

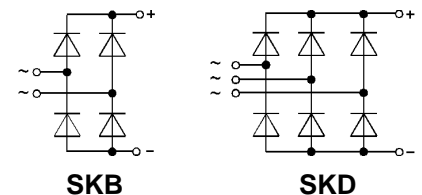
Power Bridge Rectifiers

SKB 50 SKD 50



V _{RSM} V _{RRM} V	I _D (T _{case} = . . .)			
	50 A (64 °C)		50 A (92 °C)	
	Types	R _{min} Ω	Types	R _{min} Ω
200	SKB 50/02 A3	0,1	SKD 50/02 A3	0,1
400	SKB 50/04 A3	0,3	SKD 50/04 A3	0,2
800	SKB 50/08 A3	0,4	SKD 50/08 A3	0,4
1200	SKB 50/12 A3	0,6	SKD 50/12 A3	0,6
1400	SKB 50/14 A3	0,7	SKD 50/14 A3	0,7
1600	SKB 50/16 A3	0,8	SKD 50/16 A3	0,8

Symbol	Conditions	SKB 50	SKD 50	Units	
I _D	T _{amb} = 45 °C; isolated ¹⁾	10	10	A	
	chassis ²⁾	20	22	A	
	P1A/120	34	40	A	
I _{DCL}	T _{amb} = 35 °C; P1A/120 F	47	60	A	
	T _{amb} = 45 °C; isolated ¹⁾	8	10	A	
	chassis ²⁾	16	22	A	
	P1A/120	29	40	A	
I _{FSM}	T _{vj} = 25 °C, 10 ms	750		A	
	T _{vj} = 150 °C, 10 ms	600		A	
i ² t	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	1,6		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 _{RD} = V _{RRM}	1		mA	
	T _{vj} = 150 °C; V _{RD} = V _{RRM}	10		mA	
t _{rr}	T _{vj} = 25 °C	typ. 10		μs	
f _G		2000		Hz	
R _{thjc}	total	0,65	0,45	°C/W	
R _{thch}	total	0,06	0,06	°C/W	
R _{thja}	T _{amb} = 35 °C; P1A/120 F	0,9	0,7	°C/W	
	isolated ¹⁾	5,7	5,5	°C/W	
	chassis ²⁾	2,5	2,3	°C/W	
	P1A/120	1,3	1,1	°C/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~	
RC	P _R = 1 W	50		Ω	
		0,1		μF	
F _u		50		A	
M ₁	to heatsink	SI units	5 ± 15 %		Nm
		US units	44 ± 15 %		lb. in.
M ₂	to terminals	SI units	3 ± 15 %		Nm
		US units	26 ± 15 %		lb. in.
w		250		g	
Case		G 14	G 15		



Features

- Isolated metal case with screw terminals
- Blocking voltage to 1600 V
- High surge current
- **SKB** = single phase bridge rectifier
- **SKD** = three phase bridge rectifier
- Easy chassis mounting

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

¹⁾ Freely suspended or mounted on an insulator

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

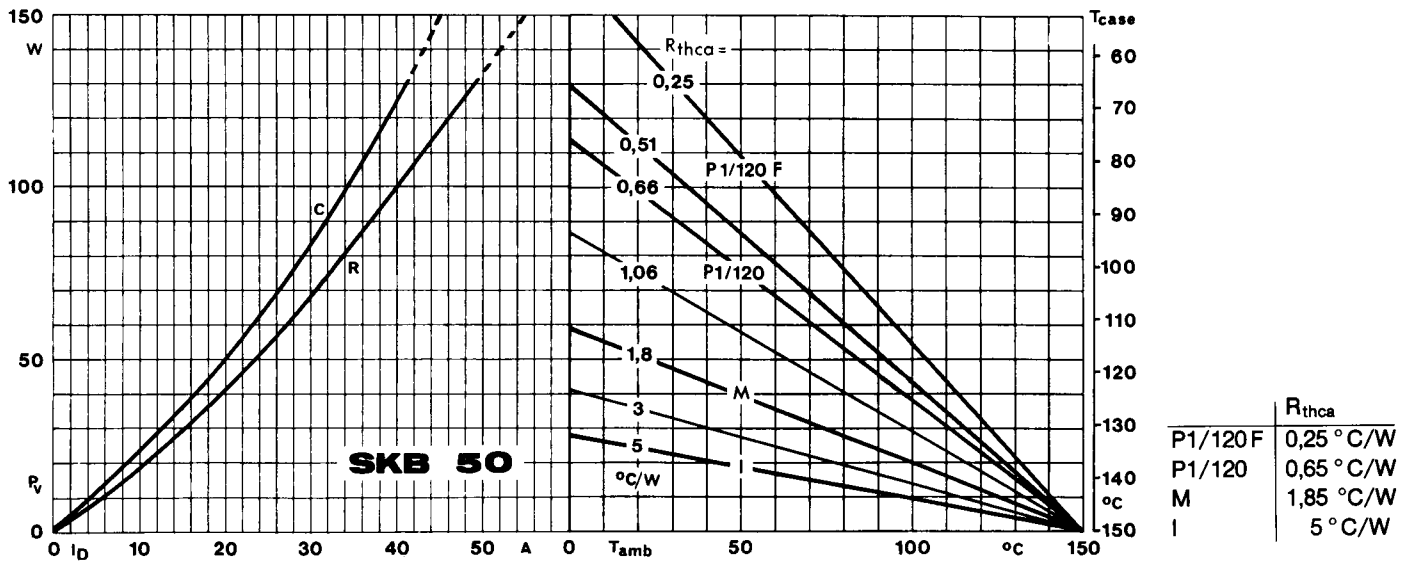


Fig. 3 a Power dissipation vs. output current and case temperature

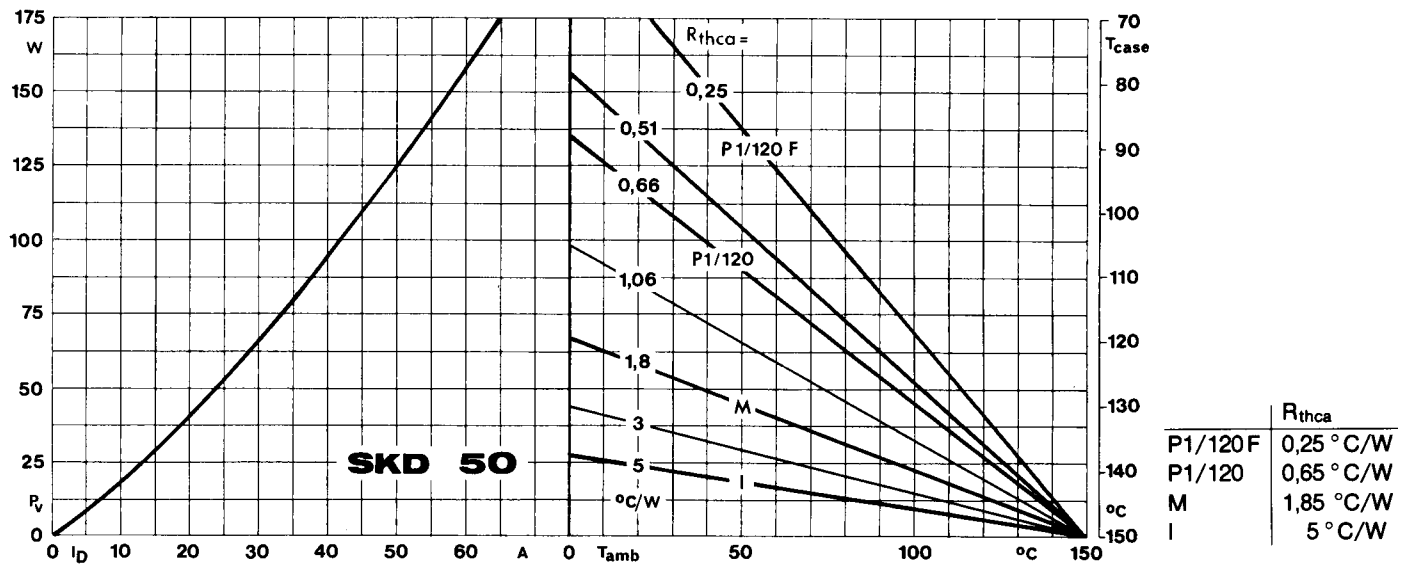


Fig. 3 b Power dissipation vs. output current and case temperature

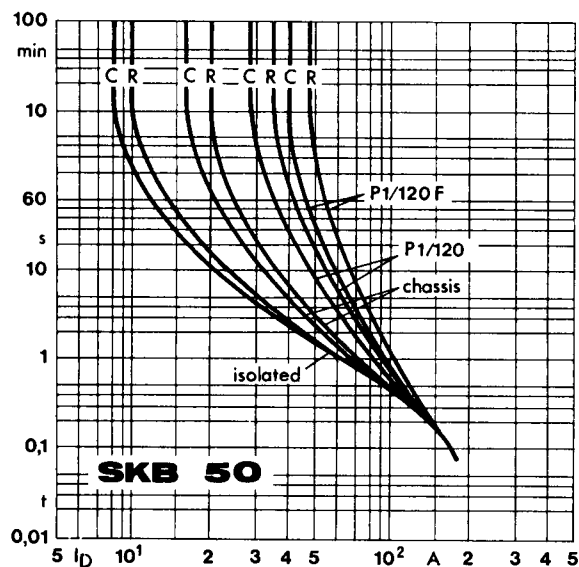


Fig. 6 a Rated overload current vs. time

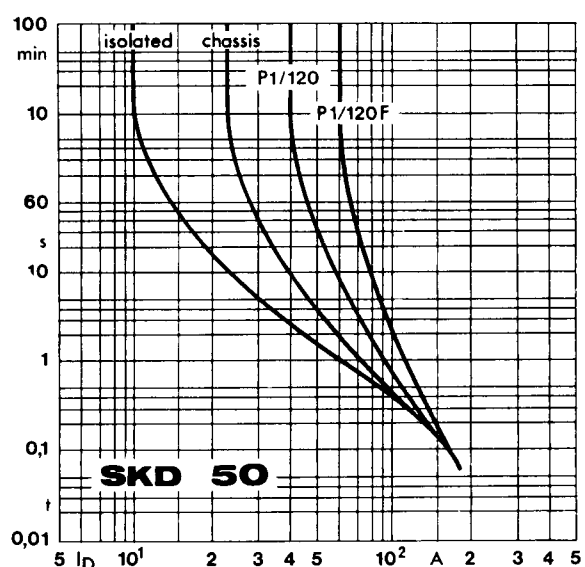


Fig. 6 b Rated overload current vs. time

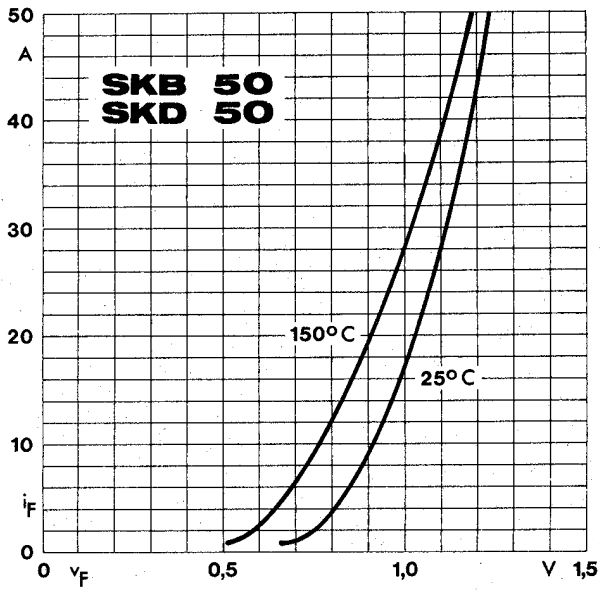


Fig. 9 Forward characteristics of a single diode

