



SEMITOP® 2

Bridge Rectifier

SK100B

Target Data

Features

- Compact design
- One screw mounting
- Heat transfer and insulation through direct copper bonded aluminium oxide ceramic (DCB)
- Up 1600V reverse voltage
- High surge current
- Glass passivated diode chips
- UL recognized, file no. E 63 532

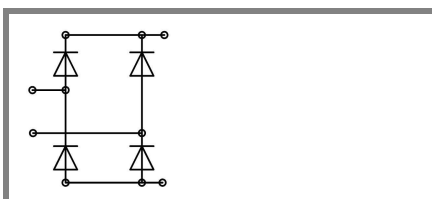
Typical Applications

- Input rectifier for power supplies
- Rectifier

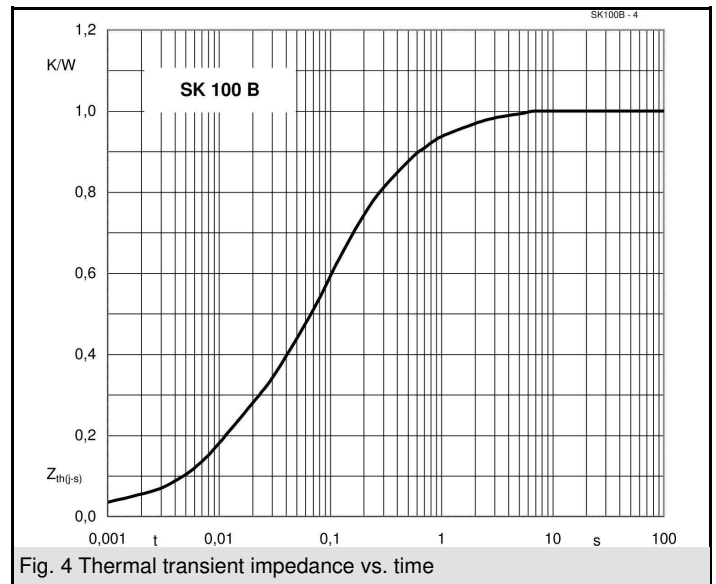
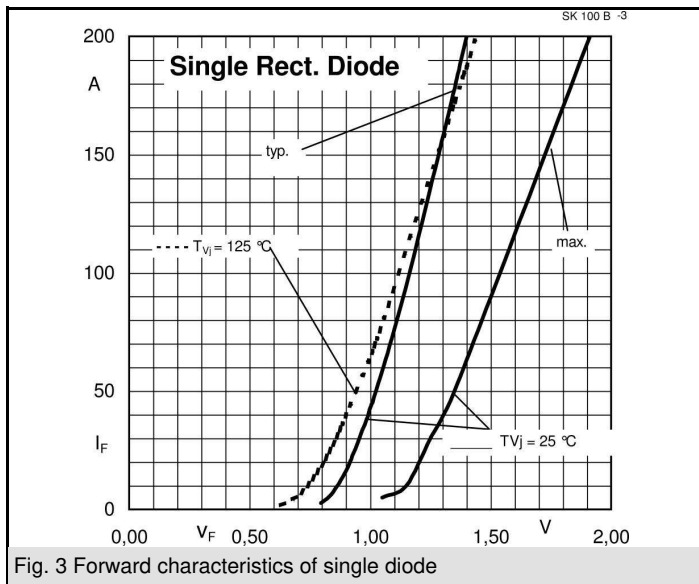
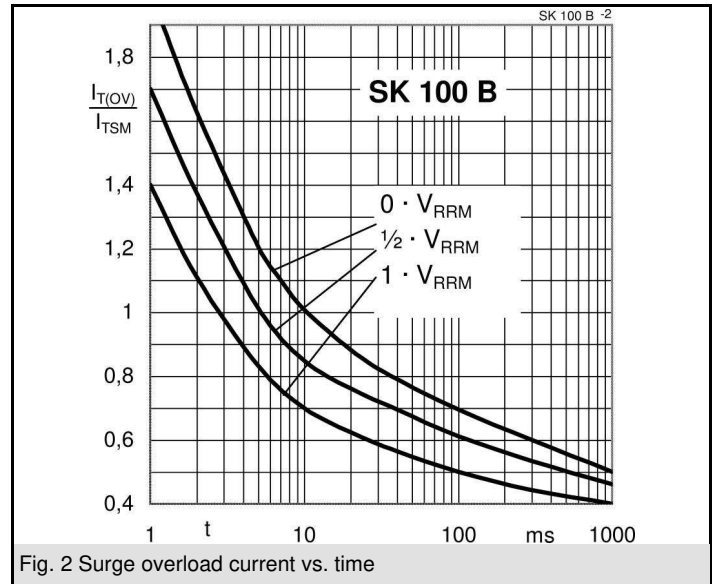
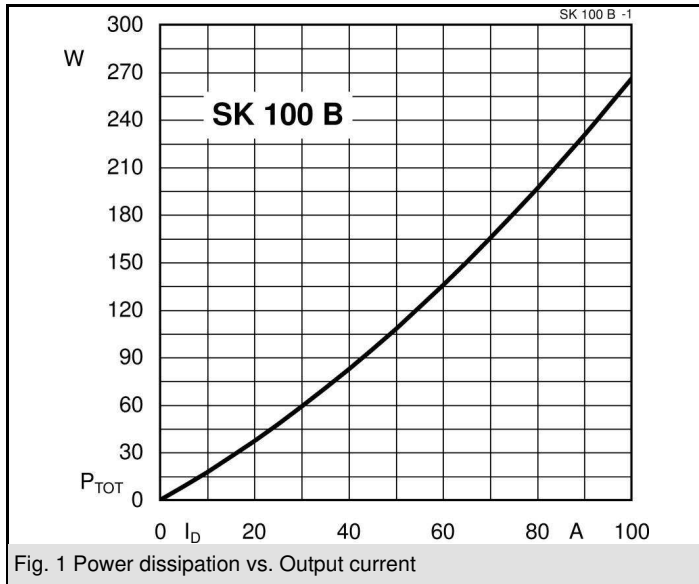
1) V_F , $V_{(TO)}$, r_T = chip level value

V_{RSM} V	V_{RRM} , V_{DRM} V	$I_D = 51$ A (full conduction) ($T_s = 80$ °C)
900	800	SK100B08
1300	1200	SK100B12
1700	1600	SK100B16

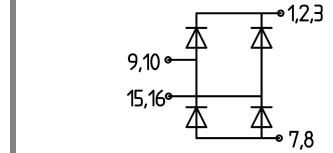
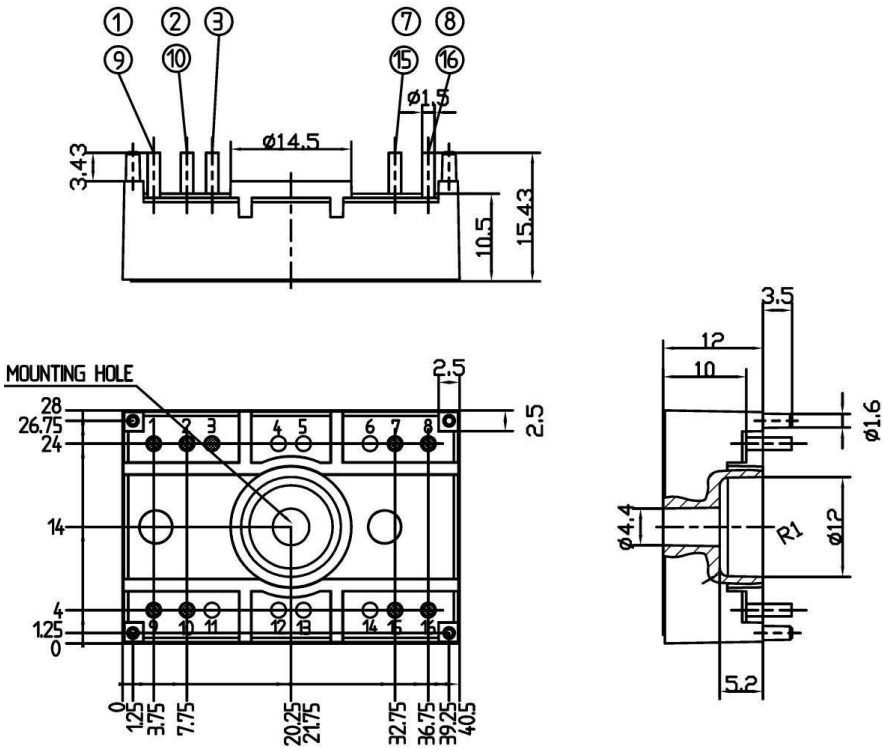
Symbol	Conditions	Values	Units
I_D	$T_s = 80$ °C	100	A
I_{FSM}	$T_{vj} = 25$ °C; 10 ms $T_{vj} = 150$ °C; 10 ms	1000 890	A A
i^2t	$T_{vj} = 25$ °C; 8,3...10 ms $T_{vj} = 125$ °C; 8,3...10 ms	5000 3960	A ² s A ² s
V_F	$T_{vj} = 25$ °C; $I_F = 40$ A	max. 1,21	V
$V_{(TO)}$	$T_{vj} = 125$ °C	max. 0,83	V
r_T	$T_{vj} = 125$ °C	max. 3,9	mΩ
I_{RD}	$T_{vj} = 150$ °C; $V_{DD} = V_{DRM}$; $V_{RD} = V_{RRM}$	max. 1,1	mA mA
$R_{th(f-s)}$	per diode per module	1 0,25	K/W K/W
T_{solder}	terminals, 10s	260	°C
T_{vj}		-40...+150	°C
T_{stg}		-40...+125	°C
V_{isol}	a. c. 50 Hz; r.m.s.; 1 s / 1 min.	3000 (2500)	V
M_s	mounting torque to heatsink	2	Nm
M_t			
m	approx. weight	19	g
Case	SEMITOP® 2	T 6	



B



Dimensions in mm



Case T97

B

Case T97 (Suggested hole diameter, in the PCB, for solder pins and plastic mounting pins = 2mm)

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