

SEMIPONT® 3

Power Bridge Rectifiers

SKB 52

Features

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

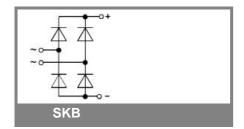
Typical Applications

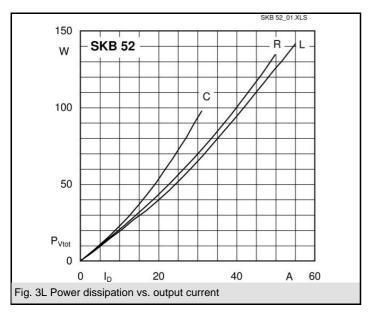
- Single phase rectifiers for power supplies
- Input rectifiers for variable frequency drives
- Rectifiers for DC motor field supplies
- · Battery charger rectifiers
- 1) Freely suspended or mounted on an isolator
- 2) Mounted on a painted metal sheet of min. 250 x 250 x 1 mm:

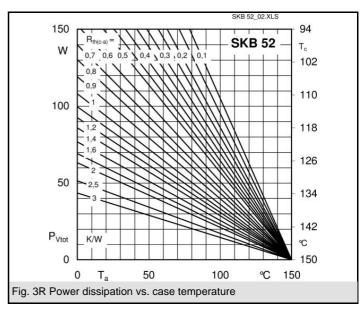
$$R_{th(s-a)} = 1.8 \text{ K/W}$$

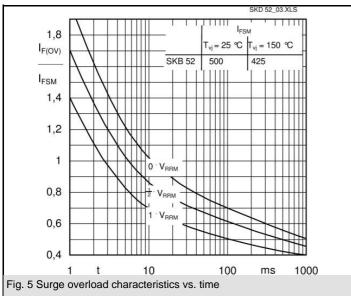
V_{RSM}	V_{RRM}, V_{DRM}	I _D = 50 A (full conduction)
V	V	(T _c = 99 °C)
400	400	SKB 52/04
800	800	SKB 52/08
1200	1200	SKB 52/12
1400	1400	SKB 52/14
1600	1600	SKB 52/16
1800	1800	SKB 52/18

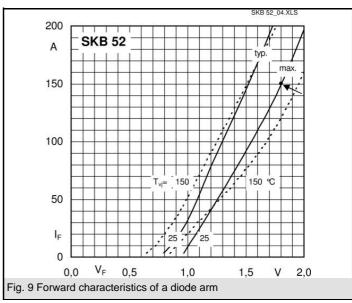
Symbol	Conditions	Values	Units
I _D	T _c = 85 °C	60	Α
	resistive / inductive load		
	T _a = 45 °C; isolated ¹⁾	9,5	Α
	T _a = 45 °C; chassis ²⁾	21,5	Α
	T _a = 45 °C; P1A/120 (P1A/200)	40 (45)	Α
I _{FSM}	T _{vj} = 25 °C; 10 ms	500	A
	T _{vi} = 150 °C; 10 ms	425	Α
i²t	T _{vi} = 25 °C; 8,3 10 ms	1250	A²s
	T _{vj} = 150 °C; 8,3 10 ms	900	A²s
V_{F}	T _{vi} = 25 °C; I _F = 150 A	max. 1,8	V
$V_{(TO)}$	T _{vi} = 150 °C	max. 0,85	V
r _T	T _{vi} = 150 °C	max. 8	mΩ
I _{RD}	T_{vj}^{3} = 25 °C; V_{DD} = V_{DRM} ; V_{RD} = V_{RRM}	max. 0,5	mA
	$T_{vj}^{v} = 150 ^{\circ}\text{C}; V_{RD} = V_{RRM}$	5	mA
R _{th(j-c)}	per diode	1.5	K/W
tn(j-c)	total	0,375	K/W
R _{th(c-s)}	total	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 35	

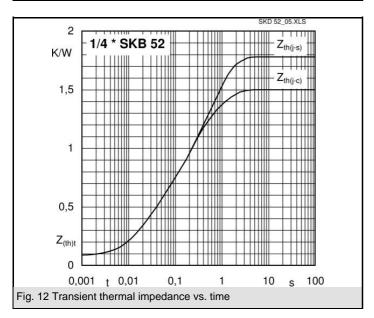


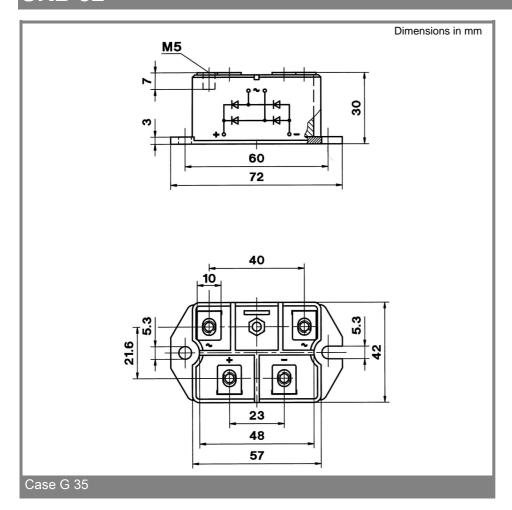












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