



Power Bridge Rectifiers

SKD 50

Features

- Isolated metal case with screw terminals
- Blocking voltage up to 1600 V
- High surge current
- Easy chassis mounting

Typical Applications

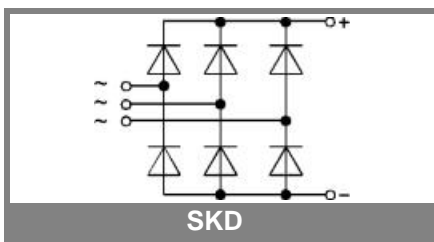
- Three phase rectifiers for power supplies
- Input rectifiers for variable frequency drives
- Rectifiers for DC motor field supplies
- Battery charger rectifiers
- Recommended snubber network:
RC: 0.1 μ F, 50 Ω ($P_R = 1$ W)

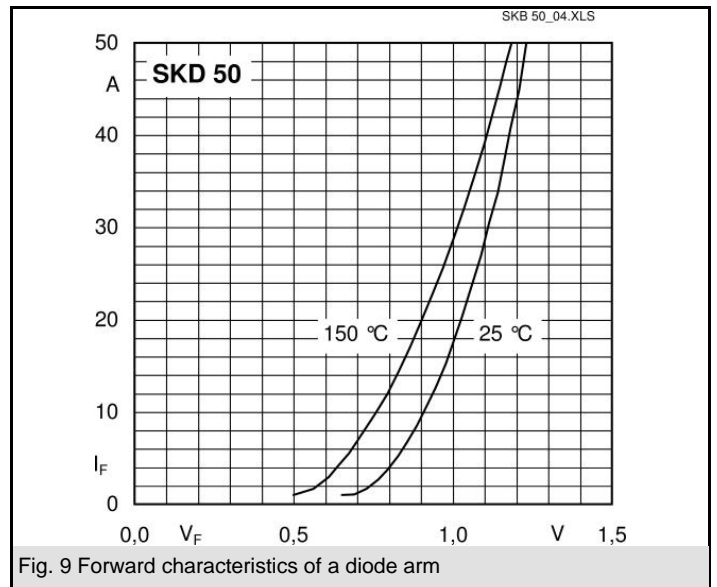
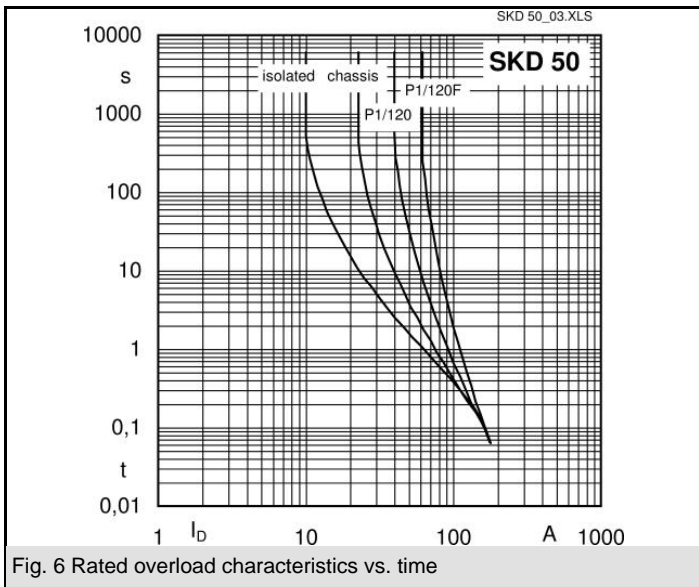
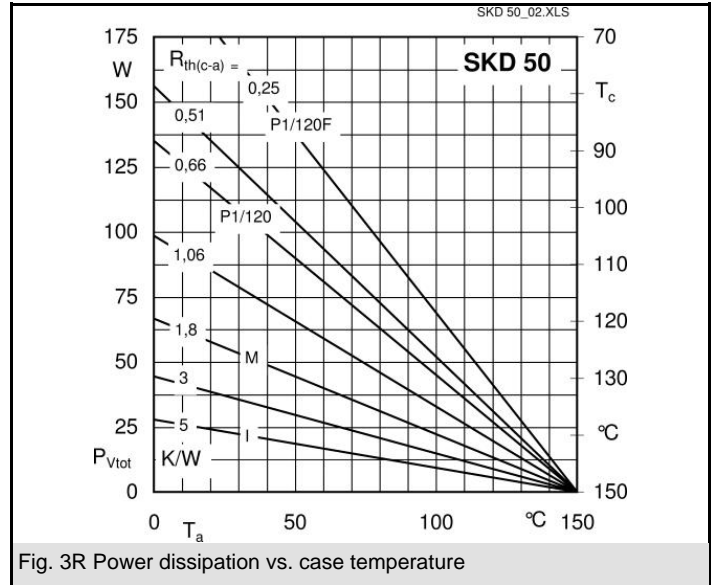
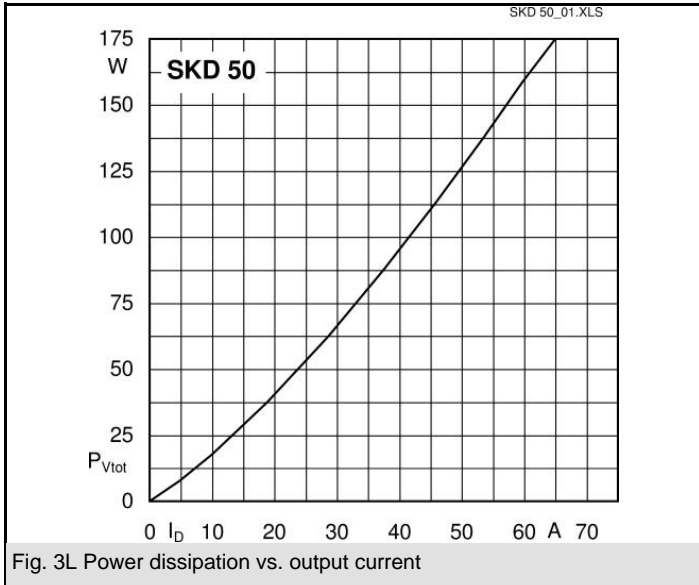
1) Freely suspended or mounted on an insulator

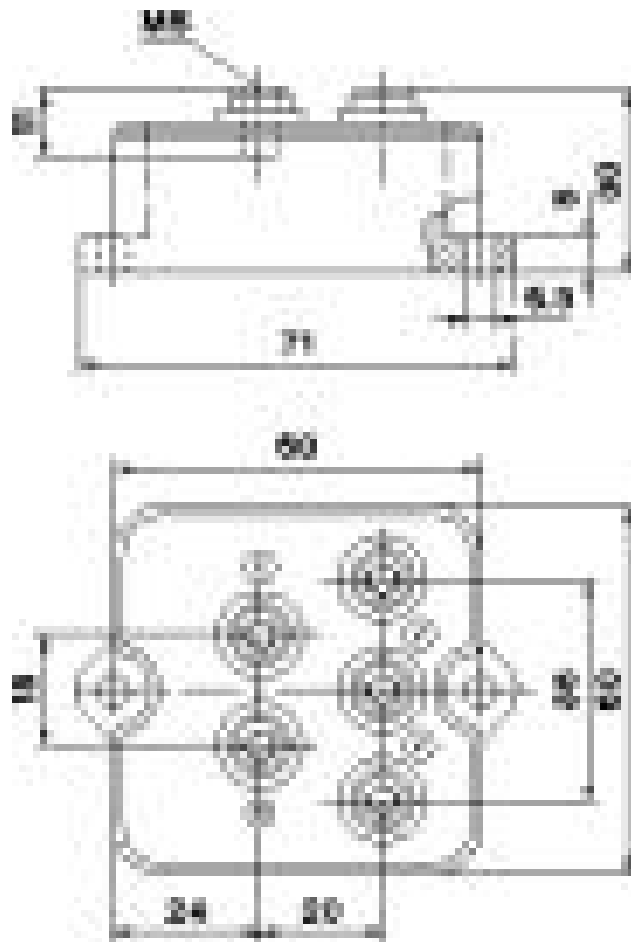
2) Mounted on a painted metal sheet of min. 250 x 250 x 1 mm

V_{RSM}, V_{RRM} V	V_{VRMS} V	$I_D = 50$ A ($T_c = 92$ °C) Types	C_{max} μ F	R_{min} Ω
200		SKD 50/02A3		0,1
400		SKD 50/04A3		0,2
800		SKD 50/08A3		0,4
1200		SKD 50/12A3		0,6
1400		SKD 50/14A3		0,7
1600		SKD 50/16A3		0,8

Symbol	Conditions	Values	Units
I_D	$T_a = 45$ °C, isolated ¹⁾	10	A
	$T_a = 45$ °C, chassis ²⁾	22	A
I_{DCL}	$T_a = 45$ °C, isolated ¹⁾	10	A
	$T_a = 45$ °C, chassis ²⁾	22	A
	$T_a = 35$ °C, P1A/120 F	60	A
I_{FSM}	$T_{vj} = 25$ °C, 10 ms	750	A
	$T_{vj} = 150$ °C, 10 ms	600	A
i^2t	$T_{vj} = 25$ °C, 8,3 ... 10 ms	2800	A ² s
	$T_{vj} = 150$ °C, 8,3 ... 10 ms	1800	A ² s
V_F	$T_{vj} = 25$ °C, $I_F = 150$ A	max. 1,6	V
$V_{(TO)}$	$T_{vj} = 150$ °C	max. 0,85	V
r_T	$T_{vj} = 150$ °C	max. 8	m Ω
I_{RD}	$T_{vj} = 25$ °C, $V_{RD} = V_{RRM}$	1000	μ A
	$T_{vj} =$ °C, $V_{RD} = V_{RRM} \geq V$		μ A
I_{RD}	$T_{vj} = 150$ °C, $V_{RD} = V_{RRM}$	10	mA
	$T_{vj} =$ °C, $V_{RD} = V_{RRM} \geq V$		mA
t_{tr}	$T_{vj} = 25$ °C	10	μ s
f_G		2000	Hz
$R_{th(j-a)}$	isolated ¹⁾	5,5	K/W
	chassis ²⁾	2,3	K/W
$R_{th(j-c)}$	total	0,45	K/W
$R_{th(c-s)}$	total	0,06	K/W
T_{vj}		- 40 ... + 150	°C
T_{stg}		- 55 ... + 150	°C
V_{isol}	a. c. 50 ... 60 Hz; r.m.s.; 1 s / 1 min.	3000 / 2500	V~
M_s	to heatsink	5 \pm 15 %	Nm
M_t	to terminals	3 \pm 15 %	Nm
a		5 * 9,81	m/s ²
w		250	g
F_u		50	A
Case		G 15	







Case G 15

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