

SKKT 57, SKKH 57, SKKT 57B



SEMIPACK® 1

Thyristor / Diode Modules

SKKT 57

SKKH 57

SKKT 57B

Features

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

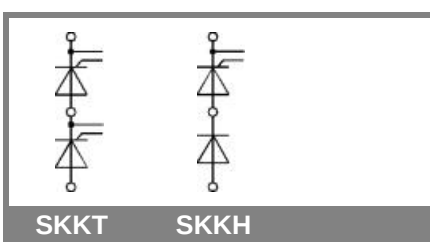
Typical Applications

- 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

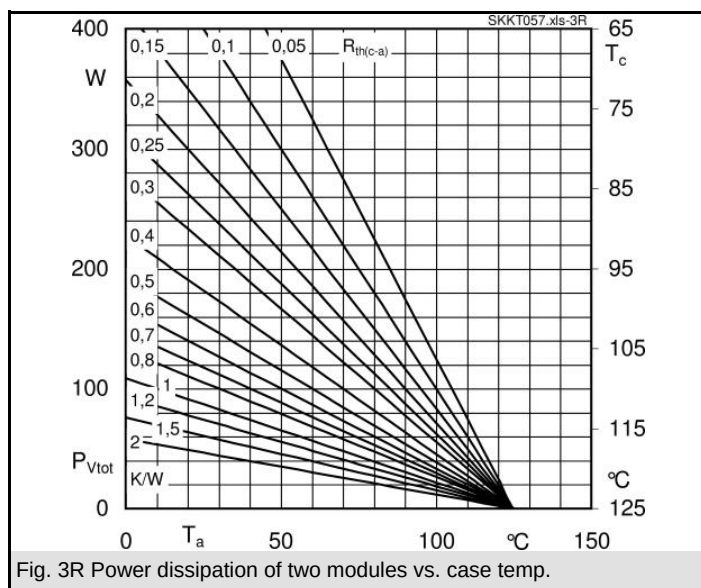
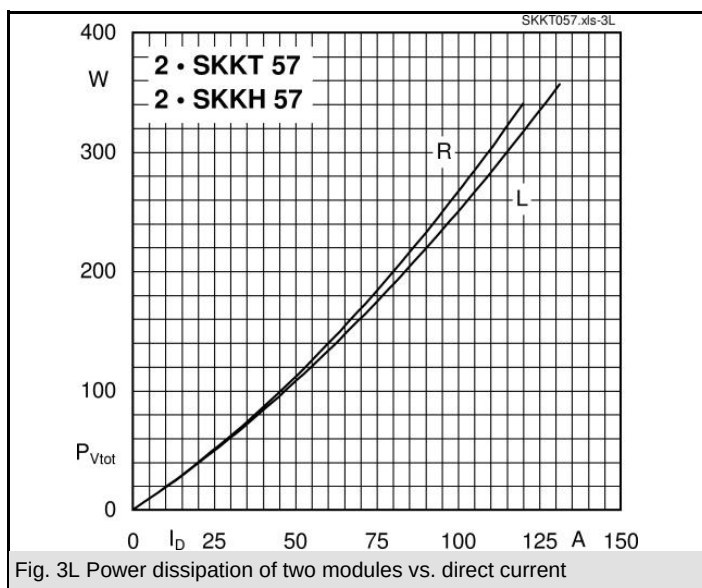
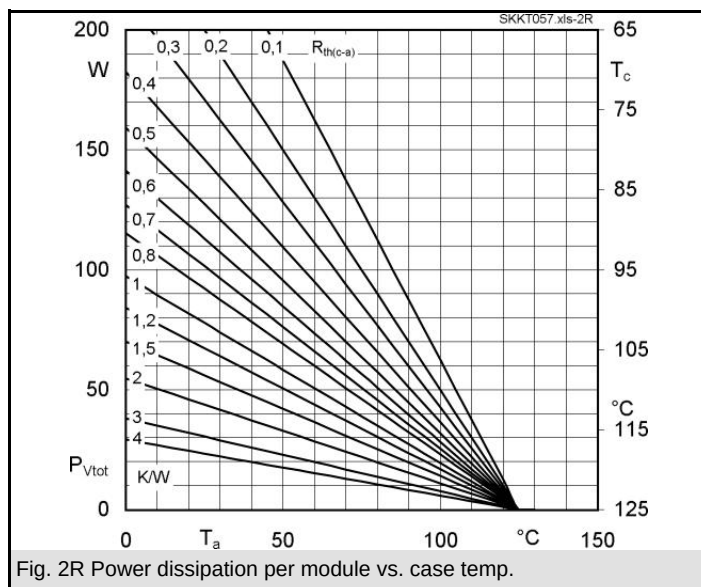
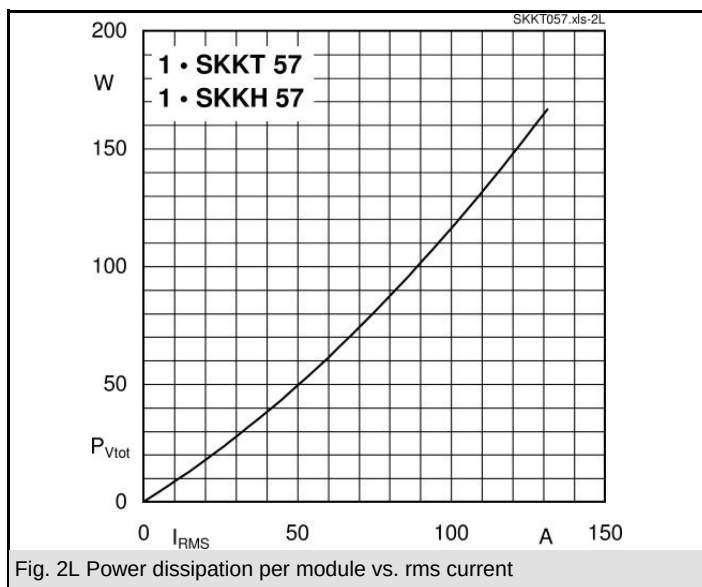
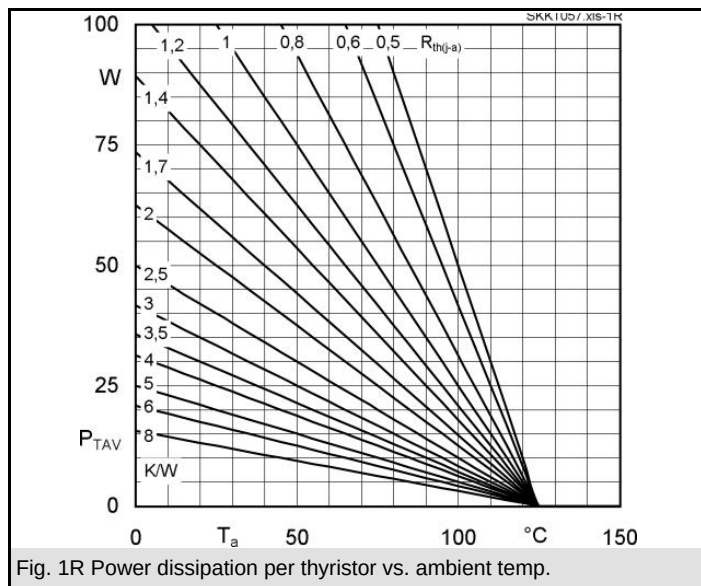
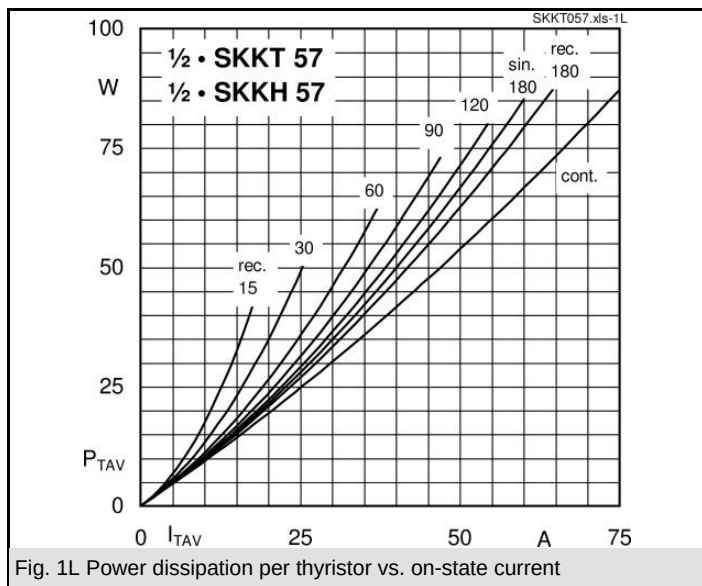
V_{RSM} V	V_{RRM}, V_{DRM} V	$I_{TRMS} = 95 \text{ A}$ (maximum value for continuous operation) $I_{TAV} = 55 \text{ A}$ (sin. 180; $T_c = 80^\circ \text{C}$)		
900	800	SKKT 57/08E	SKKT 57B08E	SKKH 57/08E
1300	1200	SKKT 57/12E	SKKT 57B12E	SKKH 57/12E
1500	1400	SKKT 57/14E	SKKT 57B14E	SKKH 57/14E
1700	1600	SKKT 57/16E	SKKT 57B16E	SKKH 57/16E
1900	1800	SKKT 57/18E	SKKT 57B18E	SKKH 57/18E
2100	2000	SKKT 57/20EH4		SKKH 57/20EH4
2300	2200	SKKT 57/22EH4		SKKH 57/22EH4

Symbol	Conditions	Values	Units
I_{TAV}	sin. 180; $T_c = 85 (100)^\circ \text{C}$;	50 (35)	A
I_D	P3/180; $T_a = 45^\circ \text{C}$; B2 / B6	57 / 68	A
	P3/180F; $T_a = 35^\circ \text{C}$; B2 / B6	100 / 130	A
I_{RMS}	P3/180F; $T_a = 35^\circ \text{C}$; W1 / W3	130 / 3 x 100	A
I_{TSM}	$T_{vj} = 25^\circ \text{C}$; 10 ms	1500	A
	$T_{vj} = 125^\circ \text{C}$; 10 ms	1250	A
i^2t	$T_{vj} = 25^\circ \text{C}$; 8,3 ... 10 ms	11000	A ² s
	$T_{vj} = 125^\circ \text{C}$; 8,3 ... 10 ms	8000	A ² s
V_T	$T_{vj} = 25^\circ \text{C}$; $I_T = 200 \text{ A}$	max. 1,65	V
$V_{T(TO)}$	$T_{vj} = 125^\circ \text{C}$	max. 0,9	V
r_T	$T_{vj} = 125^\circ \text{C}$	max. 3,5	mΩ
I_{DD}, I_{RD}	for SKK .../20E, SKK .../22E	30	mA
I_{DD}, I_{RD}	$T_{vj} = 25^\circ \text{C}$; $V_{RD} = V_{RRM}$; $V_{DD} = V_{DRM}$	max. 15	mA
t_{gd}	$T_{vj} = 25^\circ \text{C}$; $I_G = 1 \text{ A}$; $di_G/dt = 1 \text{ A}/\mu\text{s}$	1	μs
t_{gr}	$V_D = 0,67 \cdot V_{DRM}$	2	μs
$(di/dt)_{cr}$	$T_{vj} = 125^\circ \text{C}$	max. 150	A/μs
$(dv/dt)_{cr}$	$T_{vj} = 125^\circ \text{C}$	max. 1000	V/μs
t_q	$T_{vj} = 125^\circ \text{C}$	80	μs
I_H	$T_{vj} = 25^\circ \text{C}$; typ. / max.	150 / 250	mA
I_L	$T_{vj} = 25^\circ \text{C}$; $R_G = 33 \Omega$; typ. / max.	300 / 600	mA
V_{GT}	$T_{vj} = 25^\circ \text{C}$; d.c.	min. 3	V
I_{GT}	$T_{vj} = 25^\circ \text{C}$; d.c.	min. 150	mA
V_{GD}	$T_{vj} = 125^\circ \text{C}$; d.c.	max. 0,25	V
I_{GD}	$T_{vj} = 125^\circ \text{C}$; d.c.	max. 6	mA
$R_{th(j-c)}$	cont.; per thyristor / per module	0,57 / 0,29	K/W
$R_{th(j-c)}$	sin. 180; per thyristor / per module	0,6 / 0,3	K/W
$R_{th(j-c)}$	rec. 120; per thyristor / per module	0,64 / 0,32	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~
V_{isol}	a. c. 50 Hz; r.m.s.; 1 s / 1 min. for SKK...H4	4800 / 4000	V~
M_s	to heatsink	$5 \pm 15 \%$ ¹⁾	Nm
M_t	to terminals	$3 \pm 15 \%$	Nm
a		$5 \cdot 9,81$	m/s ²
m	approx.	95	g
Case	SKKT	A 46	
	SKKT ...B	A 48	
	SKKH	A 47	

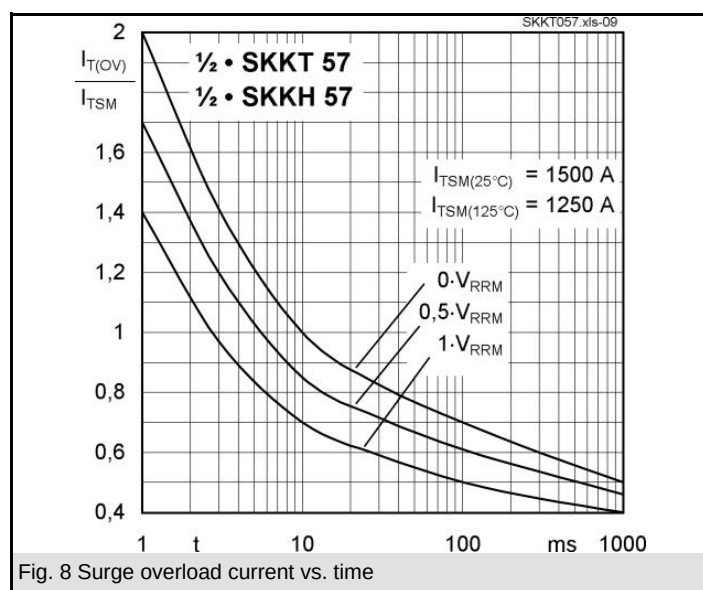
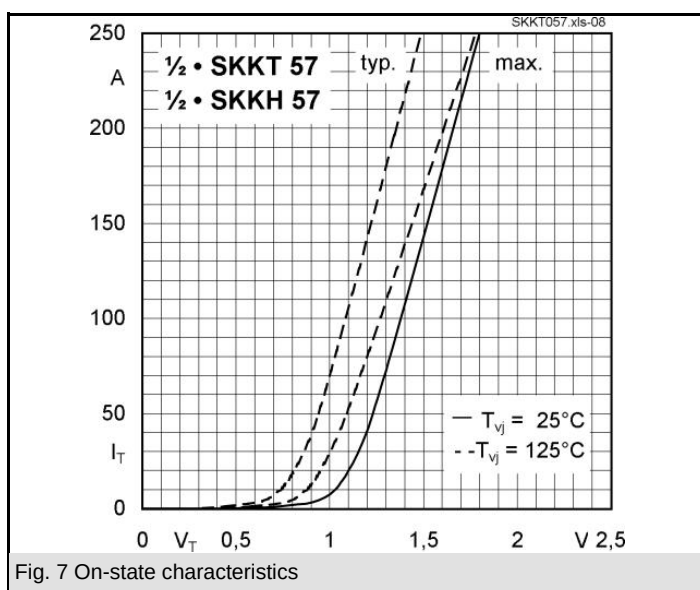
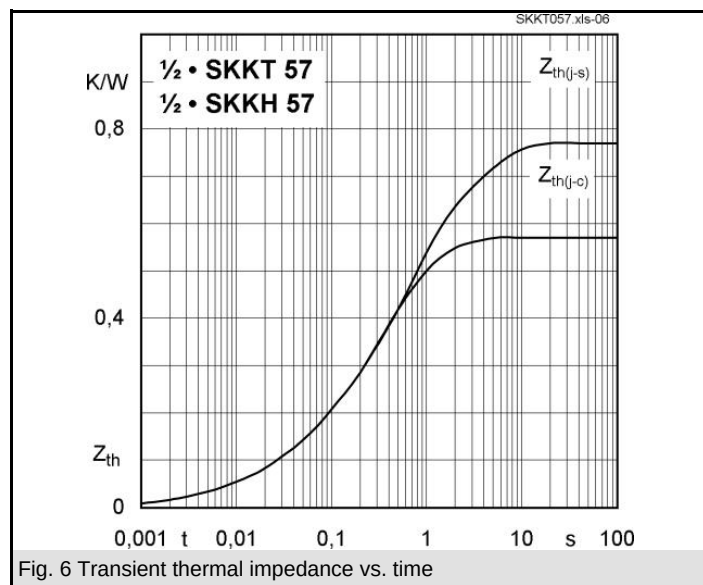
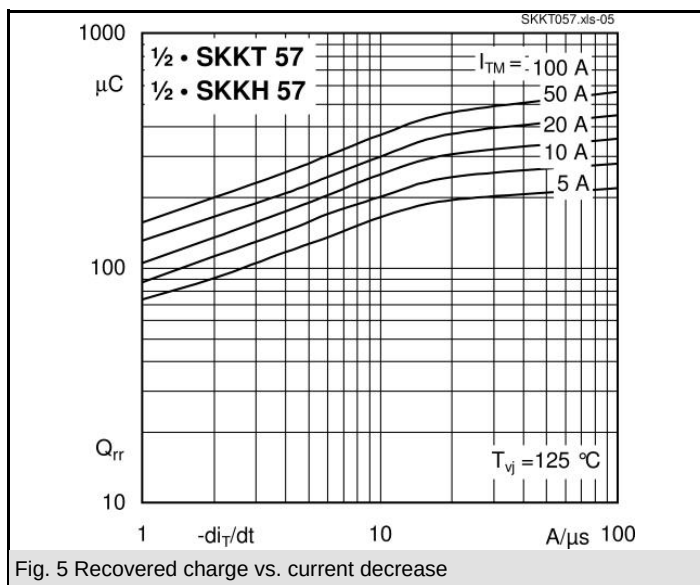
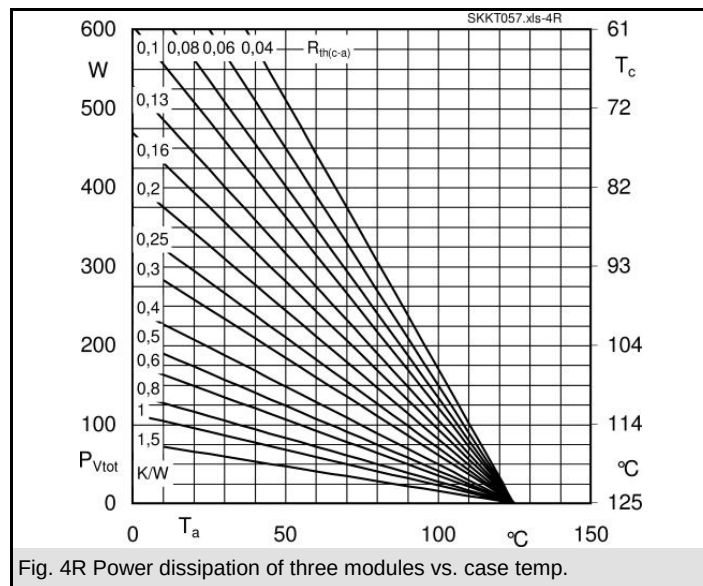
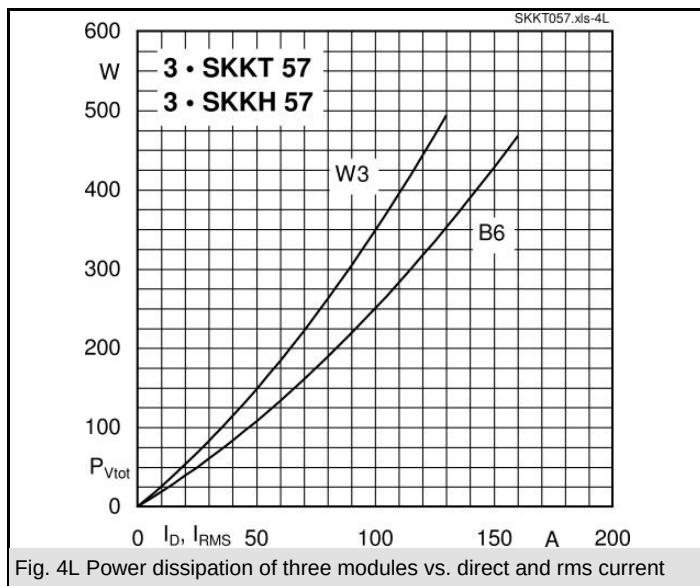


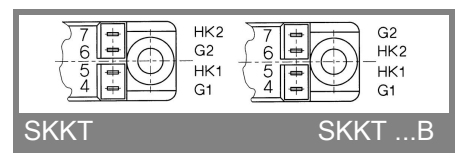
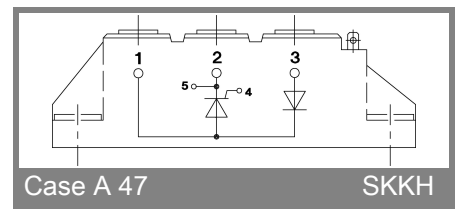
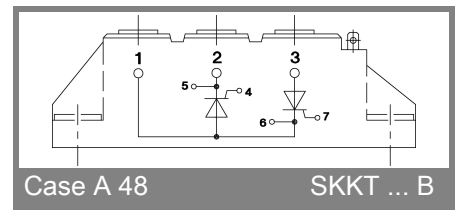
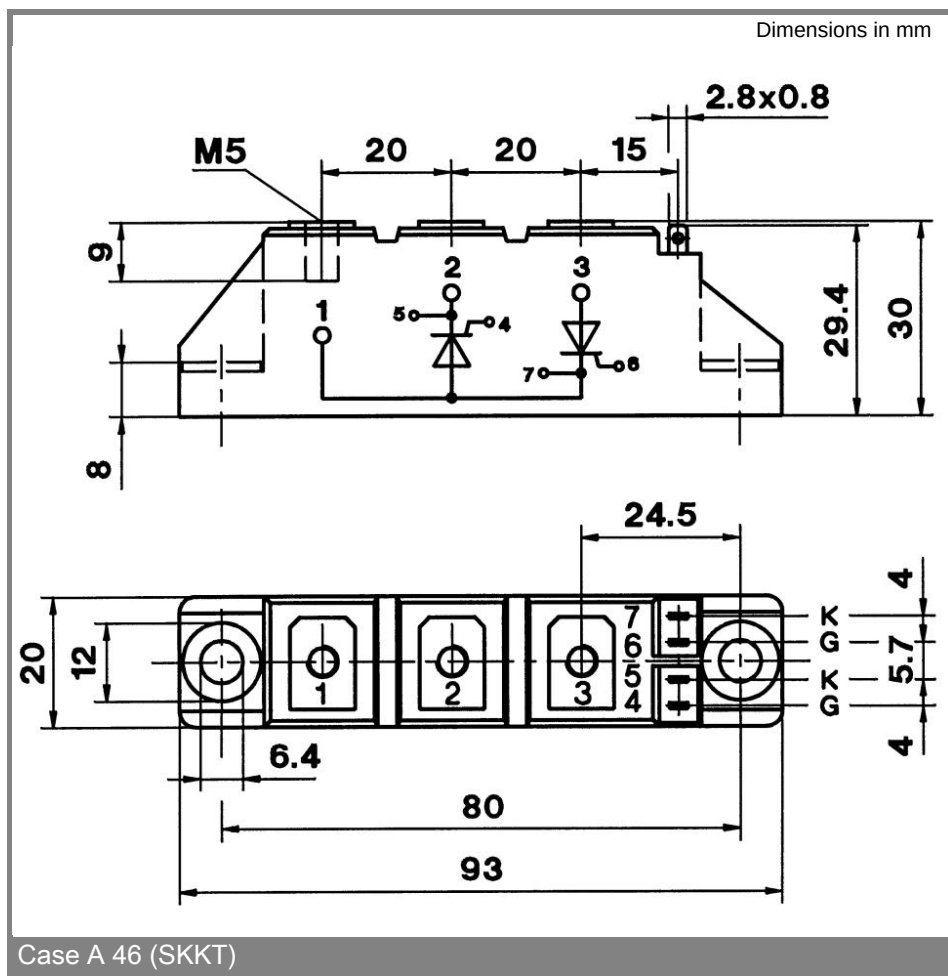
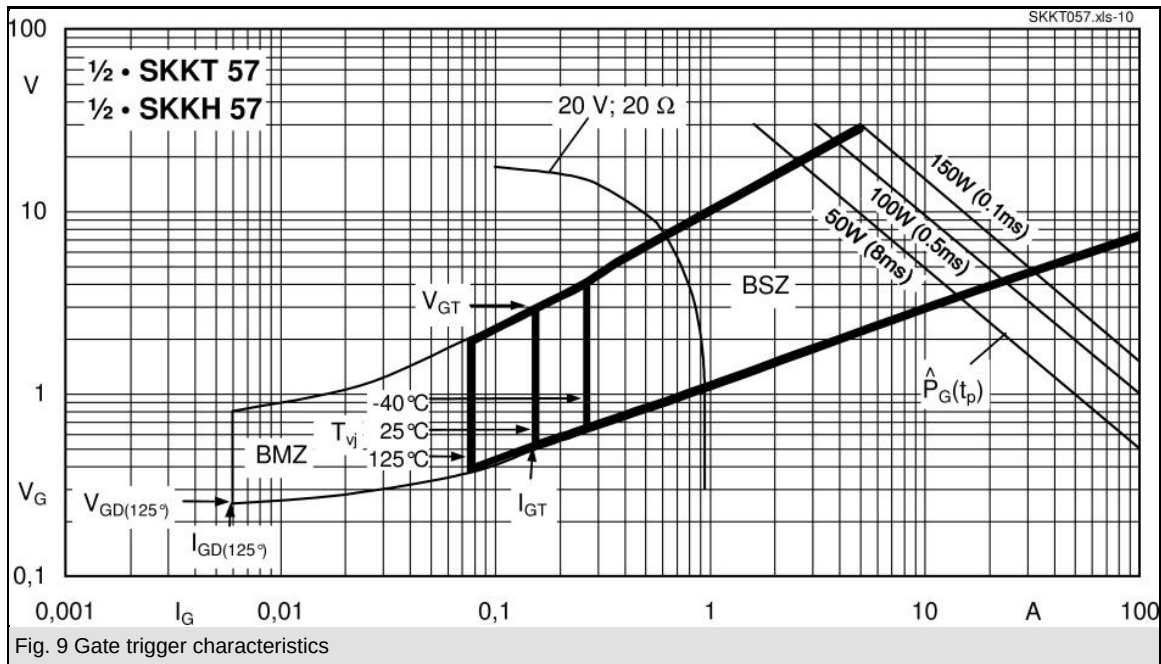
SKKT

SKKH



SKKT 57, SKKH 57, SKKT 57B





This technical information specifies semiconductor devices but promises no characteristics. No warranty or guarantee expressed or implied is made regarding delivery, performance or suitability.