



**SEMITOP<sup>®</sup>3**

## Antiparallel Thyristor Module

### SK100WT

Preliminary Data

### Features

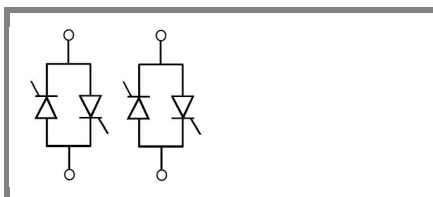
- Compact Design
- One screw mounting
- Heat transfer and isolation through direct copper bonded aluminium oxide ceramic (DCB)
- Glass passivated thyristor chips
- Up to 1600V reverse voltage
- UL recognized, file no. E 63 532

### Typical Applications\*

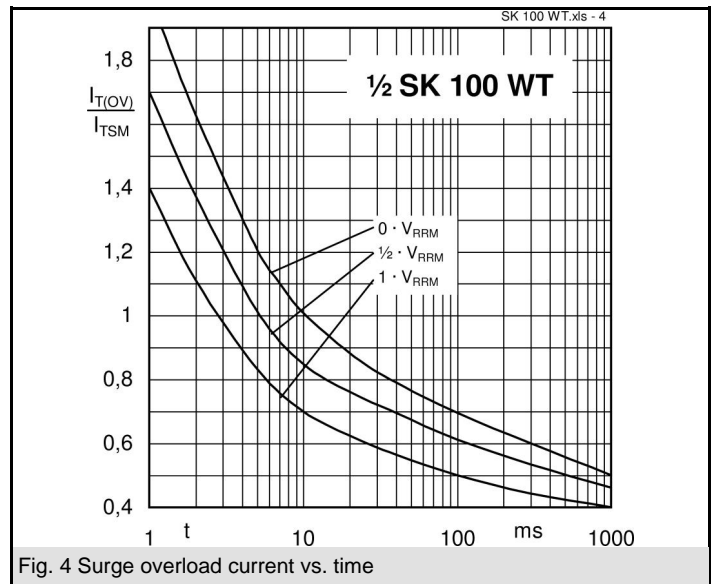
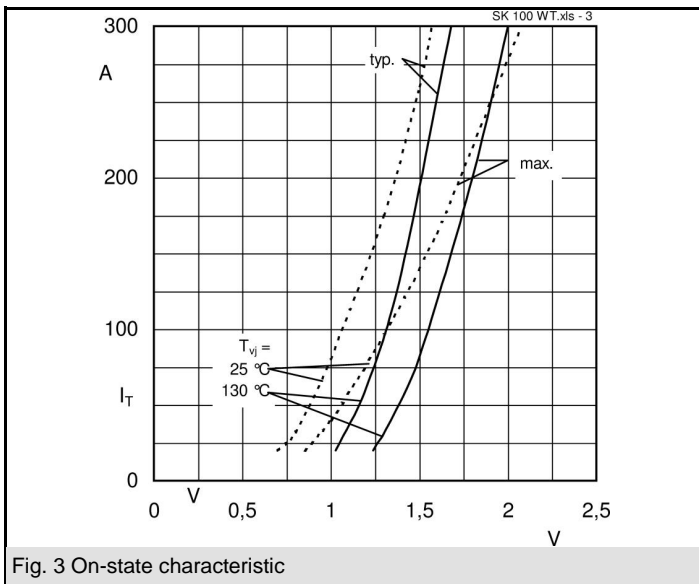
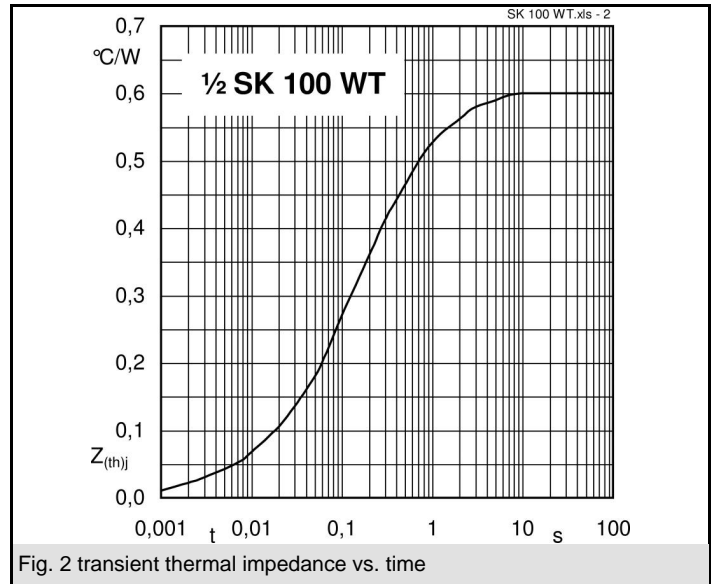
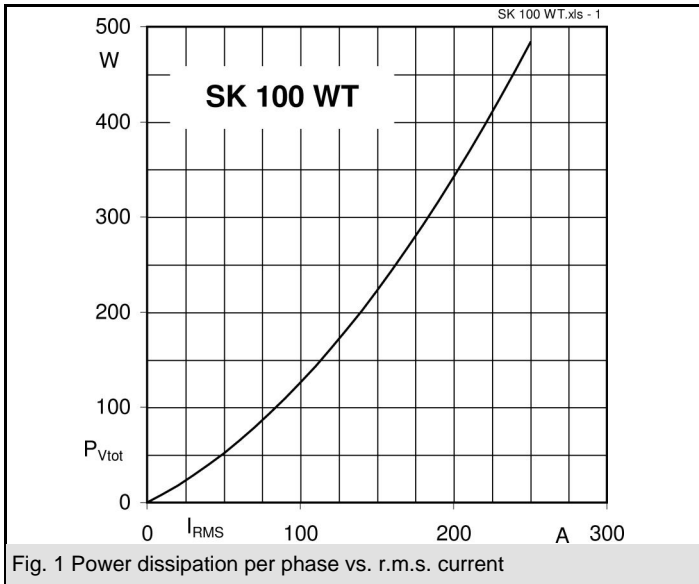
- Soft starters
- Light control (studios, theaters...)
- Temperature control

$V_{RSM}$ V	$V_{RRM}, V_{DRM}$ V	$I_{RMS} = 101 \text{ A (full conduction)}$ ( $T_s = 85^\circ \text{C}$ )
900	800	SK 100 WT 08
1300	1200	SK 100 WT 12
1700	1600	SK 100 WT 16

Symbol	Conditions	Values	Units
$I_{RMS}$	W1C ; sin. $180^\circ$ ; $T_s = 100^\circ \text{C}$	71	A
	W1C ; sin. $180^\circ$ ; $T_s = 85^\circ \text{C}$	101	A
$I_{TSM}$	$T_{vj} = 25^\circ \text{C}$ ; 10 ms	1500	A
	$T_{vj} = 125^\circ \text{C}$ ; 10 ms	1350	A
$i^2t$	$T_{vj} = 25^\circ \text{C}$ ; 8,3 ... 10 ms	11250	A <sup>2</sup> s
	$T_{vj} = 125^\circ \text{C}$ ; 8,3 ... 10 ms	9100	A <sup>2</sup> s
$V_T$	$T_{vj} = 25^\circ \text{C}$ , $I_T = 200 \text{ A}$	max. 1,8	V
$V_{T(TO)}$	$T_{vj} = 125^\circ \text{C}$	max. 0,9	V
$r_T$	$T_{vj} = 125^\circ \text{C}$	max. 4,5	m $\Omega$
$I_{DD}, I_{RD}$	$T_{vj} = 25^\circ \text{C}$ , $V_{RD} = V_{RRM}$	max. 1	mA
	$T_{vj} = 125^\circ \text{C}$ , $V_{RD} = V_{RRM}$	max. 20	mA
$t_{gd}$	$T_{vj} = 25^\circ \text{C}$ , $I_G = 1 \text{ A}$ ; $di_G/dt = 1 \text{ A}/\mu\text{s}$	1	$\mu\text{s}$
$t_{gr}$	$V_D = 0,67 * V_{DRM}$	2	$\mu\text{s}$
$(dv/dt)_{cr}$	$T_{vj} = 125^\circ \text{C}$	1000	V/ $\mu\text{s}$
$(di/dt)_{cr}$	$T_{vj} = 125^\circ \text{C}$ ; $f = 50 \dots 60 \text{ Hz}$	50	A/ $\mu\text{s}$
$t_q$	$T_{vj} = 125^\circ \text{C}$ ; typ.	80	$\mu\text{s}$
$I_H$	$T_{vj} = 25^\circ \text{C}$ ; typ. / max.	100 / 200	mA
$I_L$	$T_{vj} = 25^\circ \text{C}$ ; $R_G = 33 \Omega$ ; typ. / max.	200 / 500	mA
$V_{GT}$	$T_{vj} = 25^\circ \text{C}$ ; d.c.	min. 2	V
$I_{GT}$	$T_{vj} = 25^\circ \text{C}$ ; d.c.	min. 100	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. 5	mA
$R_{th(j-s)}$	cont. per thyristor	0,6	K/W
	sin $180^\circ$ per thyristor	0,63	K/W
$R_{th(j-s)}$	cont. per W1C	0,3	K/W
	sin $180^\circ$ per W1C	0,315	K/W
$T_{vj}$		-40 ... +125	$^\circ \text{C}$
$T_{stg}$		-40 ... +125	$^\circ \text{C}$
$T_{solder}$	terminals, 10 s	260	$^\circ \text{C}$
$V_{isol}$	a. c. 50 Hz ; r.m.s. ; 1 s / 1 min.	3000 / 2500	V~
$M_s$		2,5	Nm
$M_t$			Nm
$a$			m/s <sup>2</sup>
$m$		30	g
Case	SEMITOP <sup>®</sup> 3	T 63	



WT





## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [SCR Modules](#) category:*

*Click to view products by [Semikron](#) manufacturer:*

Other Similar products are found below :

[DT430N22KOF](#) [T1401N42TOH](#) [T1851N60TOH](#) [T390N14TOF](#) [T420N12TOF](#) [T470N16TOF](#) [T640N16TOF](#) [T901N36TOF](#) [TD140N18KOF](#)  
[TD142N16KOF](#) [TD162N16KOF-A](#) [TD250N12KOF](#) [TD330N16AOF](#) [TT215N22KOF](#) [TZ310N20KOF](#) [TZ425N12KOF](#) [TZ500N12KOF](#)  
[T300N14TOF](#) [T3710N06TOF](#) [VT](#) [T390N16TOF](#) [T460N24TOF](#) [T501N70TOH](#) [T560N16TOF](#) [T640N14TOF](#) [TD250N14KOF](#)  
[TT600N16KOF](#) [TZ500N16KOF](#) [TZ240N36KOF](#) [TT210N12KOF](#) [NTE5710](#) [TD180N16KOF](#) [TT240N28KOF](#) [TZ425N14KOF](#)  
[T1081N60TOH](#) [TT61N08KOF](#) [TD251N18KOF](#) [TT162N08KOF](#) [TZ430N22KOF](#) [TT180N12KOF](#) [T2001N34TOF](#) [TD140N22KOF](#)  
[MDMA200P1600SA](#) [TT180N16KOF](#) [VS-ST333C08LFM0](#) [VS-ST180C14C0L](#) [T1080N02TOF](#) [TD320N16SOF](#) [T360N22TOF](#)  
[TZ810N22KOF](#) [T2563NH80TOH](#)