



Power Bridge Rectifiers

SKB 35

Features

- Square plastic case with isolated metal base plate and fast-on connectors
- Blocking voltage up to 1600 V
- High surge current
- Easy chassis mounting
- UL recognized plastic material

Typical Applications

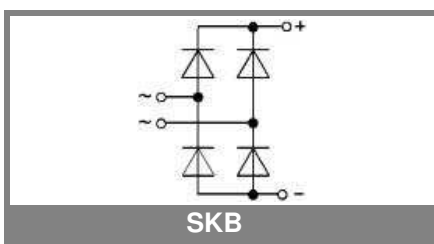
- Rectifier for power supplies
- Input rectifier for variable frequency drives
- Rectifier for DC motor field supplies
- Battery charger rectifiers
- Recommended snubber network:
RC: 50 Ω, 0.1 μF ($P_R = 1 \text{ W}$)

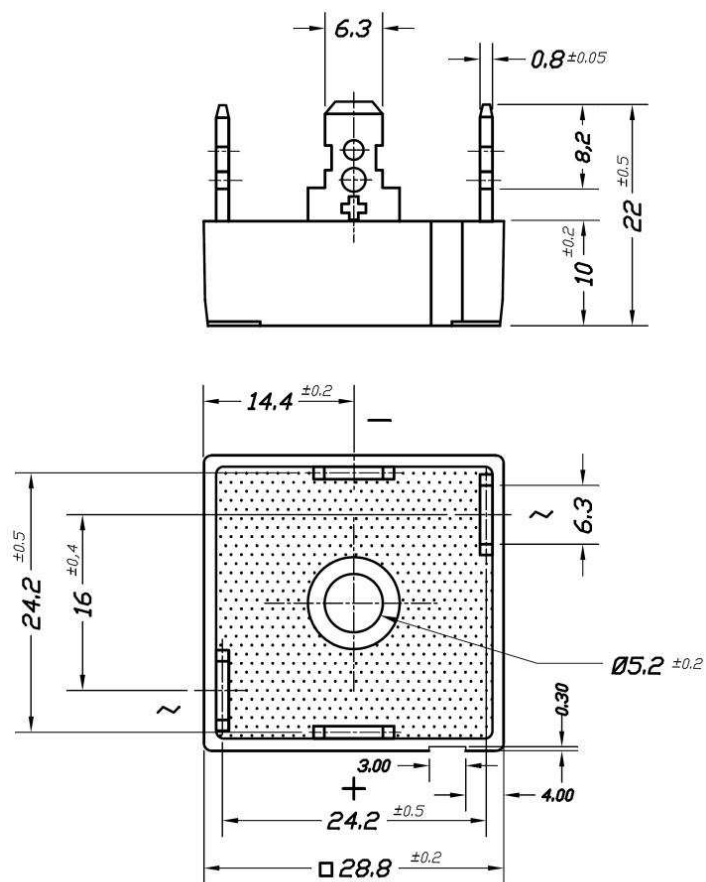
1) Freely suspended or mounted on an insulator

2) Mounted on a painted metal sheet of min. 250 x 250 x 1 mm

V_{RSM}, V_{RRM} V	V_{VRMS} V	$I_D = 35 \text{ A } (T_c = 29^\circ\text{C})$ Types	C_{max} μF	R_{min} Ω
400	125	SKB 35/04		0,3
800	250	SKB 35/08		0,7
1200	400	SKB 35/12		1
1600	500	SKB 35/16		1,5

Symbol	Conditions	Values	Units
I_D	$T_a = 45^\circ\text{C}$, P1/120 black	22	A
	$T_a = 40^\circ\text{C}$, chassis ²⁾	13,5	A
I_{DCL}	$T_a = 45^\circ\text{C}$, P1/120 black	18,5	A
	$T_a = 40^\circ\text{C}$, chassis ²⁾	12	A
	$T_a = 45^\circ\text{C}$, isolated ¹⁾	3,9	A
I_{FSM}	$T_{vj} = 25^\circ\text{C}$, 10 ms	380	A
	$T_{vj} = 150^\circ\text{C}$, 10 ms	330	A
i^2t	$T_{vj} = 25^\circ\text{C}$, 8,3 ... 10 ms	700	A ² s
	$T_{vj} = 150^\circ\text{C}$, 8,3 ... 10 ms	540	A ² s
V_F	$T_{vj} = 25^\circ\text{C}$, $I_F = 150 \text{ A}$	max. 1,9	V
$V_{(TO)}$	$T_{vj} = 150^\circ\text{C}$	max. 0,85	V
r_T	$T_{vj} = 150^\circ\text{C}$	max. 7	mΩ
I_{RD}	$T_{vj} = 25^\circ\text{C}$, $V_{RD} = V_{RRM}$	300	μA
	$T_{vj} = ^\circ\text{C}$, $V_{RD} = V_{RRM} \geq V$		μA
I_{RD}	$T_{vj} = 150^\circ\text{C}$, $V_{RD} = V_{RRM}$	5	mA
	$T_{vj} = ^\circ\text{C}$, $V_{RD} = V_{RRM} \geq V$		mA
t_{rr}	$T_{vj} = 25^\circ\text{C}$	10	μs
f_G		2000	Hz
$R_{th(j-a)}$	isolated ¹⁾	14,5	K/W
	chassis ²⁾	4,2	K/W
$R_{th(j-c)}$	total	1,5	K/W
$R_{th(c-s)}$	total	0,15	K/W
T_{vj}		- 40 ... + 150	°C
T_{stg}		- 55 ... + 150	°C
V_{isol}	a.c. 50 ... 60 Hz; r.m.s.; 1 s / 1 min.	3000 / 2500	V~
M_s	to heatsink	$2 \pm 15 \%$	Nm
M_t			Nm
a			m/s ²
w	approx.	18	g
F_u		25	A
Case		G 10b	





Case G 10b

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