SKB 60

SEMIPONT® 2

Power Bridge Rectifiers

SKB 60

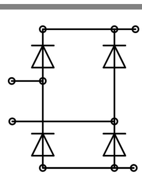
Features

- Robust plastic case with screw terminals
- Large, isolated base plate
- Blocking voltage to 1600 V
- High surge currents
- Single phase bridge rectifier
- Easy chassis mounting
- UL recognized, file no. E 63 532

Typical Applications

- Single phase rectifiers for power supplies
- Input rectifiers for variable frequency drives
- Rectifiers for DC motor field supplies
- Battery charger rectifiers

1) Painted metal sheet of minimum 250 x 250 x 1 mm: $Rh_{th(c-a)}$ = 1,8 K/W



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V_{RSM} V	V_{RRM}, V_{DRM} V	I_D = 60 A (full conduction) (T_c = 88 °C)
400	400	SKB 60/04
800	800	SKB 60/08
1200	1200	SKB 60/12
1400	1400	SKB 60/14
1600	1600	SKB 60/16

Symbol	Conditions	Values	Units
I_D	T_c = 85 °C	67	A
	inductive load		A
	T_a = 45 °C, chassis [1)]	20	A
	T_a = 45 °C; P13A/125 (P1A/120)	25 (44)	A
	T_a = 35 °C, P1A/200F	88	A
I_{FSM}	T_{vj} = 25 °C; 10 ms	1000	A
	T_{vj} = 125 °C; 10 ms	850	A
i²t	T_{vj} = 25 °C; 8,3 ... 10 ms	5000	A²s
	T_{vj} = 125 °C; 8,3 ... 10 ms	3600	A²s
V_F	T_{vj} = 25 °C; I_F = 150 A	max. 1,6	V
$V_{(TO)}$	T_{vj} = 125 °C	max. 0,85	V
r_T	T_{vj} = 125 °C	max. 5	mΩ
I_{RD}	T_{vj} = 25 °C; V_{DD} = V_{DRM}; V_{RD} = V_{RRM}	max. 0,5	mA
	T_{vj} = 125 °C, V_{RD} = V_{RRM}	2	mA
$R_{th(j-c)}$	per diode	1	K/W
	total	0,25	K/W
$R_{th(c-s)}$	total	0,05	K/W
T_{vj}		- 40 ... + 125	°C
T_{stg}		- 40 ... + 125	°C
V_{isol}	a. c. 50 Hz; r.m.s.; 1 s / 1 min.	3600 (3000)	V
M_s	to heatsink	5 ± 15 %	Nm
M_t	to terminals	5 ± 15 %	Nm
m		165	g
Case		G 17	

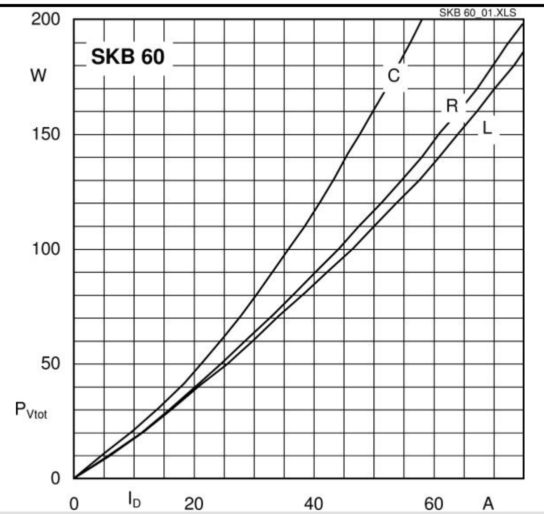

Fig. 3L Power dissipation vs. output current

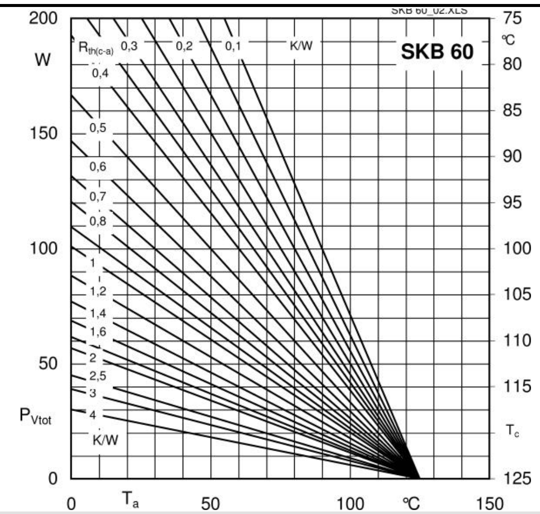

Fig. 3R Power dissipation vs. case temperature

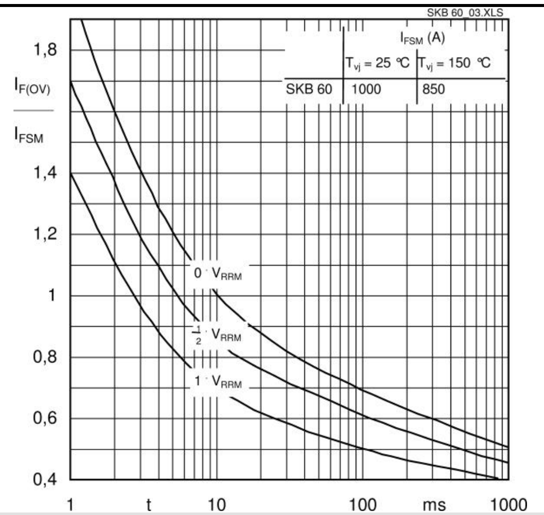

Fig. 6 Surge overload characteristics vs. time

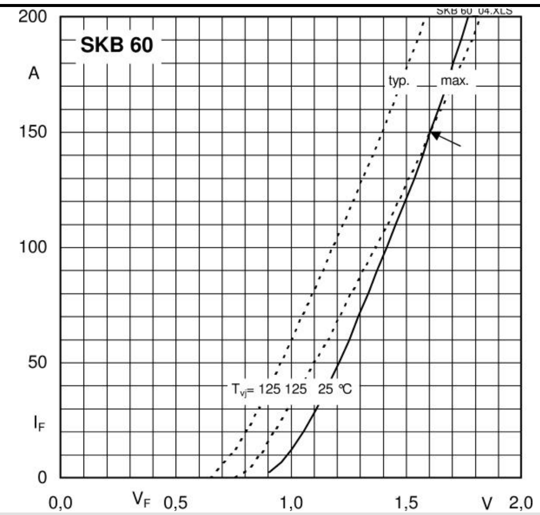

Fig. 9 Forward characteristics of a diode arm

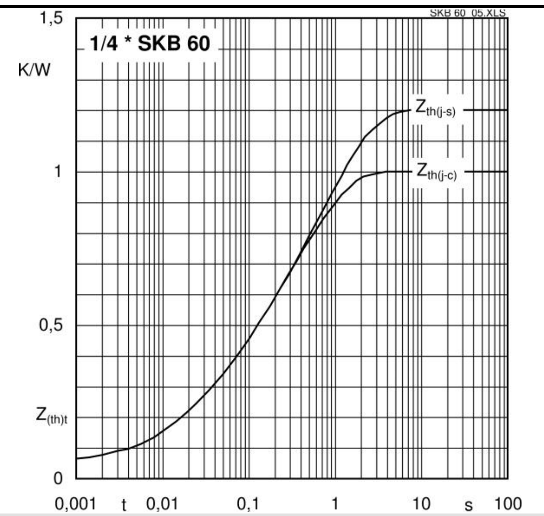

Fig. 12 Transient thermal impedance vs. time

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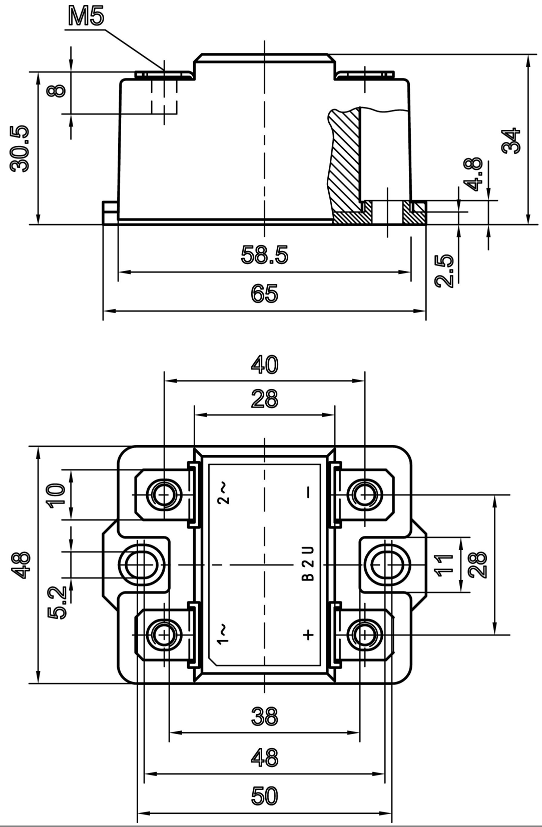
Dimensions in mm



Case G 17

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