

## Power Bridge Rectifiers

## **SKD 25**

## **Features**

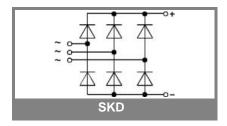
- Square plastic case with isolated metal base plate and fast-on connectors
- Blocking voltage to 1600 V
- High surge current
- Easy chassis mounting
- UL recognized, file no. E 63 532

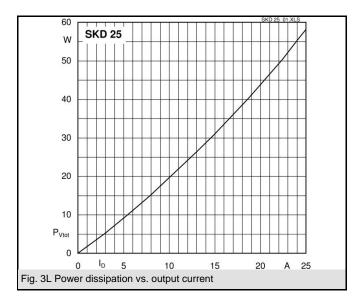
## Typical Applications

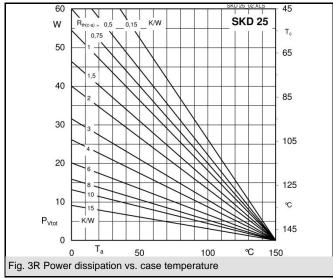
- Three phase rectifier for power supplies
- Input rectifiers for variable frequency drives
- Rectifier for DC motor field supplies
- · Battery charger rectifiers
- Recommended snubber network: RC: 50  $\Omega$ , 0.1  $\mu$ F (P  $_{R}$  = 1 W)
- Freely suspended or mounted on an insulator
- 2) Mounted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

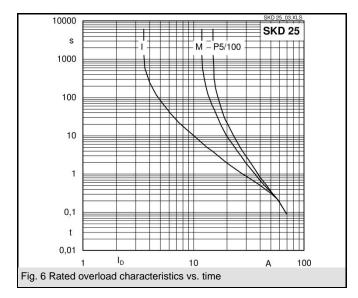
V <sub>RSM</sub> , V <sub>RRM</sub>	$V_{VRMS}$	I <sub>D</sub> = 20 A (T <sub>c</sub> = 73 °C)	C <sub>max</sub>	$R_{min}$
V	V	Types	μF	Ω
200		SKD 25/02		0,15
400		SKD 25/04		0,3
800		SKD 25/08		0,7
1200		SKD 25/12		1
1400		SKD 25/14		1,2
1600		SKD 25/16		1,5

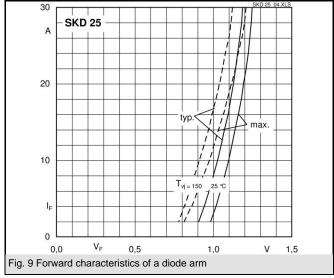
Symbol	Conditions	Values	Units
I <sub>D</sub>	T <sub>a</sub> = 45 °C, isolated <sup>1)</sup>	3,5	Α
	T <sub>a</sub> = 45 °C, chassis <sup>2)</sup>	12	Α
I <sub>DCL</sub>	T <sub>a</sub> = 45 °C, isolated <sup>1)</sup>	3,5	Α
	T <sub>a</sub> = 45 °C, chassis <sup>2)</sup>	12	Α
	T <sub>a</sub> = °C,		Α
I <sub>FSM</sub>	T <sub>vi</sub> = 25 °C, 10 ms	370	Α
	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 <sub>vj</sub> = 150°C	max. 0,85	V
r <sub>T</sub>	T <sub>vi</sub> = 150°C	max. 12	mΩ
$I_{RD}$	$T_{vi} = 25$ °C, $V_{RD} = V_{RRM}$	300	μA
	$T_{vj} = {^{\circ}C}, V_{RD} = V_{RRM} \ge V$		μA
$I_{RD}$	$T_{vj} = 150$ °C, $V_{RD} = V_{RRM}$	5	mA
	$T_{vi} = {^{\circ}C}, V_{RD} = V_{RRM} \ge V$		mA
t <sub>rr</sub>	$T_{vi} = 25^{\circ}C$	10	μs
$f_G$		2000	Hz
R <sub>th(j-a)</sub>	isolated <sup>1)</sup>	15	K/W
	chassis <sup>2)</sup>	4,7	K/W
R <sub>th(j-c)</sub>	total	1,75	K/W
R <sub>th(c-s)</sub>	total	0,15	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~
Ms	to heatsink	2 ± 15 %	Nm
M <sub>t</sub>			Nm
a			m/s²
w		26	g
Fu		20	Α
Case		G 11b	

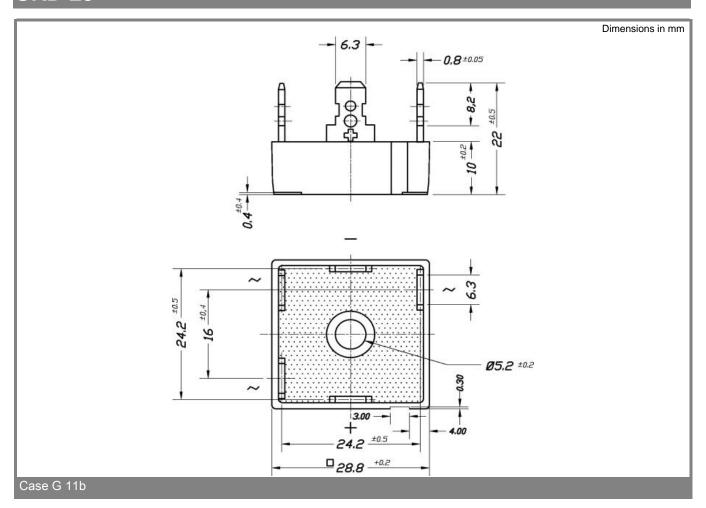












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