

# SKUT 115 T



**SEMIPONT™ 5**

## Three phase antiparallel Thyristor Module

### SKUT 115 T

Target Data

### Features

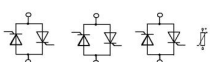
- Compact design
- Two screws mounting
- Heat transfer and isolation through direct copper board (Low  $R_{th}$ )
- Low resistance in Steady-State and high reliability
- High surge currents
- Glass passivated thyristors chips
- Up to 1600V reverse voltage
- UL recognized, file no. E 63 532
- Integrated temperature sensor

### Typical Applications

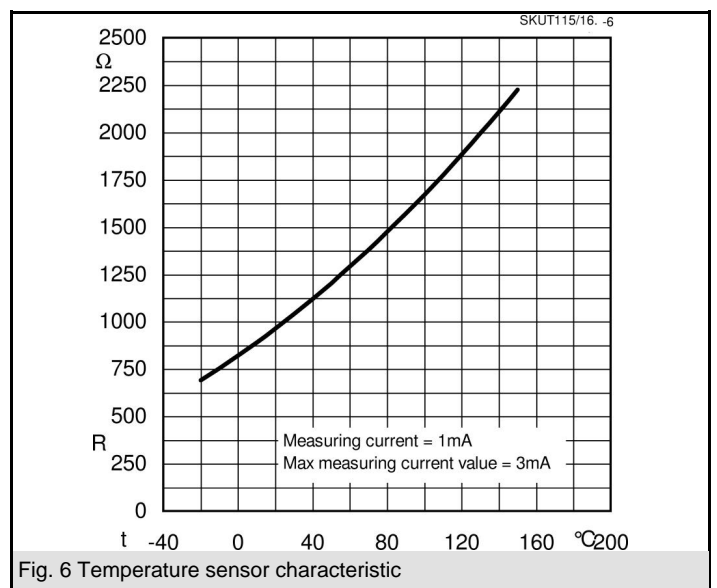
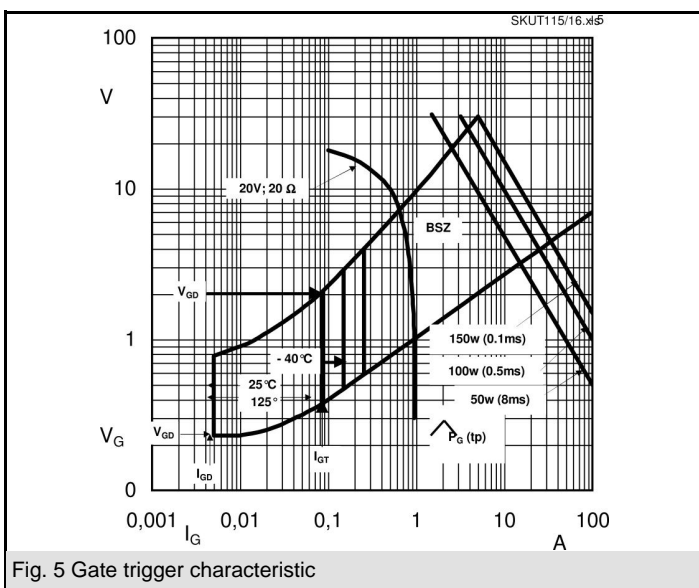
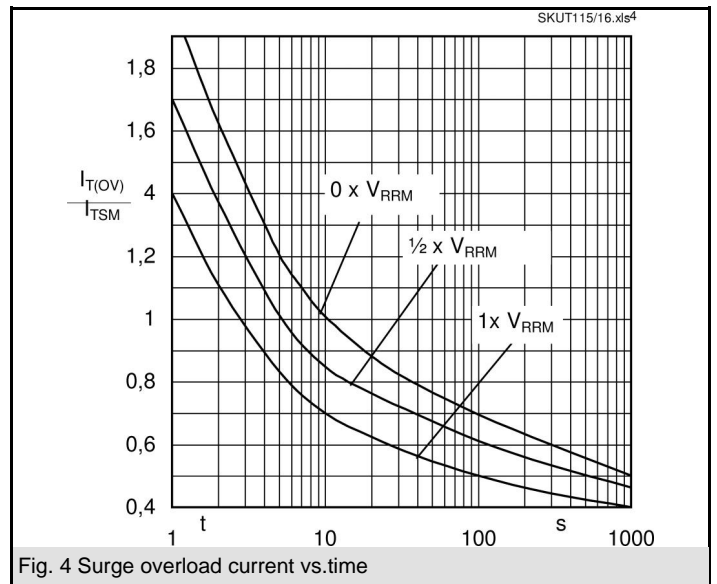
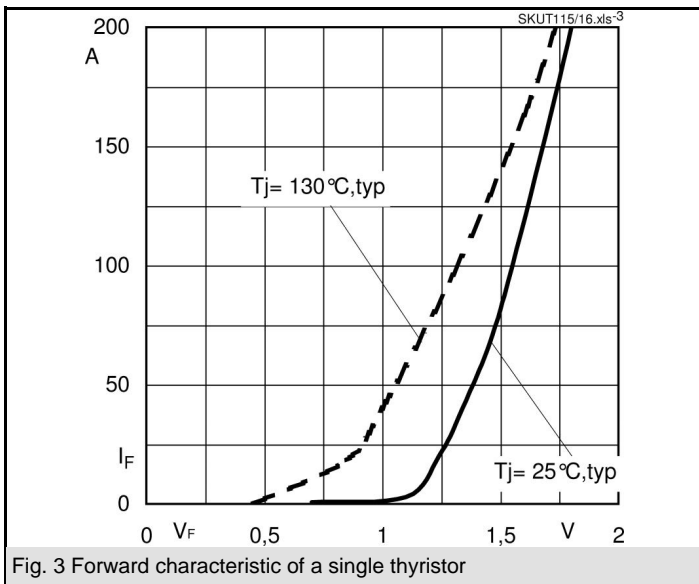
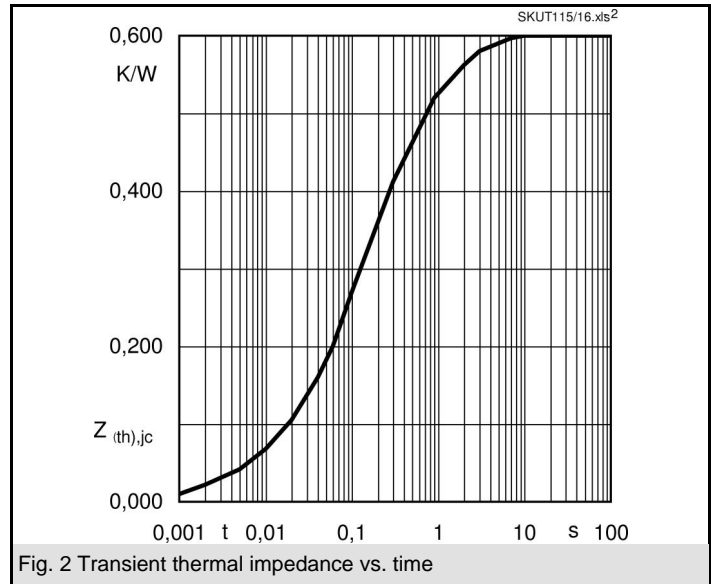
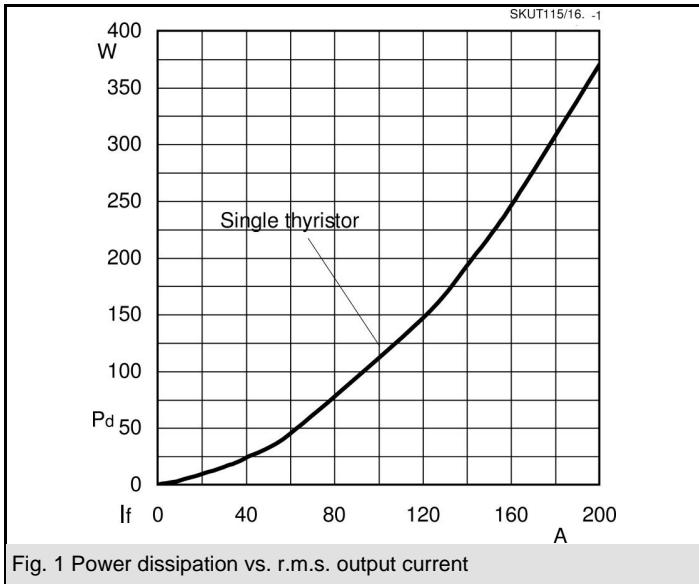
- Soft starter
- Light control (e.g. studios, theaters)
- Temperature control (e.g. oven, chemical processes)

$V_{RSM}$ V	$V_{RRM}, V_{DRM}$ V	$I_{RMS} = 105$ A (full conduction) ( $T_s = 85^\circ\text{C}$ )
1300	1200	SKUT 115/12
1700	1600	SKUT 115/16

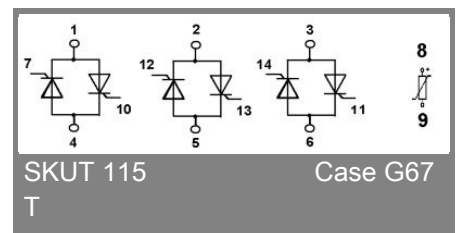
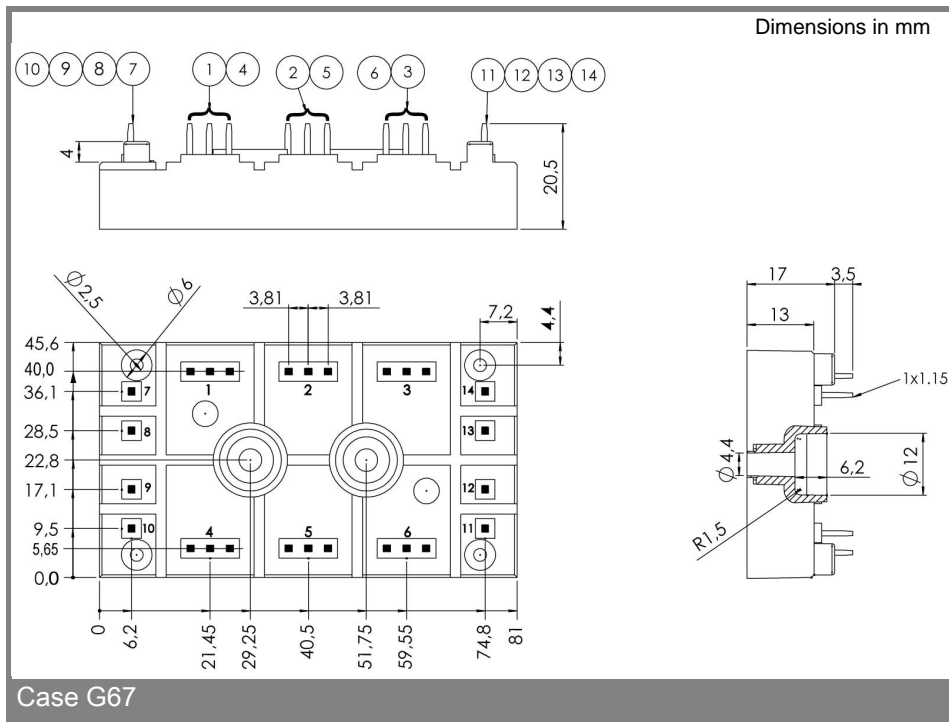
Symbol	Conditions	Values	Units
$I_{RMS}$	W3C ; sin. $180^\circ$ ; $T_s = 85^\circ\text{C}$ ; sin. $180^\circ$ ;	105	A A
$I_{TSM}$	$T_{vj} = 25^\circ\text{C}$ ; 10 ms $T_{vj} = 125^\circ\text{C}$ ; 10 ms	1250	A A
$i^2t$	$T_{vj} = 25^\circ\text{C}$ ; 10 ms $T_{vj} = 125^\circ\text{C}$ ; 8,3...10 ms	7800	A <sup>2</sup> s A <sup>2</sup> s
$V_T$	$T_{vj} = 25^\circ\text{C}$ , $I_T = 150$ A	max. 1,6	V
$V_{T(TO)}$	$T_{vj} = 125^\circ\text{C}$	max. 0,9	V
$r_T$	$T_{vj} = 125^\circ\text{C}$	max. 5	m $\Omega$
$I_{DD}, I_{RD}$	$T_{vj} = 25^\circ\text{C}$ , $V_{RD} = V_{RRM}$ $T_{vj} = 125^\circ\text{C}$ , $V_{RD} = V_{RRM}$	max. 1 max. 20	mA mA
$t_{gd}$	$T_{vj} = 25^\circ\text{C}$ , $I_G = 1$ A ; $di_G/dt = 1$ A/ $\mu\text{s}$	1	$\mu\text{s}$
$t_{gr}$	$V_D = 0,67 * V_{DRM}$	2	$\mu\text{s}$
$(dv/dt)_{cr}$	$T_{vj} = 125^\circ\text{C}$	500	V/ $\mu\text{s}$
$(di/dt)_{cr}$	$T_{vj} = 125^\circ\text{C}$ ; $f = 50...60$ Hz	50	A/ $\mu\text{s}$
$t_q$	$T_{vj} = 125^\circ\text{C}$ ; typ.	150	$\mu\text{s}$
$I_H$	$T_{vj} = 25^\circ\text{C}$ ; typ. / max.	200	mA
$I_L$	$T_{vj} = 25^\circ\text{C}$ ; $R_G = 33 \Omega$ ; typ. / max.	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
$R_{th(j-s)}$	sin $180^\circ\text{C}$ per Thyristor	0,63	K/W K/W
Temperature sensor	$R_{TS}$ @ $25^\circ\text{C}$ $R_{TS}$ @ $100^\circ\text{C}$	1000 1670	$\Omega$ $\Omega$
$T_{vj}$		-40...+125	$^\circ\text{C}$
$T_{stg}$		-40...+125	$^\circ\text{C}$
$T_{sold}$	Terminals, 10s max	260	$^\circ\text{C}$
$V_{isol}$	a. c. 50 Hz ; r.m.s. ; 1 s / 1 min.	3600 / 3000	V~
$M_s$	Mounting torque to Heatsink, SI units	2,5	Nm
$M_t$			Nm
a			m/s <sup>2</sup>
m		75	g
Case	SEMIPONT 5	G67	



W3C



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