SEMIKRON INC

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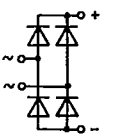
Miniature Bridge Rectifiers

SKB 1,2
SKBa 1,2

T-23-05

V_{RSM} V_{RRM} V	V_{VRMS} V	I_D (T_{amb} = 45 °C) 1,2 A Types	C_{max} µF	R_{min} Ω
100	40	**SKB 1,2/01**	5 000	0,5
200	80	**SKB 1,2/02**	3 300	0,8
400	125	**SKB 1,2/04**	1 600	1,5
800	250	**SKB 1,2/08**	800	3
1200	500	**SKB 1,2/12**	400	6
$V_{(BR)}$ V	V_{VRMS} V	**Avalanche Type**		
1300	500	**SKBa 1,2/13**	400	6



Symbol	Conditions	SKB 1,2 SKBa 1,2
I_D	T_{amb} = 45 °C[1)]	1,2 A
	T_{amb} = 40 °C[1)]	
I_{DCL}	T_{amb} = 45 °C[1)]	1 A
	T_{amb} = 40 °C[1)]	
I_N	T_{amb} = 45 °C[1)]	1 A
I_{NCL}	T_{amb} = 45 °C[1)]	0,8 A
I_{FSM}	T_{vj} = 25 °C; 8,3 ms/10 ms	64 A/58 A
	$T_{vj\,max}$; 8,3 ms/10 ms	55 A/50 A
i^2t	T_{vj} = 25 °C; 8,3 ...10 ms	17 A^2s
	$T_{vj\,max}$; 8,3 ms...10 ms	12,5 A^2s
P_{RSM}	t_p = 10 µs; avalanche type	1000 W
V_F	T_{vj} = 25 °C; I_F= 10 A	1,35 V
$V_{(TO)}$	$T_{vj\,max}$	0,85 V
r_T	$T_{vj\,max}$	100 mW
I_{RD}	T_{vj} = 25 °C; $V_{RD} = V_{RRM}$ ≤ 200 V	20 µA
	≥ 400 V	5 µA
	$T_{vj\,max}$; $V_{RD} = V_{RRM}$ ≤ 200 V	1 mA
	≥ 400 V	0,6 mA
t_{rr}	T_{vj} = 25 °C; typ.	10 µs
f_G		2000 Hz
R_{thja}		42 °C/W
T_{vj}		– 40...+ 150 °C
T_{stg}		– 55...+ 150 °C
RC	P_R = 1 W	10 nF+20 Ω
Fu		1,5 A
w		3 g
Case		G 1

Features

- Plastic case
- High blocking voltage
- SKBa with avalanche characteristics

Typical Applications

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

[1)] Mounted on a p.c.b.

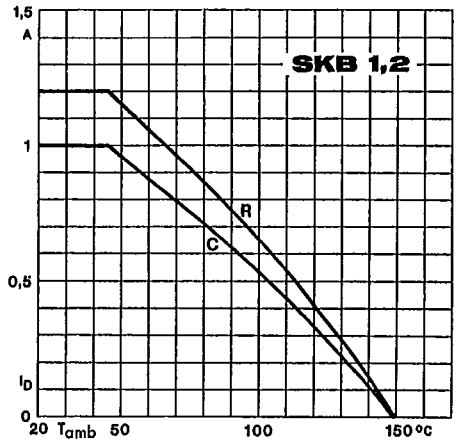


Fig. 1 Rated output current vs. ambient temperature

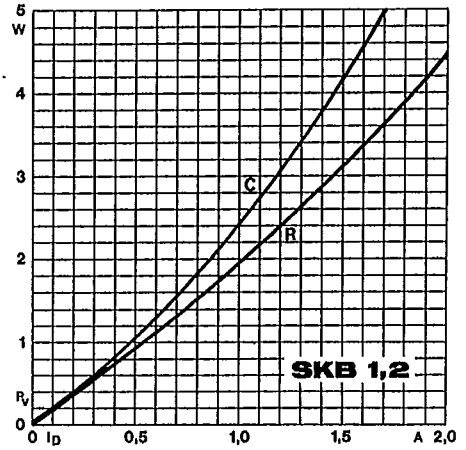


Fig. 2 Power dissipation vs. output current

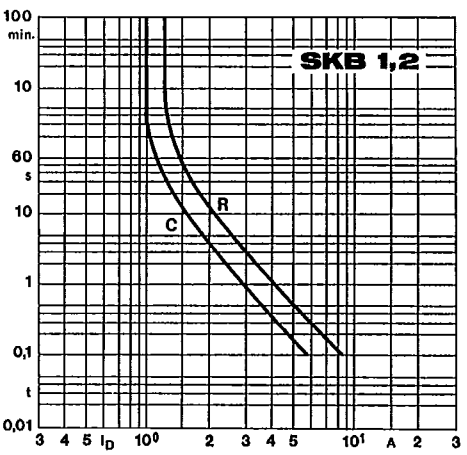


Fig. 6 Rated overload current vs. time

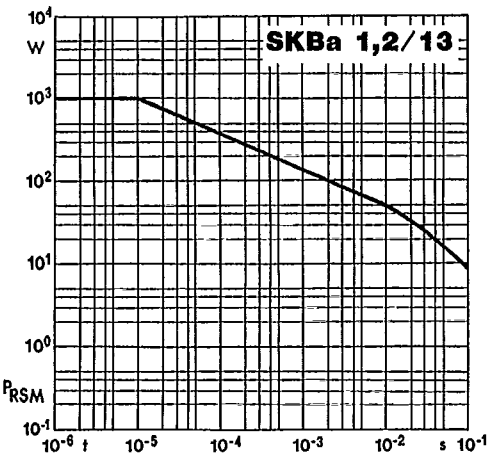


Fig. 7 Rated reverse power dissipation vs. time

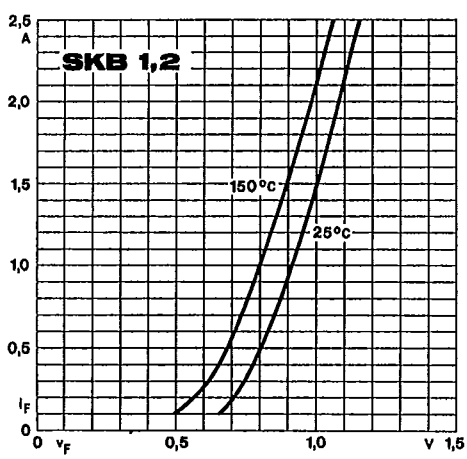
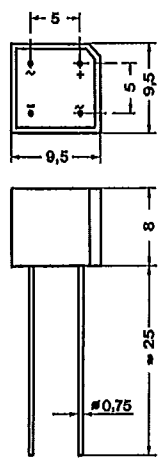


Fig. 9 Forward characteristics of a single diode

SKB 1,2
SKBa 1,2
Case G1



Dimensions in mm