SKBa 30

$V_{(BR)}$ V	V_{RMS} V	I_D = 30 A (T_c = 94 ºC) Types	$C_{máx}$ µF	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

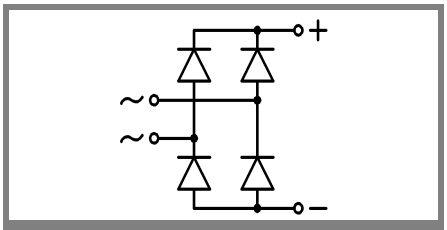
Typical Applications

- 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 µF, 50 Ω (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 ºC, isolated[1)]	6,5	A
	T_a = 45 ºC, chassis[2)]	15	A
I_{DCL}	T_a = 45 ºC, isolated[1)]	6	A
	T_a = 45 ºC, chassis[2)]	13	A
I_{FSM}	T_{vj} = 25 ºC ; 10 ms	370	A
	T_{vj} = 150 ºC ; 10 ms	320	A
i^2t	T_{vj} = 25 ºC ; 8,3 ...10 ms	680	A^2s
	T_{vj} = 150 ºC ; 8,3 ...10 ms	500	A^2s
P_{RSM}	t_p = 10 µs	6	kW
V_F	T_{vj} = 25 ºC, I_F = 150 A	max. 2,2	V
$V_{(TO)}$	T_{vj} = 150 ºC	max. 0,85	V
r_T	T_{vj} = 150 ºC	max. 12	mΩ
I_{RD}	T_{vj} = 25 ºC ; V_{RD} = V_{RRM}	300	µA
I_{RD}	T_{vj} = 150 ºC ; V_{RD} = V_{RRM}	5	mA
t_{rr}	T_{vj} = 25 ºC	typ. 25	µs
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 SI units	5 ± 15 %	Nm
M_t	to terminals SI units	1,5 ± 15 %	Nm
A			m/s^2
W	approx.	125	g
Case		G 12	



SKB

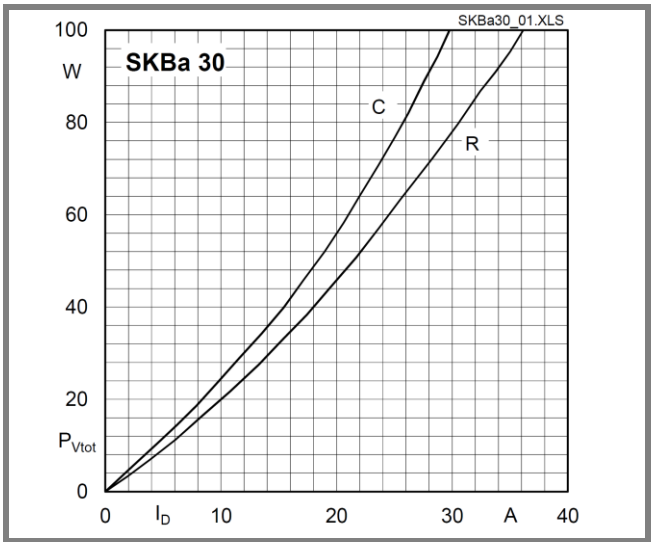


Fig. 3L Power dissipation vs. output current

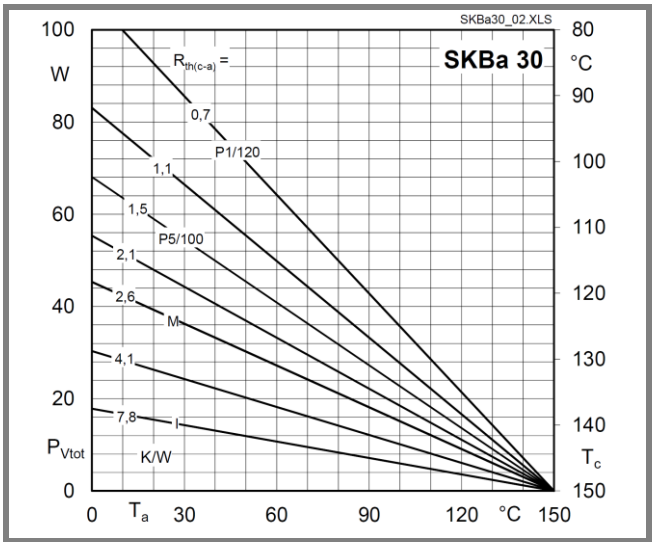


Fig. 3R Power dissipation vs case temperature

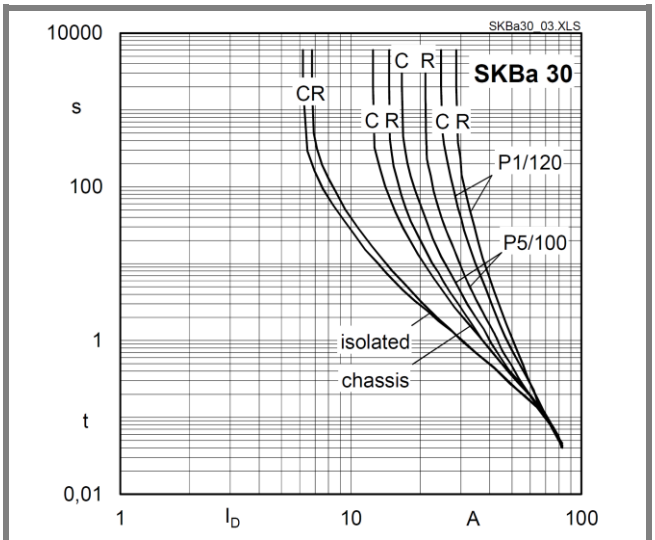


Fig. 6 Rated overload characteristics vs. time

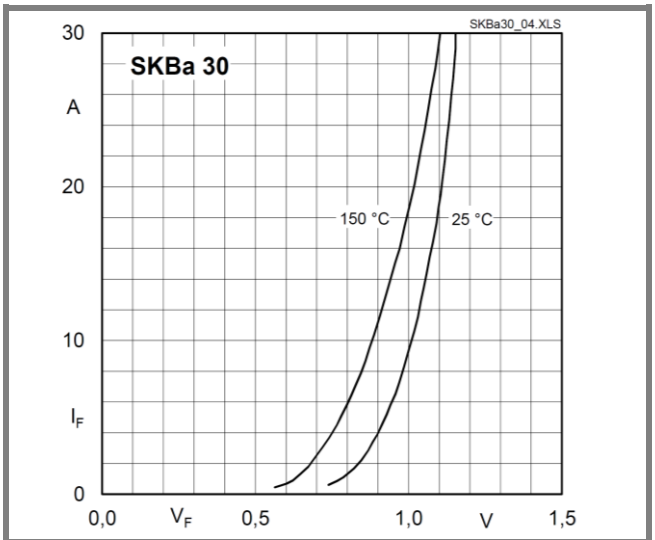


Fig. 9 Forward characteristics of a diode arm

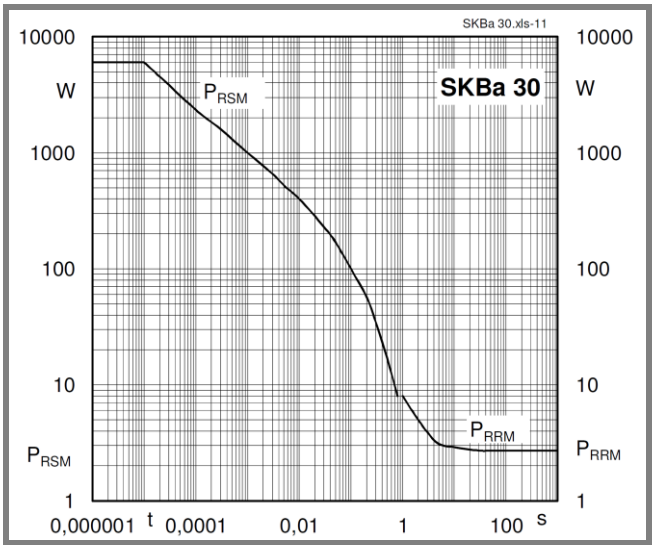
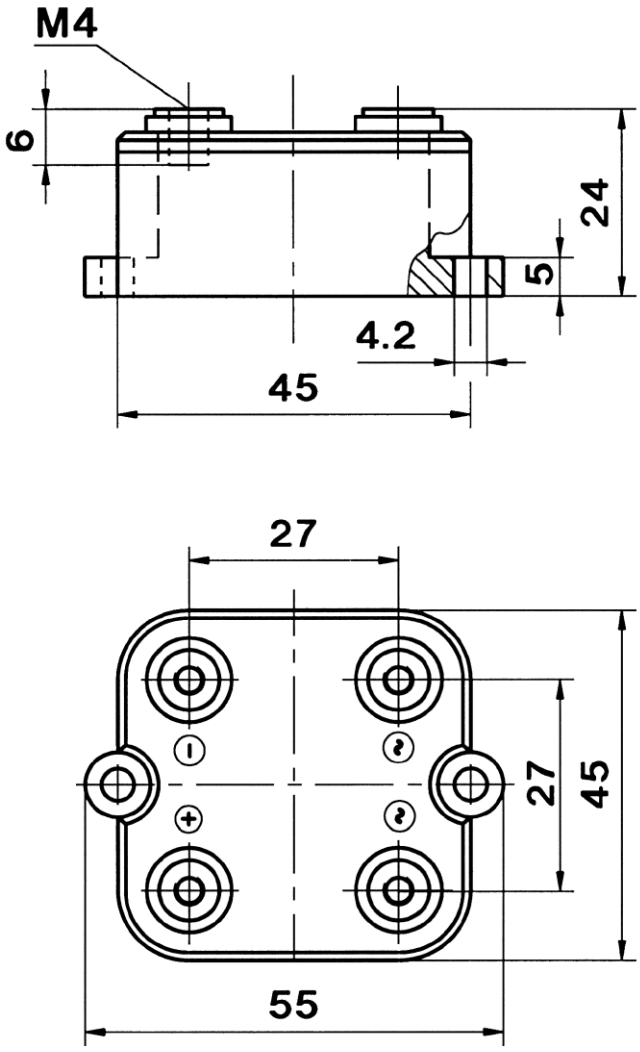


Fig. 11 Rated reverse power dissipation vs. time

Dimensions in millimeters



Case G12

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