SKD 50

V_{RSM}, V_{RRM} V	V_{VRMS} V	I_D = 50 A (T_c = 92 °C) Types	C_{max} µF	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

Power Bridge Rectifiers

SKD 50

Features

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

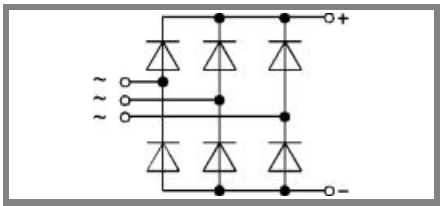
Typical Applications

- 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 µF, 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

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
i²t	T_{vj} = 25 °C, 8,3 ... 10 ms	2800	A²s
	T_{vj} = 150 °C, 8,3 ... 10 ms	1800	A²s
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	mΩ
I_{RD}	T_{vj} = 25°C, V_{RD}=V_{RRM}	1000	µA
	T_{vj} = °C, V_{RD}=V_{RRM} ≥ V		µA
I_{RD}	T_{vj} = 150°C, V_{RD}=V_{RRM}	10	mA
	T_{vj} = °C, V_{RD}=V_{RRM} ≥ V		mA
t_{rr}	T_{vj} = 25°C	10	µs
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 ± 15 %	Nm
M_t	to terminals	3 ± 15 %	Nm
a		5 * 9,81	m/s²
w		250	g
Fu		50	A
Case		G 15	



SKD

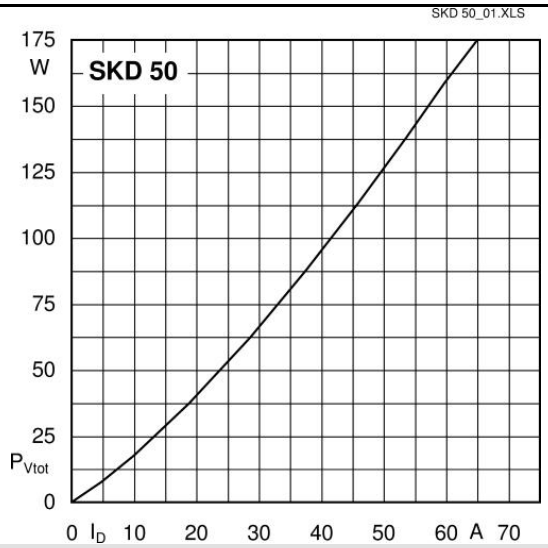


Fig. 3L Power dissipation vs. output current

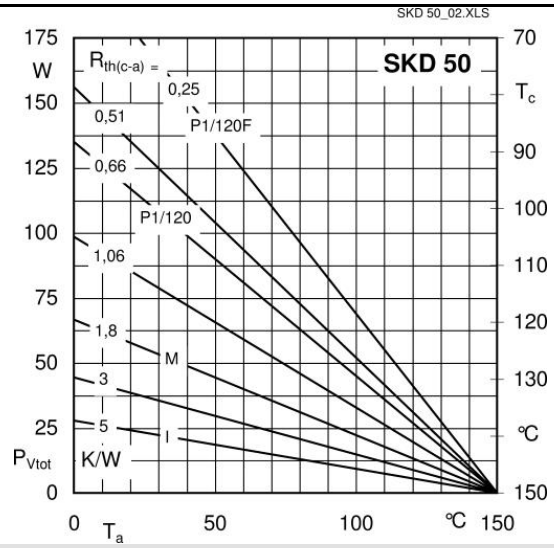


Fig. 3R Power dissipation vs. case temperature

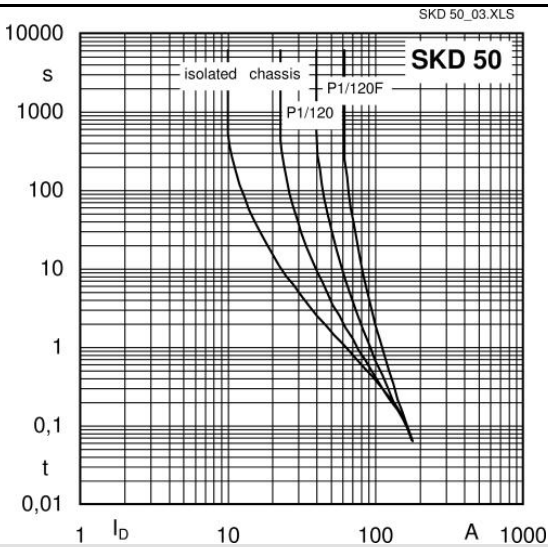


Fig. 6 Rated overload characteristics vs. time

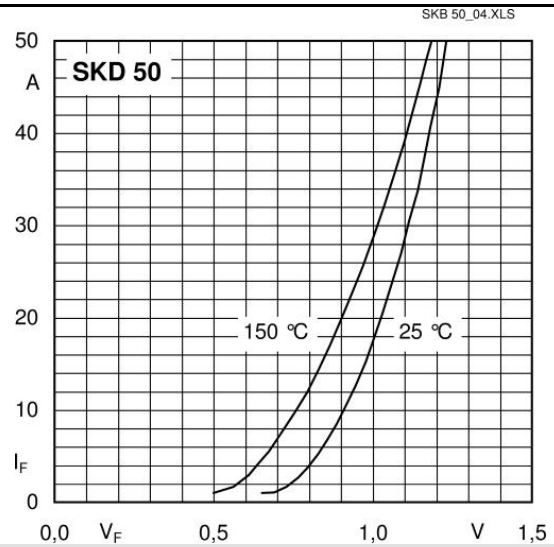
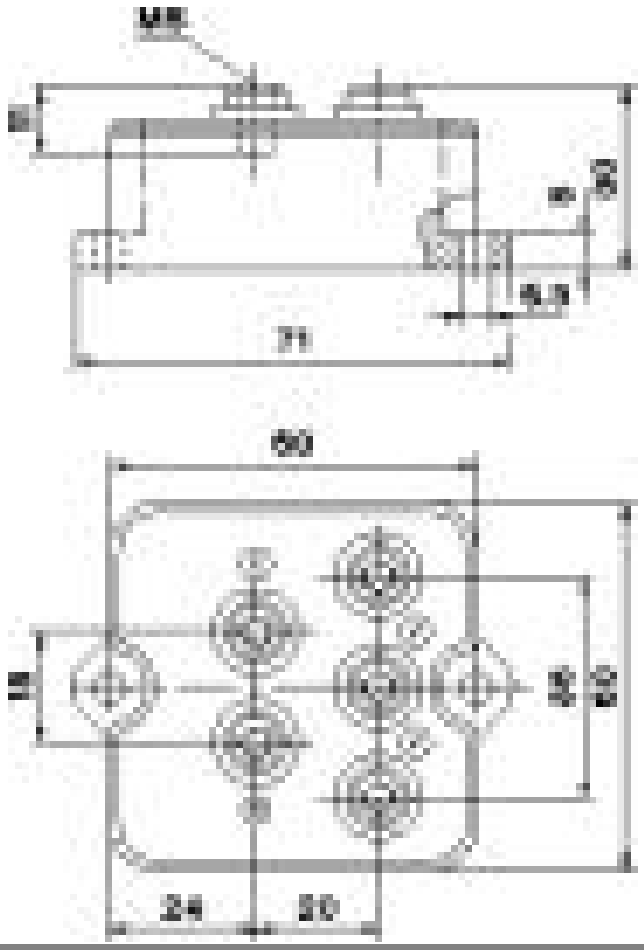


Fig. 9 Forward characteristics of a diode arm

Dimensions in mm



Case G 15