

# SKKT 15, SKKH 15



**SEMIPACK<sup>®</sup> 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

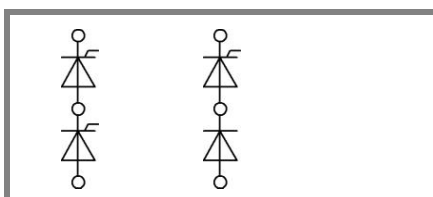
### Typical Applications

- 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 mm<sup>2</sup> for the main terminals
- 2) Flexible leads of 6 mm<sup>2</sup> 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; $T_c = 75^\circ C$ )	
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

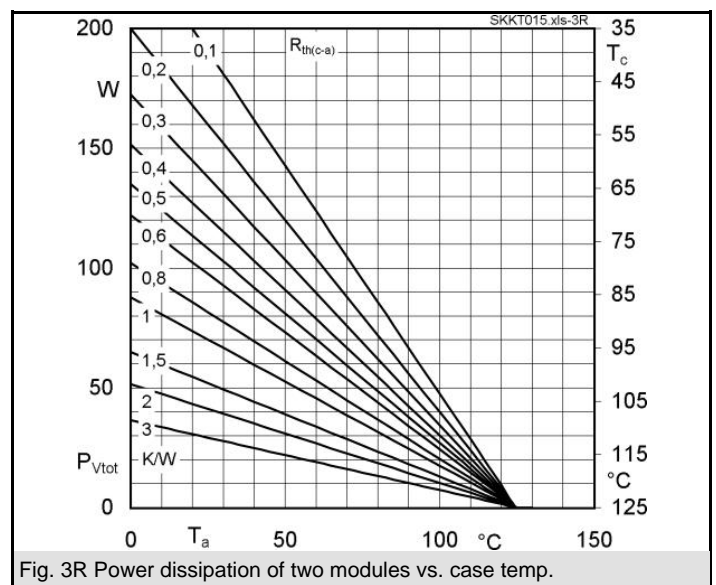
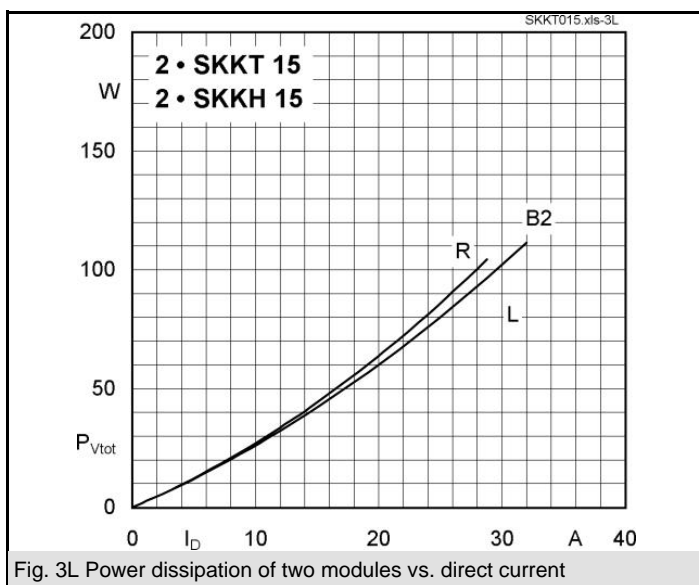
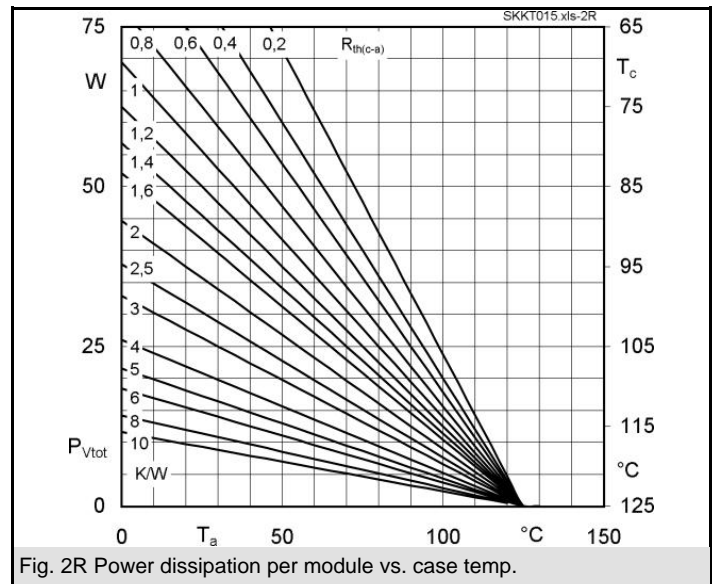
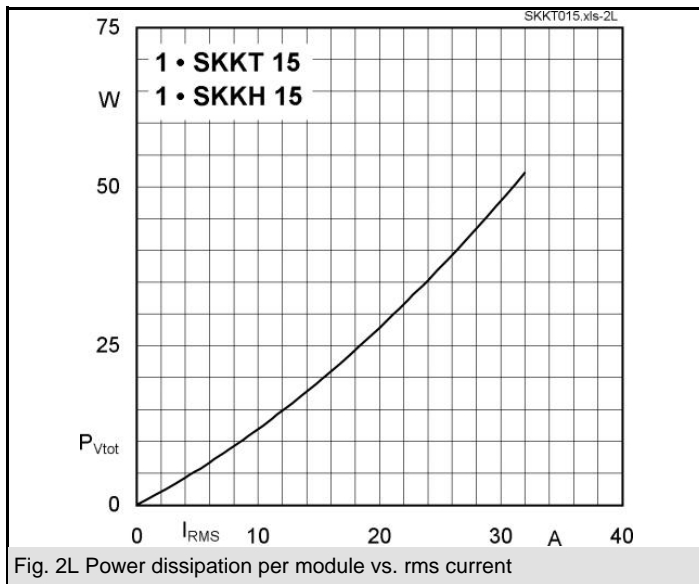
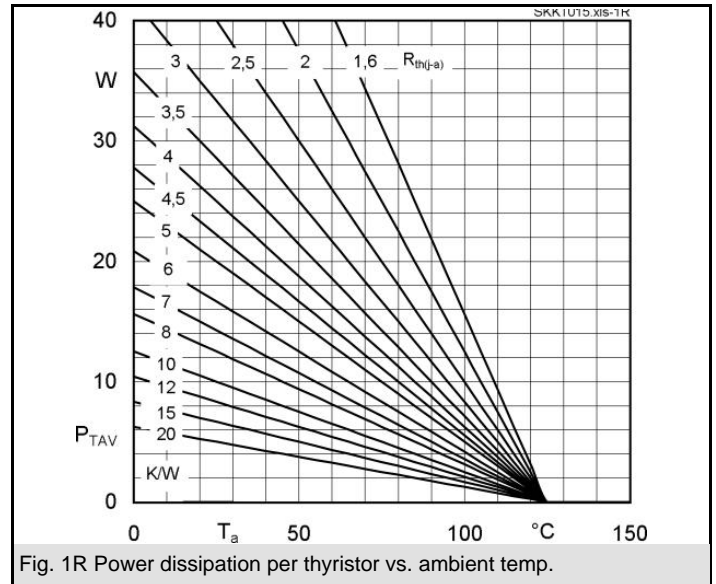
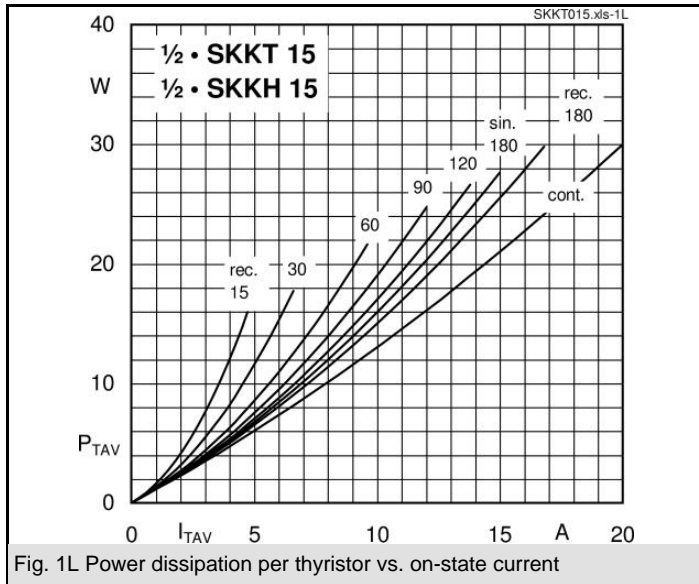
Symbol	Conditions	Values	Units
$I_{TAV}$	sin. 180; $T_c = 85$ (100) °C	13,5 (9,5)	A
$I_D$	P13A/100; $T_a = 45^\circ C$ ; B2 / B6	14 / 17	A
$I_{RMS}$	P13A/100; $T_a = 45^\circ C$ ; W1 / W3	21 / 3 x 12	A
$I_{TSM}$	$T_{vj} = 25^\circ C$ ; 10 ms	320	A
	$T_{vj} = 125^\circ C$ ; 10 ms	280	A
$i^2t$	$T_{vj} = 25^\circ C$ ; 8,3 ... 10 ms	510	A <sup>2</sup> s
	$T_{vj} = 125^\circ C$ ; 8,3 ... 10 ms	390	A <sup>2</sup> 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	mΩ
$I_{DD}, I_{RD}$	$T_{vj} = 125^\circ C$ ; $V_{RD} = V_{RRM}$ ; $V_{DD} = V_{DRM}$	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
	sin. 180; per thyristor / per module	1,7 / 0,9	K/W
	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	°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	$1,5 \pm 15\%$ <sup>3)</sup>	Nm
$a$		$5 * 9,81$	m/s <sup>2</sup>
$m$	approx.	50	g
Case	SKKT	A 1	
	SKKH	A 2	



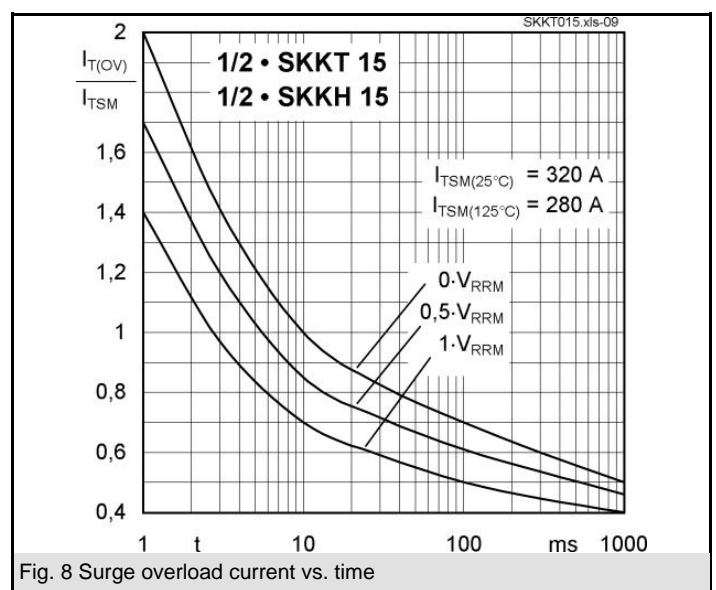
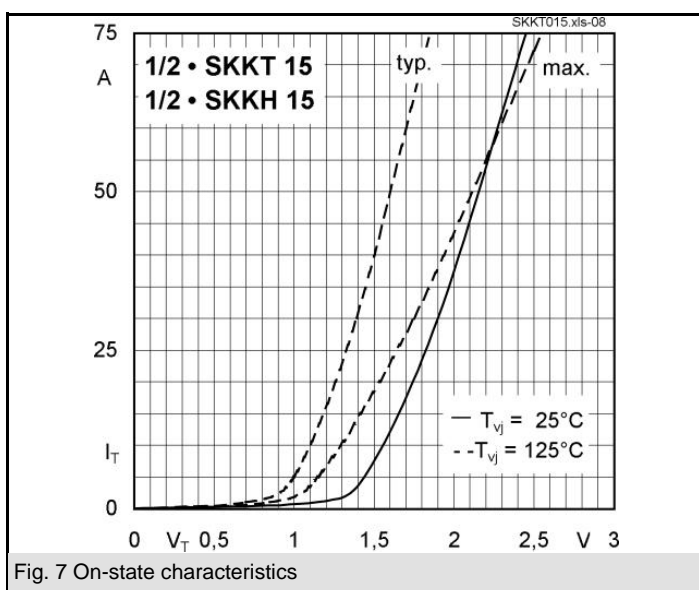
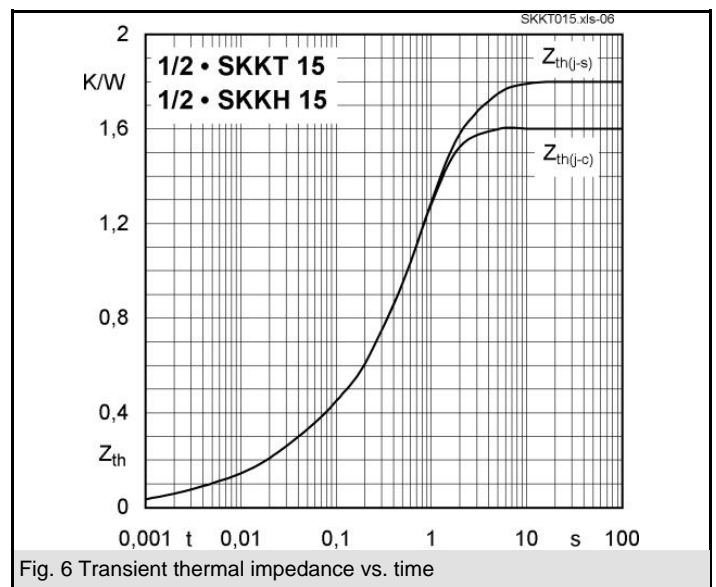
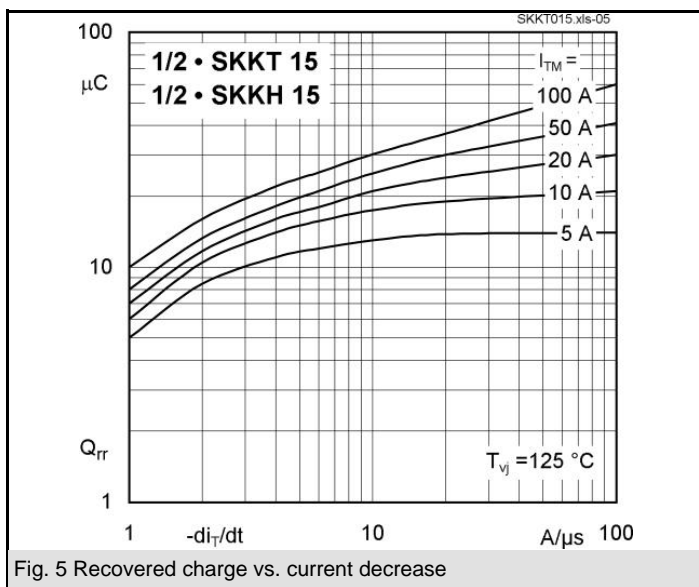
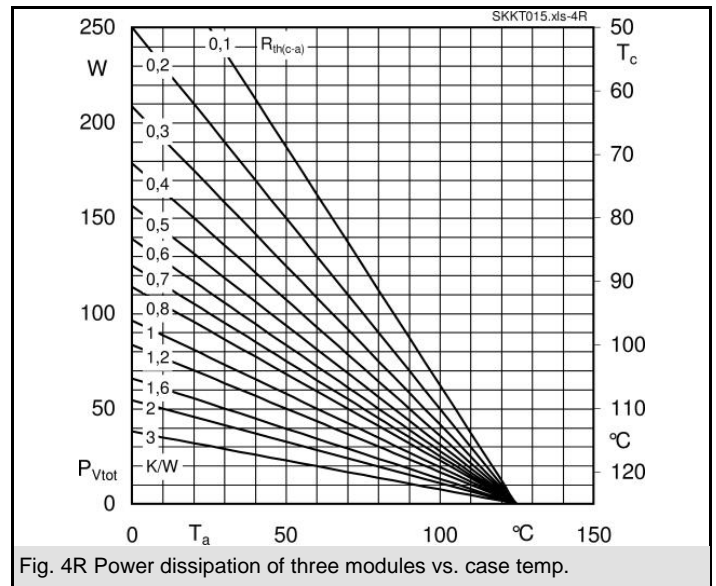
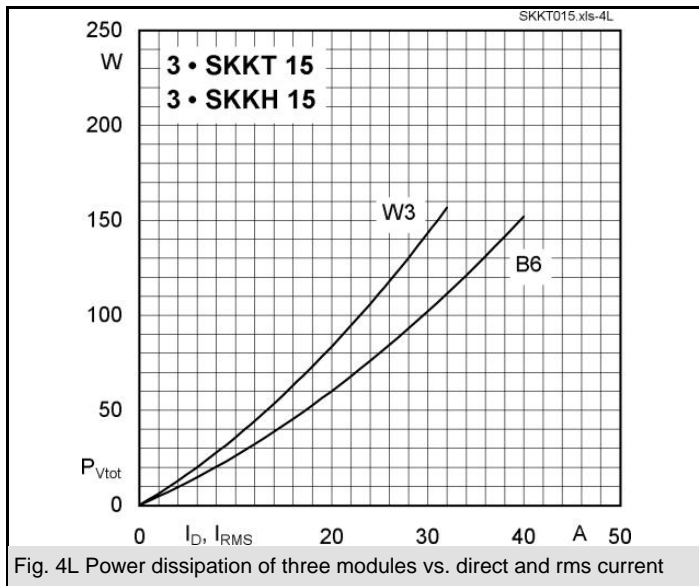
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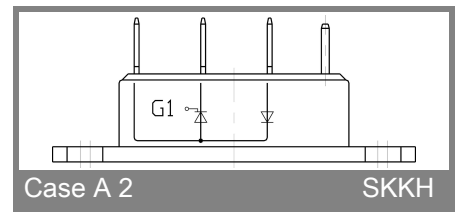
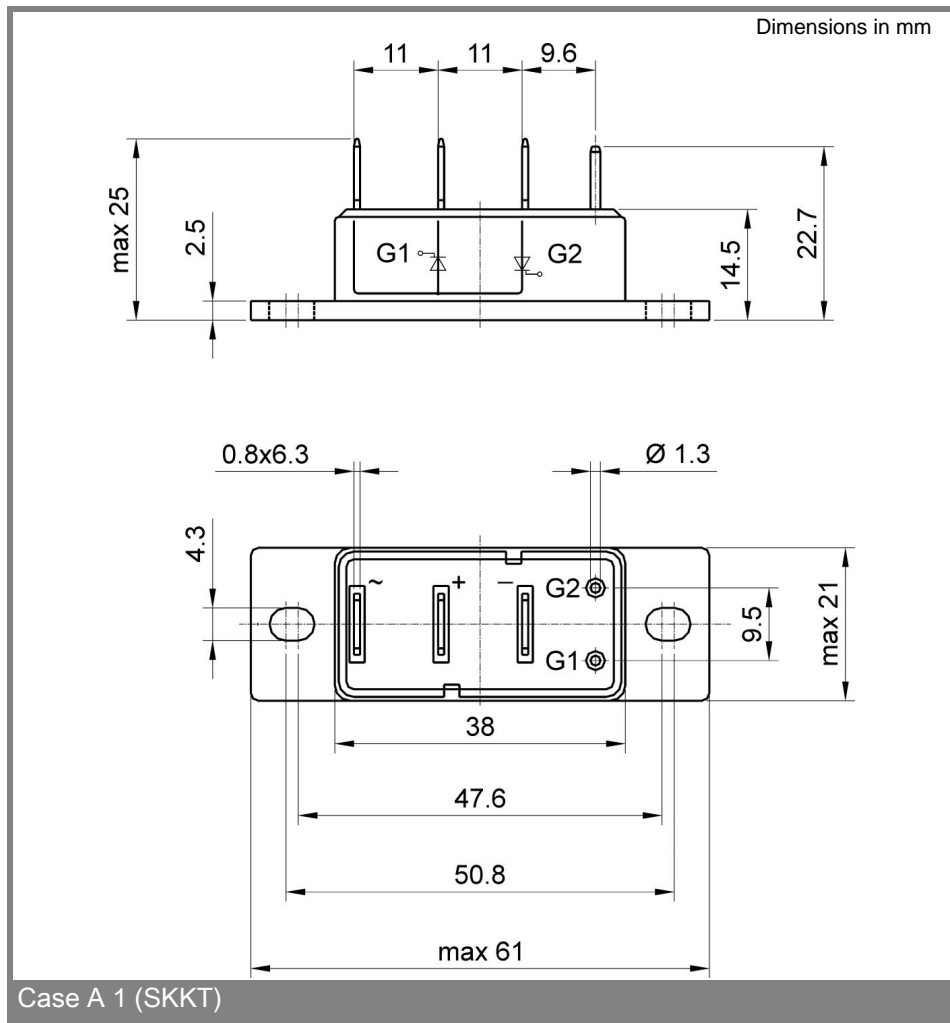
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