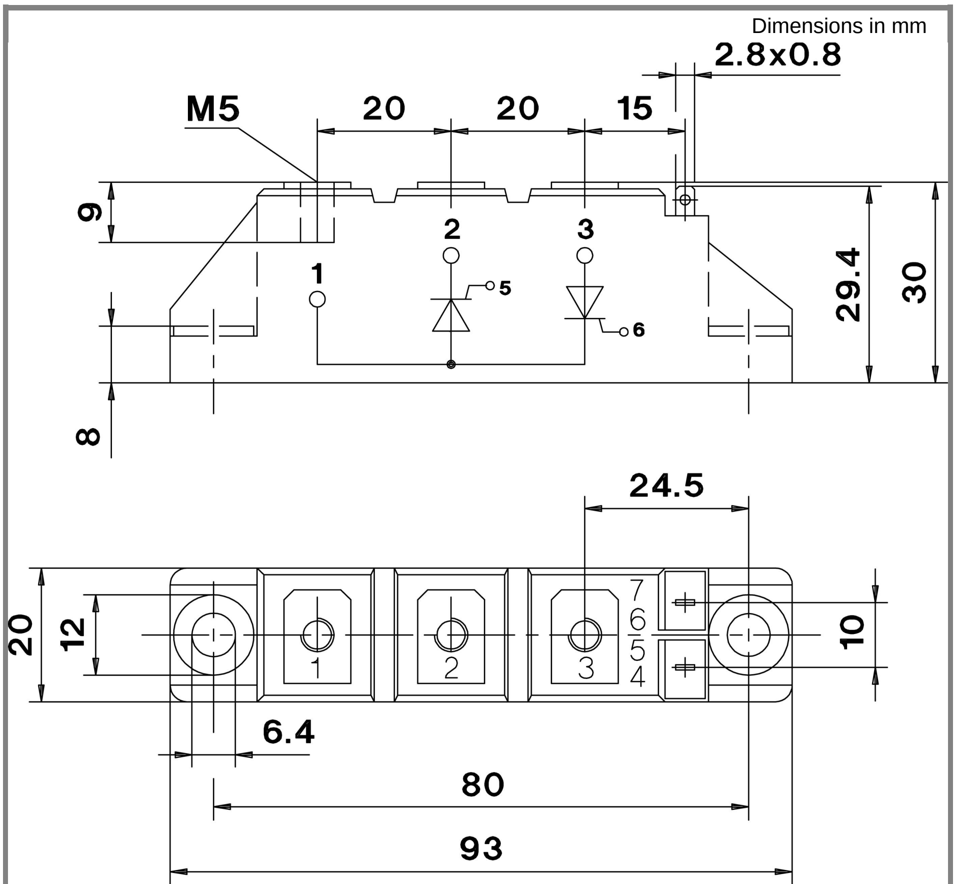
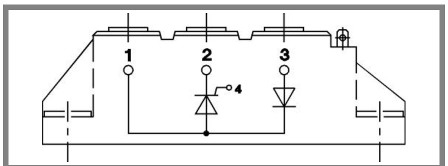


Fig. 9 Gate trigger characteristics



Case A 5 (SKKT)



Case A 6 SKKH

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