SK 45 WT



SEMITOP[®] 2

Antiparallel Thyristor Module

SK 45 WT

Preliminary Data

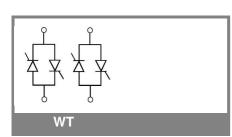
Features

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

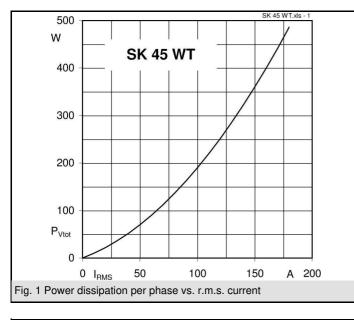
Typical Applications*

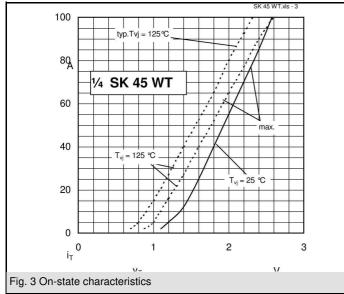
- Soft starters
- Light control (studios, theaters...)
- Temperature control

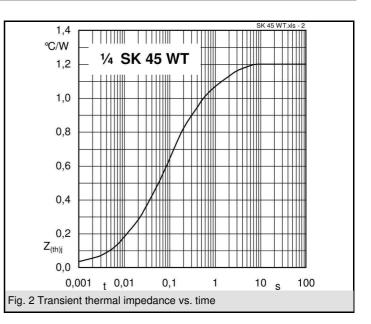
V	V _{RRM} , V _{DRM}		I _{RMS} = 47 A A (full conduction)		
V _{RSM} V	V RRM [,] V		$(T_s = 85 \text{ °C})$		
900	800		e e e e e e e e e e e e e e e e e e e		
1300 1200		SK 45 WT 08 SK 45 WT 12			
1700	1600		SK 45 WT 16		
Symbol C	onditions		Values	Units	
	/1C ; sin. 180° ; T _s = 100°	Ċ	33	A	
1 4110	/1C ; sin. 180° ; T _s = 85°C		47	А	
	_{vi} = 25 °C ; 10 ms	- -	450	Α	
	_{vi} = 125 °C ; 10 ms		380	A	
	_{vi} = 25 °C ; 8,310 ms		1000	A ² s	
	_{vi} = 125 °C ; 8,310 ms		720	A²s	
	_{vi} = 25 °C, I _T = 75 A		max. 1,9	V	
	vi = 125 °C		max. 1	V	
	vi = 125 °C		max. 10	mΩ	
	_{vi} = 25 °C, V _{RD} =V _{RRM}		max. 0,5	mA	
	$v_i = 125 \text{°C}, V_{RD} = V_{RRM}$		max. 10	mA	
	$r_{vi} = 25 \text{ °C}, I_G = 1 \text{ A; } di_G/dt$	= 1 A/µs	1	μs	
U .	_ = 0,67 *V _{DRM}		2	μs	
5	_{vi} = 125 °C		1000	V/µs	
	_{vi} = 125 °C; f= 5060 Hz		50	A/µs	
	_{vi} = 125 °C; typ.		120	μs	
I _H T,	_{vi} = 25 °C; typ. / max.		80 / 150	mA	
IL T,	_{vi} = 25 °C; R _G = 33 Ω ; typ	o. / max.	150 / 300	mA	
V _{GT} T,	vi = 25 °C; d.c.		min. 3	V	
I _{GT} T,	_{vi} = 25 °C; d.c.		min. 100	mA	
	_{vi} = 125 °C; d.c.		max. 0,25	V	
I _{GD} T,	_{vj} = 125 °C; d.c.		max. 3	mA	
R _{th(j-s)} co	ont. per thyristor		1,2	K/W	
si	n 180° per thyristor		1,24	K/W	
R _{th(j-s)} co	ont. per W1C		0,6	K/W	
si	n 180° per W1C		0,62	K/W	
Τ _{vj}			-40 +125	°C	
T _{stg}			-40 +125	°C	
T _{solder} te	erminals, 10s		260	°C	
V _{isol} a.	. c. 50 Hz; r.m.s.; 1 s / 1 n	nin.	3000 / 2500	V~	
M _s M	lounting torque to heatsin	k	1,5	Nm	
M _t				Nm	
а				m/s²	
m			13	g	
Case S	EMITOP [®] 2		T 37		

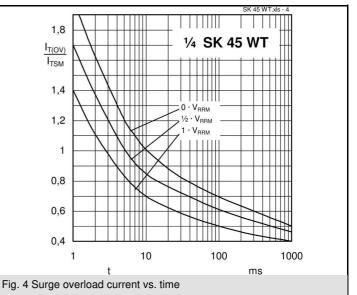


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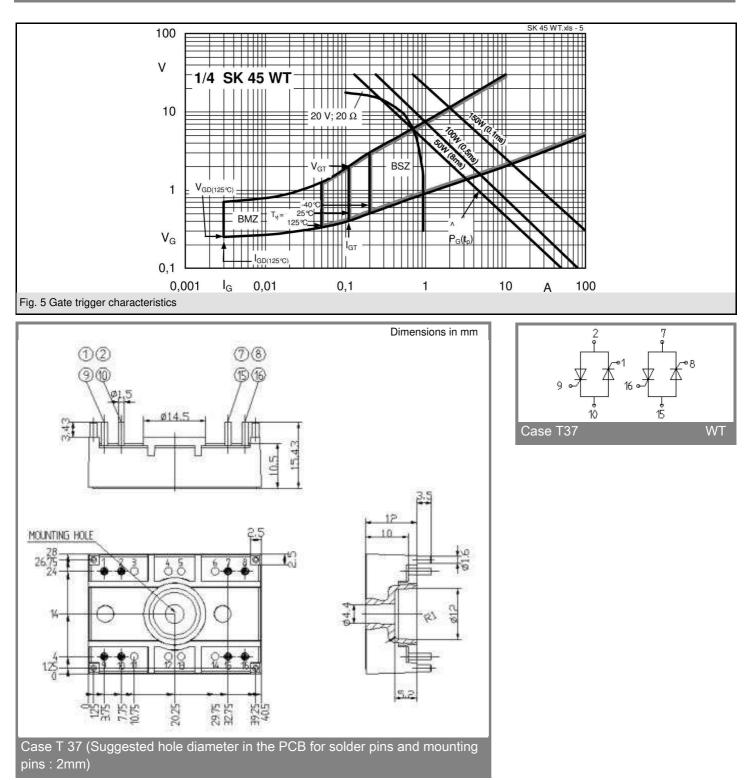








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* The specifications of our components may not be considered as an assurance of component characteristics. Components have to be tested for the respective application. Adjustments may be necessary. The use of SEMIKRON products in life support appliances and systems is subject to prior specification and written approval by SEMIKRON. We therefore strongly recommend prior consultation of our personal.