### SK 55 B 12 F



### **Bridge Rectifier**

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**Preliminary Data** 

### **Features**

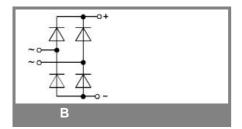
- Compact design
- · One screw mounting
- Heat transfer and insulation through direct copper bonded aluminium oxide ceramic (DCB
- Fast and soft recovery CAL (Controlled Axial Lifetime) diode
- UL recognized, file no. E 63 532

### **Typical Applications**

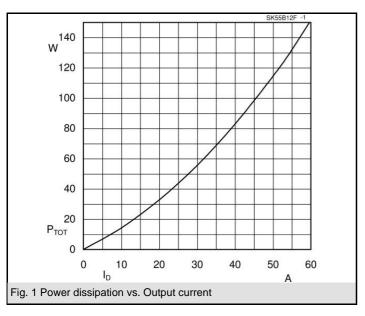
- General power switching applications
- UPS
- SMPS

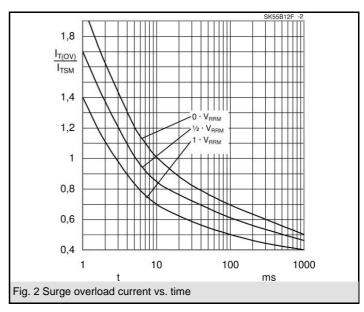
V <sub>RSM</sub>	V <sub>RRM</sub> , V <sub>DRM</sub>	I <sub>D</sub> = 57 A (full conduction)
V	V	(T <sub>s</sub> = 80 °C)
	1200	

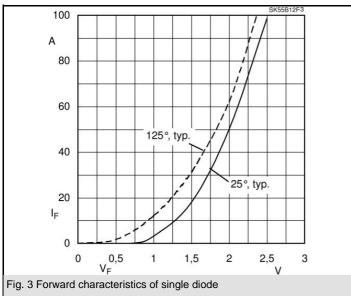
Symbol	Conditions	Values	Units
I <sub>D</sub>	T <sub>s</sub> = 80 °C	57	Α
I <sub>RRM</sub>	T <sub>vj</sub> = 125°C (See Fig. 6)	typ. 40	Α
$Q_{rr}$	T <sub>vj</sub> = 25 (125)°C (See Fig. 6)	typ. 3 (8)	μC
$I_R$	T <sub>vj</sub> = 25 (150)°C; V <sub>R</sub> =V <sub>RRM</sub>	0,2 (4)	mA
I <sub>FSM</sub>	T <sub>vj</sub> = 150 °C; 10 ms	550	Α
	T <sub>vi</sub> = °C; ms		Α
i²t	$T_{vj} = 150 ^{\circ}\text{C}; 10 \text{ms}$	1500	A²s
	$T_{vj} = {^{\circ}C}$ ; ms		A²s
V <sub>F</sub>	T <sub>vi</sub> = 25 °C; I <sub>F</sub> = 50 A	max. 2,5	V
$V_{(TO)}$	T <sub>vi</sub> = 125 °C	max. 1,2	V
r <sub>T</sub>	T <sub>vj</sub> = 125 °C	max. 22	mΩ
I <sub>RD</sub>	$T_{vj} = {^{\circ}C}; V_{DD} = V_{DRM}; V_{RD} = V_{RRM}$		mA
			mA
R <sub>th(j-s)</sub>	per diode	0,9	K/W
(11() 3)	per module	0,23	K/W
T <sub>solder</sub>	terminals, 10s	260	°C
T <sub>vi</sub>	15	-40+150	°C
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 <sub>t</sub>			
m	approx. weight	19	g
Case	SEMITOP® 2	Т 6	

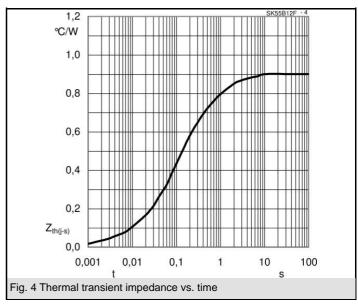


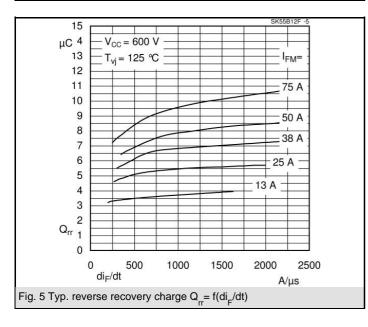
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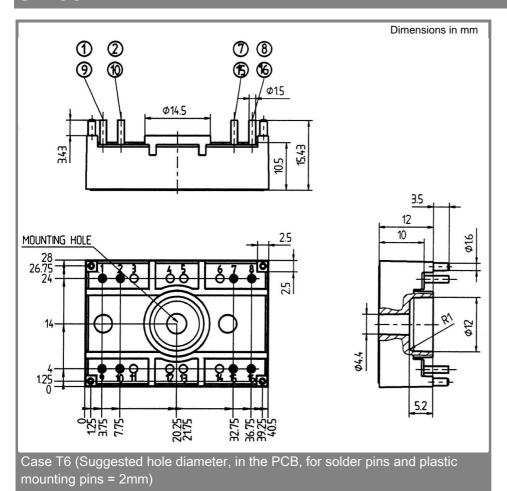


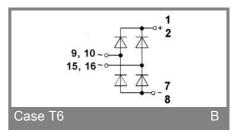
Measurement conditions for switching parameters:

I<sub>F</sub>= 50A V<sub>R</sub>= 600V -di/dt = 800A/μs

Fig. 6

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