

# SKD 26



## Power Bridge Rectifiers

### SKD 26

#### Features

- Square plastic case with isolated metal base plate and wire leads
- Ideal for printed circuit boards
- Blocking voltage up to 1600 V
- High surge currents
- Notch moulded in casing for easy polarity identification
- Easy chassis mounting

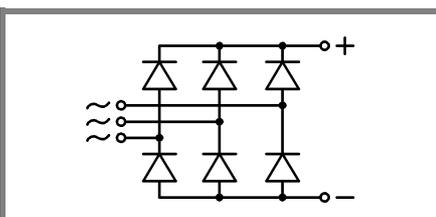
#### Typical Applications

- 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  $\Omega$ , 0.1  $\mu$ F ( $P_R = 1$  W)

- 1) Soldered directly on a p.c.b. of 100 x 160 mm with tinned tracking of min. 2.5 mm
- 2) Mounted on a painted metal sheet of min. 250 x 250 x 1 mm
- 3) Recommended

$V_{RSM}, V_{RRM}$ V	$V_{VRMS}^{3)}$ V	$I_D = 20$ A ( $T_c = 73$ °C) Types	$C_{max}$ $\mu$ F	$R_{min}$ $\Omega$
400	125	SKD 26/04		0,3
800	250	SKD 26/08		0,7
1200	380	SKD 26/12		1
1600	500	SKD 26/16		1,5

Symbol	Condition	Values	Units
$I_D$	$T_a = 45$ °C, isolated <sup>1)</sup>	3,5	A
	$T_a = 45$ °C, chassis <sup>2)</sup>	12	A
$I_{DCL}$	$T_a = 45$ °C, isolated <sup>1)</sup>	3,5	A
	$T_a = 45$ °C, chassis <sup>2)</sup>	12	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	A <sup>2</sup> s
	$T_{vj} = 150$ °C ; 8,3 ... 10 ms	500	A <sup>2</sup> s
$V_F$	$T_{vj} = 25$ °C, $I_F = 150$ A	max. 2,2	V
$V_{(TO)}$	$T_{vj} = 150$ °C	0,85	V
$r_T$	$T_{vj} = 150$ °C	12	m $\Omega$
$I_{RD}$	$T_{vj} = 25$ °C ; $V_{RD} = V_{RRM}$	300	$\mu$ A
$I_{RD}$	$T_{vj} = 150$ °C ; $V_{RD} = V_{RRM}$	5	mA
$t_{rr}$	$T_{vj} = 25$ °C	typ. 10	$\mu$ s
$f_G$		2000	Hz
$R_{th(j-a)}$	isolated <sup>1)</sup> chassis <sup>2)</sup>	15	K/W
$R_{th(j-c)}$	total	4,7	K/W
$R_{th(c-s)}$	total	1,75	K/W
$T_{vj}$		0,15	K/W
$T_{stg}$		-40 ... +150	°C
		-55 ... +150	°C
$V_{isol}$	a. c. 50 ... 60 Hz; r.m.s.; 1 s / 1 min. to heatsink	3000 / 2500	V~
$M_s$	SI units	2 $\pm$ 15 %	Nm
	US units	18 $\pm$ 15 %	Lb. in.
m	approx.	18	g
Case			



SKD

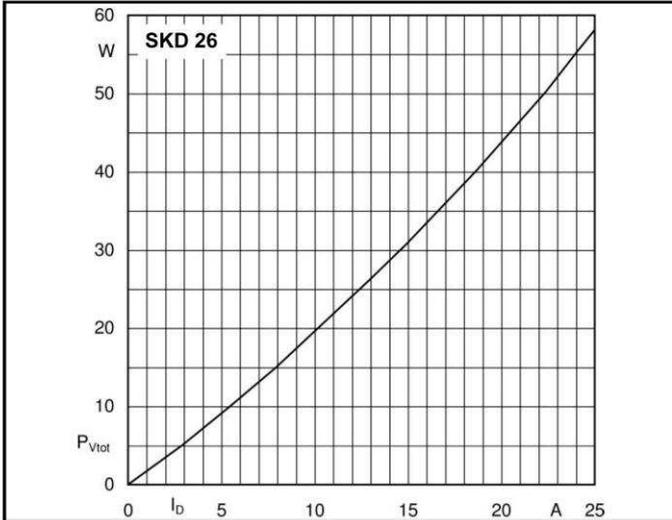


Fig. 3L Power dissipation vs. output current

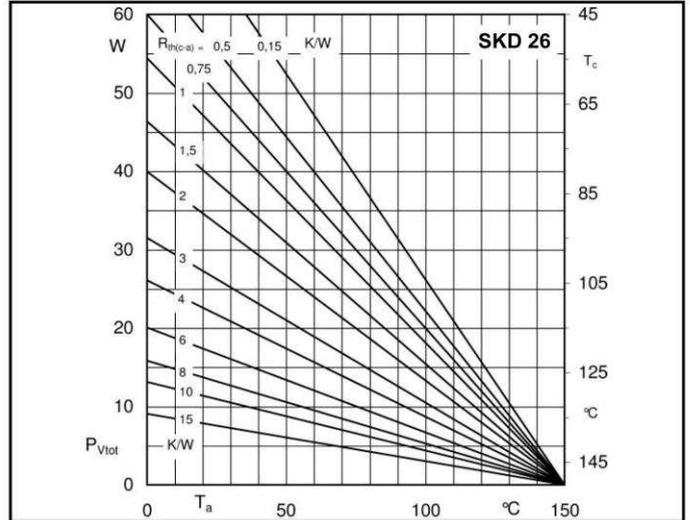


Fig. 3R Power dissipation vs. case temperature

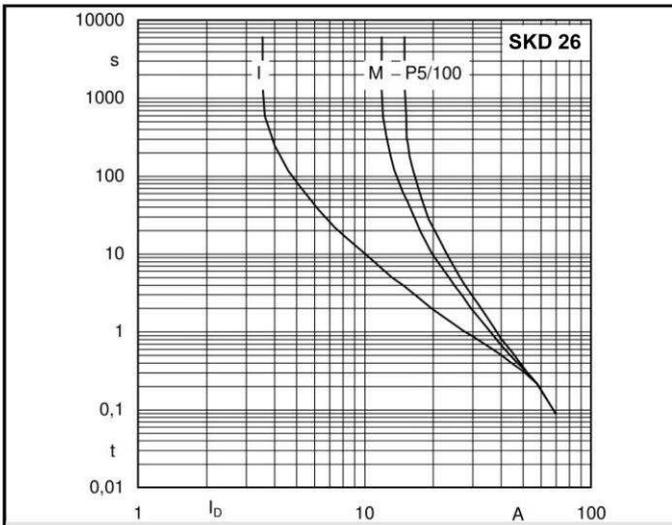


Fig. 6 Rated overload characteristics vs. time

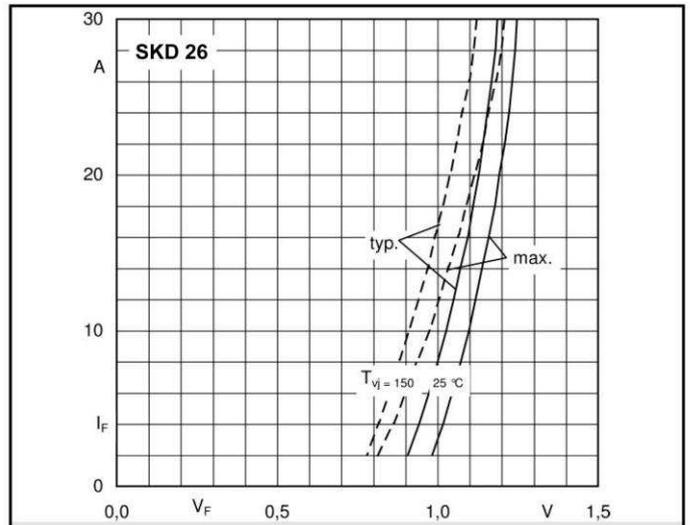
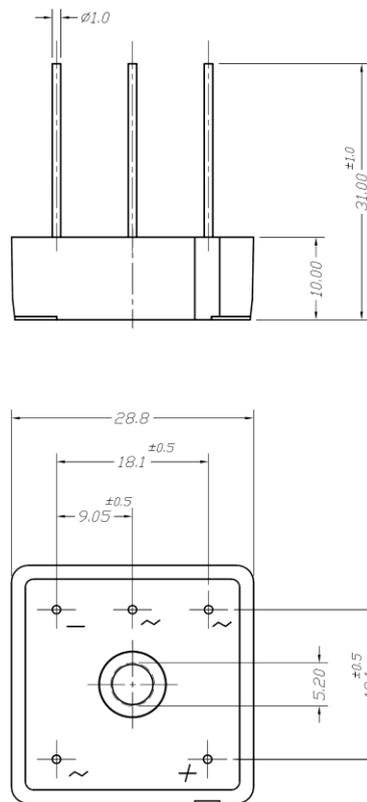


Fig. 9 Forward characteristics of a diode arm



Case G50d

**\*IMPORTANT INFORMATION AND WARNINGS**

The specifications of SEMIKRON products may not be considered as guarantee or assurance of product characteristics ("Beschaffenheitsgarantie"). The specifications of SEMIKRON products describe only the usual characteristics of products to be expected in typical applications, which may still vary depending on the specific application. Therefore, products must be tested for the respective application in advance. Application adjustments may be necessary. The user of SEMIKRON products is responsible for the safety of their applications embedding SEMIKRON products and must take adequate safety measures to prevent the applications from causing a physical injury, fire or other problem if any of SEMIKRON products become faulty. The user is responsible to make sure that the application design is compliant with all applicable laws, regulations, norms and standards. Except as otherwise explicitly approved by SEMIKRON in a written document signed by authorized representatives of SEMIKRON, SEMIKRON products may not be used in any applications where a failure of the product or any consequences of the use thereof can reasonably be expected to result in personal injury. No representation or warranty is given and no liability is assumed with respect to the accuracy, completeness and/or use of any information herein, including without limitation, warranties of non-infringement of intellectual property rights of any third party. SEMIKRON does not assume any liability arising out of the applications or use of any product; neither does it convey any license under its patent rights, copyrights, trade secrets or other intellectual property rights, nor the rights of others. SEMIKRON makes no representation or warranty of non-infringement or alleged noninfringement of intellectual property rights of any third party which may arise from applications. Due to technical requirements our products may contain dangerous substances. For information on the types in question please contact the nearest SEMIKRON sales office. This document supersedes and replaces all information previously supplied and may be superseded by updates. SEMIKRON reserves the right to make changes.