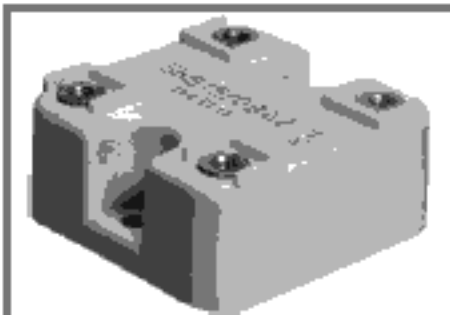


SKB 15



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

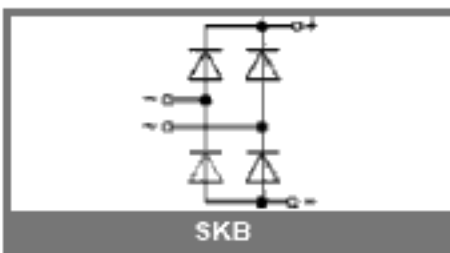
- Internal power supplies for electronic equipment
- Electronic control equipment
- DC motors
- Field rectifiers for DC motors
- Battery charger rectifiers
- Recommended snubber network:
RC: 100 nF, 20...50 Ω ($P_R = 1$ W)

1) Freely suspended or mounted on an insulator

2) Mounted on a painted metal sheet of min. 260 x 260 x 1 mm

V_{RRM}, V_{RRM} V	V_{VRMS} V	$I_D = 15$ A ($T_c = 117$ °C) Types	C_{max} μ F	R_{th} Ω
200	60	SKB 15/02 A2		0,15
400	125	SKB 15/04 A2		0,3
800	250	SKB 15/08 A2		0,6
1200	380	SKB 15/12 A2		0,75
1400	440	SKB 15/14 A2		0,9
1600	600	SKB 15/16 A2		1

Symbol	Conditions	Values	Units
I_D	$T_{vj} = 45$ °C, isolated ¹⁾	6	A
	$T_{vj} = 45$ °C, chassis ²⁾	11	A
I_{DCL}	$T_{vj} = 45$ °C, isolated ¹⁾	4	A
	$T_{vj} = 45$ °C, chassis ²⁾	9	A
	$T_{vj} = 45$ °C, P6A/100	14	A
I_{FSM}	$T_{vj} = 25$ °C, 10 ms	370	A
	$T_{vj} = 150$ °C, 10 ms	320	A
P_t	$T_{vj} = 25$ °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	0,85	V
r_T	$T_{vj} = 150$ °C	12	m Ω
I_{RD}	$T_{vj} = 25$ °C, $V_{RD} = V_{RRM}$	300	μ A
I_{RD}	$T_{vj} = 150$ °C, $V_{RD} = V_{RRM}$	6	mA
t_{tr}	$T_{vj} = 25$ °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
$R_{th(j-w)}$	total	0,3	K/W
T_{vj}		- 40 + 160	°C
T_{stg}		- 65 ... + 150	°C
V_{isol}	a.c. 50 ... 60 Hz; r.m.s.; 1 s / 1 min.	3000/2500	V~
M_x	to heatsink	1,5 \pm 15 %	Nm
M_t	to terminals	1 \pm 15 %	Nm
m		65	g
F_u		20	A
Case		G 9	



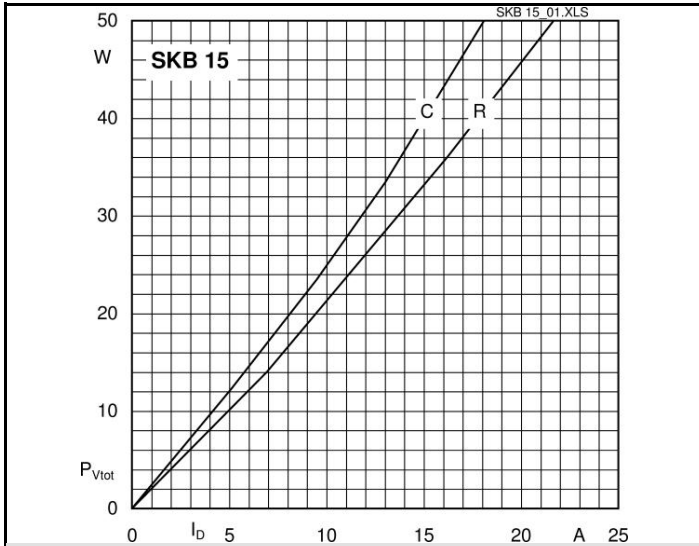


Fig. 1 Power dissipation vs. output current

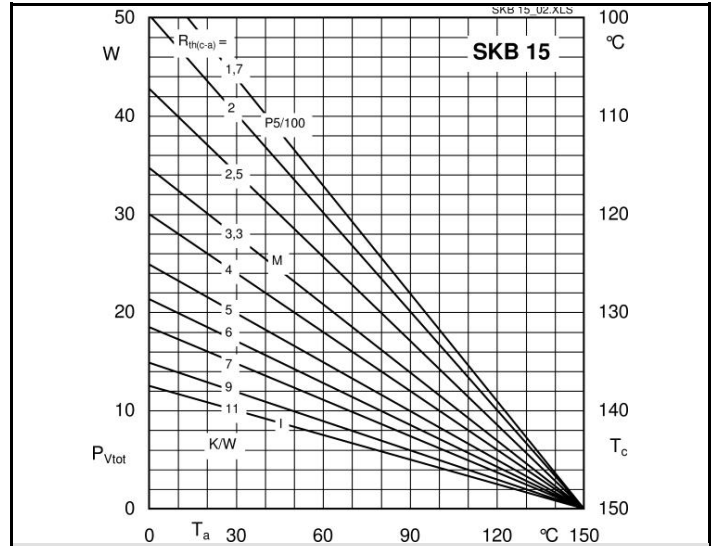


Fig. 2 Power dissipation vs. case temperature

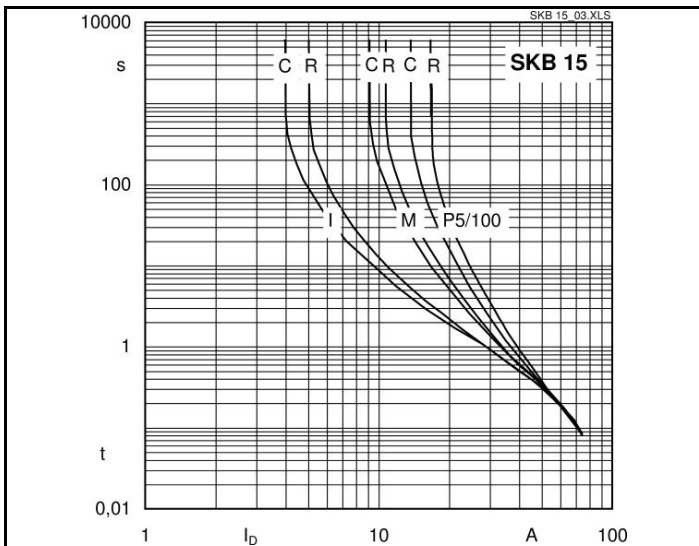


Fig. 6 Rated overload characteristics vs. time

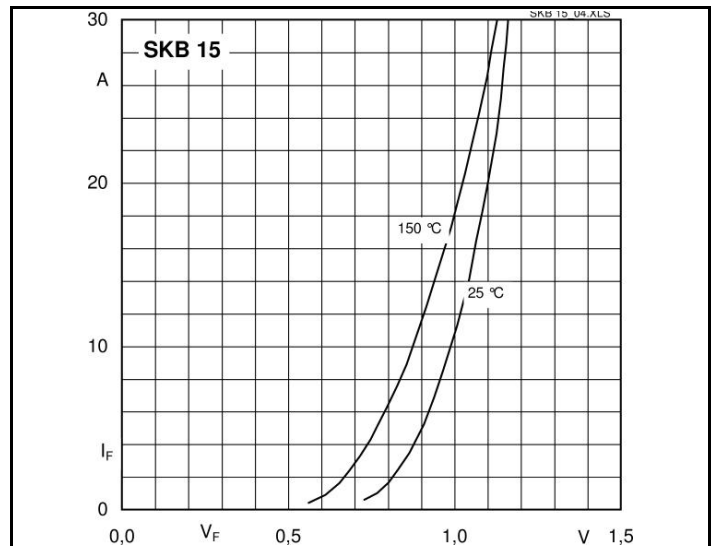
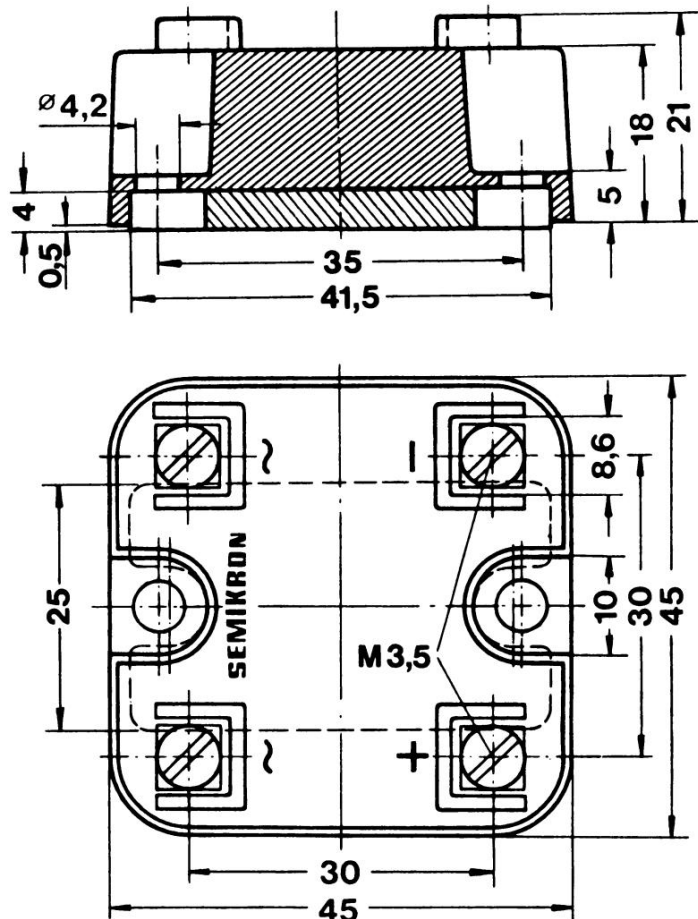


Fig. 9 Forward characteristics of a diode arm



Case G 9

This technical information specifies semiconductor devices but promises no characteristics. No warranty or guarantee expressed or implied is made regarding delivery, performance or suitability.