SKD 30

V_{RSM}, V_{RRM} V	V_{VRMS} V	I_D = 30 A (T_c = 98 °C) Types	C_{max} µF	R_{min} Ω
200		SKD 30/02A1		0,15
400		SKD 30/04A1		0,3
800		SKD 30/08A1		0,5
1200		SKD 30/12A1		0,75
1400		SKD 30/14A1		0,9
1600		SKD 30/16A1		1

Power Bridge Rectifiers

SKD 30

Features

- Isolated metal case with screw terminals
- Blocking voltage up to 1600 V
- High surge currents
- Easy chassis mounting
- UL recognized, file no. E 63 532

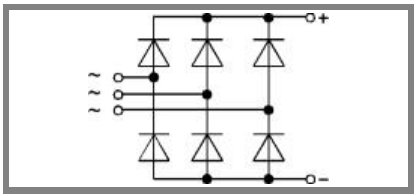
Typical Applications

- Three phase rectifiers for power supplies
- Input rectifiers for variable frequency drives
- Rectifiers for DC motor field supplies
- Battery charger rectifiers
- 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]	6,5	A
	T_a = 45 °C, chassis[2]	15	A
I_{DCL}	T_a = 45 °C, isolated[1]	6,5	A
	T_a = 45 °C, chassis[2]	15	A
	T_a = °C,		A
I_{FSM}	T_{vj} = 25 °C, 10 ms	370	A
	T_{vj} = 150 °C, 10 ms	320	A
i^2t	T_{vj} = 25 °C, 8,3 ... 10 ms	680	A²s
	T_{vj} = 150 °C, 8,3 ... 10 ms	500	A²s
V_F	T_{vj} = 25°C, I_F = 150 A	max. 2,2	V
$V_{(TO)}$	T_{vj} = 150°C	max. 0,85	V
r_T	T_{vj} = 150°C	max. 12	mΩ
I_{RD}	T_{vj} = 25°C, V_{RD}=V_{RRM}	300	µA
	T_{vj} = °C, V_{RD}=V_{RRM} ≥ V		µA
I_{RD}	T_{vj} = 150°C, V_{RD}=V_{RRM}	5	mA
	T_{vj} = °C, V_{RD}=V_{RRM} ≥ V		mA
t_{rr}	T_{vj} = 25°C	25	µs
f_G		2000	Hz
$R_{th(j-a)}$	isolated[1]	8,5	K/W
	chassis[2]	3,3	K/W
$R_{th(j-c)}$	total	0,7	K/W
$R_{th(c-s)}$	total	0,1	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	1,5 ± 15 %	Nm
a			m/s²
w		125	g
Fu		25	A
Case		G 13	



SKD

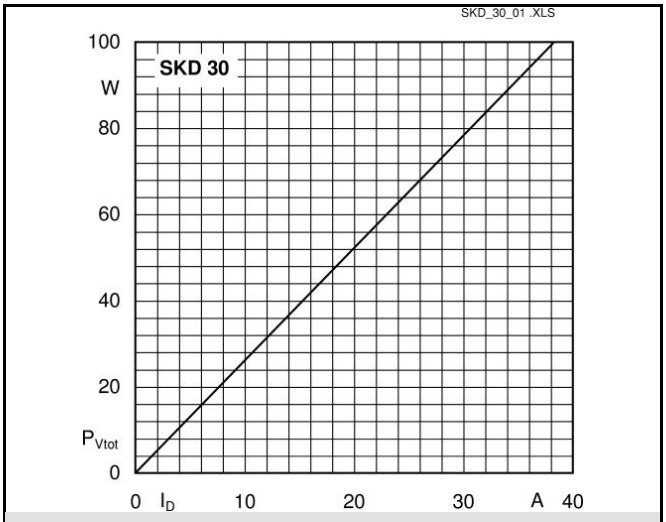


Fig. 3L Power dissipation vs. output current

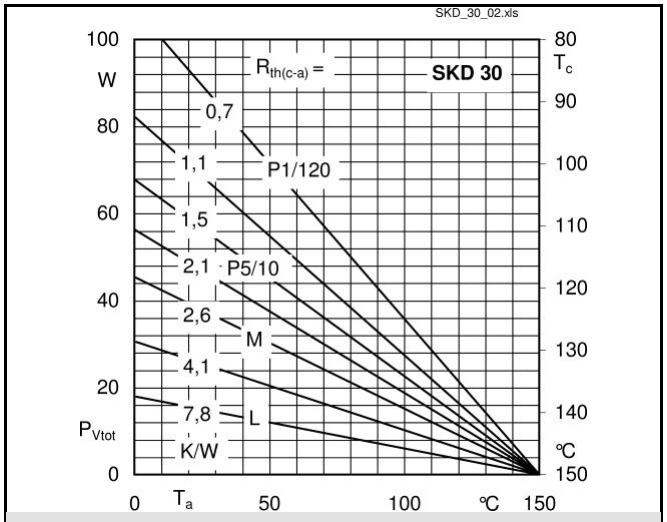


Fig. 3R Power dissipation vs. case temperature

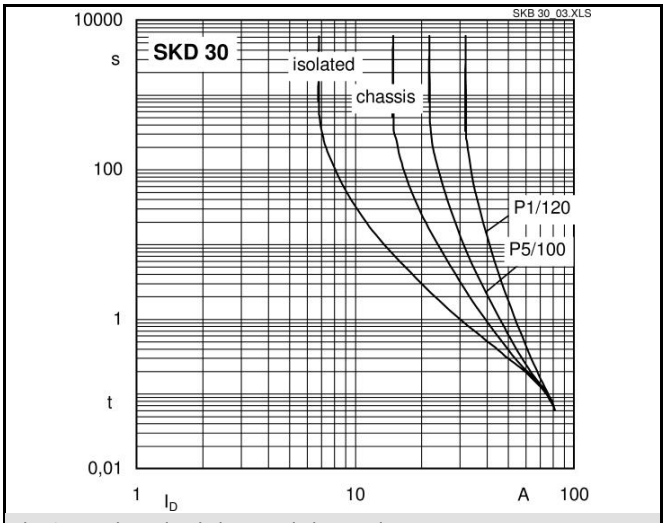


Fig. 6 Rated overload characteristics vs. time

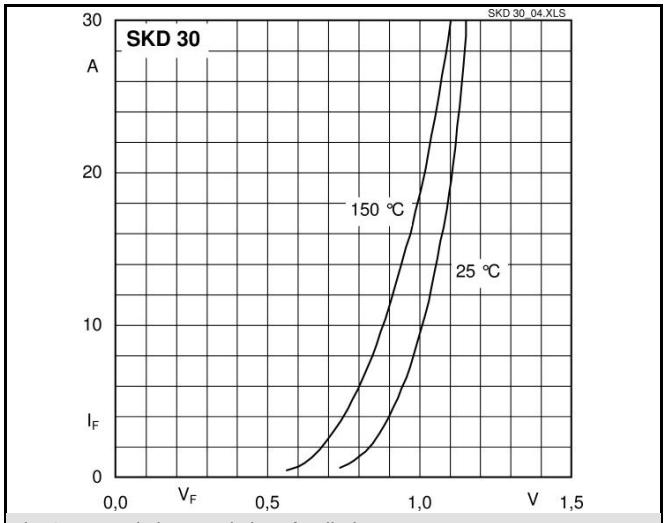
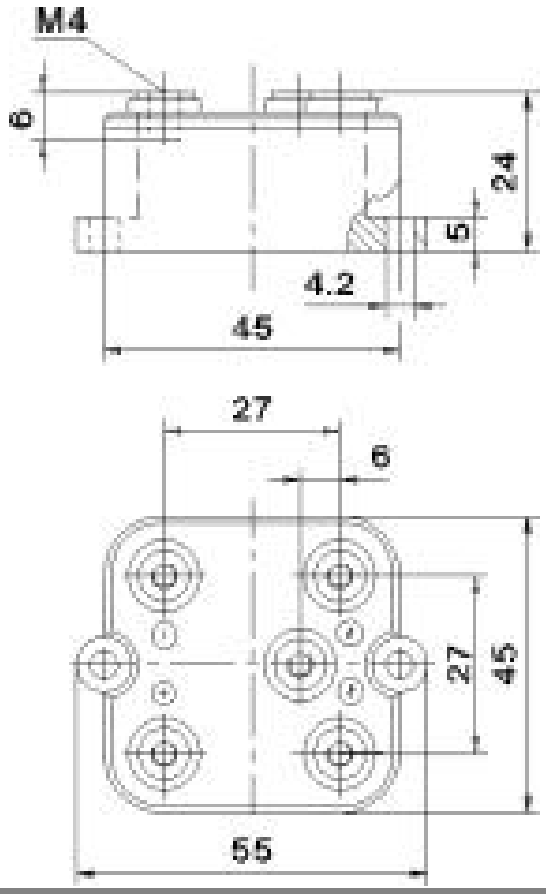


Fig. 9 Forward characteristics of a diode arm

Dimensions in mm



Case G 13

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