SKBa 25

Avalanche bridge

Power Bridge Rectifiers

SKBa 25

Features

- Square plastic case with isolated metal base plate and fast-on connectors
- Avalanche characteristics
- Minimum breakdown voltage of 1300 and 1700 V
- High surge current
- Easy chassis mounting
- UL-94V0 plastic material

Typical Applications

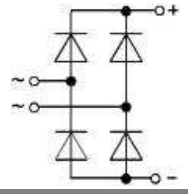
- Inductive Loads
- Solenoid power supply
- Motor brakes
- Rectifier for power supplies
- DC motor field supplies

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 = 17 A (T_c = 75 °C) Types	C_{max} µF	R_{min} Ω
	500	SKBa 25/13 ($V_{(BR)min}$ = 1300 V)		1
	660	SKBa 25/17 ($V_{(BR)min}$ = 1700 V)		1,5
		P_{RSM} = 6 kW @ T_{vj} = 150°C, t_p = 10 µs		

Symbol	Conditions	Values	Units
I_D	T_a = 45 °C, isolated[1)]	3,5	A
	T_a = 45 °C, chassis[2)]	10	A
I_{DCL}	T_a = 45 °C, isolated[1)]	3	A
	T_a = 45 °C, chassis[2)]	9,5	A
	T_a = °C,		A
I_{FSM}	T_{vj} = 25 °C, 10 ms	370	A
	T_{vj} = 150 °C, 10 ms	320	A
i²t	T_{vj} = 25 °C, 8,3 ... 10 ms	680	A²s
	T_{vj} = 150 °C, 8,3 ... 10 ms	500	A²s
V_F	T_{vj} = 25°C, I_F = 150 A	max. 2,2	V
$V_{(TO)}$	T_{vj} = 150°C	max. 0,85	V
r_T	T_{vj} = 150°C	max. 12	mΩ
I_{RD}	T_{vj} = 25°C, V_{RD}=V_{RRM}	20	µA
	T_{vj} = °C, V_{RD}=V_{RRM} ≥ V		µA
I_{RD}	T_{vj} = 150°C, V_{RD}=V_{RRM}	4	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)]	15	K/W
	chassis[2)]	4,7	K/W
$R_{th(j-c)}$	total	2	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 ± 15 %	Nm
M_t			Nm
a			m/s²
w		24	g
Fu		20	A
Case		G 10b	



SKB

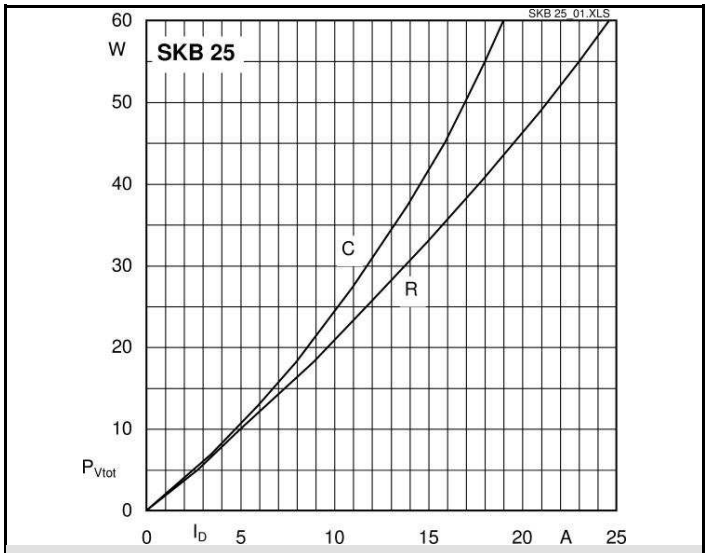


Fig. 3L Power dissipation vs. output current

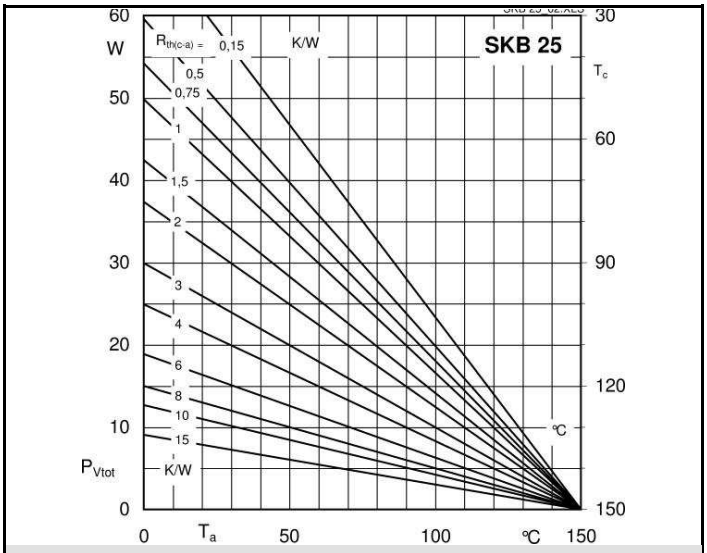


Fig. 3R Power dissipation vs. case temperature

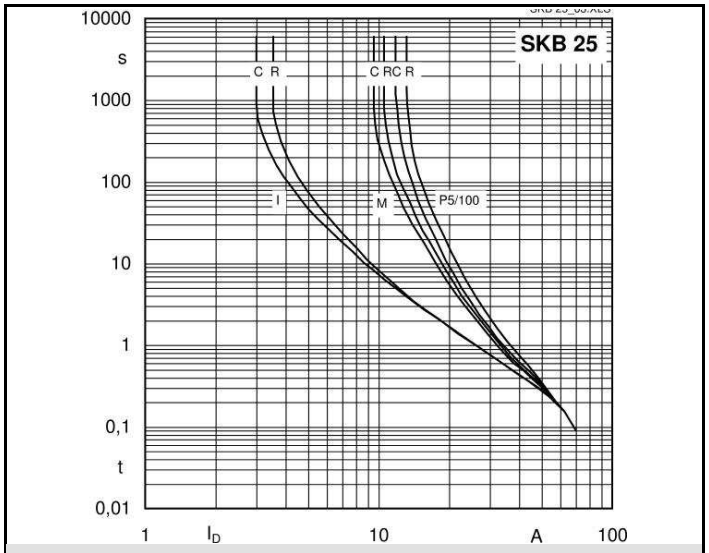


Fig. 6 Rated overload characteristics vs. time

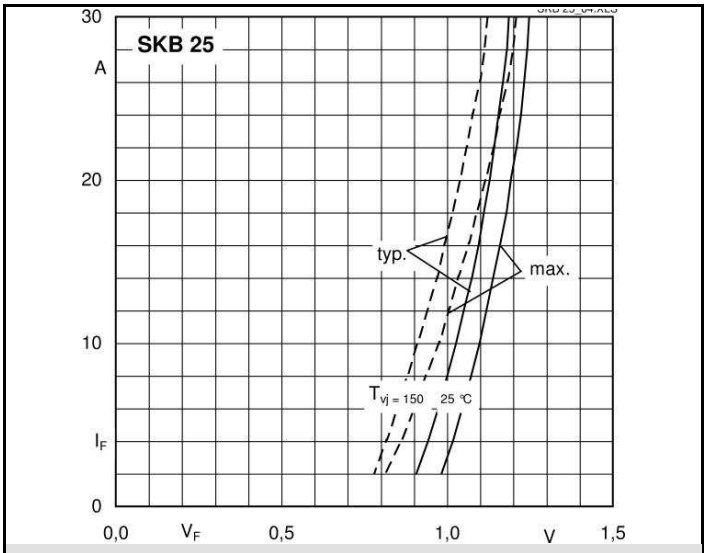
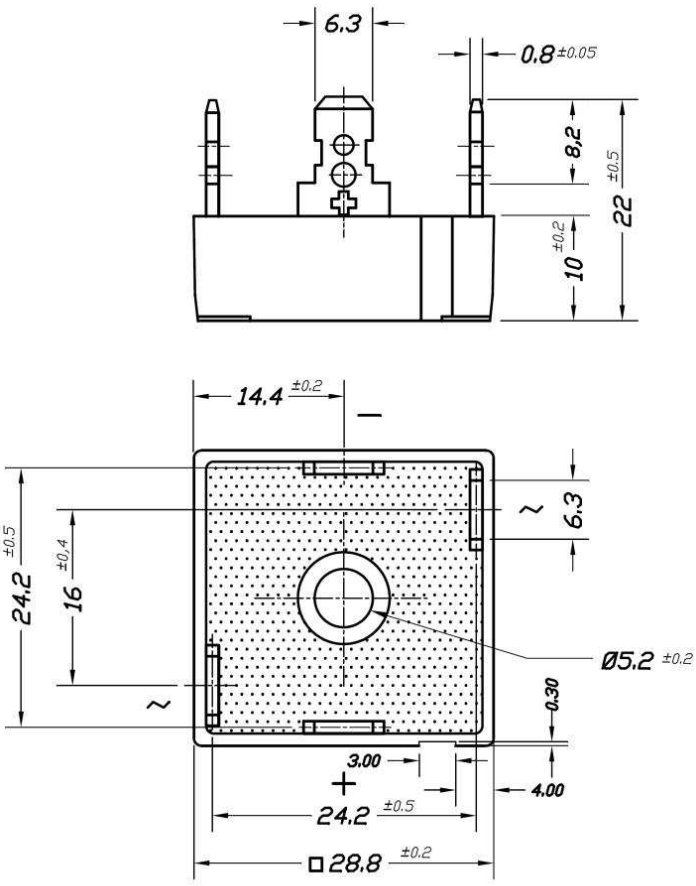


Fig. 9 Forward characteristics of a diode arm

Dimensions in mm



Case G 10b

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