



V_{RSM}, V_{RRM} V	V_{VRMS} V	$I_D = 30 \text{ A}$ ($T_c = 98^\circ\text{C}$) 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

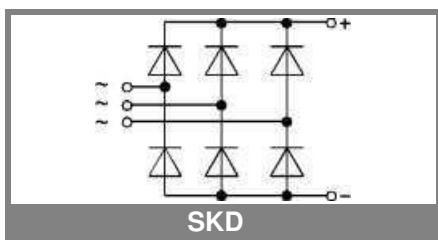
Typical Applications*

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

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	$T_a = 45^\circ\text{C}$, isolated ¹⁾	6,5	A
	$T_a = 45^\circ\text{C}$, chassis ²⁾	15	A
I_{DCL}	$T_a = 45^\circ\text{C}$, isolated ¹⁾	6,5	A
	$T_a = 45^\circ\text{C}$, chassis ²⁾	15	A
I_{FSM}	$T_{vj} = 25^\circ\text{C}, 10 \text{ ms}$	370	A
	$T_{vj} = 150^\circ\text{C}, 10 \text{ ms}$	320	A
	i^2t $T_{vj} = 25^\circ\text{C}, 8,3 \dots 10 \text{ ms}$	680	A^2s
	$T_{vj} = 150^\circ\text{C}, 8,3 \dots 10 \text{ ms}$	500	A^2s
V_F $V_{(TO)}$ r_T I_{RD} I_{RD} t_{rr} f_G	$T_{vj} = 25^\circ\text{C}, I_F = 150 \text{ A}$	max. 2,2	V
	$T_{vj} = 150^\circ\text{C}$	max. 0,85	V
	$T_{vj} = 150^\circ\text{C}$	max. 12	$\text{m}\Omega$
	$T_{vj} = 25^\circ\text{C}, V_{RD}=V_{RRM}$	300	μA
	$T_{vj} = 0^\circ\text{C}, V_{RD}=V_{RRM} \geq V$		μA
	$T_{vj} = 150^\circ\text{C}, V_{RD}=V_{RRM}$	5	mA
	$T_{vj} = 0^\circ\text{C}, V_{RD}=V_{RRM} \geq V$		mA
	$T_{vj} = 25^\circ\text{C}$	25	μs
		2000	Hz
$R_{th(j-a)}$ $R_{th(j-c)}$ $R_{th(c-s)}$ T_{vj} T_{stg}	isolated ¹⁾	8,5	K/W
	chassis ²⁾	3,3	K/W
	total	0,7	K/W
	total	0,1	K/W
		- 40 ... + 150	°C
V_{isol} M_s M_t a w	T_{vj}	- 55 ... + 150	°C
F_u		25	A
Case		G 13	



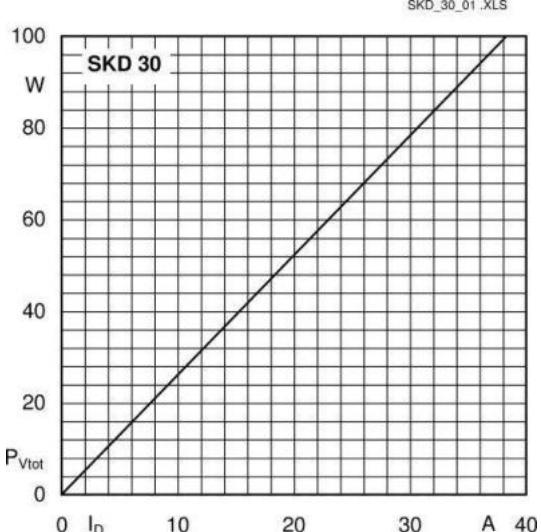


Fig. 3L Power dissipation vs. output current

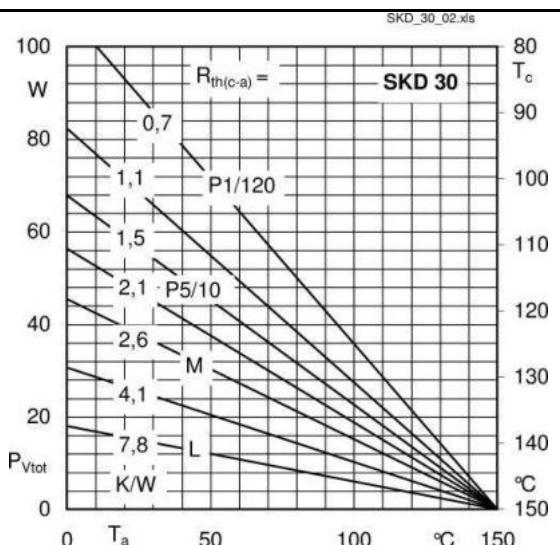


Fig. 3R Power dissipation vs. case temperature

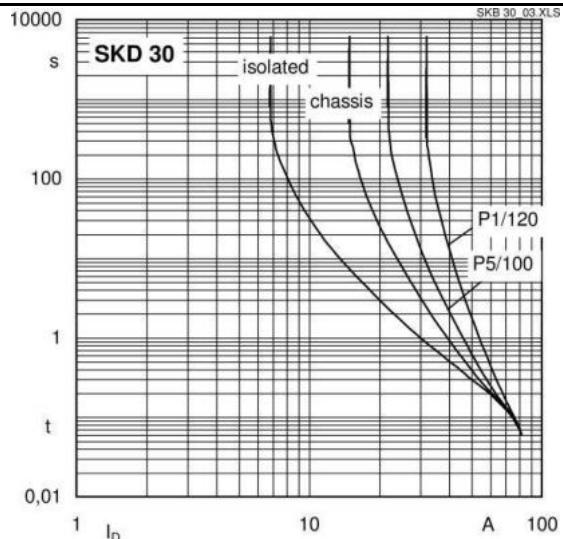


Fig. 6 Rated overload characteristics vs. time

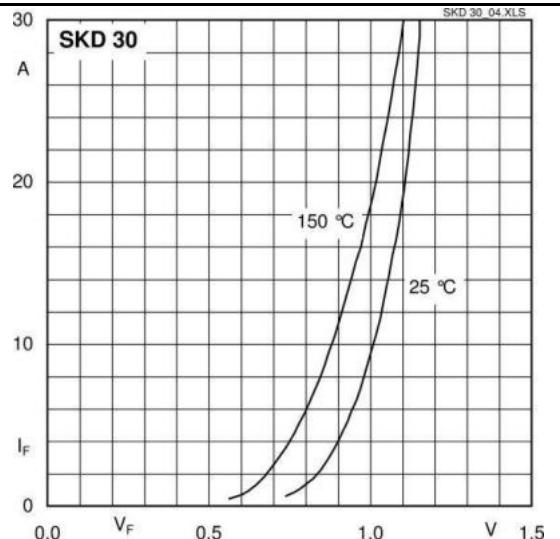
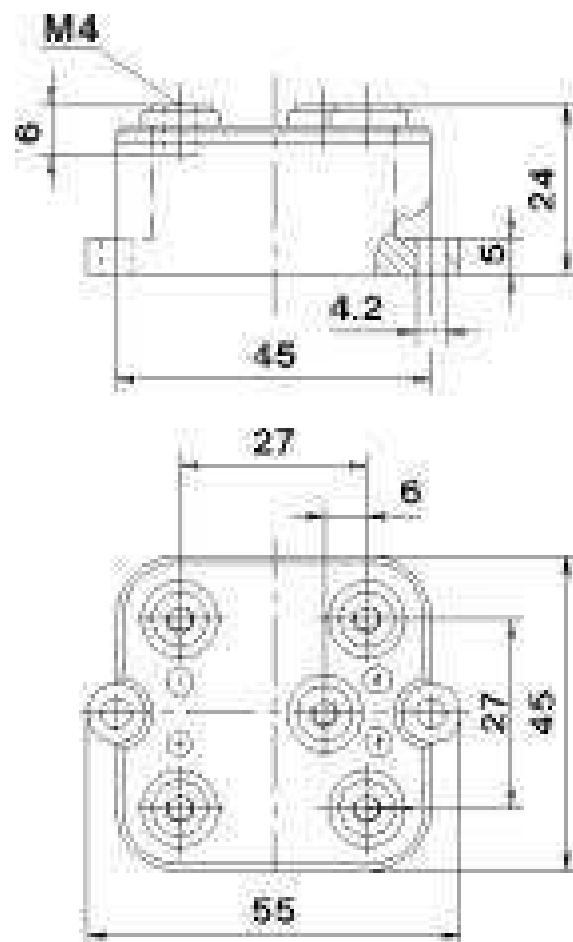


Fig. 9 Forward characteristics of a diode arm

Dimensions in mm



Case G 13

* 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.