

## Power Bridge Rectifiers

## **SKD 30**

## **Features**

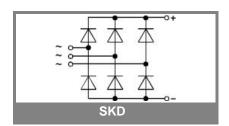
- Isolated metal case with screw terminals
- Blocking voltage up to 1600 V
- High surge currents
- · Easy chassis mounting
- UL recognized, file no. E 63 532

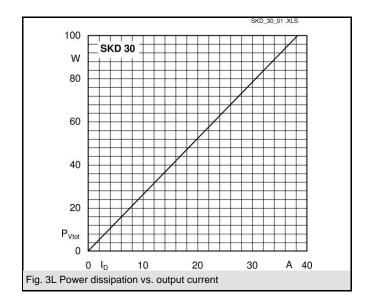
## **Typical Applications**

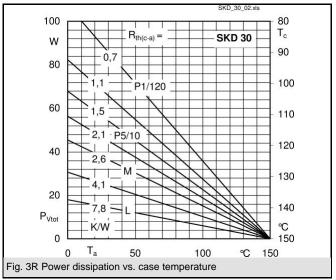
- Three phase rectifiers for power supplies
- Input rectifiers for variable frequency drives
- Rectifiers for DC motor field supplies
- · Battery charger rectifiers
- Recommended snubber network: RC: 0.1  $\mu$ F, 50  $\Omega$  (P  $_{R}$  = 1 W)
- Freely suspended or mounted on an insulator
- 2) Mounted on a painted metal sheet of min. 250 x 250 x 1 mm

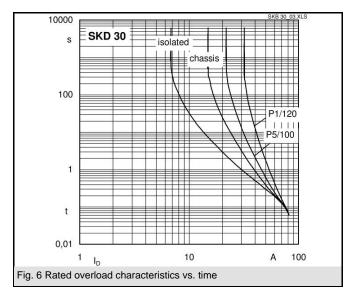
$V_{RSM}, V_{RRM}$	V <sub>VRMS</sub>	I <sub>D</sub> = 30 A (T <sub>c</sub> = 98 °C)	C <sub>max</sub>	R <sub>min</sub>
V	V	Types	μF	Ω
200		SKD 30/02A1		0,15
400		SKD 30/04A1		0,3
800		SKD 30/08A1		0,5
1200		SKD 30/12A1		0,75
1400		SKD 30/14A1		0,9
1600		SKD 30/16A1		1

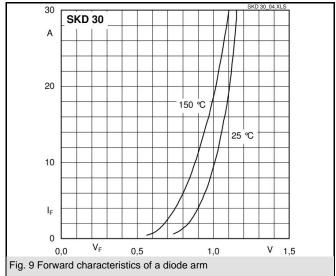
Symbol	Conditions	Values	Units
I <sub>D</sub>	T <sub>a</sub> = 45 °C, isolated <sup>1)</sup>	6,5	Α
	T <sub>a</sub> = 45 °C, chassis <sup>2)</sup>	15	Α
I <sub>DCL</sub>	T <sub>a</sub> = 45 °C, isolated <sup>1)</sup>	6,5	Α
	T <sub>a</sub> = 45 °C, chassis <sup>2)</sup>	15	Α
	$T_a = {^{\circ}C},$		Α
I <sub>FSM</sub>	T <sub>vi</sub> = 25 °C, 10 ms	370	А
	T <sub>vi</sub> = 150 °C, 10 ms	320	Α
i²t	T <sub>vj</sub> = 25 °C, 8,3 10 ms	680	A²s
	T <sub>vj</sub> = 150 °C, 8,3 10 ms	500	A²s
V <sub>F</sub>	T <sub>vj</sub> = 25°C, I <sub>F</sub> = 150 A	max. 2,2	V
$V_{(TO)}$	$T_{vj} = 150^{\circ}C$	max. 0,85	V
r <sub>T</sub>	T <sub>vj</sub> = 150°C	max. 12	mΩ
$I_{RD}$	$T_{vj}^{3} = 25^{\circ}C, V_{RD} = V_{RRM}$	300	μA
	$T_{vj}^{s} = {^{\circ}C}, V_{RD} = V_{RRM} \ge V$		μA
$I_{RD}$	$T_{vj}^{s} = 150^{\circ}C, V_{RD} = V_{RRM}$	5	mA
	$T_{vj} = {^{\circ}C}, V_{RD} = V_{RRM} \ge V$		mA
t <sub>rr</sub>	T <sub>vj</sub> = 25°C	25	μs
$f_G$		2000	Hz
R <sub>th(j-a)</sub>	isolated <sup>1)</sup>	8,5	K/W
• ,	chassis <sup>2)</sup>	3,3	K/W
$R_{th(j-c)}$	total	0,7	K/W
R <sub>th(c-s)</sub>	total	0,1	K/W
T <sub>vi</sub>		- 40 <b>+</b> 150	°C
T <sub>stg</sub>		- 55 <b>+</b> 150	°C
V <sub>isol</sub>	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
а			m/s²
w		125	g
Fu		25	А
Case		G 13	

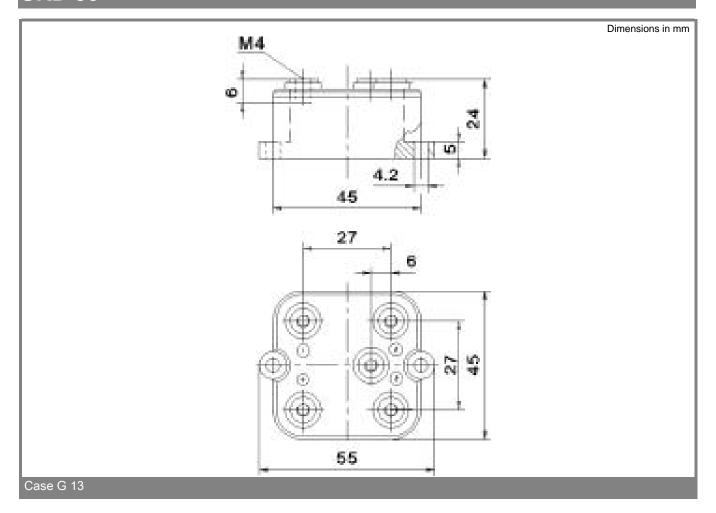












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