

Miniature Bridge Rectifiers

SKB 2

Features

- Compact plastic package with in-line terminals
- High blocking voltage

Typical Applications*

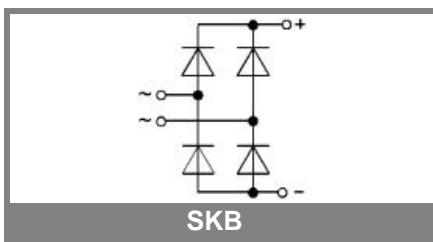
- Internal power supplies for electronic equipment
- DC power supplies
- Control equipment
- TV sets
- Recommended snubber network:
RC: 10 nF, 20...50 Ω ($P_R = 1 W$)

1) Freely suspended or mounted on an insulator

2) Mounted on a painted metal sheet of min. 250 x 250 x 1 mm

V_{RSM}, V_{RRM} V	V_{VRMS} V	$I_D = 2,5 A (T_a = 45 °C)$ Types	C_{max} μF	R_{min} Ω
200	60	SKB 2/02L5A	3000	1
400	125	SKB 2/04L5A	2200	1,5
800	250	SKB 2/08L5A	1000	3
1200	500	SKB 2/12L5A	500	6

Symbol	Conditions	Values	Units
I_D	$T_a = 45 °C, \text{isolated}^{1)}$ $T_a = 45 °C, \text{chassis}^{2)}$	1,7 2,5	A A
I_{DCL}	$T_a = 45 °C, \text{isolated}^{1)}$ $T_a = 45 °C, \text{chassis}^{2)}$ $T_a = °C,$	1,4 2	A A A
I_{FSM}	$T_{vj} = 25 °C, 10 \text{ ms}$ $T_{vj} = 150 °C, 10 \text{ ms}$	58 50	A A
i^2t	$T_{vj} = 25 °C, 8,3 \dots 10 \text{ ms}$ $T_{vj} = 150 °C, 8,3 \dots 10 \text{ ms}$	17 12,5	A ² s A ² s
V_F	$T_{vj} = 25 °C, I_F = 10 A$	max. 1,65	V
$V_{(TO)}$	$T_{vj} = 150 °C$	max. 0,85	V
r_T	$T_{vj} = 150 °C$	max. 100	mΩ
I_{RD}	$T_{vj} = 25 °C, V_{RD} = V_{RRM} = 200 V$ $T_{vj} = 25 °C, V_{RD} = V_{RRM} \geq 400 V$	20 5	μA μA
I_{RD}	$T_{vj} = 150 °C, V_{RD} = V_{RRM} = 200 V$ $T_{vj} = 150 °C, V_{RD} = V_{RRM} \geq 400 V$	1 0,6	mA mA
t_{rr}	$T_{vj} = 25 °C$	10	μs
f_G		2000	Hz
$R_{th(j-a)}$	isolated ¹⁾ chassis ²⁾	30 17,5	K/W K/W
T_{vj}		- 40 ... + 150	°C
T_{stg}		- 55 ... + 150	°C
V_{isol}			V~
M_s			Nm
M_t			Nm
a			m/s ²
w		4	g
F_u		2	A
Case		G 4	



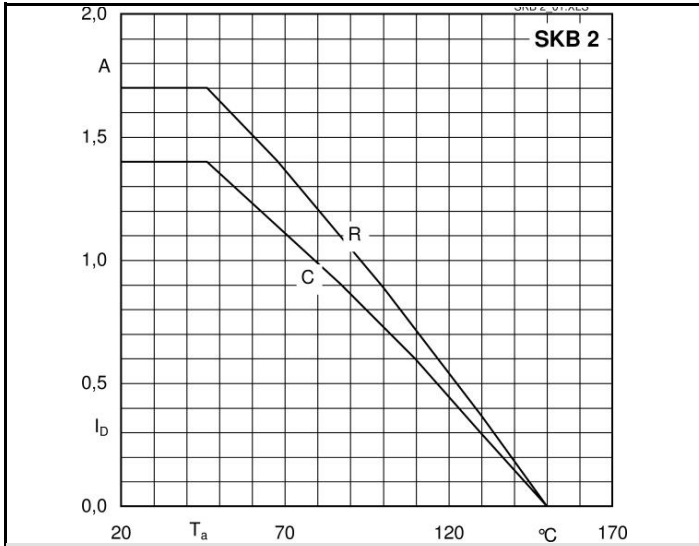


Fig. 1 Rated output current vs. ambient temperature

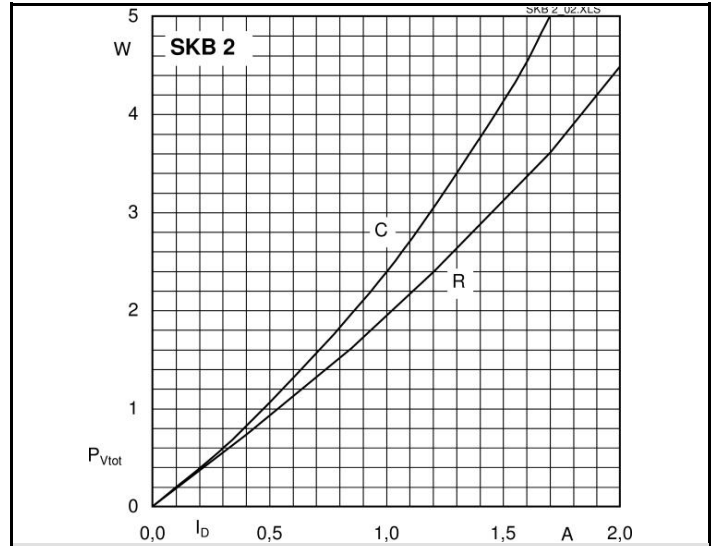


Fig. 2 Power dissipation vs. output current

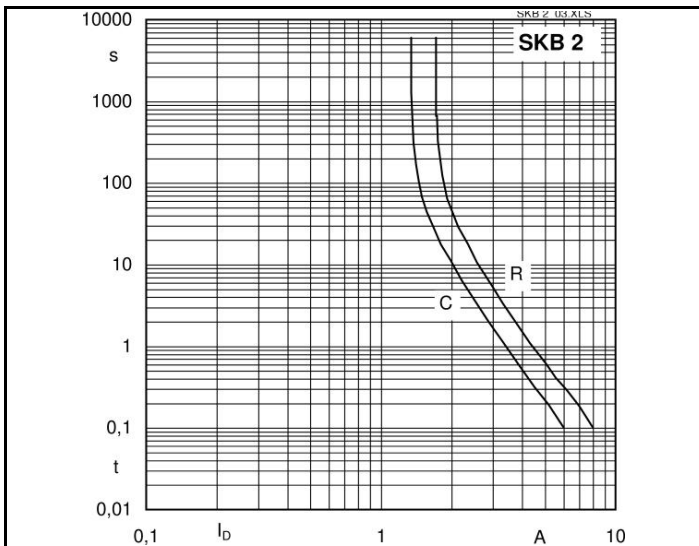


Fig. 6 Rated overload characteristics vs. time

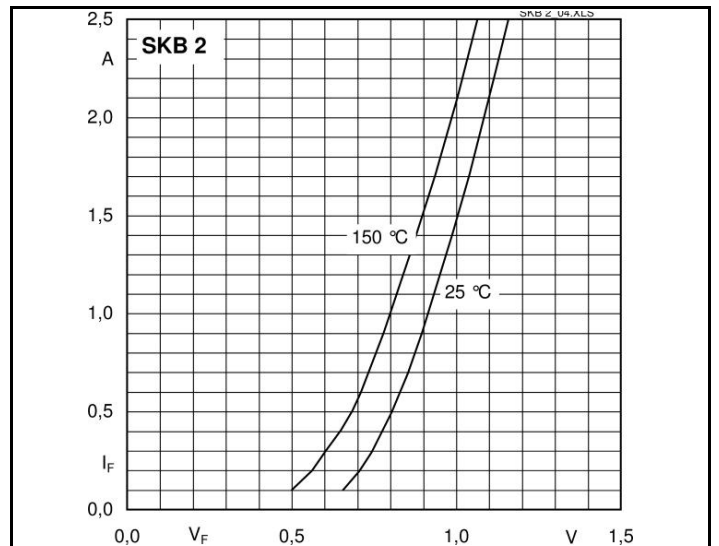
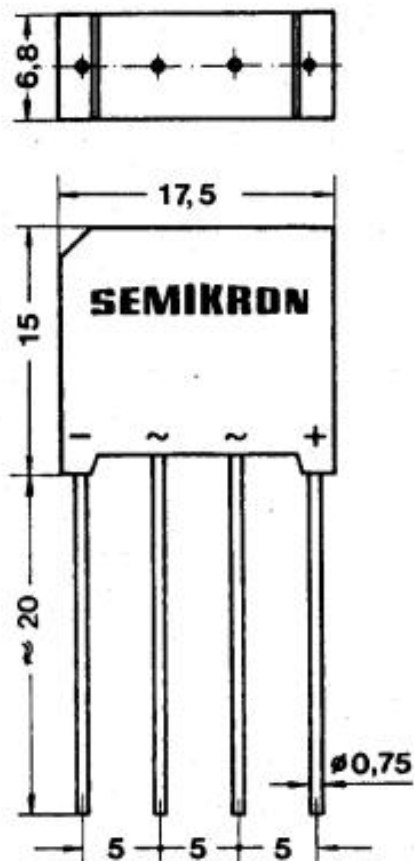


Fig. 9 Forward characteristics of a diode arm



Case G 4

* 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.