



Power Bridge Rectifiers

SKB 15

Features

- Square plastic case with screw terminals
- Blocking voltage up to 1600 V
- Metal baseplate for improved heat transfer

Typical Applications*

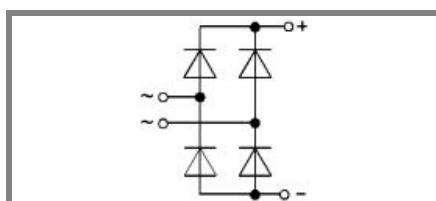
- Internal power supplies for electronic equipment
- Electronic control equipment
- DC motors
- Field rectifiers for DC motors
- Battery charger rectifiers
- Recommended snubber network:
RC: 100 nF, 20...50 Ω ($P_R = 1$ W)

1) Freely suspended or mounted on an insulator

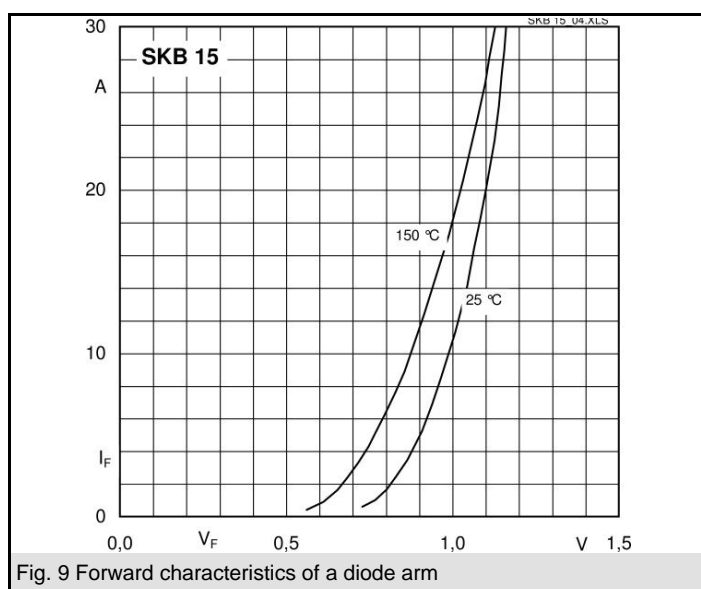
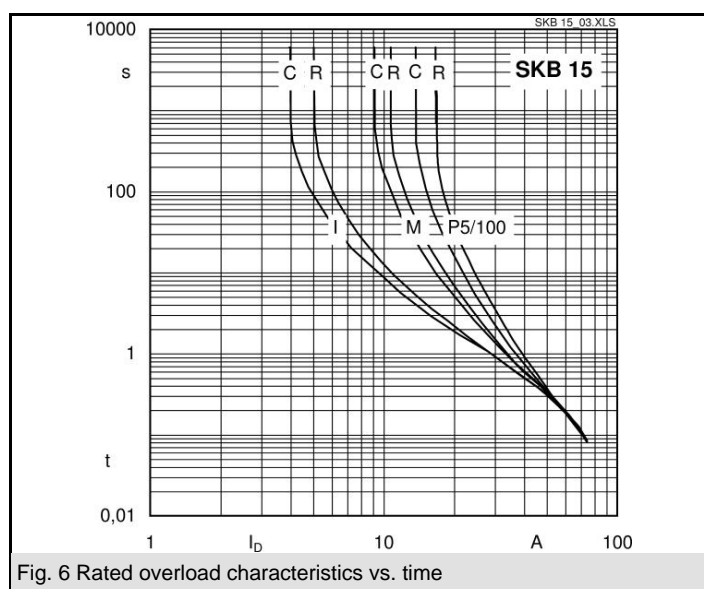
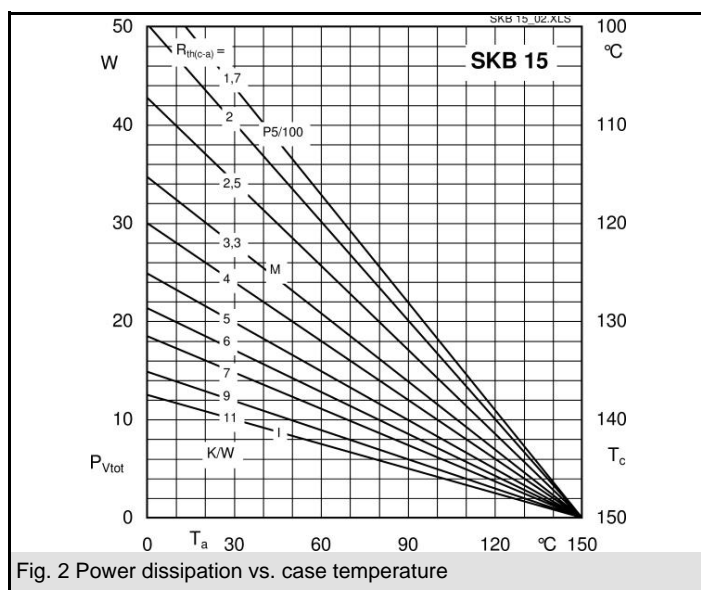
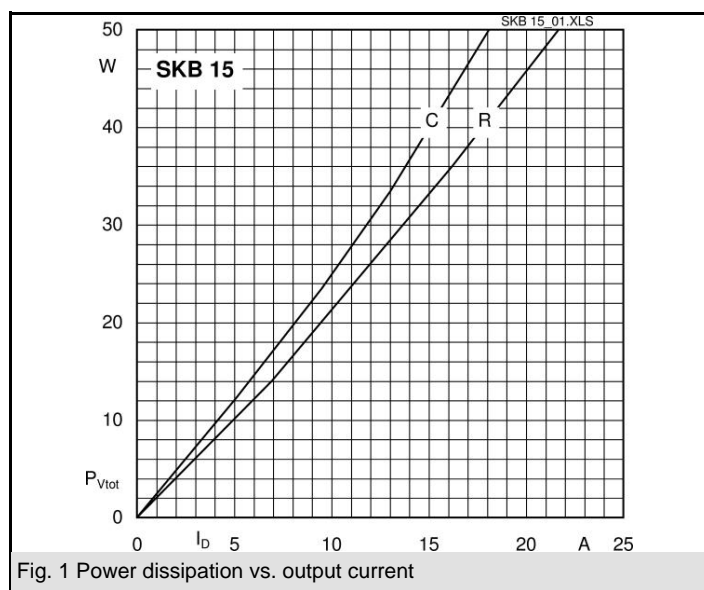
2) Mounted on apainted metal sheet of min. 250 x 250 x 1 mm

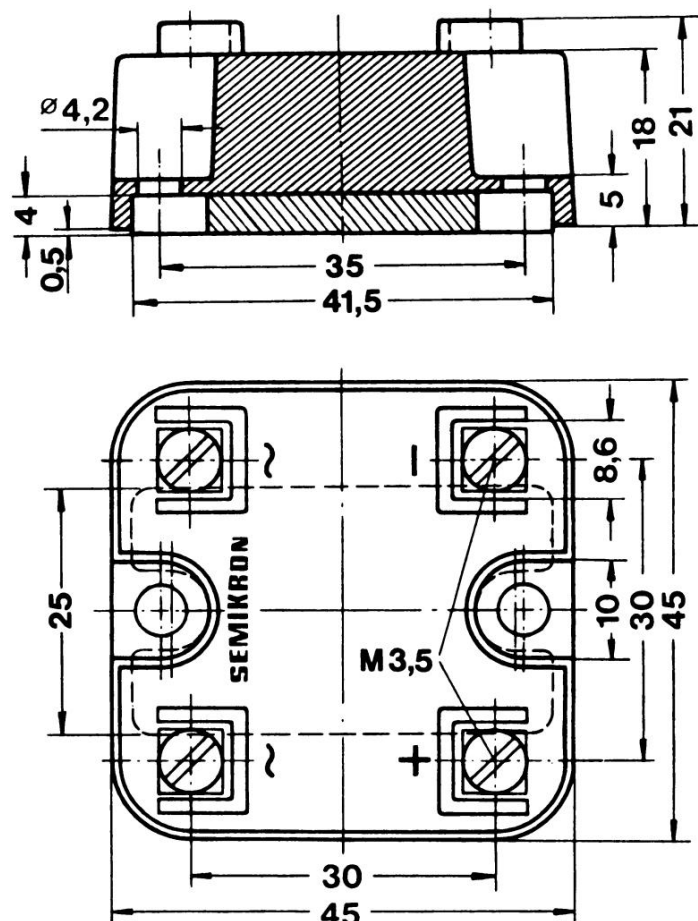
V_{RSM}, V_{RRM} V	V_{VRMS} V	$I_D = 15$ A ($T_c = 117$ °C) Types	C_{max} μ F	R_{min} Ω
200	60	SKB 15/02 A2		0,15
400	125	SKB 15/04 A2		0,3
800	250	SKB 15/08 A2		0,5
1200	380	SKB 15/12 A2		0,75
1400	440	SKB 15/14 A2		0,9
1600	500	SKB 15/16 A2		1

Symbol	Conditions	Values	Units
I_D	$T_a = 45$ °C, isolated ¹⁾	5	A
	$T_a = 45$ °C, chassis ²⁾	11	A
I_{DCL}	$T_a = 45$ °C, isolated ¹⁾	4	A
	$T_a = 45$ °C, chassis ²⁾	9	A
	$T_a = 45$ °C, P5A/100	14	A
I_{FSM}	$T_{vj} = 25$ °C, 10 ms	370	A
	$T_{vj} = 150$ °C, 10 ms	320	A
i^2t	$T_{vj} = 25$ °C, 8,3 ... 10 ms	680	A ² s
	$T_{vj} = 150$ °C, 8,3 ... 10 ms	500	A ² s
V_F	$T_{vj} = 25$ °C, $I_F = 150$ A	max. 2,2	V
$V_{(TO)}$	$T_{vj} = 150$ °C	max. 0,85	V
r_T	$T_{vj} = 150$ °C	max. 12	m Ω
I_{RD}	$T_{vj} = 25$ °C, $V_{RD} = V_{RRM}$	300	μ A
	$T_{vj} =$ °C, $V_{RD} = V_{RRM} \geq V$		μ A
I_{RD}	$T_{vj} = 150$ °C, $V_{RD} = V_{RRM}$	5	mA
	$T_{vj} =$ °C, $V_{RD} = V_{RRM} \geq V$		mA
t_{rr}	$T_{vj} = 25$ °C	10	μ s
f_G		2000	Hz
$R_{th(j-a)}$	isolated ¹⁾	12	K/W
	chassis ²⁾	4,3	K/W
$R_{th(j-c)}$	total	1	K/W
$R_{th(c-s)}$	total	0,3	K/W
T_{vj}		- 40 + 150	°C
T_{stg}		- 55 ... + 150	°C
V_{isol}	a.c. 50 ... 60 Hz; r.m.s.; 1 s / 1 min.	3000/2500	V~
M_s	to heatsink	1,5 \pm 15 %	Nm
M_t	to terminals	1 \pm 15 %	Nm
a			m/s ²
w		65	g
F_u		20	A
Case		G 9	



SKB





Case G 9

* 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.