SKD 62

SEMIPONT® 3

Power Bridge Rectifiers

SKD 62

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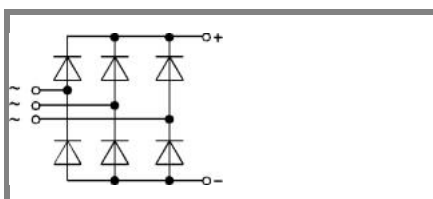- Easy chassis mounting
- UL recognized, file no. E 63 532

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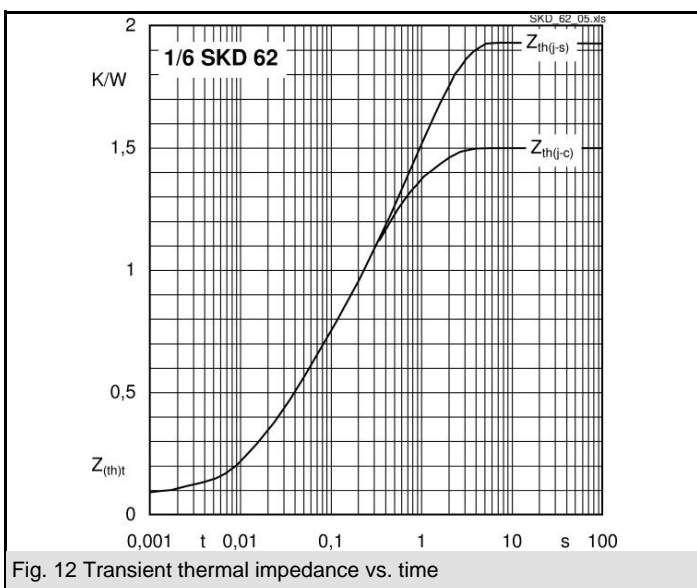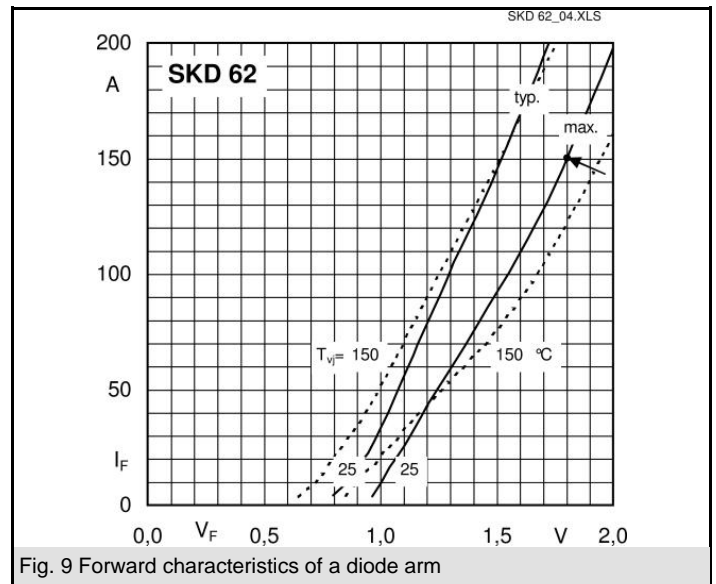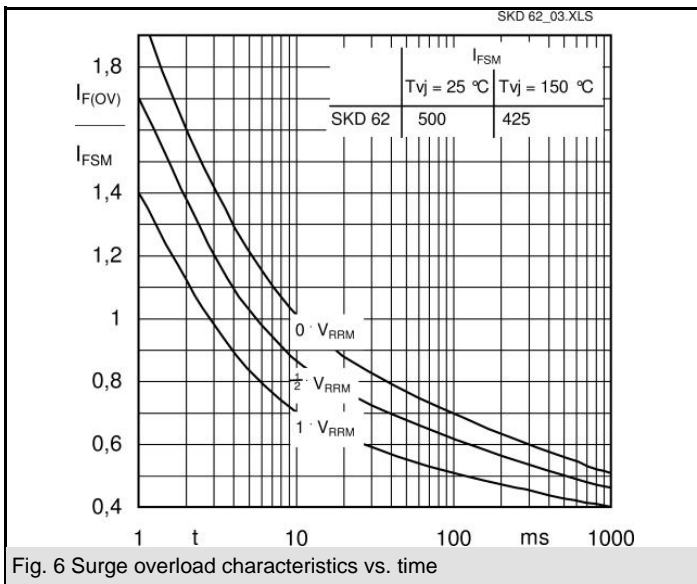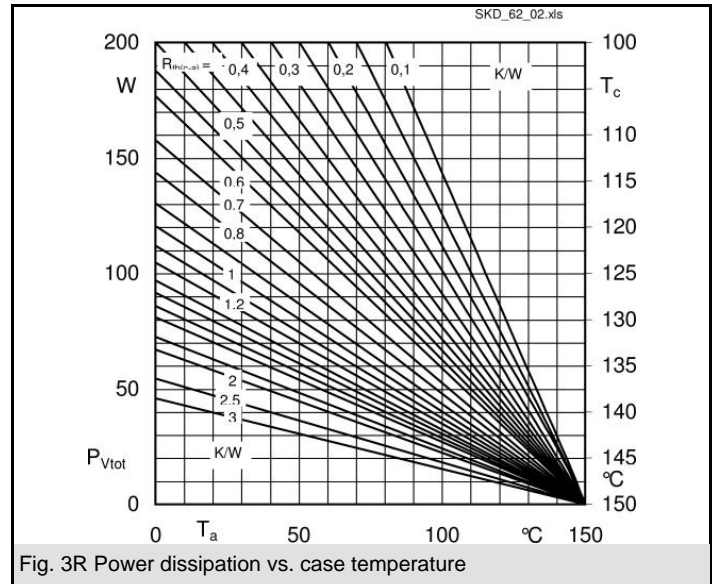- Battery charger rectifiers

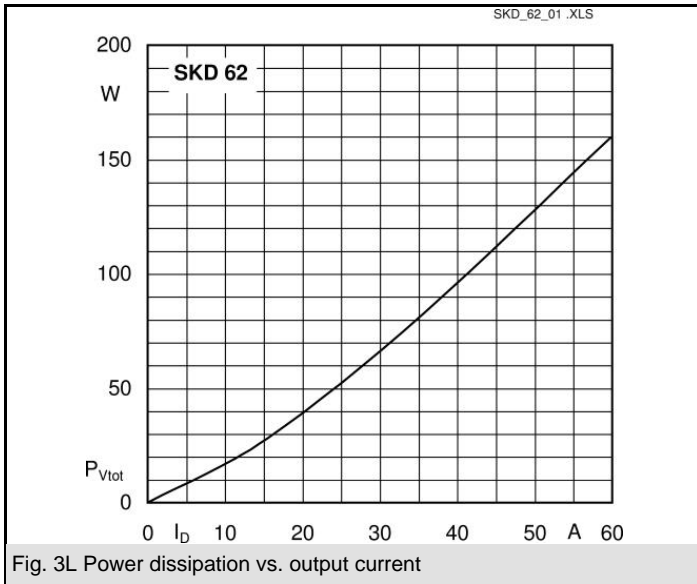[1] Freely suspended or mounted on an insulator

[2] Mounted on a painted metal sheet of min. 250 x 250 x 1 mm; $R_{th(s-a)}$ = 1,8 K/W

[3] Available in limited quantities

V_{RSM} V	V_{RRM}, V_{DRM} V	I_D = 60 A (full conduction) (T_c = 110 °C)
400		SKD 62/04
800		SKD 62/08
1200		SKD 62/12
1400		SKD 62/14
1600		SKD 62/16
1800		SKD 62/18 [3]

Symbol	Conditions	Values	Units
I_D	T_c = 85 °C	86	A
	resistive / inductive load		
	T_a = 45 °C; isolated [1]	10,5	A
	T_a = 45 °C; chassis [2]	24	A
	T_a = 45 °C; P1A/120 (P 1A/200)	46 (53)	A
I_{FSM}	T_{vj} = 25 °C; 10 ms	500	A
	T_{vj} = 150 °C; 10 ms	425	A
i^2t	T_{vj} = 25 °C; 8,3 ... 10 ms ms	1250	A²s
	T_{vj} = 150 °C; 8,3 ... 10 ms ms	900	A²s
V_F	T_{vj} = 25 °C; I_F = 150 A	max. 1,8	V
$V_{(TO)}$	T_{vj} = 150 °C	0,85	V
r_T	T_{vj} = 150 °C	8	mΩ
I_{RD}	T_{vj} = 25 °C; V_{DD} = V_{DRM}; V_{RD} = V_{RRM}	max. 0,5	mA
	T_{vj} = 150 °C; V_{RD} = V_{RRM}	5	mA
$R_{th(j-c)}$	per diode	1,5	K/W
	total	0,25	K/W
$R_{th(c-s)}$		0,07	K/W
T_{vj}		-40 ... + 150	°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 36	

SKD

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Fig. 3L Power dissipation vs. output current

Fig. 3R Power dissipation vs. case temperature

Fig. 6 Surge overload characteristics vs. time

I_FSM	Tvj = 25 ℃	Tvj = 150 ℃
SKD 62	500	425

Fig. 9 Forward characteristics of a diode arm

Fig. 12 Transient thermal impedance vs. time

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Dimensions in mm

M5

7

3

30

60

72

40

10

5.3

21.6

5.3

42

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+ −

23

48

57
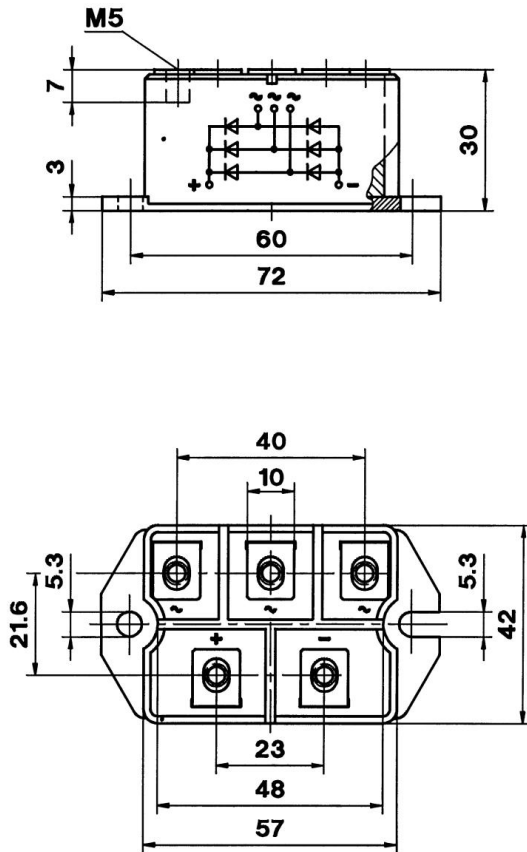
Case G 36

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