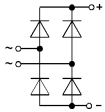
Miniature Bridge Rectifiers

SKB B . . . C 1000 L5B
SKB B . . . C 1500 L5B
SKBa B 500 C 1000 L5B
SKBa B 500 C 1500

V_{RSM} V_{RRM} V	V_{VRMS} V	I_D (T_{amb} = 45 °C) 1,8 A Types	C_{max} µF	R_{min} Ω	2,5 A Types	C_{max} µF	R_{min} Ω
120	40	**SKB B 40 C 1000 L5B**	5000	0,5	**SKB B 40 C 1500 L5B**	7000	0,4
400	125	**SKB B 80 C 1000 L5B**	1600	1,5	**SKB B 80 C 1500 L5B**	2200	1,1
800	250	**SKB B 250 C 1000 L5B**	800	3	**SKB B 250 C 1500 L5B**	1000	2,5
1000	380	**SKB B 380 C 1000 L5B**	600	4,5	**SKB B 380 C 1500 L5B**	700	4
1200	500	**SKB B 500 C 1000 L5B**	400	6	**SKB B 500 C 1500 L5B**	500	5
$V_{(BR)}$ min	V_{VRMS} V	**Avalanche Types**					
1300	500	**SKBa B 500 C 1000 L5B**	400	6	**SKBa B 500 C 1500**	500	5

Symbol	Conditions	SKB B...C 1000 SKBa B 500 C 1000	SKB B...C 1500 SKBa B 500 C 1500
I_D	T_{amb} = 45 °C; isolated[1]	1,2 A	1,5 A
	chassis[2]	1,8 A	–
I_{DCL}	T_{amb} = 33 °C; isolated[1]	–	1,5 A
	T_{amb} = 45 °C; isolated[1]	1 A	–
	chassis[2]	1,5 A	–
I_{FSM}	T_{vj} = 25 °C, 10 ms	58 A	80 A
	T_{vj} = 150 °C, 10 ms	50 A	70 A
i^2t	T_{vj} = 25 °C, 8,3 ... 10 ms	17 A^2s	32 A^2s
	T_{vj} = 150 °C, 8,3 ... 10 ms	12,5 A^2s	24,5 A^2s
P_{RSM}	t_p = 10 µs; avalanche types	1000 W	1000 W
V_F	T_{vj} = 25 °C; I_F = 10 A	1,65 V	1,5 V
$V_{(TO)}$	T_{vj} = 150 °C	0,85 V	0,85 V
r_T	T_{vj} = 150 °C	100 mΩ	60 mA
I_{RD}	T_{vj} = 25 °C; V_{RD} = V_{RRM} = 120 V	20 µA	
	≥ 400 V	5 µA	
	V_{RD} = $V_{(BR)min}$	5 µA	
	T_{vj} = 150 °C; V_{RD} = V_{RRM} = 120 V	1 mA	
	≥ 400 V	0,6 mA	
t_{rr}	T_{vj} = 25 °C	typ. 10 µs	
f_G		2000 Hz	
R_{thja}	isolated[1]	42 °C/W	36 °C/W
	chassis[2]	27 °C/W	–
T_{vj}		– 40...+ 150 °C	
T_{stg}		– 55...+ 150 °C	
RC	P_R = 1 W	10 nF + 20...50 Ω	
Fu		1,5 A	2 A
w		2 g	2 g
Case		G 2	



Features

- Compact plastic package with in-line terminals
- High blocking voltage
- SKBa with avalanche characteristics

Typical Applications

- Internal power supplies for electronic equipment
- DC power supplies
- Control equipment
- TV sets
- Avalanche types for inductive loads: Solenoids, Motor brakes

[1] Freely suspended or mounted on an insulator
[2] Mounted on a painted metal sheet of min. 250 x 250 x 1 mm

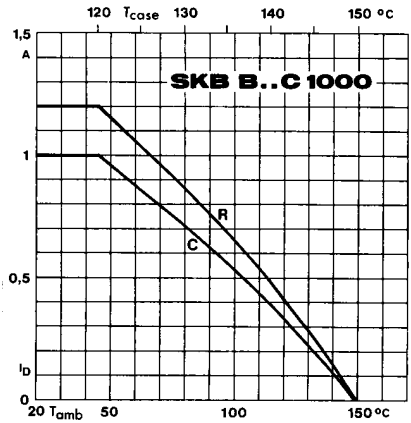


Fig. 1 a Rated output current vs. ambient temperature

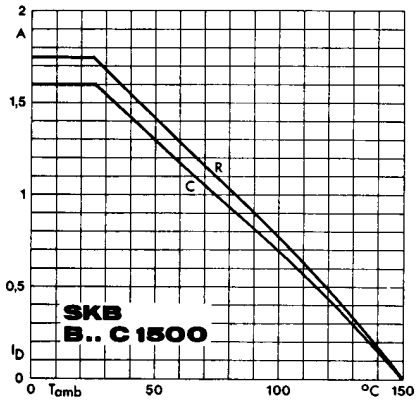


Fig. 1 b Rated output current vs. ambient temperature

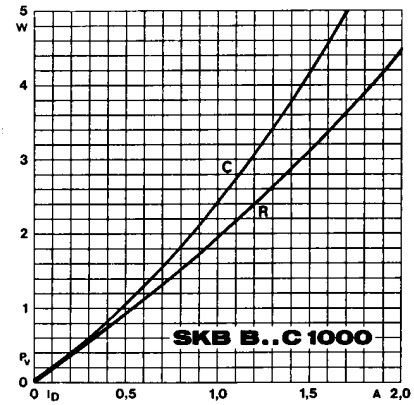


Fig. 2 a Power dissipation vs. output current

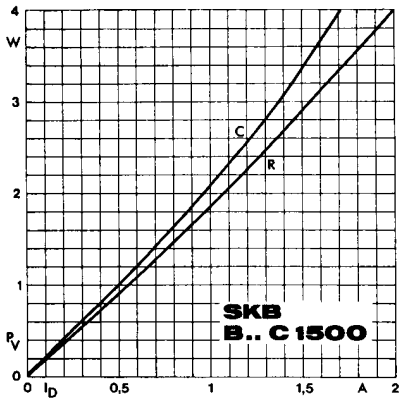


Fig. 2 b Power dissipation vs. output current

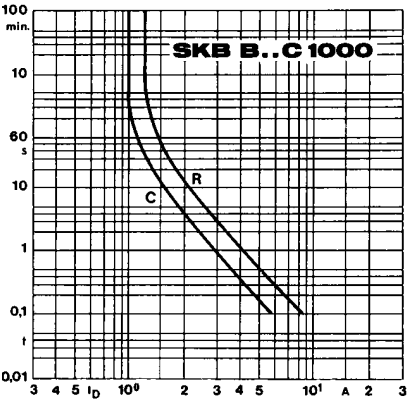


Fig. 6 a Rated overload current vs. time

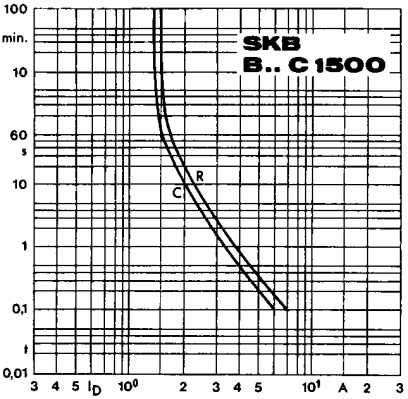


Fig. 6 b Rated overload current vs. time

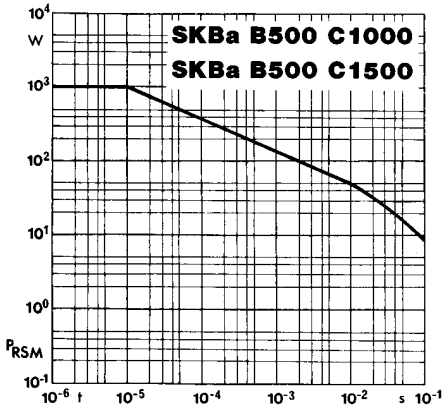


Fig. 7 Rated reverse power dissipation vs. time

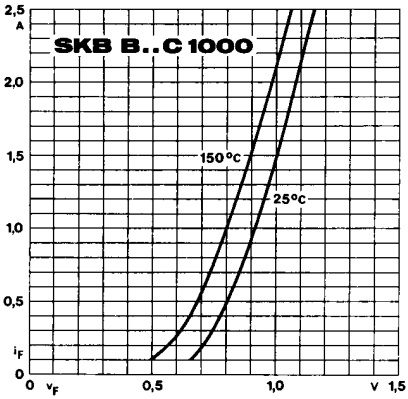


Fig. 9 a Forward characteristics of a single diode

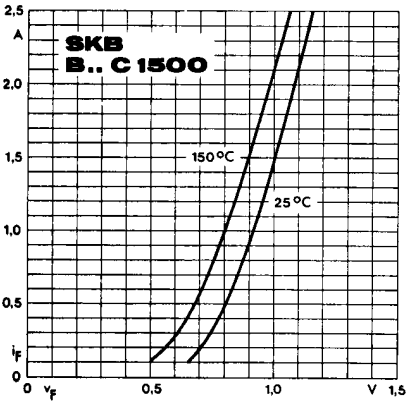
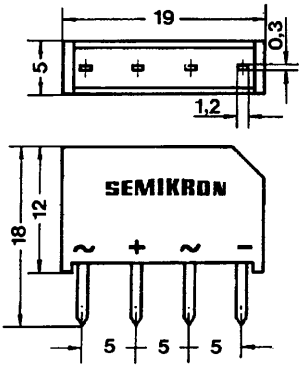


Fig. 9 b Forward characteristics of a single diode

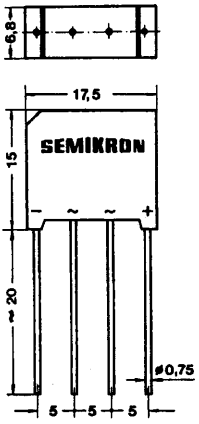
SKB B . . . C 1000 L5B **SKB B . . . C 1500 L5B**
SKBa B 500 C 1000 L5B **SKBa B 500 C 1500**

Case G 2



SKB 2

Case G 4



Dimensions in mm