V_{RSM} V_{RRM} V	I_D (T_{case} = . . .) 50 A (99 °C)	70 A (101 °C)	60 A (110 °C)	80 A (110 °C)
400	**SKB 52/04**	**SKB 72/04**	**SKD 62/04**	**SKD 82/04**
800	**SKB 52/08**	**SKB 72/08**	**SKD 62/08**	**SKD 82/08**
1200	**SKB 52/12**	**SKB 72/12**	**SKD 62/12**	**SKD 82/12**
1400	**SKB 52/14**	**SKB 72/14**	**SKD 62/14**	**SKD 82/14**
1600	**SKB 52/16**	**SKB 72/16**	**SKD 62/16**	**SKD 82/16**
1800	**SKB 52/18**	**SKB 72/18**	**SKD 62/18***	**SKD 82/18***

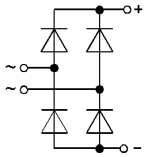
Symbol	Conditions		SKB 52	SKD 62	SKB 72	SKD 82	Units
I_D	T_{case} = 110 °C; resistive/ inductive load		42	60	60	80	A
	T_{amb} = 45 °C; isolated [1]		9,5	10,5	10	12	A
		chassis [2]	21,5	24	23,5	26	A
		P1A/120	40	46	48	54	A
		P1A/200	45	53	54	63	A
I_{FSM}	T_{vj} = 25 °C; 10 ms		500		750		A
	T_{vj} = 150 °C; 10 ms		425		640		A
i^2t	T_{vj} = 25 °C; 8,3 ... 10 ms		1250		2800		A^2s
	T_{vj} = 150 °C; 8,3 ... 10 ms		900		2000		A^2s
V_F	T_{vj} = 25 °C; I_F = 150 A		1,8		1,6		V
$V_{(TO)}$	T_{vj} = 150 °C		0,85		0,85		V
r_T	T_{vj} = 150 °C		8		5		mΩ
I_{RD}	T_{vj} = 25 °C; V_{RD} = V_{RRM}		0,5		0,5		mA
	T_{vj} = 150 °C; V_{RD} = V_{RRM}		5		6		mA
R_{thjc}	per diode		1,5		1,1		°C/W
	total, SKB		0,375		0,275		°C/W
	total, SKD		0,25		0,183		°C/W
R_{thch}	total		0,07				°C/W
T_{vj}			– 40 ... + 150				°C
T_{stg}			– 40 ... + 125				°C
V_{isol}	a. c. 50... 60 Hz; r.m.s; 1s/1min		3600 / 3000				V~
M_1	to heatsink	SI units	5 ± 15 %				Nm
		US units	44 ± 15 %				lb. in.
M_2	to terminals	SI units	5 ± 15 %				Nm
		US units	44 ± 15 %				lb. in.
w			140				g
Case			G 35	G 36	G 35	G 36	

* Available in limited quantities

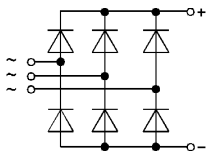
[1] Freely suspended or mounted on an isolator
[2] Mounted on a painted metal sheet of min. 250 x 250 x 1 mm; R_{thha} = 1,8 °C/W

SEMIPONT® 3
Power Bridge Rectifiers

SKB 52 SKD 62
SKB 72 SKD 82



SKB



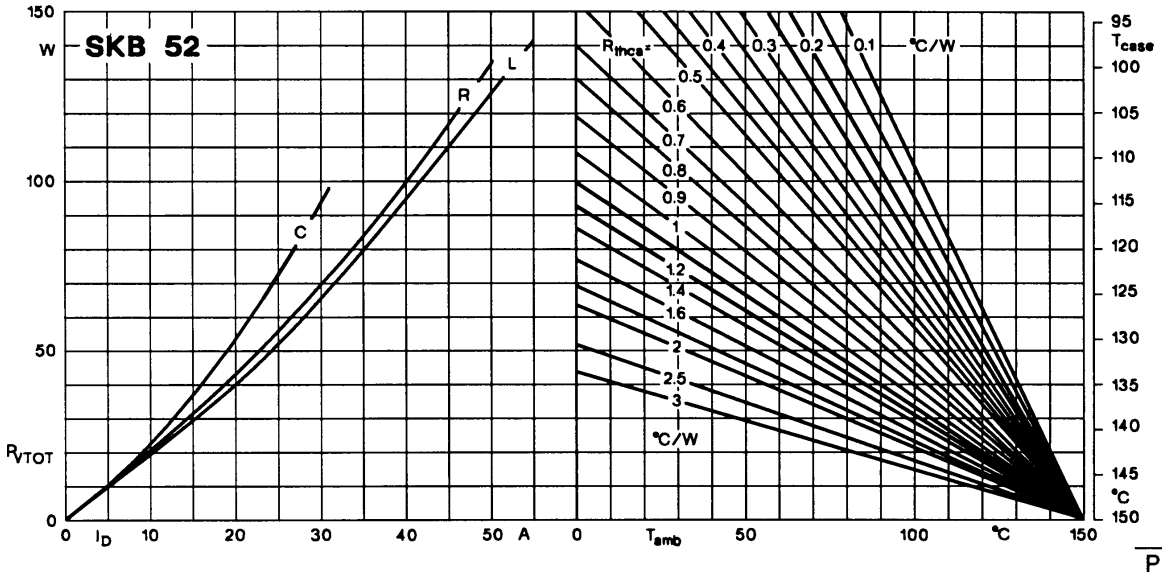
SKD

Features

- Robust plastic case with screw terminals
- Large, isolated base plate
- Blocking voltage up to 1800 V
- High surge currents
- **SKB =** single phase bridge rectifier
  SKD = three phase bridge rectifier
- Easy chassis mounting
- UL recognized, file no. E 63 532

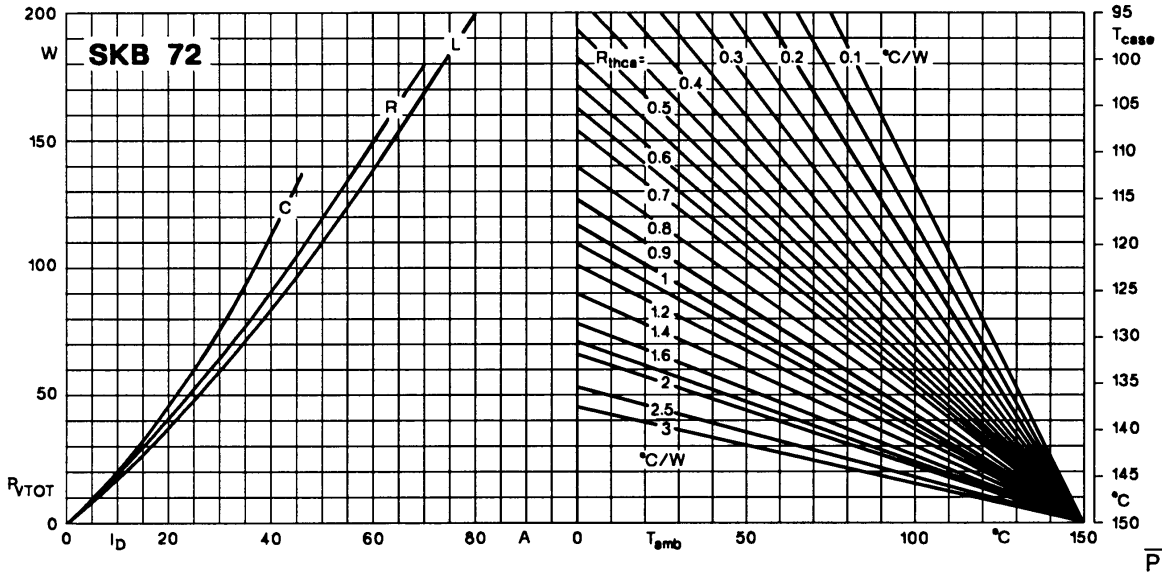
Typical Applications

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



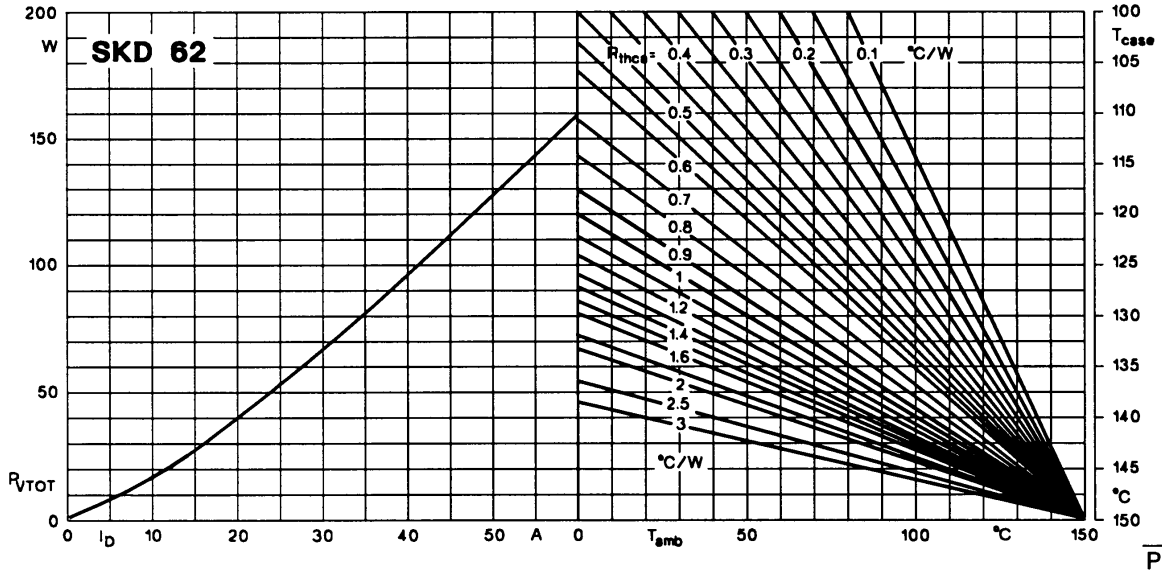
	R_{thca}
P1/120	0,65 °C/W
P1/200	0,52 °C/W

Fig. 3 a Power dissipation vs. output current and case temperature



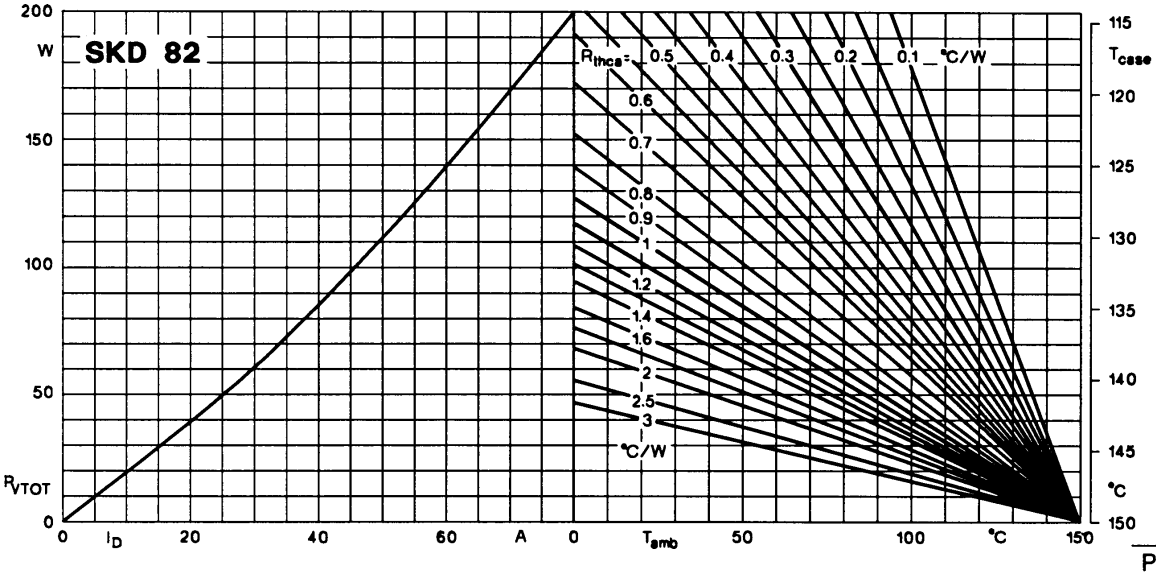
	R_{thca}
P1/120	0,65 °C/W
P1/200	0,52 °C/W

Fig. 3 b Power dissipation vs. output current and case temperature



	R_{thca}
P1/120	0,65 °C/W
P1/200	0,52 °C/W

Fig. 3 c Power dissipation vs. output current and case temperature



	R_{thca}
P1/120	0,65 °C/W
P1/200	0,52 °C/W

Fig. 3 d Power dissipation vs. output current and case temperature

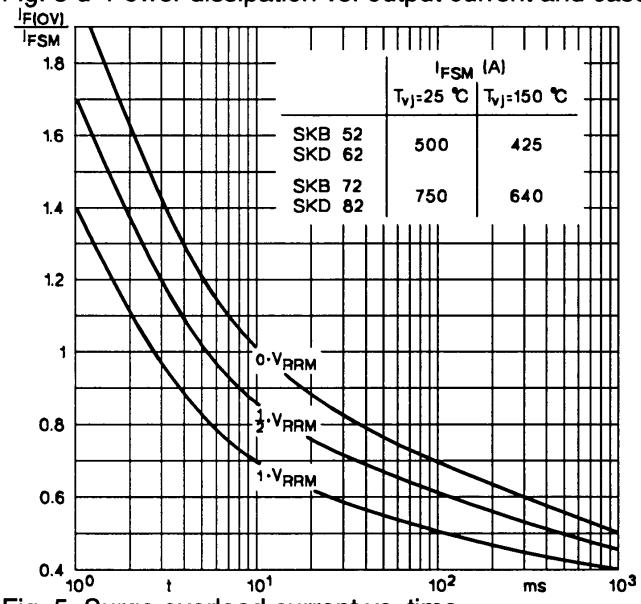


Fig. 5 Surge overload current vs. time

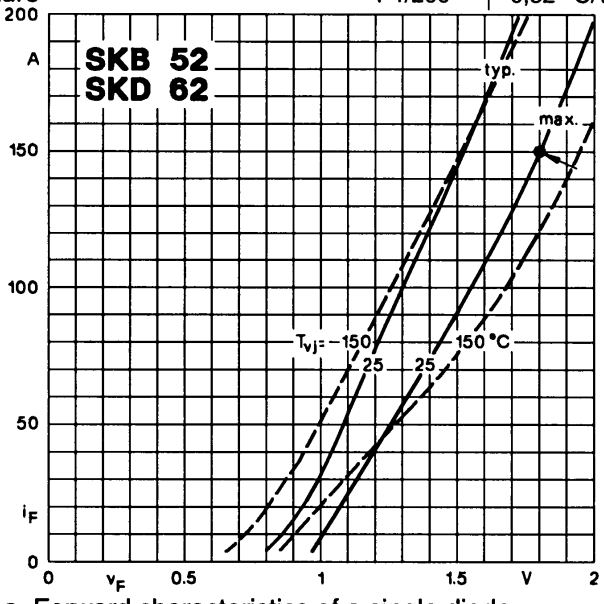


Fig. 9 a Forward characteristics of a single diode

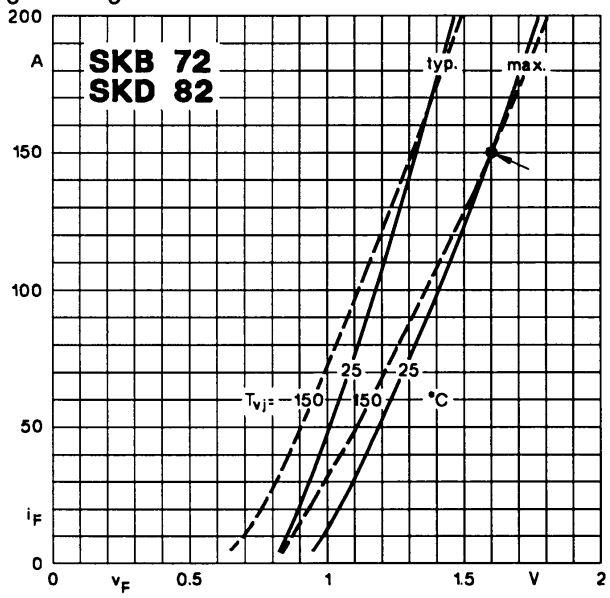


Fig. 9 b Forward characteristics of a single diode

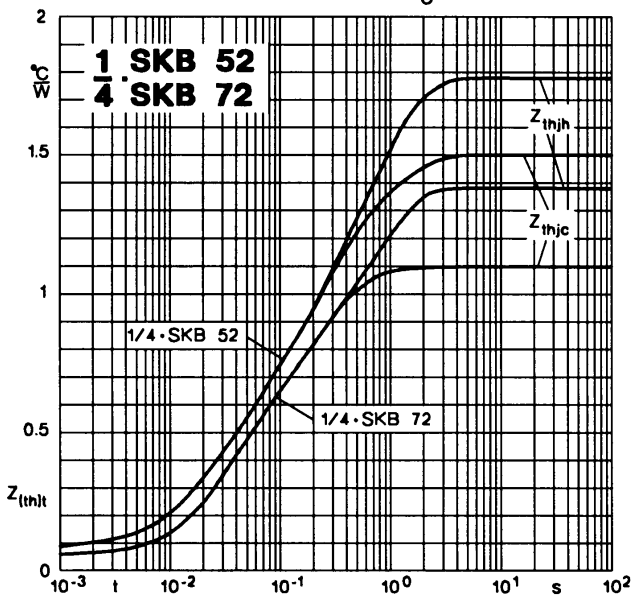


Fig. 12 a Transient thermal impedance vs. time

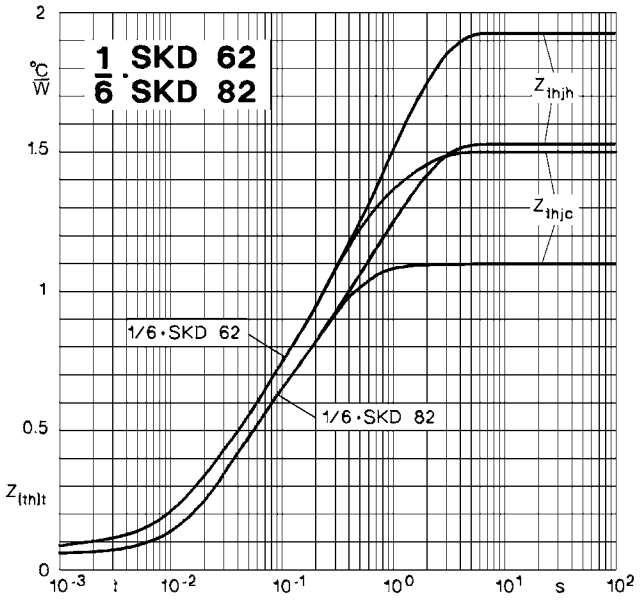
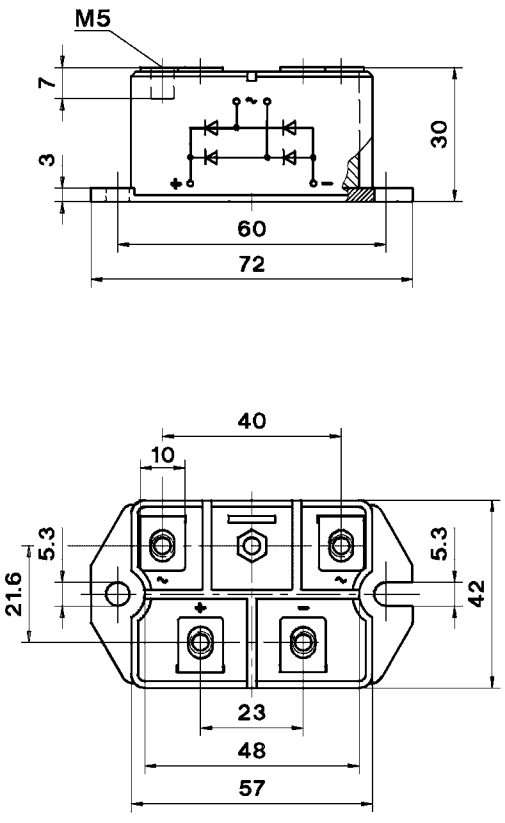


Fig. 12 b Transient thermal impedance vs. time

SKB 52 **SEMIPONT®3**

SKB 72

Case G 35

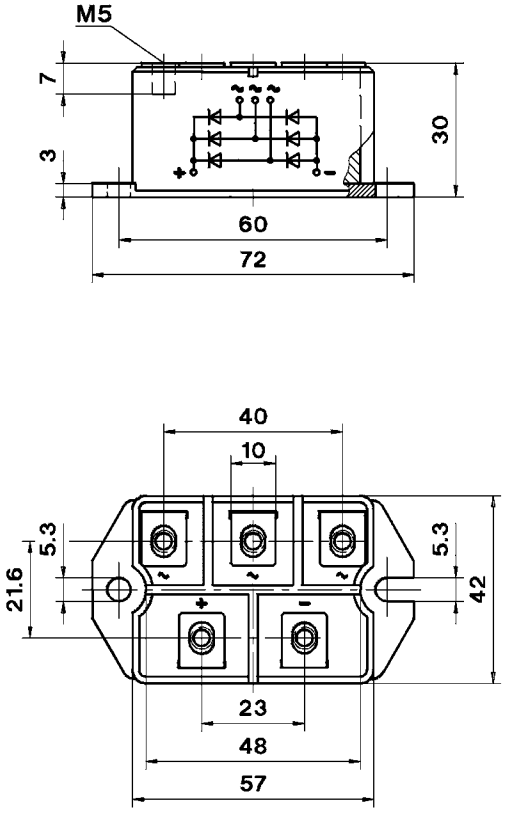


Dimensions in mm

SKD 62 **SEMIPONT®3**

SKD 82

Case G 36



Dimensions in mm