SKD 25



V_{RSM}, V_{RRM} V	V_{VRMS} V	I_D = 20 A (T_c = 73 °C) Types	C_{max} µF	R_{min} Ω
200		SKD 25/02		0,15
400		SKD 25/04		0,3
800		SKD 25/08		0,7
1200		SKD 25/12		1
1400		SKD 25/14		1,2
1600		SKD 25/16		1,5

Power Bridge Rectifiers

SKD 25

Features

- Square plastic case with isolated metal base plate and fast-on connectors
- Blocking voltage to 1600 V
- High surge current
- Easy chassis mounting
- UL recognized, file no. E 63 532

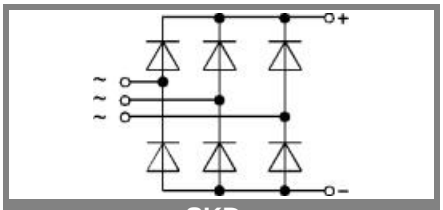
Typical Applications*

- Three phase rectifier for power supplies
- Input rectifiers for variable frequency drives
- Rectifier for DC motor field supplies
- Battery charger rectifiers
- Recommended snubber network: RC: 50 Ω, 0.1 µF (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)]	3,5	A
	T_a = 45 °C, chassis[2)]	12	A
I_{DCL}	T_a = 45 °C, isolated[1)]	3,5	A
	T_a = 45 °C, chassis[2)]	12	A
	T_a = °C,		A
I_{FSM}	T_{vj} = 25 °C, 10 ms	370	A
	T_{vj} = 150 °C, 10 ms	320	A
i²t	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	10	µs
f_G		2000	Hz
$R_{th(j-a)}$	isolated[1)]	15	K/W
	chassis[2)]	4,7	K/W
$R_{th(j-c)}$	total	1,75	K/W
$R_{th(c-s)}$	total	0,15	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	2 ± 15 %	Nm
M_t			Nm
a			m/s²
w		26	g
Fu		20	A
Case		G 11b	



SKD

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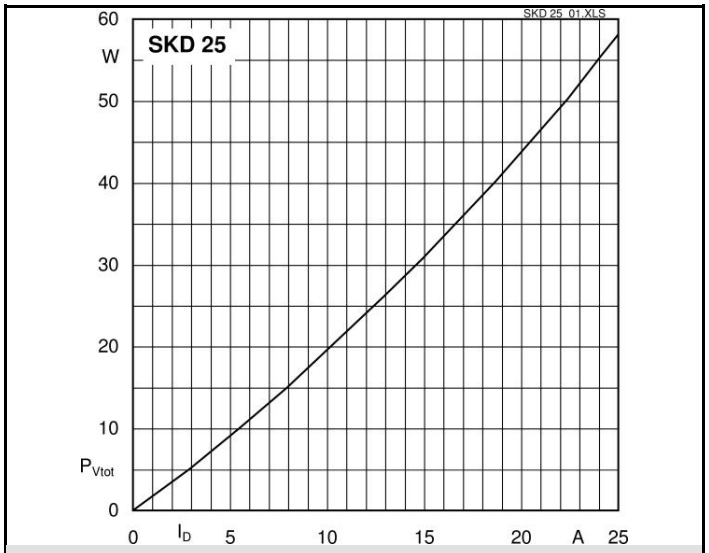


Fig. 3L Power dissipation vs. output current

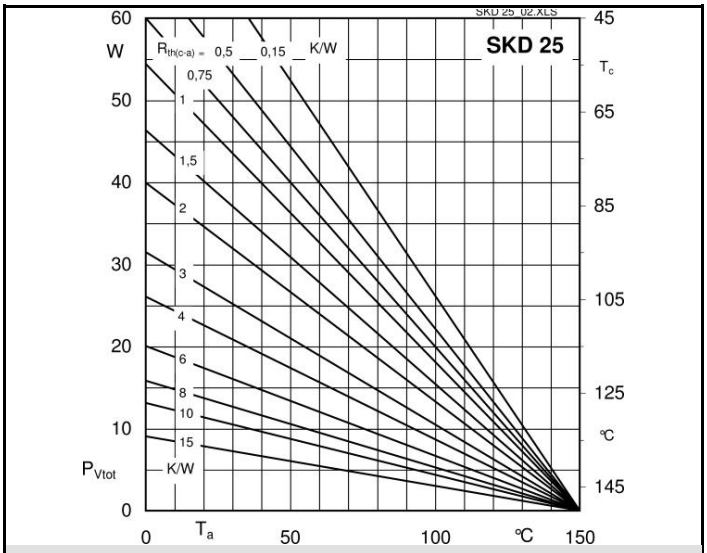


Fig. 3R Power dissipation vs. case temperature

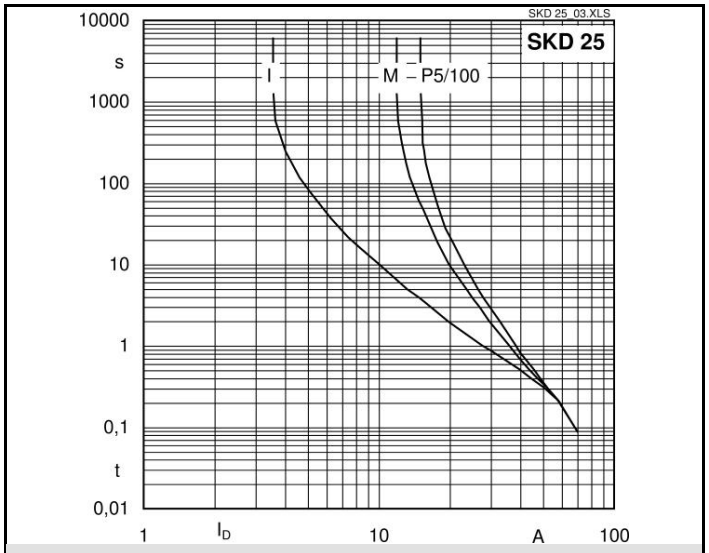


Fig. 6 Rated overload characteristics vs. time

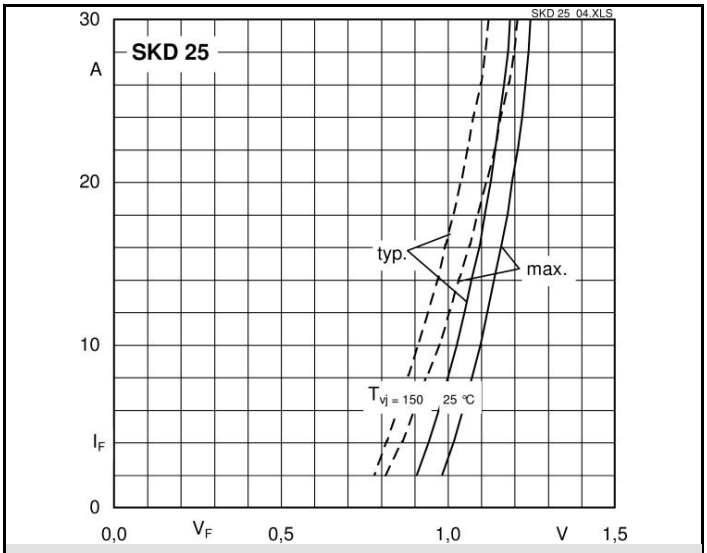
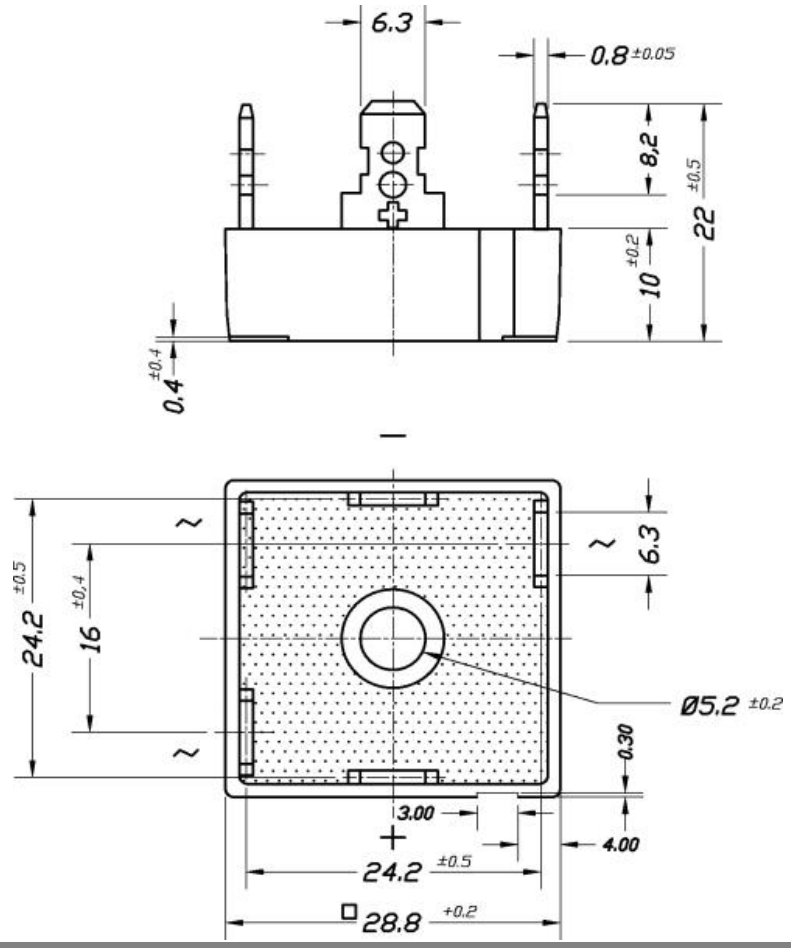


Fig. 9 Forward characteristics of a diode arm

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Dimensions in mm



Case G 11b

* The specifications of our components may not be considered as an assurance of component characteristics. Components have to be tested for the respective application. Adjustments may be necessary. The use of SEMIKRON products in life support appliances and systems is subject to prior specification and written approval by SEMIKRON. We therefore strongly recommend prior consultation of our personal.

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