SKD 41

V_{RSM}, V_{RRM} V	V_{VRMS} V	I_D = 41 A (T_c = 65 °C) Types	C_{max} µF	R_{min} Ω
200		SKD 41/02		
400		SKD 41/04		
800		SKD 41/08		
1000		SKD 41/10		

Power Bridge Rectifiers

SKD 41

Preliminary Data

Features

- Square plastic case with isolated metal base plate and fast-on connectors
- Blocking voltage to 1000 V
- High surge current
- Easy chassis mounting

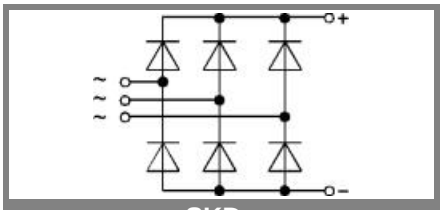
Typical Applications

- 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 Ω, 0.1 µF (P_R = 1 W)

1) Freely suspended or mounted on an insulator

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

Symbol	Conditions	Values	Units
I_D	T_a = 35 °C, P1/120 forced cooling	42	A
	T_a = 45 °C, P1/120 natural cooling	30	A
I_{DCL}	T_a = 35 °C, P1/120 forced cooling	36	A
	T_a = 45 °C, P1/120 natural cooling	26,5	A
	T_a = °C,		A
I_{FSM}	T_{vj} = 25 °C, 10 ms	500	A
	T_{vj} = 150 °C, 10 ms	430	A
i²t	T_{vj} = 25 °C, 8,3 ... 10 ms	1250	A²s
	T_{vj} = 150 °C, 8,3 ... 10 ms	920	A²s
V_F	T_{vj} = 25°C, I_F = 150 A	max. 1,7	V
$V_{(TO)}$	T_{vj} = 150°C	max. 0,8	V
r_T	T_{vj} = 150°C	max. 5,7	mΩ
I_{RD}	T_{vj} = 25°C, V_{RD}=V_{RRM}	300	µA
	T_{vj} = °C, V_{RD}=V_{RRM} ≥ V		µA
I_{RD}	T_{vj} = 150°C, V_{RD}=V_{RRM}	5	mA
	T_{vj} = °C, V_{RD}=V_{RRM} ≥ V		mA
t_{rr}	T_{vj} = 25°C	10	µs
f_G		2000	Hz
$R_{th(j-a)}$	isolated[1)]	14	K/W
	chassis[2)]	3,8	K/W
$R_{th(j-c)}$	total	1,0	K/W
$R_{th(c-s)}$	total	0,15	K/W
T_{vj}		- 40 ... + 150	°C
T_{stg}		- 55 ... + 130	°C
V_{isol}	a. c. 50 ... 60 Hz; r.m.s.; 1 s / 1 min.	3000 / 2500	V~
M_s	to heatsink	2 ± 15 %	Nm
M_t			Nm
a			m/s²
w		26	g
Fu			A
Case		G 11b	



SKD

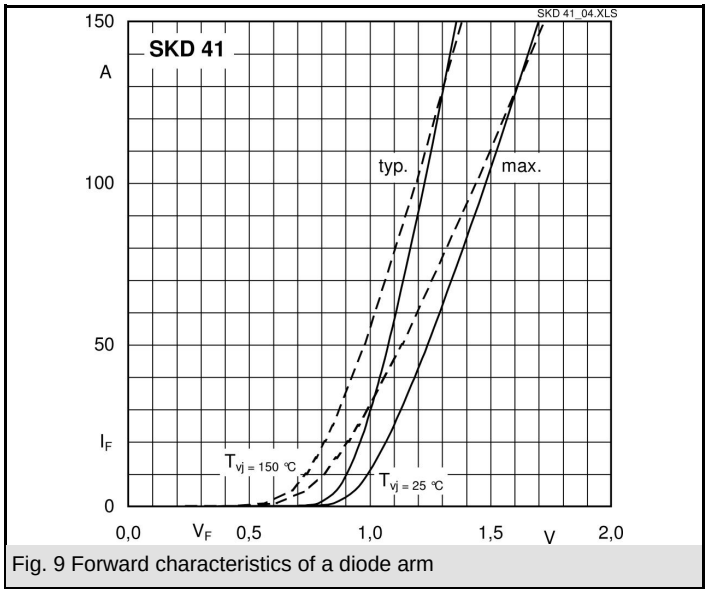
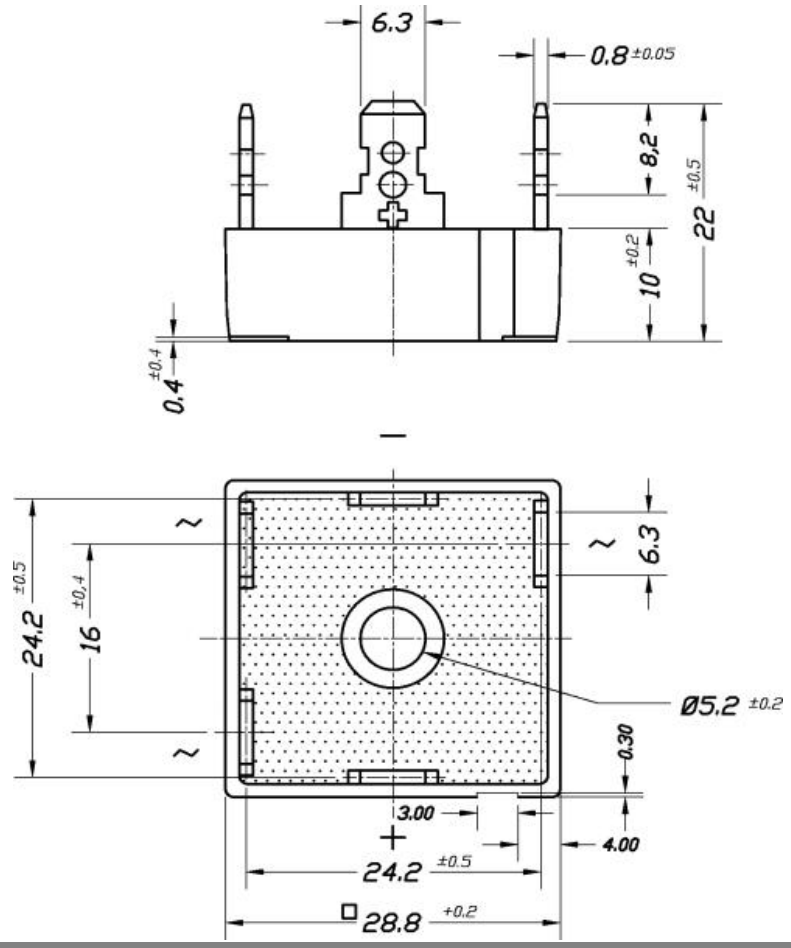


Fig. 9 Forward characteristics of a diode arm

Dimensions in mm



Case G 11b

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