

SKKT 15, SKKH 15



SEMIPACK[®] 0

Thyristor / Diode Modules

SKKT 15

SKKH 15

Features

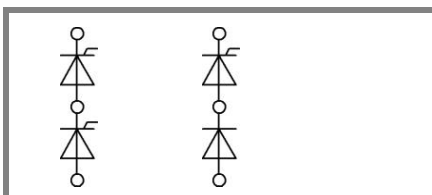
- Heat transfer through aluminium oxide ceramic isolated metal baseplate
- Hard soldered joints for high reliability
- UL recognized, file no. E 63 532

Typical Applications

- DC motor control (e. g. for machine tools)
 - Temperature control (e. g. for ovens, chemical processes)
 - Professional light dimming (studios, theaters)
- 1) Using tin plated connectors with flexible leads of 6 mm² for the main terminals
 - 2) Flexible leads of 6 mm² soldered to the main terminals
 - 3) See the assembly instructions

V_{RSM} V	V_{RRM}, V_{DRM} V	$I_{TRMS} = 24^{1)} A; 30^{2)} A$ (maximum value for continuous operation) $I_{TAV} = 15^{1)} A$ (sin. 180; $T_c = 75 ^\circ C$)	
500	400	SKKT 15/04E	SKKH 15/04E
700	600	SKKT 15/06E	SKKH 15/06E
900	800	SKKT 15/08E	SKKH 15/08E
1300	1200	SKKT 15/12E	SKKH 15/12E
1500	1400	SKKT 15/14E	SKKH 15/14E
1700	1600	SKKT 15/16E	SKKH 15/16E

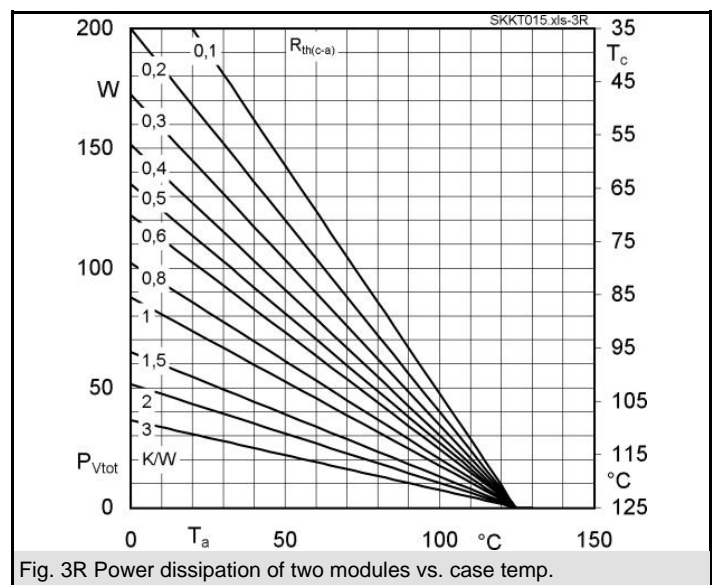
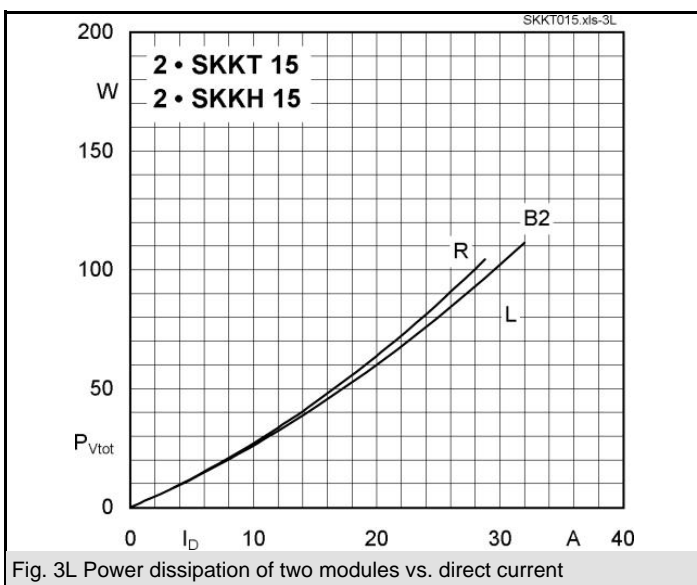
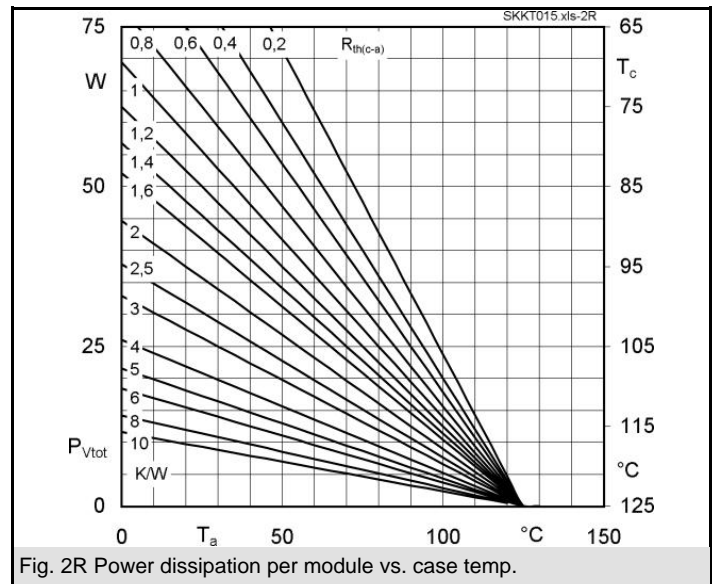
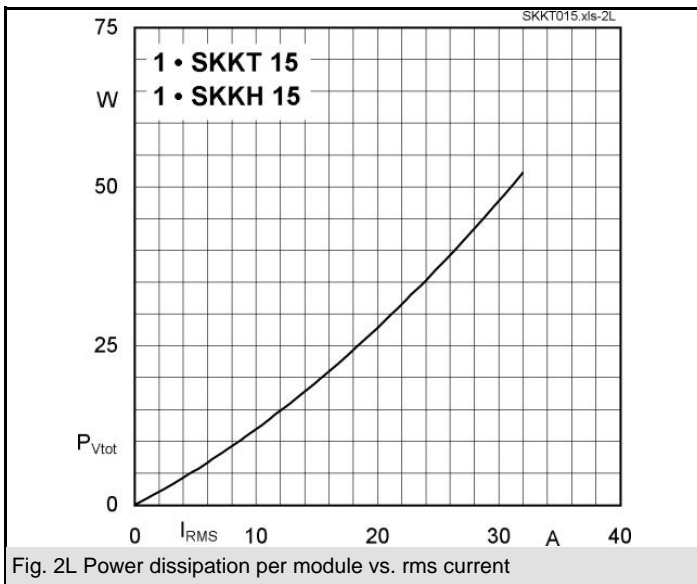
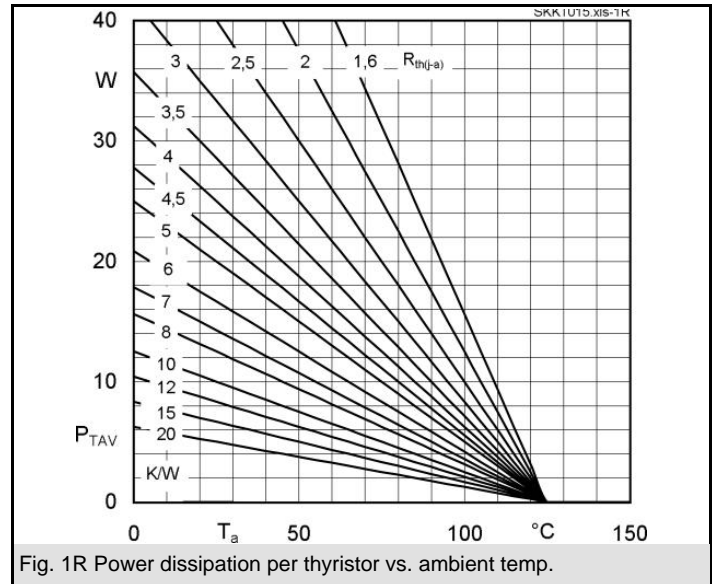
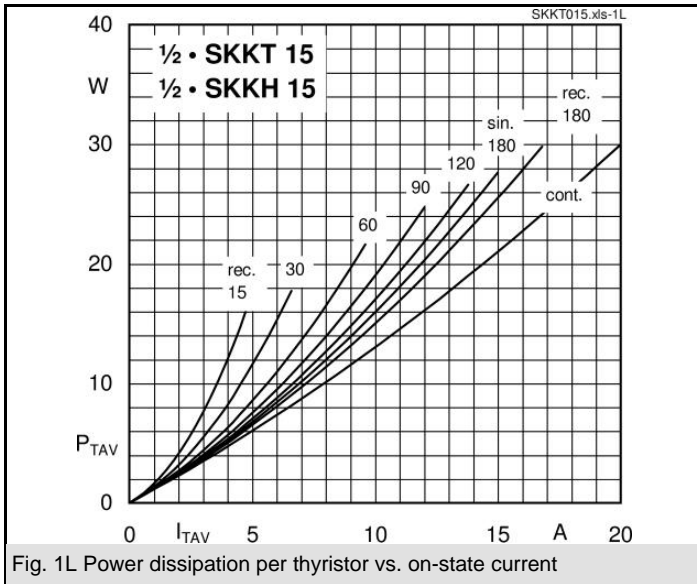
Symbol	Conditions	Values	Units
I_{TAV}	sin. 180; $T_c = 85 (100) ^\circ C$	13,5 (9,5)	A
I_D	P13A/100; $T_a = 45 ^\circ C$; B2 / B6	14 / 17	A
I_{RMS}	P13A/100; $T_a = 45 ^\circ C$; W1 / W3	21 / 3 x 12	A
I_{TSM}	$T_{vj} = 25 ^\circ C$; 10 ms	320	A
	$T_{vj} = 125 ^\circ C$; 10 ms	280	A
i^2t	$T_{vj} = 25 ^\circ C$; 8,3 ... 10 ms	510	A ² s
	$T_{vj} = 125 ^\circ C$; 8,3 ... 10 ms	390	A ² s
V_T	$T_{vj} = 25 ^\circ C$; $I_T = 75 A$	max. 2,45	V
$V_{T(TO)}$	$T_{vj} = 125 ^\circ C$	1,1	V
r_T	$T_{vj} = 125 ^\circ C$	20	m Ω
$I_{DD}; I_{RD}$	$T_{vj} = 125 ^\circ C$; $V_{RD} = V_{RRM}$; $V_{DD} = V_{DRM}$	max. 8	mA
t_{gd}	$T_{vj} = 25 ^\circ C$; $I_G = 1 A$; $di_G/dt = 1 A/\mu s$	1	μs
t_{gr}	$V_D = 0,67 * V_{DRM}$	1	μs
$(di/dt)_{cr}$	$T_{vj} = 125 ^\circ C$	max. 100	A/ μs
$(dv/dt)_{cr}$	$T_{vj} = 125 ^\circ C$	max. 1000	V/ μs
t_q	$T_{vj} = 125 ^\circ C$	80	μs
I_H	$T_{vj} = 25 ^\circ C$; typ. / max.	80 / 150	mA
I_L	$T_{vj} = 25 ^\circ C$; $R_G = 33 \Omega$; typ. / max.	150 / 300	mA
V_{GT}	$T_{vj} = 25 ^\circ C$; d.c.	min. 3	V
I_{GT}	$T_{vj} = 25 ^\circ C$; d.c.	min. 100	mA
V_{GD}	$T_{vj} = 125 ^\circ C$; d.c.	max. 0,25	V
I_{GD}	$T_{vj} = 125 ^\circ C$; d.c.	max. 5	mA
$R_{th(j-c)}$	cont.; per thyristor / per module	1,6 / 0,8	K/W
$R_{th(j-c)}$	sin. 180; per thyristor / per module	1,7 / 0,9	K/W
$R_{th(j-c)}$	rec. 120; per thyristor / per module	1,8 / 0,9	K/W
$R_{th(c-s)}$	per thyristor / module	0,2 / 0,1	K/W
T_{vj}		- 40 ... + 125	$^\circ C$
T_{stg}		- 40 ... + 125	$^\circ C$
V_{isol}	a. c. 50 Hz; r.m.s.; 1 s / 1 min.	3600 / 3000	V~
M_s	to heatsink	$1,5 \pm 15 \%^{3)}$	Nm
a		$5 * 9,81$	m/s ²
m	approx.	50	g
Case	SKKT	A 1	
	SKKH	A 2	



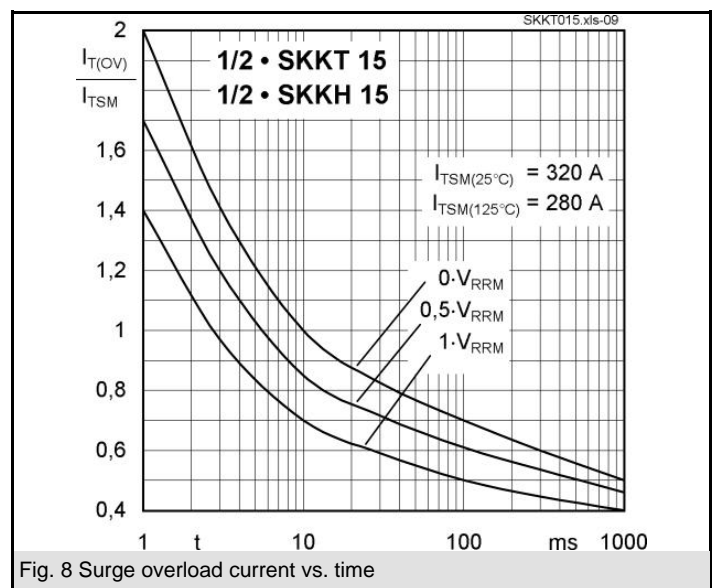
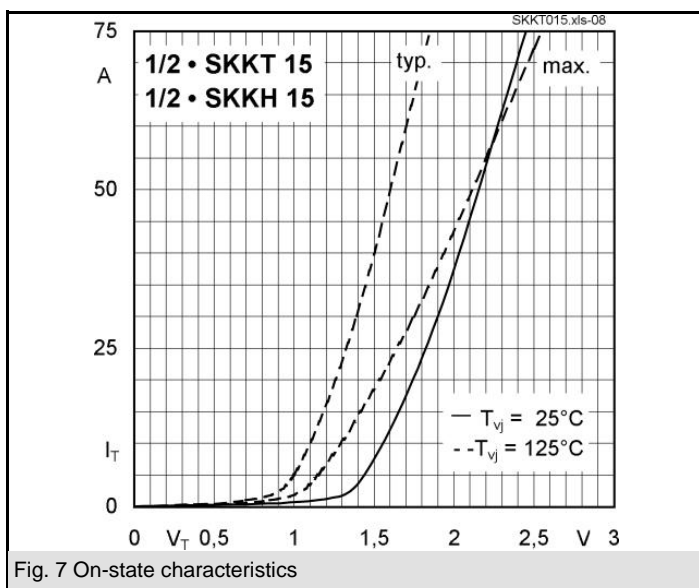
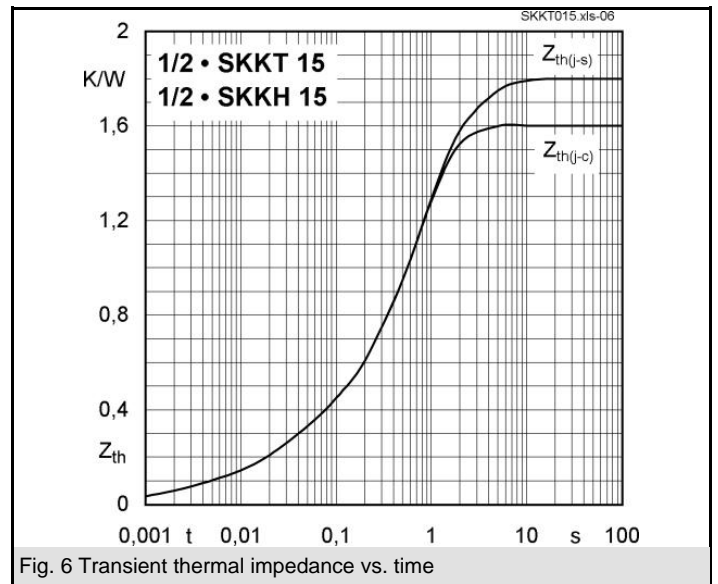
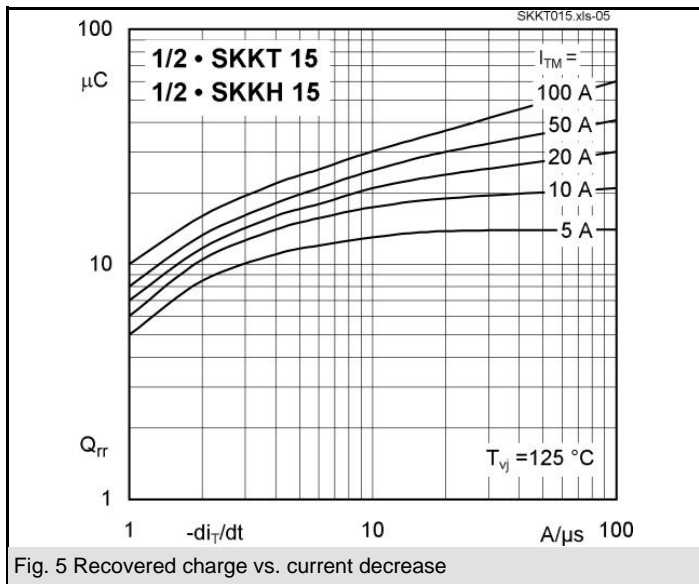
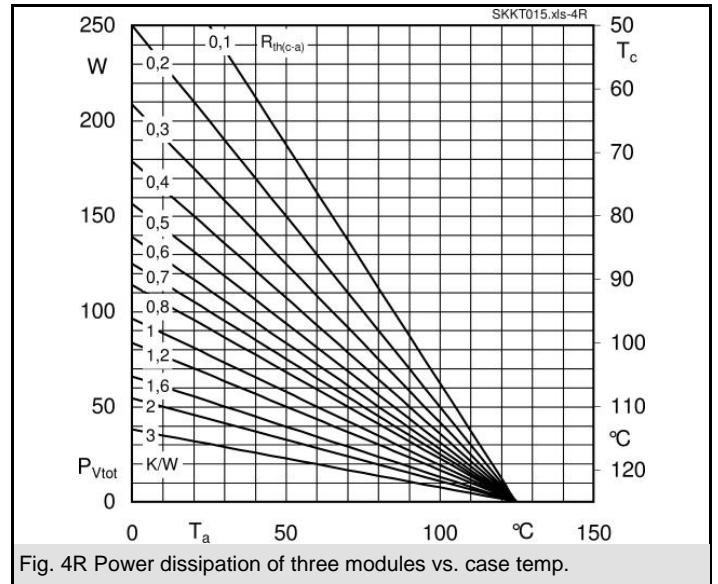
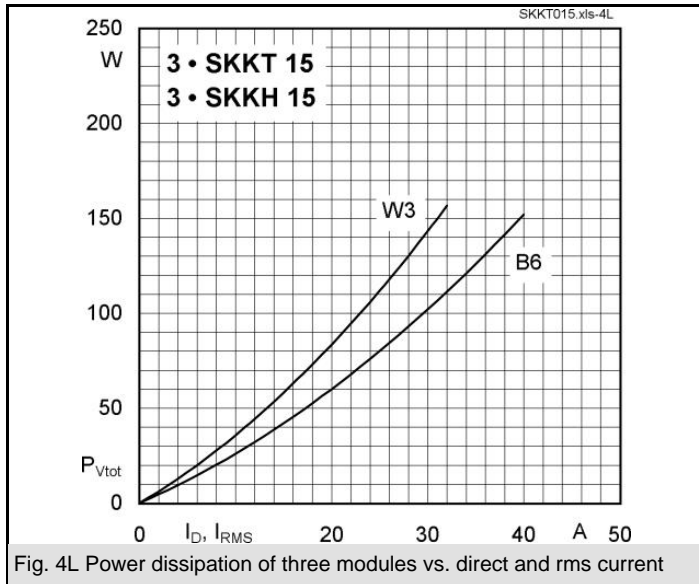
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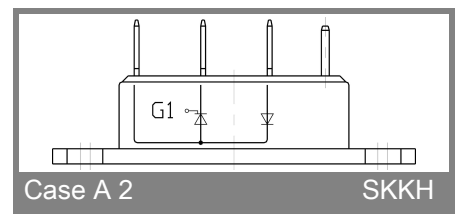
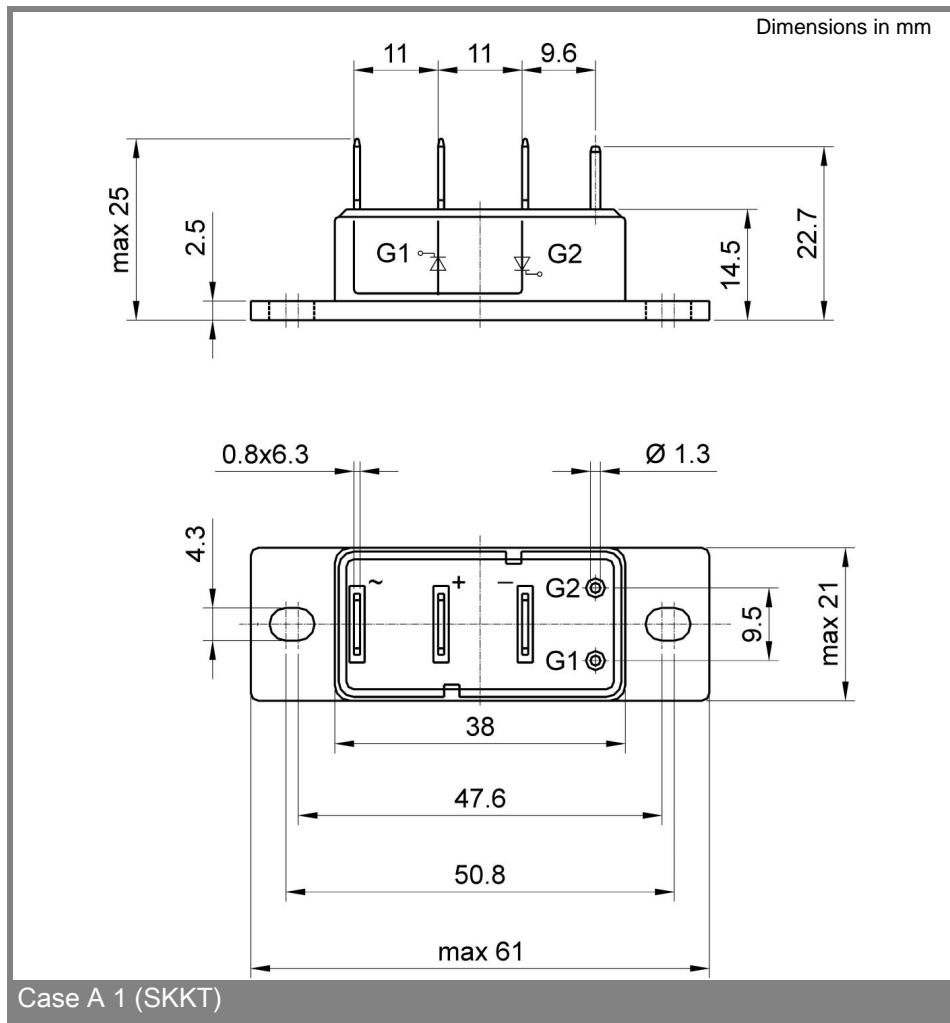
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