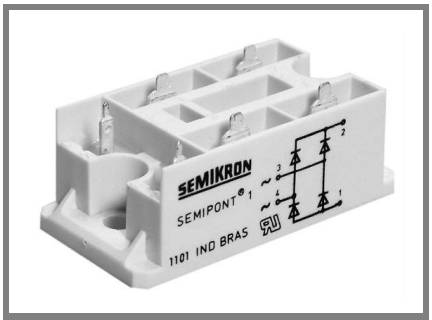
SKB 28



SEMIPONT® 1

Power Bridge Rectifiers

SKB 28

Features

- Sturdy isolated metal baseplate
- Fast-on terminals with solder tips
- Suitable for wave soldering
- High surge current rating
- Blocking voltage of 1600 V
- UL recognized plastic material

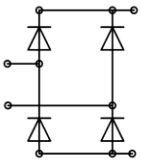
Typical Applications*

- DC power supply, e.g. for transistorized AC motor controllers
- Battery chargers
- Non-controlled DC motor field supply
- Recommended snubber network: RC: 50 Ω, 0.1 µF (P_R = 1 W)

1) Freely suspended or mounted on insulator
2) Painted metal sheet of minimum. 250 x 250 x 1 mm: $R_{th(c-a)}$ = 1,85 K/W

V_{RSM} V	V_{RRM}, V_{DRM} V	I_D = 32 A (Inductive Load) (T_c = 85 °C)
200	200	SKB 28/02
400	400	SKB 28/04
800	800	SKB 28/08
1200	1200	SKB 28/12
1400	1400	SKB 28/14
1600	1600	SKB 28/16

Symbol	Conditions	Values	Units
I_D	T_c = 85 ºC (full conduction)	30	A
	T_a = 45 ºC, isolated[1)]	3	A
	T_a = 45 ºC, chassis[2)]	12,8	A
	T_a = 45 ºC, P1A/120	27	A
I_{FSM}	T_{vj} = 25 ºC ; 10 ms	370	A
	T_{vj} = 125 ºC ; 10 ms	320	A
i^2t	T_{vj} = 25 ºC ; 8,3 ...10 ms	685	A^2s
	T_{vj} = 125 ºC ; 8,3 ...10 ms	510	A^2s
V_F	T_{vj} = 25 ºC, I_F = 75 A	max. 1,75	V
$V_{(TO)}$	T_{vj} = 125 ºC	max. 0,85	V
r_T	T_{vj} = 125 ºC	max. 12	mΩ
I_{RD}	T_{vj} = 25 ºC ; V_{RD} = V_{RRM}	200	µA
	T_{vj} = 125 ºC ; V_{RD} = V_{RRM}	2	mA
t_{rr}	T_{vj} = 25 ºC	10	µs
$R_{th(j-a)}$	isolated[1)]	15	K/W
	chassis[2)]	3	K/W
$R_{th(j-c)}$	per diode	2	K/W
$R_{th(c-s)}$	total	0,1	K/W
T_{vj}		-40 ... +125	°C
T_{stg}		-40 ... +125	°C
V_{isol}	a. c. 50 ... 60 Hz; r.m.s.; 1 s / 1 min.	3600 / 3000	V~
M_s	to heatsink M4	2	Nm
M_t	to terminal M5	3	Nm
w	approx.	66	g
Case		G 27	



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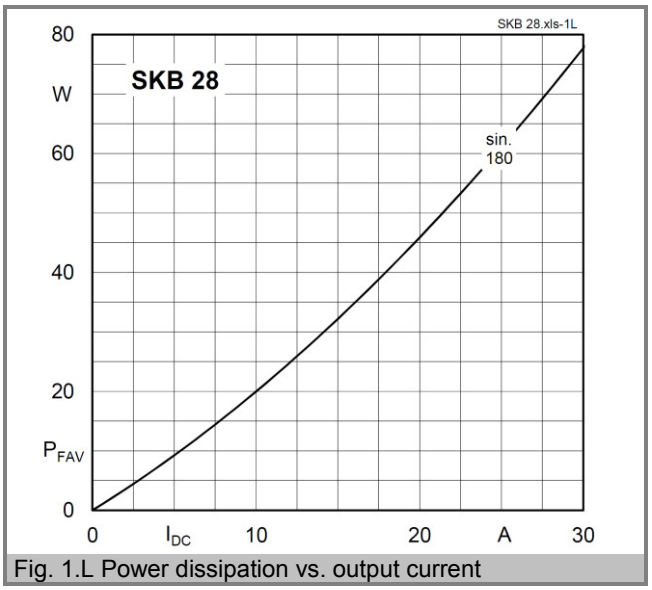


Fig. 1.L Power dissipation vs. output current

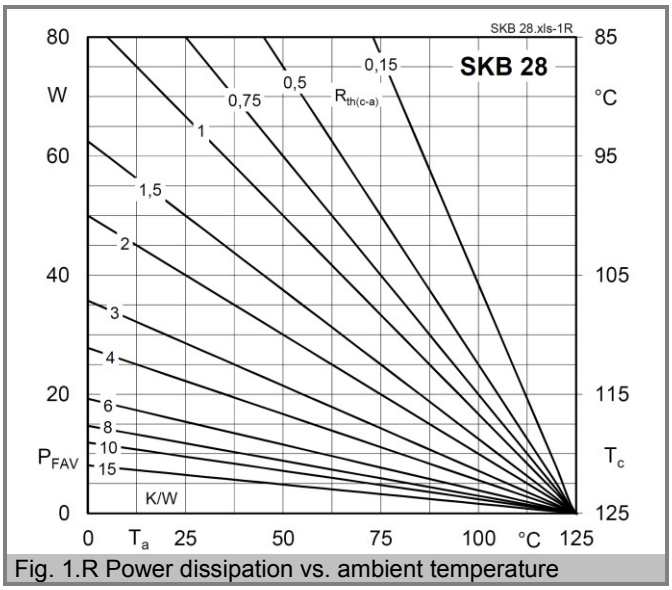


Fig. 1.R Power dissipation vs. ambient temperature

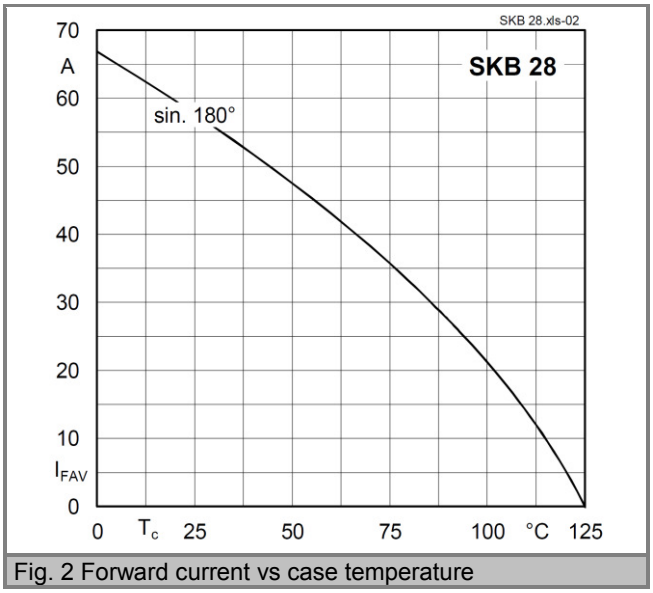


Fig. 2 Forward current vs case temperature

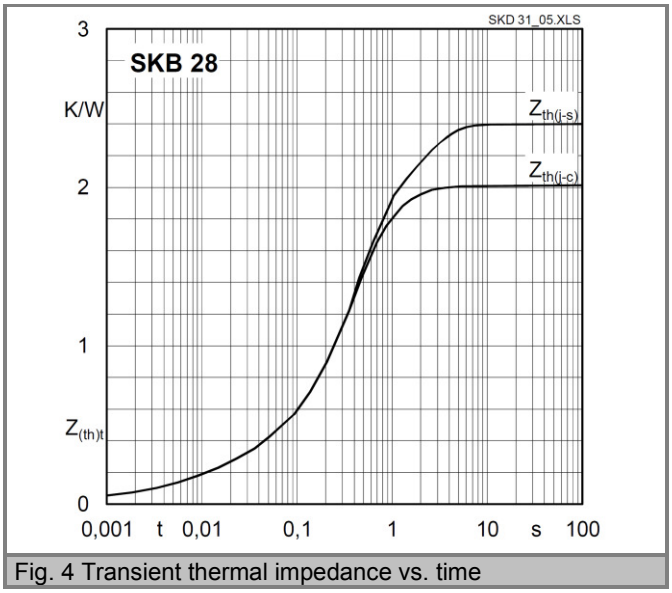


Fig. 4 Transient thermal impedance vs. time

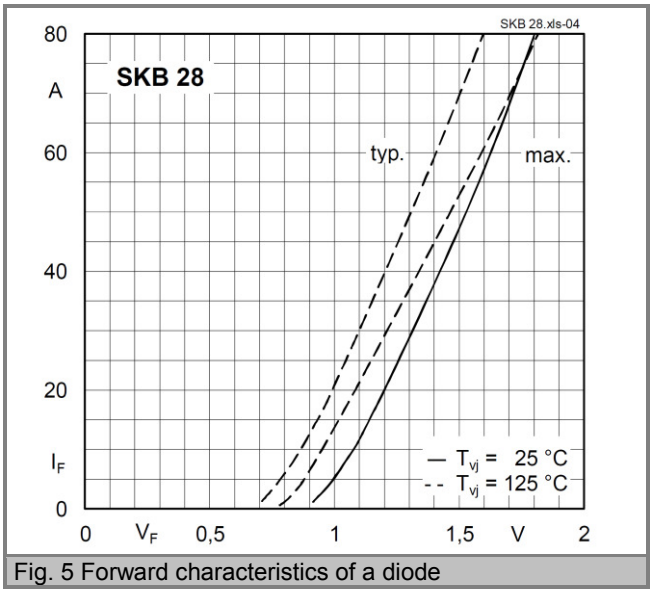


Fig. 5 Forward characteristics of a diode

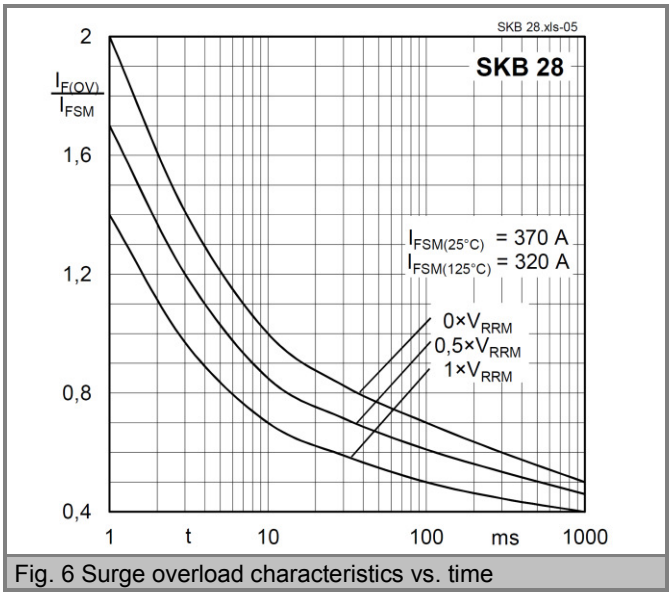
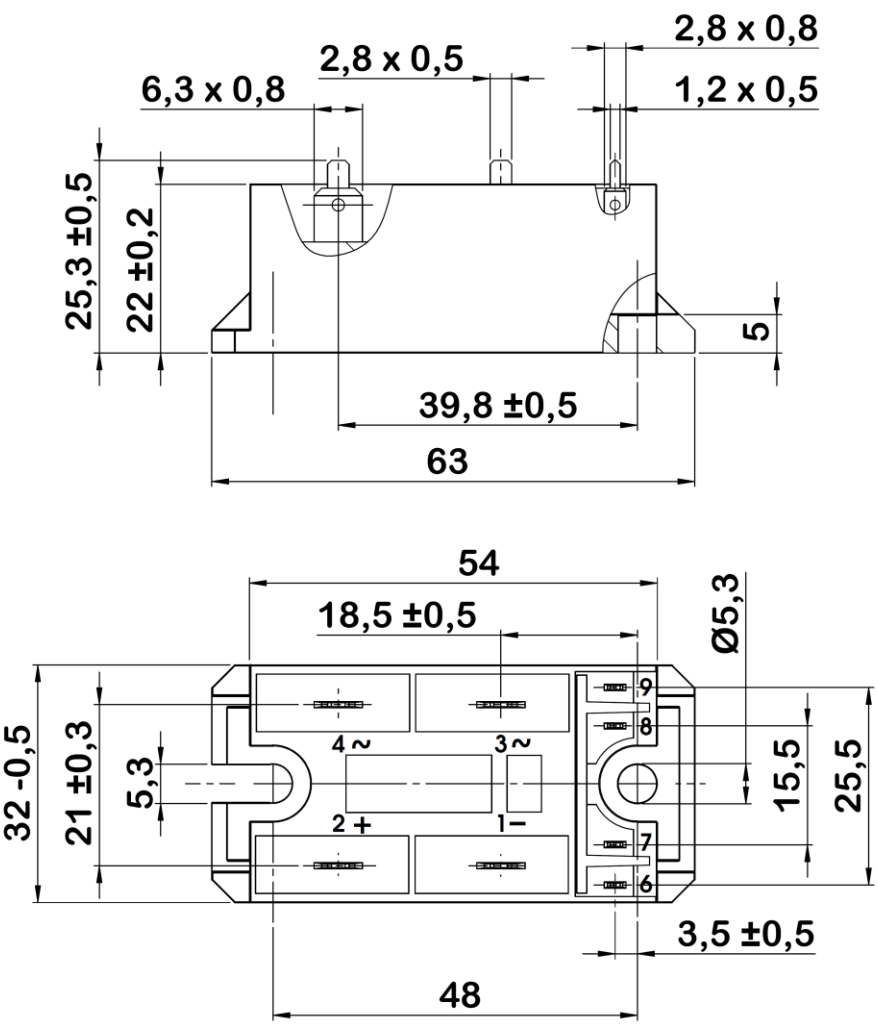


Fig. 6 Surge overload characteristics vs. time

Dimensions in millimeters



Case G 27

*IMPORTANT INFORMATION AND WARNINGS

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