### SK 50 B 06 UF



# SEMITOP<sup>® 2</sup>

### **Bridge Rectifier**

#### SK 50 B 06 UF

**Target Data** 

#### **Features**

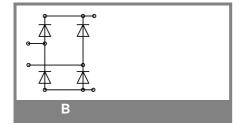
- Compact design
- · One screw mounting
- Heat transfer and insulation through direct copper bonded aluminium oxide ceramic (DCB)
- Ultra Fast diodes
- UL recognized, file no. E 63 532

#### **Typical Applications\***

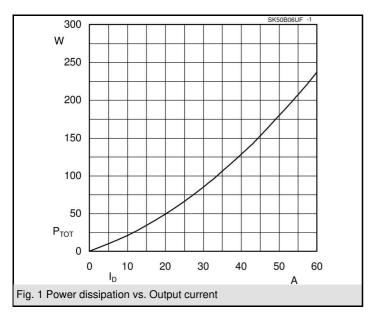
- General power switching applications
- UPS
- SMPS
- Welding equipment

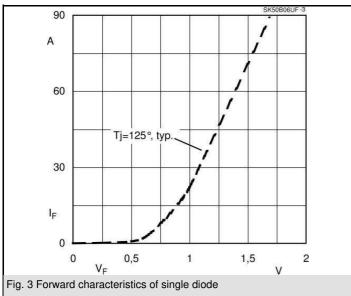
V <sub>RSM</sub>	V <sub>RRM</sub> , V <sub>DRM</sub>	$I_D = 46 \text{ A (full conduction)}$
V	V	$(T_S = 80 ^{\circ}\text{C})$
600	600	

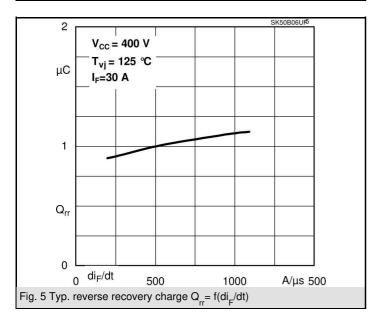
Symbol	Conditions	Values	Units
I <sub>D</sub>	T <sub>s</sub> = 80 °C	46	Α
I <sub>RRM</sub>	T <sub>vj</sub> =125°C;V <sub>R</sub> =400V;I <sub>F</sub> =30A;	11	Α
$Q_{rr}$	- dI <sub>F</sub> /dt=300A/µs	typ. 0,93	μC
I <sub>R</sub>	T <sub>vj</sub> = 25 (150)°C; V <sub>R</sub> =V <sub>RRM</sub>	max 0,015 (0,475)	mA
I <sub>FSM</sub>	T <sub>vj</sub> = 150 °C; 10 ms	400	Α
	T <sub>vi</sub> = °C; ms		Α
i²t	$T_{vj} = 150 ^{\circ}\text{C}; 10 \text{ms}$	800	A²s
	T <sub>vj</sub> = °C; ms		A²s
V <sub>F</sub>	T <sub>vi</sub> = 125 °C; I <sub>F</sub> = 50 A	max. 1,95	V
V <sub>(TO)</sub>	T <sub>vi</sub> = 125 °C	max. 0,8	V
r <sub>T</sub>	T <sub>vi</sub> = 125 °C	max. 11	$m\Omega$
$I_{RD}$	$T_{vi} = {^{\circ}C}; V_{DD} = V_{DRM}; V_{RD} = V_{RRM}$		mA
			mA
R <sub>th(j-s)</sub>	per diode	1,8	K/W
ti (j-3)	per module	0,45	K/W
_			0.0
T <sub>solder</sub>	terminals, 10s	260	°C
$T_{vj}$		-40+150	
T <sub>stg</sub>		-40+125	°C
V <sub>isol</sub>	a. c. 50 Hz; r.m.s.; 1 s / 1 min.	3000 ( 2500 )	V
M <sub>s</sub>	mounting torque to heatsink	2	Nm
$M_t$			
m	approx. weight	19	g
Case	SEMITOP® 2	Т 6	



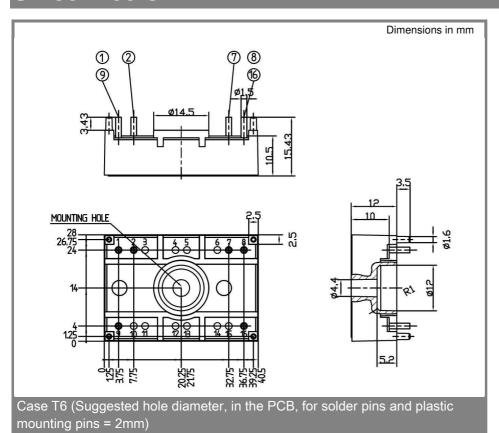
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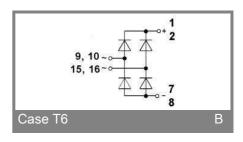






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\* The specifications of our components may not be considered as an assurance of component characteristics. Components have to be tested for the respective application. Adjustments may be necessary. The use of SEMIKRON products in life support appliances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