

SKBa 30



$V_{(BR)}$ V	V_{RMS} V	$I_D = 30$ A ($T_c = 94$ °C) Types	C_{max} μ F	R_{min} Ω
1700	500	SKBa 30/17		1

Power Bridge Rectifiers

SKBa 30

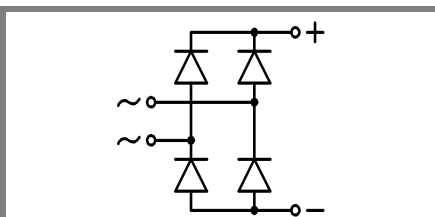
Features

- Isolated metal case with screw terminals
- Avalanche characteristic
- High surge currents
- Easy chassis mounting
- UL recognized, file no. E 63 532

Typical Applications

- Single phase rectifiers for power supplies
 - Input rectifiers for variable frequency drives
 - Rectifiers for DC motor field supplies
 - Battery charger rectifiers
 - Recommended snubber network:
 $R_C: 0.1 \mu$ F, 50Ω ($P_R = 1$ 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	$T_a = 45$ °C, isolated ¹⁾	6,5	A
	$T_a = 45$ °C, chassis ²⁾	15	A
I_{DCL}	$T_a = 45$ °C, isolated ¹⁾	6	A
	$T_a = 45$ °C, chassis ²⁾	13	A
I_{FSM}	$T_{vj} = 25$ °C ; 10 ms	370	A
	$T_{vj} = 150$ °C ; 10 ms	320	A
i^2t	$T_{vj} = 25$ °C ; 8,3 ...10 ms	680	A ² s
	$T_{vj} = 150$ °C ; 8,3 ...10 ms	500	A ² s
P_{RSM}	$t_p = 10 \mu$ s	6	kW
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	m Ω
I_{RD}	$T_{vj} = 25$ °C ; $V_{RD} = V_{RRM}$	300	μ A
I_{RD}	$T_{vj} = 150$ °C ; $V_{RD} = V_{RRM}$	5	mA
t_{rr}	$T_{vj} = 25$ °C	typ. 25	μ s
f_G		2000	Hz
$R_{th(j-a)}$	isolated ¹⁾	8,5	K/W
	chassis ²⁾	3,3	K/W
$R_{th(j-c)}$	total	0,7	K/W
$R_{th(c-s)}$	total	0,1	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	5 \pm 15 %	Nm
M_t	to terminals	1,5 \pm 15 %	Nm
A			m/s ²
W	approx.	125	g
Case		G 12	



SKB

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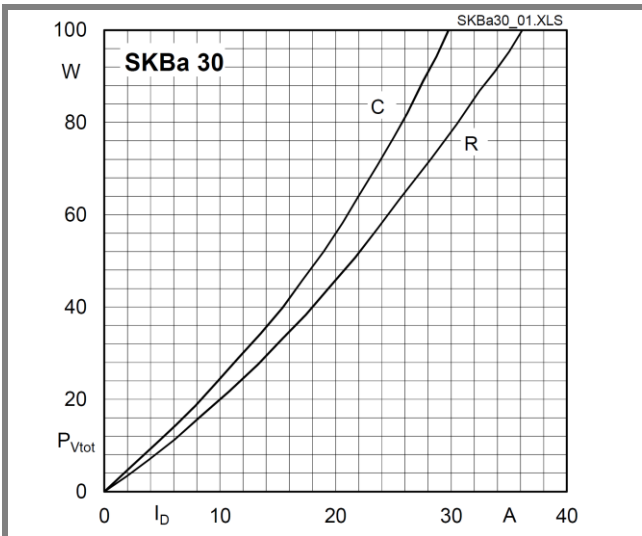


Fig. 3L Power dissipation vs. output current

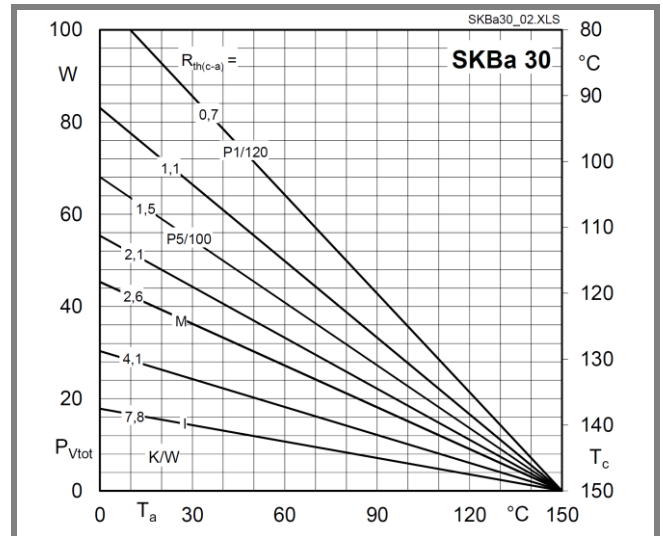


Fig. 3R Power dissipation vs case temperature

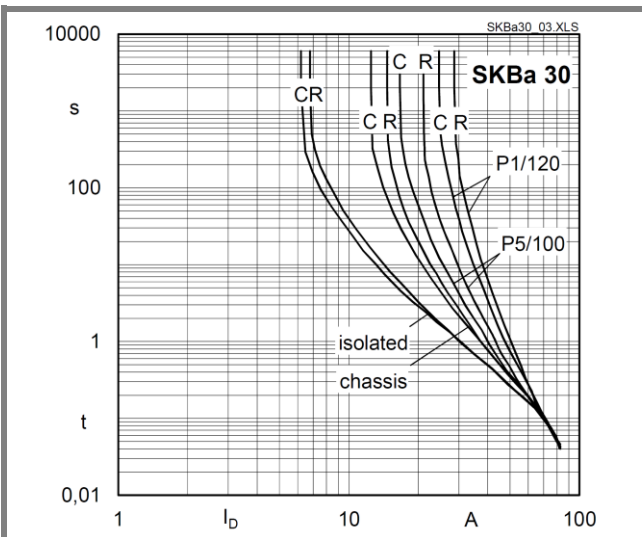


Fig. 6 Rated overload characteristics vs. time

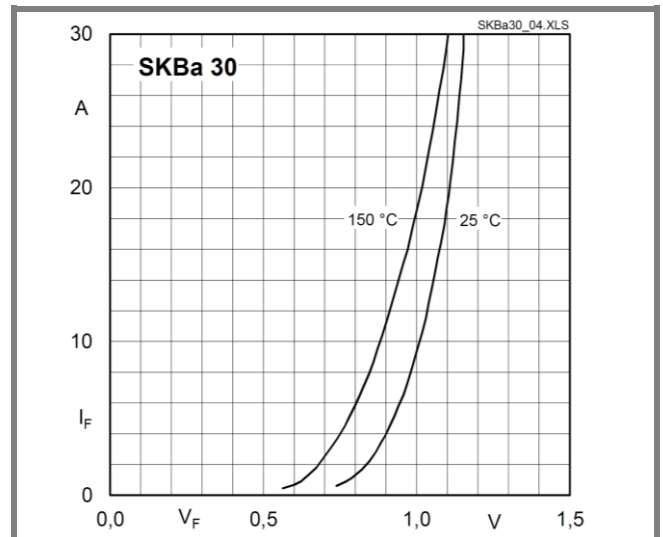


Fig. 9 Forward characteristics of a diode arm

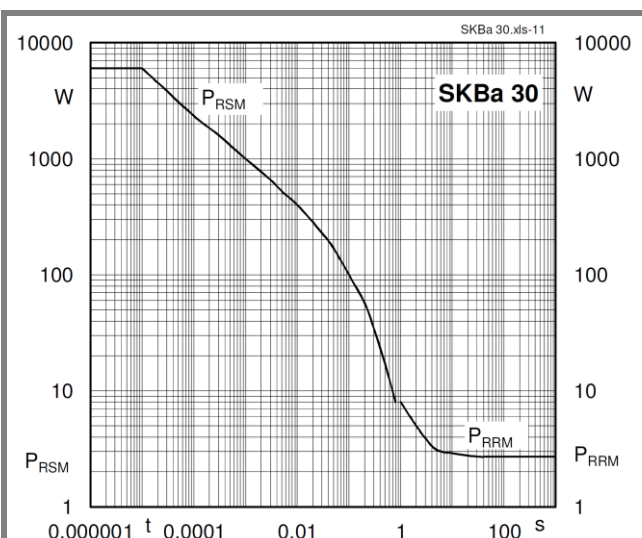
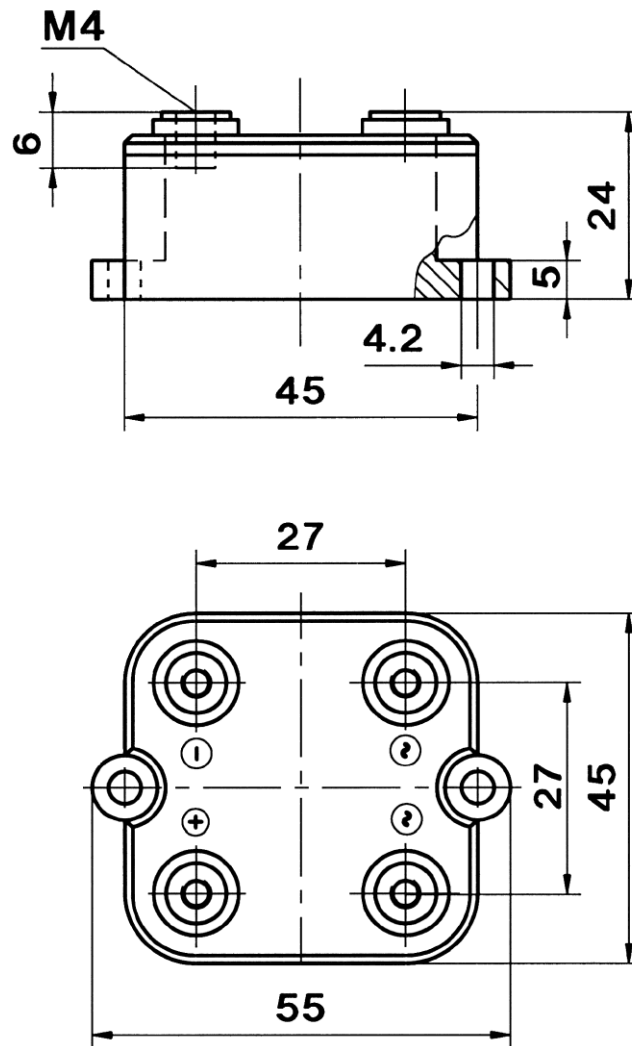


Fig. 11 Rated reverse power dissipation vs. time

Dimensions in millimeters



Case G12

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