

SKD 35 AV



Square bridge

V_{RSM}, V_{RRM} V	V_{RMS} V	$I_D = 40 \text{ A } (T_c = 70 \text{ }^\circ\text{C})$ Types	C_{max} μF	R_{min} Ω
1200 1600	760 1000	SKD 35/12 AV SKD 35/16 AV		1 1,5

Power Bridge Rectifiers

SKD 35

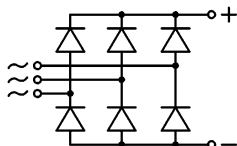
Features

- Reverse breakdown with avalanche behaviour
- Square plastic case with isolated metal base plate and fast-on connectors
- Blocking voltage up to 1800 V
- Avalanche characteristic
- High surge currents
- Easy chassis mounting
- UL recognized, file no. E 63532

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 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
 - 3) Recommended V values:
 $V_{RMS} = V_{RRM} / 2,83$
 - 4) Can be supplied with tinned terminals on request

Symbol	Condition	Values	Units
I_D	$T_a = 45 \text{ }^\circ\text{C}$, P1/120 natural cooling $T_a = 45 \text{ }^\circ\text{C}$, chassis ²⁾	30 15	A A
I_{DCL}	$T_a = 45 \text{ }^\circ\text{C}$, P1/120 forced cooling $T_a = 45 \text{ }^\circ\text{C}$, P1/120 natural cooling $T_a = 45 \text{ }^\circ\text{C}$, chassis ²⁾	40 30 15	A A A
I_{FSM}	$T_{vj} = 25 \text{ }^\circ\text{C}$; 10 ms $T_{vj} = 150 \text{ }^\circ\text{C}$; 10 ms	400 345	A A
i^2t	$T_{vj} = 25 \text{ }^\circ\text{C}$; 8,3 ... 10 ms $T_{vj} = 150 \text{ }^\circ\text{C}$; 8,3 ... 10 ms	800 600	A^2s A^2s
V_F	$T_{vj} = 25 \text{ }^\circ\text{C}$, $I_F = 150 \text{ A}$	max. 1,8	V
$V_{(TO)}$	$T_{vj} = 150 \text{ }^\circ\text{C}$	0,90	V
r_T	$T_{vj} = 150 \text{ }^\circ\text{C}$	max. 6	$\text{m}\Omega$
I_{RD}	$T_{vj} = 25 \text{ }^\circ\text{C}$; $V_{RD} = V_{RRM}$	50	μA
I_{RD}	$T_{vj} = 150 \text{ }^\circ\text{C}$; $V_{RD} = V_{RRM}$	3	mA
t_{rr}	$T_{vj} = 25 \text{ }^\circ\text{C}$	10	μs
f_G		2000	Hz
$R_{th(j-a)}$	isolated ¹⁾ chassis ²⁾	14 3,7	K/W K/W
$R_{th(j-c)}$	total (typical)	0,9	K/W
$R_{th(c-s)}$	total	0,15	K/W
T_{vj}		-40 ... +150	$^\circ\text{C}$
T_{stg}		-55 ... +150	$^\circ\text{C}$
V_{isol}	a. c. 50 ... 60 Hz; r.m.s.; 1 s / 1 min.	3000 / 2500	V~
M_s	to heatsink SI units US units	$2 \pm 15 \%$ $18 \pm 15 \%$	Nm Lb. in.
M	approx.	23	g
Case		G 11b	



SKD

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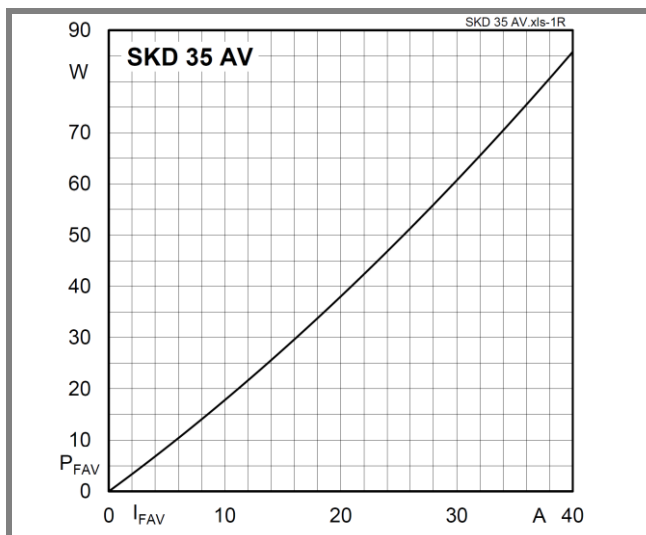


Fig. 01 Power dissipation vs. output current

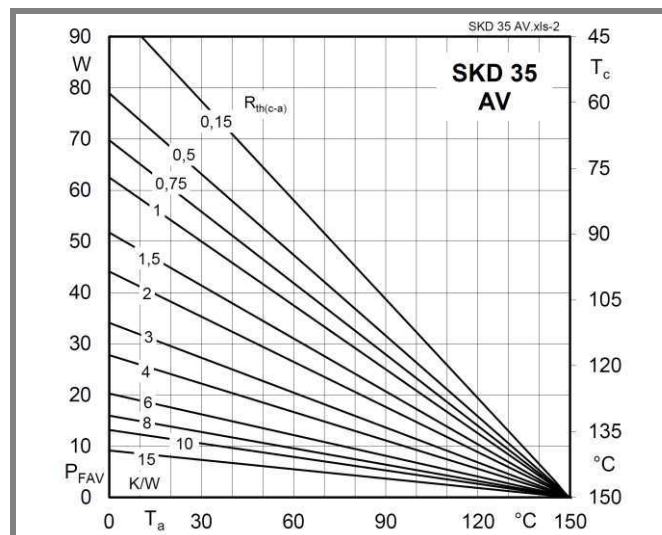


Fig. 02 Power dissipation vs. ambient temperature

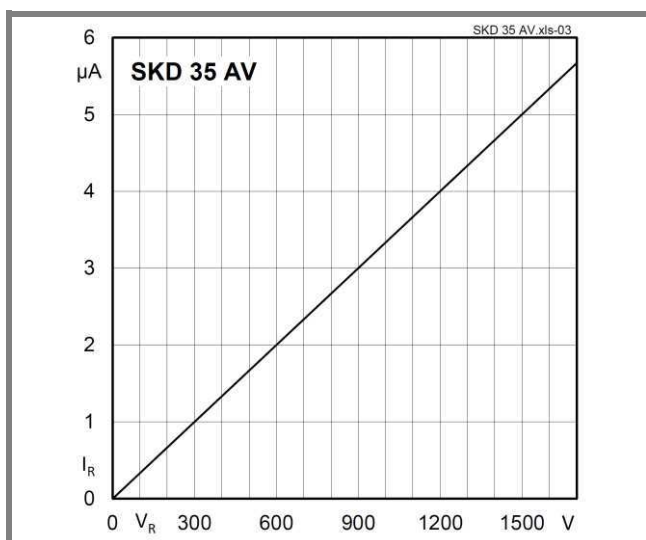


Fig. 03 Reverse Characteristics

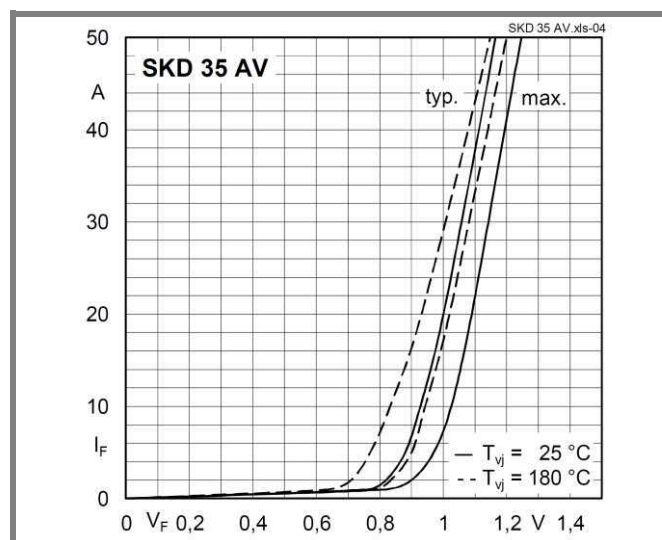


Fig. 04 Forward Characteristics of a diode arm

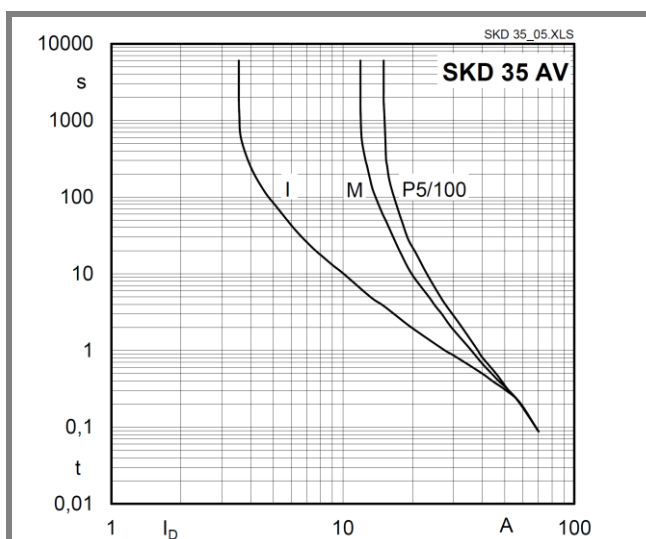
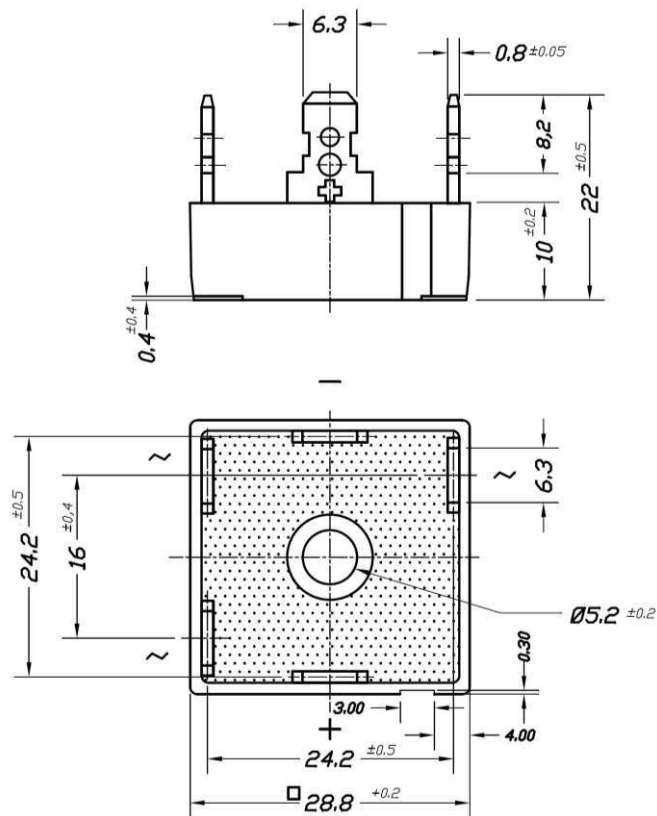


Fig. 5 Rated overload characteristics vs time



DIMENSIONS IN mm
DIMENSIONS EN mm

Case G11b

*IMPORTANT INFORMATION AND WARNINGS

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