



Stud Thyristor

Line Thyristor

SKT 10

Features

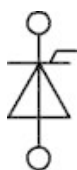
- Hermetic metal case with glass insulator
- Threaded stud ISO M5
- International standard case

Typical Applications*

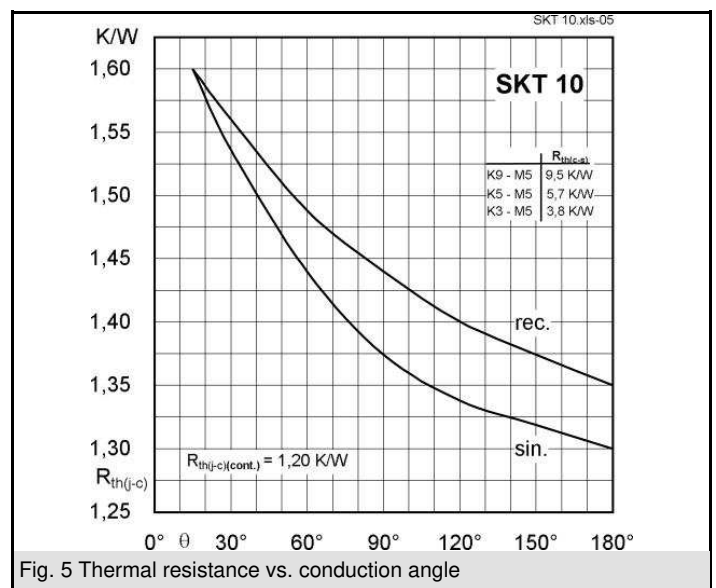
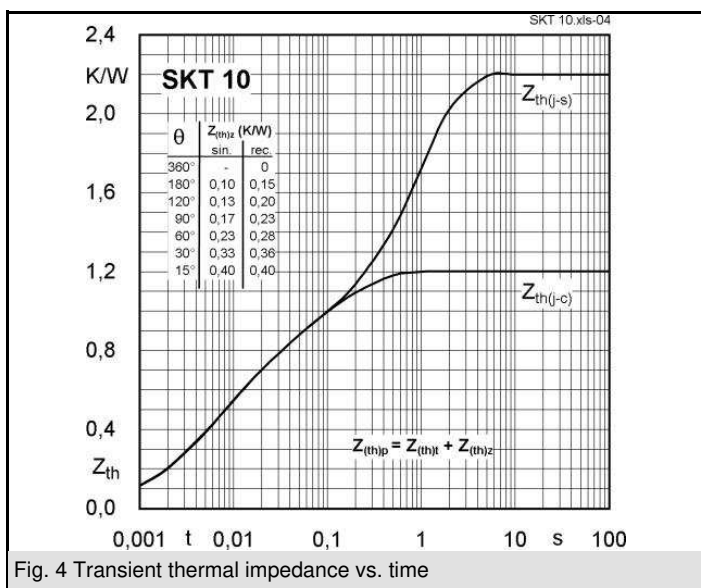
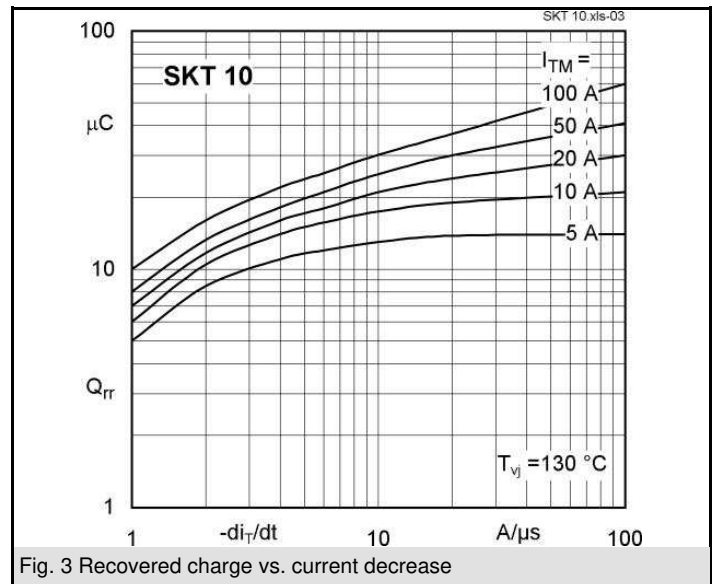
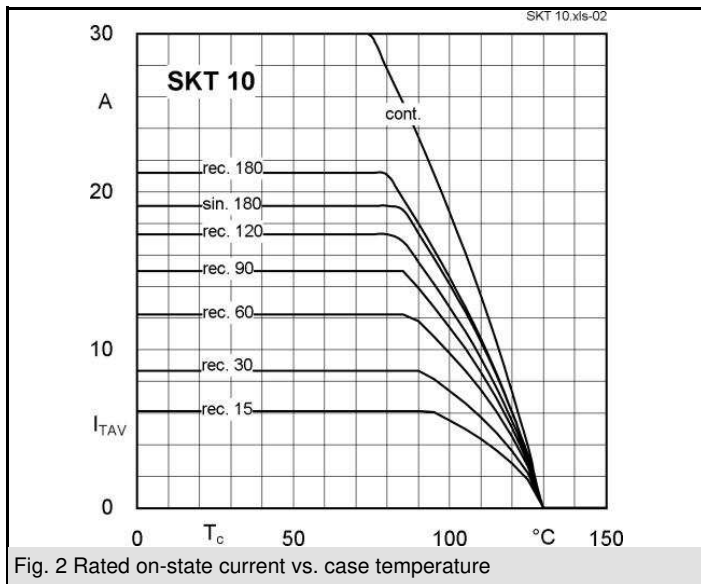
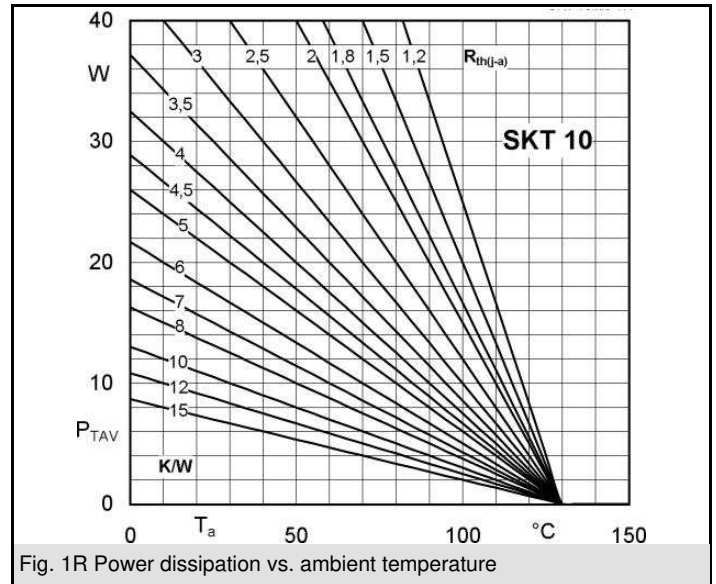
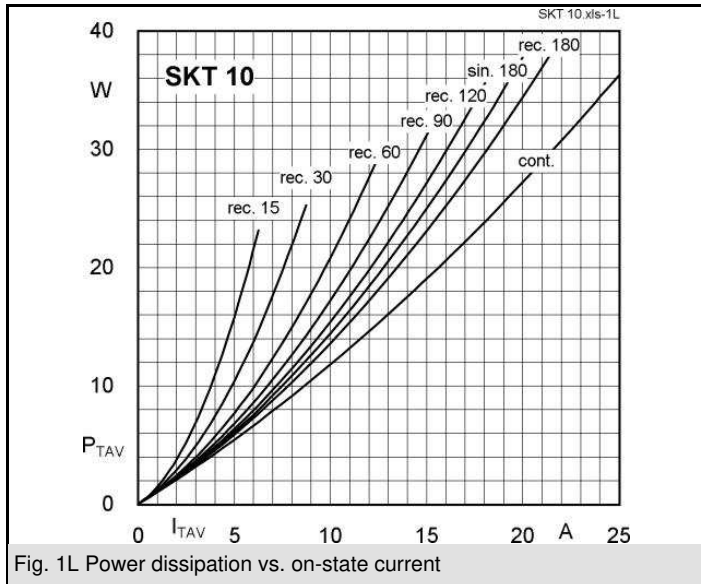
- DC motor control (e. g. for machine tools)
- Controlled rectifiers (e. g. for battery charging)
- AC controllers (e. g. for temperature control)
- Recommended snubber network
e.g. for $V_{VRMS} \leq 400$ V:
 $R = 100 \Omega/5$ W, $C = 0,1 \mu F$

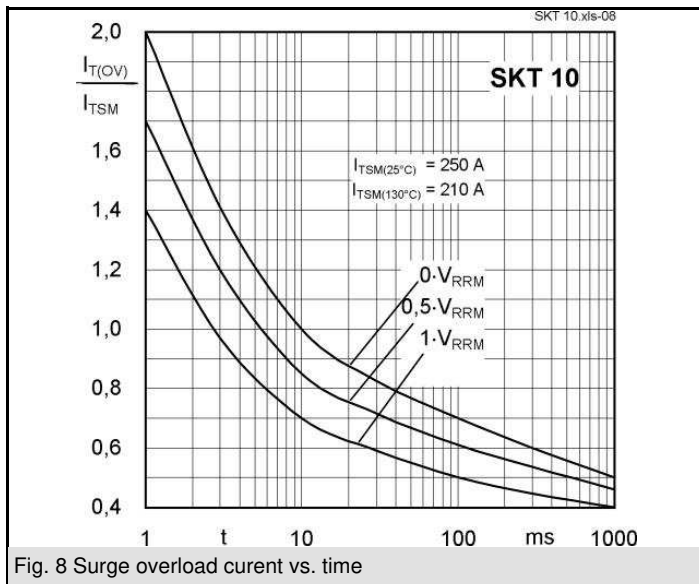
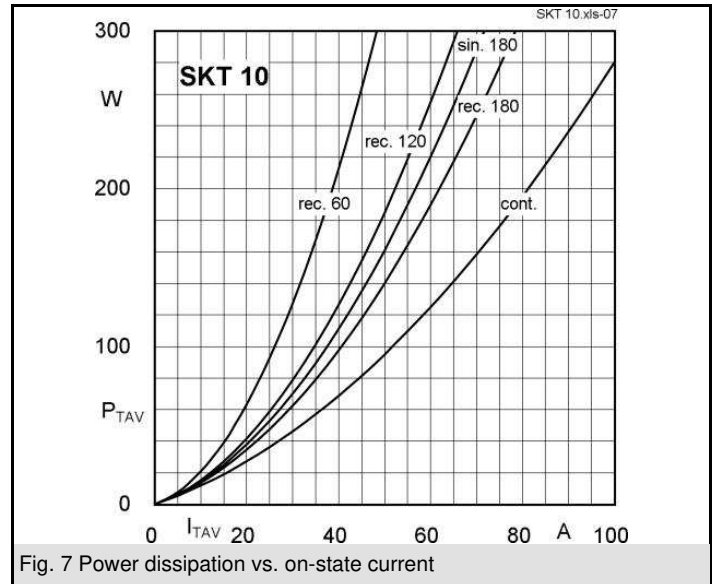
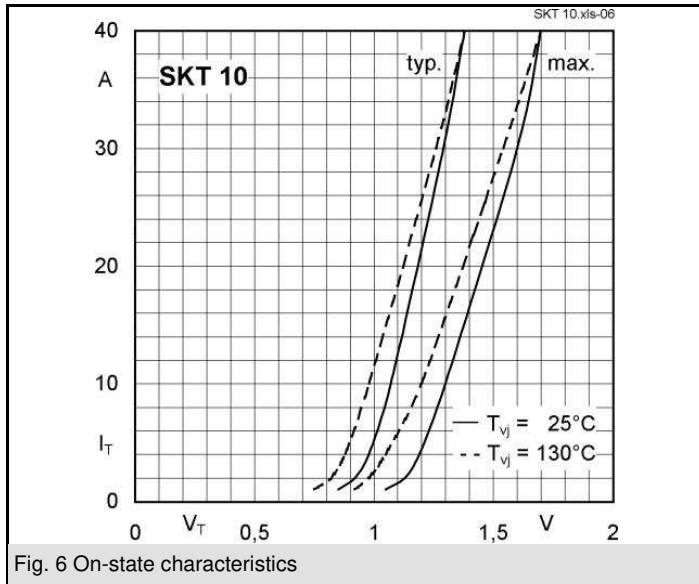
V_{RSM} V	V_{RRM}, V_{DRM} V	$I_{TRMS} = 30$ A (maximum value for continuous operation) $I_{TAV} = 10$ A (sin. 180; $T_c = 111$ °C)	
700	600	SKT 10/06D	
900	800	SKT 10/08D	
1300	1200	SKT 10/12E	

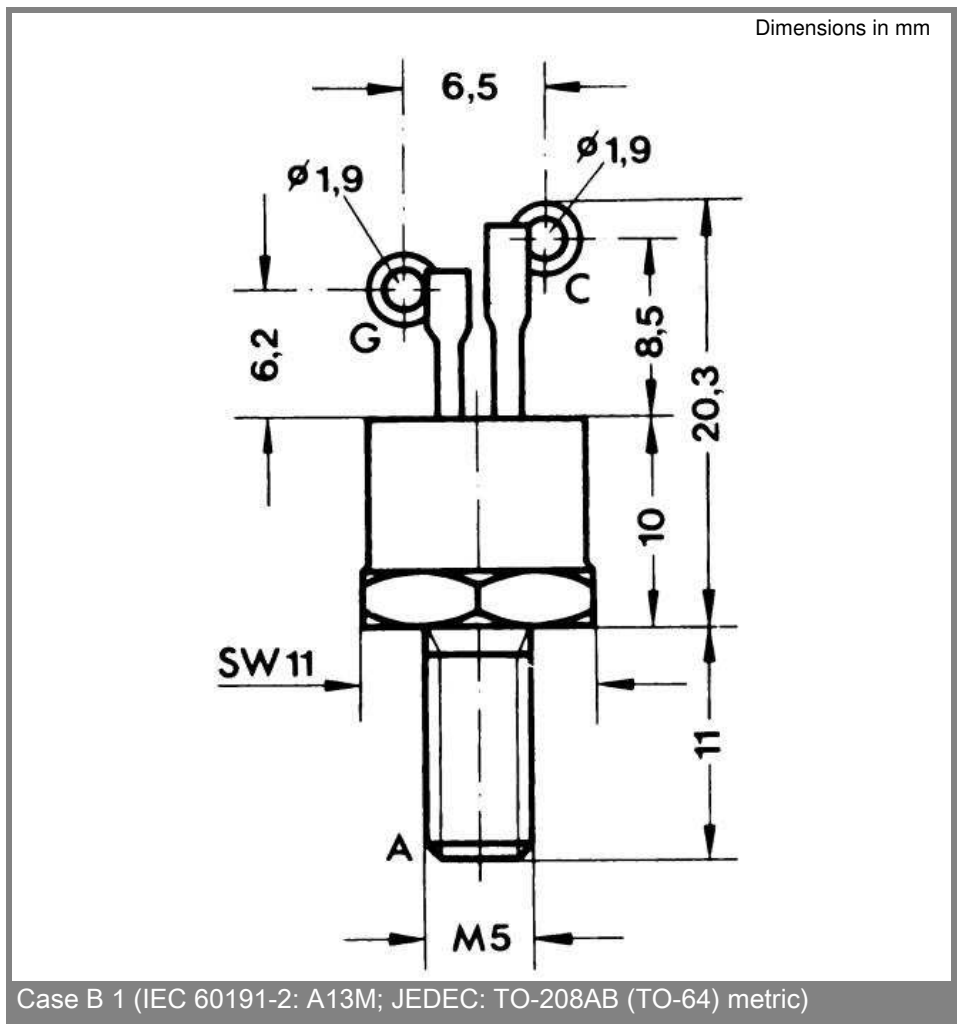
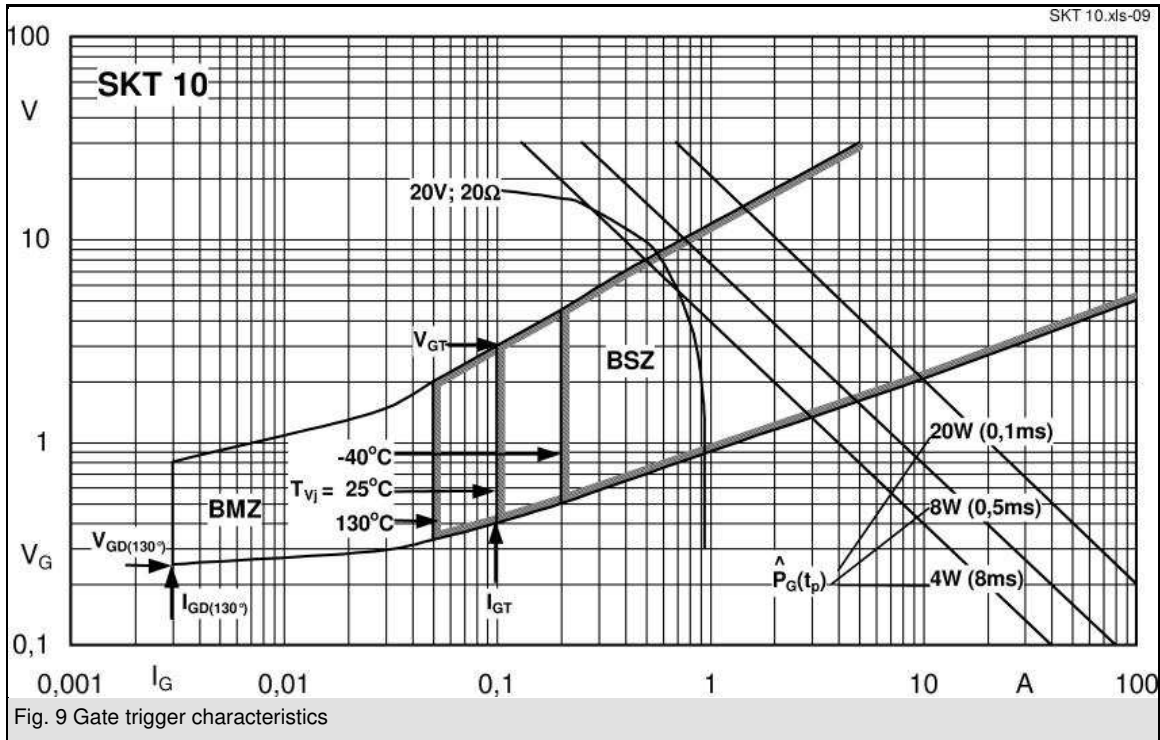
Symbol	Conditions	Values	Units
I_{TAV}	sin. 180; $T_c = 100$ (85) °C;	14 (19)	A
I_D	K9; $T_a = 45$ °C; B2 / B6	12 / 16,5	A
	K5; $T_a = 45$ °C; B2 / B6	17 / 24	A
I_{RMS}	K9; $T_a = 45$ °C; W1C	13	A
I_{TSM}	$T_{vj} = 25$ °C; 10 ms	250	A
	$T_{vj} = 130$ °C; 10 ms	210	A
i^2t	$T_{vj} = 25$ °C; 8,35 ... 10 ms	310	A ² s
	$T_{vj} = 130$ °C; 8,35 ... 10 ms	220	A ² s
V_T	$T_{vj} = 25$ °C; $I_T = 30$ A	max. 1,6	V
$V_{T(TO)}$	$T_{vj} = 130$ °C	max. 1	V
r_T	$T_{vj} = 130$ °C	max. 18	mΩ
I_{DD}, I_{RD}	$T_{vj} = 130$ °C; $V_{RD} = V_{RRM}, V_{DD} = V_{DRM}$	max. 4	mA
t_{gd}	$T_{vj} = 25$ °C; $I_G = 1$ A; $di_G/dt = 1$ A/μs	1	μs
t_{gr}	$V_D = 0,67 * V_{DRM}$	2	μs
$(di/dt)_{cr}$	$T_{vj} = 125$ °C	max. 50	A/μs
$(dv/dt)_{cr}$	$T_{vj} = 125$ °C; SKT ...D / SKT ...E	max. 500 / 1000	V/μs
t_q	$T_{vj} = 130$ °C,	80	μs
I_H	$T_{vj} = 25$ °C; typ. / max.	80 / 150	mA
I_L	$T_{vj} = 25$ °C; typ. / max.	150 / 300	mA
V_{GT}	$T_{vj} = 25$ °C; d.c.	min. 3	V
I_{GT}	$T_{vj} = 25$ °C; d.c.	min. 100	mA
V_{GD}	$T_{vj} = 130$ °C; d.c.	max. 0,25	V
I_{GD}	$T_{vj} = 130$ °C; d.c.	max. 3	mA
$R_{th(j-c)}$	cont.	1,2	K/W
$R_{th(j-c)}$	sin. 180	1,3	K/W
$R_{th(j-c)}$	rec. 120	1,35	K/W
$R_{th(c-s)}$		1	K/W
T_{vj}		- 40 ... + 130	°C
T_{stg}		- 40 ... + 150	°C
V_{isol}		-	V~
M_s	to heatsink	2,0	Nm
a		5 * 9,81	m/s ²
m	approx.	7	g
Case		B 1	



SKT







* The specifications of our components may not be considered as an assurance of component characteristics. Components have to be tested for the respective application. Adjustments may be necessary. The use of SEMIKRON

products in life support appliances and systems is subject to prior specification and written approval by SEMIKRON. We therefore strongly recommend prior consultation of our personal.