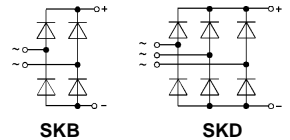


## Power Bridge Rectifiers

### SKB 25 SKD 25



### Features

- Square plastic case with isolated metal base plate and fast-on connectors
- Blocking voltage to 1600 V
- High surge currents
- **SKB** = single phase bridge rectifier
- **SKD** = three phase bridge rectifier
- Easy chassis mounting
- UL recognized, file no. E 63 532

### Typical Applications

- Single and three phase rectifiers for power supplies
- Input rectifiers for variable frequency drives
- Rectifiers for DC motor field supplies
- Battery charger rectifiers

$V_{RSM}$ $V_{RRM}$  V	$I_D$ ( $T_{case} = \dots$ )			
	17 A (75 °C)		20 A (73 °C)	
	Types	$R_{min}$ $\Omega$	Types	$R_{min}$ $\Omega$
100	<b>SKB 25/01</b>	0,1	–	–
200	<b>SKB 25/02</b>	0,15	<b>SKD 25/02</b>	0,15
400	<b>SKB 25/04</b>	0,3	<b>SKD 25/04</b>	0,3
600	<b>SKB 25/06</b>	0,5	–	–
800	<b>SKB 25/08</b>	0,7	<b>SKD 25/08</b>	0,7
1200	<b>SKB 25/12</b>	1	<b>SKD 25/12</b>	1
1400	<b>SKB 25/14</b>	1,2	<b>SKD 25/14</b>	1,2
1600	<b>SKB 25/16</b>	1,5	<b>SKD 25/16</b>	1,5

Symbol	Conditions	SKB 25	SKD 25	Units
$I_D$	$T_{amb} = 45\text{ °C}$ ; isolated <sup>1)</sup> chassis <sup>2)</sup> R4A/120 P1A/120	3,5 10 14 17	3,5 12 15 20	A A A A
$I_{DCL}$	$T_{amb} = 45\text{ °C}$ ; isolated <sup>1)</sup> chassis <sup>2)</sup> R4A/120 P1A/120	3 9,5 12 14	3,5 12 15 20	A A A A
$I_{FSM}$	$T_{vj} = 25\text{ °C}$ , 10 ms $T_{vj} = 150\text{ °C}$ , 10 ms	370 320		A A
$i^2t$	$T_{vj} = 25\text{ °C}$ , 8,3...10 ms $T_{vj} = 150\text{ °C}$ , 8,3...10 ms	680 500		A <sup>2</sup> s A <sup>2</sup> s
$V_F$	$T_{vj} = 25\text{ °C}$ ; $I_F = 150\text{ A}$	2,2		V
$V_{(TO)}$	$T_{vj} = 150\text{ °C}$	0,85		V
$r_T$	$T_{vj} = 150\text{ °C}$	12		m $\Omega$
$I_{RD}$	$T_{vj} = 25\text{ °C}$ ; $V_{RD} = V_{RRM}$ $T_{vj} = 150\text{ °C}$ ; $V_{RD} = V_{RRM}$	0,3 5		mA mA
$t_{rr}$	$T_{vj} = 25\text{ °C}$	typ. 10		$\mu$ s
$f_G$		2000		Hz
$R_{thjc}$	total	2	1,75	$^{\circ}$ C/W
$R_{thch}$	total	0,15		$^{\circ}$ C/W
$R_{thja}$	isolated <sup>1)</sup> chassis <sup>2)</sup> R4A/120 P1A/120	15 4,7 3,6 2,75		$^{\circ}$ C/W $^{\circ}$ C/W $^{\circ}$ C/W $^{\circ}$ C/W
$T_{vj}$		– 40...+ 150		$^{\circ}$ C
$T_{stg}$		– 55...+ 150		$^{\circ}$ C
$V_{isol}$	a.c. 50...60 Hz; r.m.s.; 1 s/ 1 min	3000 / 2500		V–
RC	$P_R = 1\text{ W}$	50 0,1 20		$\Omega$ $\mu$ F A
Fu				
$M_1$	to heatsink SI units US units	$2 \pm 15\%$ $18 \pm 15\%$		Nm lb. in.
w		24	26	g
Case		G 10	G 11	

<sup>1)</sup> Freely suspended or mounted on an insulator

<sup>2)</sup> Mounted on a painted metal sheet of min. 250 x 250 x 1 mm



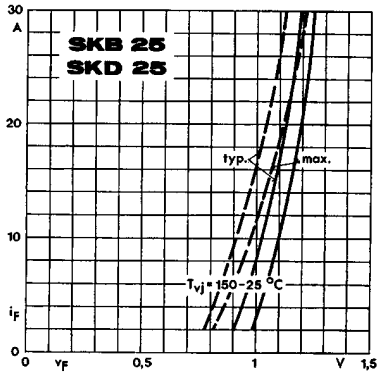
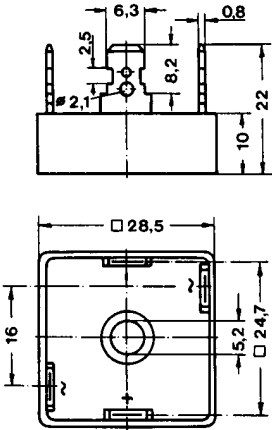


Fig. 9 Forward characteristics of a single diode

**SKB 25**  
Case G 10



**SKD 25**  
Case G 11

