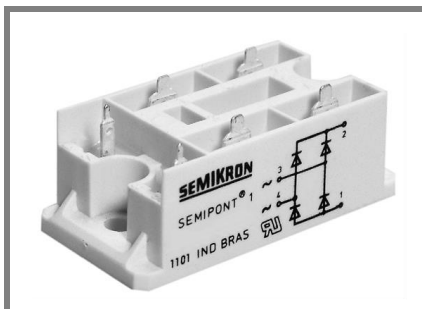


# SKB 28



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

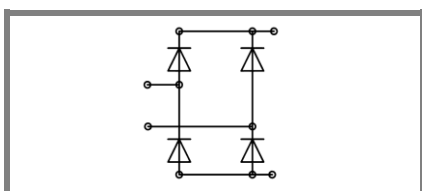
### Typical Applications\*

- 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<sub>R</sub> = 1 W)

1) Freely suspended or mounted on insulator  
2) Painted metal sheet of minimum. 250 x 250 x 1 mm: R<sub>th(c-a)</sub> = 1,85 K/W

V <sub>RSM</sub> V	V <sub>RRM</sub> , V <sub>DRM</sub> V	I <sub>D</sub> = 32 A (Inductive Load) (T <sub>c</sub> = 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 <sub>D</sub>	T <sub>c</sub> = 85 °C (full conduction)	30	A
	T <sub>a</sub> = 45 °C, isolated <sup>1)</sup>	3	A
	T <sub>a</sub> = 45 °C, chassis <sup>2)</sup>	12,8	A
	T <sub>a</sub> = 45 °C, P1A/120	27	A
I <sub>FSM</sub>	T <sub>vj</sub> = 25 °C ; 10 ms	370	A
	T <sub>vj</sub> = 125 °C ; 10 ms	320	A
i <sup>2</sup> t	T <sub>vj</sub> = 25 °C ; 8,3 ...10 ms	685	A <sup>2</sup> s
	T <sub>vj</sub> = 125 °C ; 8,3 ...10 ms	510	A <sup>2</sup> s
V <sub>F</sub>	T <sub>vj</sub> = 25 °C, I <sub>F</sub> = 75 A	max. 1,75	V
V <sub>(TO)</sub>	T <sub>vj</sub> = 125 °C	max. 0,85	V
r <sub>T</sub>	T <sub>vj</sub> = 125 °C	max. 12	mΩ
I <sub>RD</sub>	T <sub>vj</sub> = 25 °C ; V <sub>RD</sub> = V <sub>RRM</sub>	200	μA
	T <sub>vj</sub> = 125 °C ; V <sub>RD</sub> = V <sub>RRM</sub>	2	mA
t <sub>rr</sub>	T <sub>vj</sub> = 25 °C	10	μs
R <sub>th(j-a)</sub>	isolated <sup>1)</sup> chassis <sup>2)</sup>	15 3	K/W K/W
R <sub>th(j-c)</sub>	per diode	2	K/W
R <sub>th(c-s)</sub>	total	0,1	K/W
T <sub>vj</sub>		-40 ... +125	°C
T <sub>stg</sub>		-40 ... +125	°C
V <sub>isol</sub>	a. c. 50 ... 60 Hz; r.m.s.; 1 s / 1 min.	3600 / 3000	V~
M <sub>s</sub>	to heatsink M4	2	Nm
M <sub>t</sub>	to terminal M5	3	Nm
w	approx.	66	g
Case		G 27	



SKB

# SKB 28

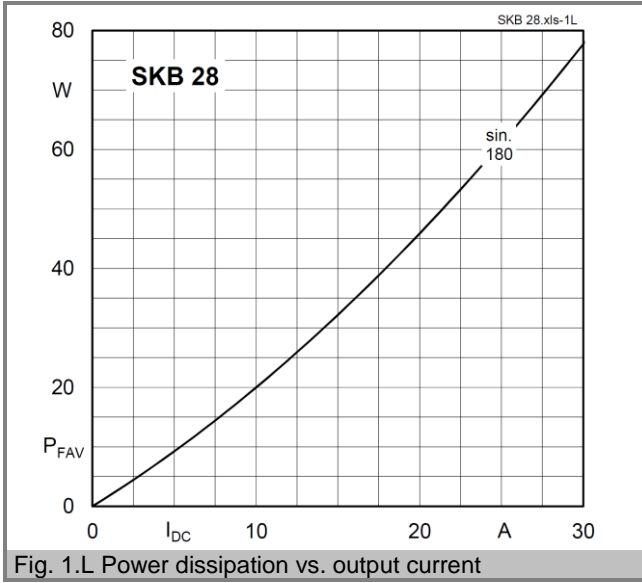


Fig. 1.L Power dissipation vs. output current

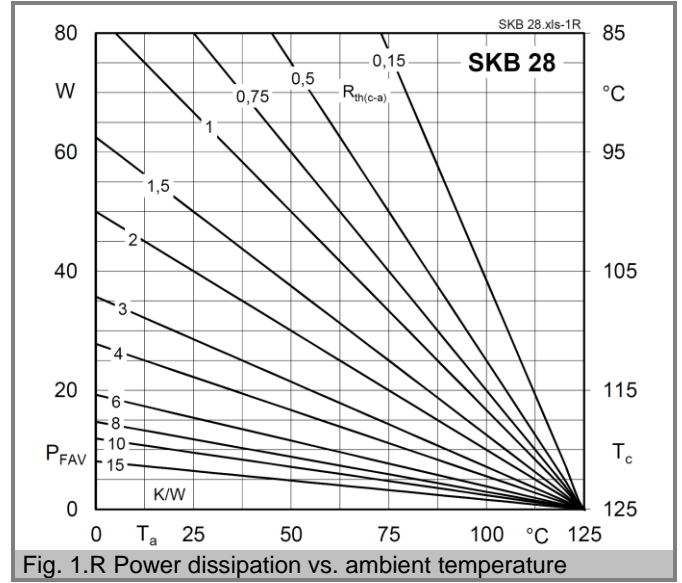


Fig. 1.R Power dissipation vs. ambient temperature

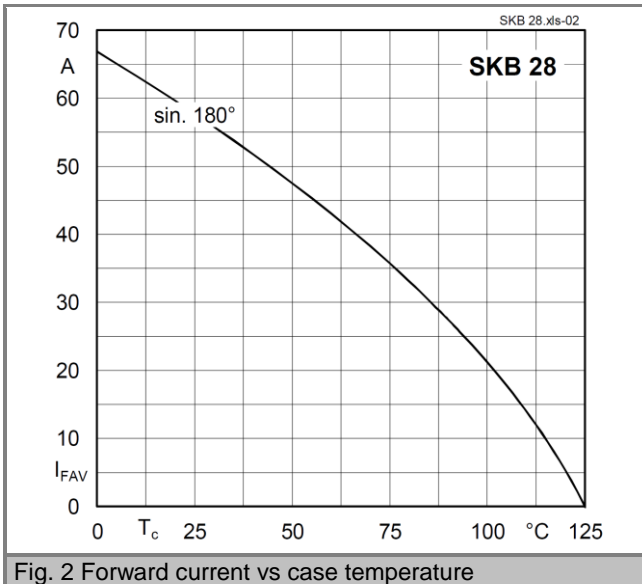


Fig. 2 Forward current vs case temperature

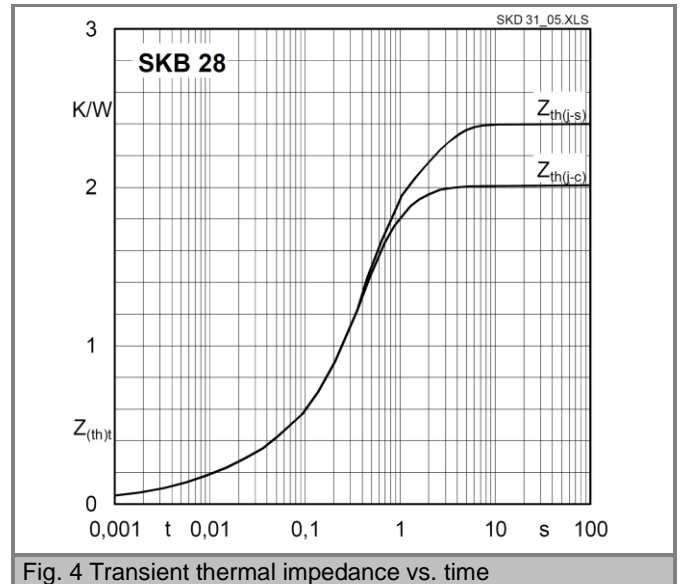


Fig. 4 Transient thermal impedance vs. time

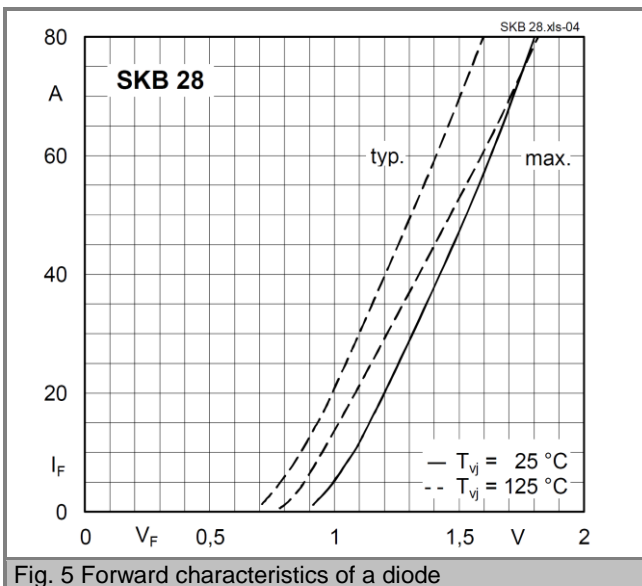


Fig. 5 Forward characteristics of a diode

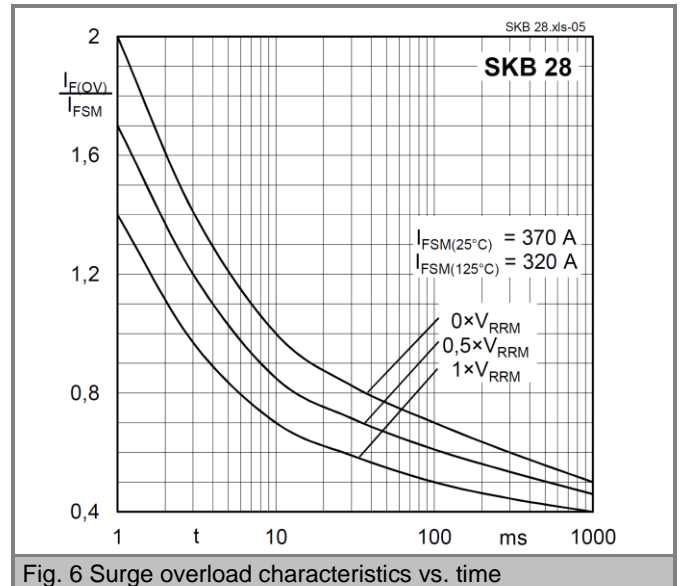
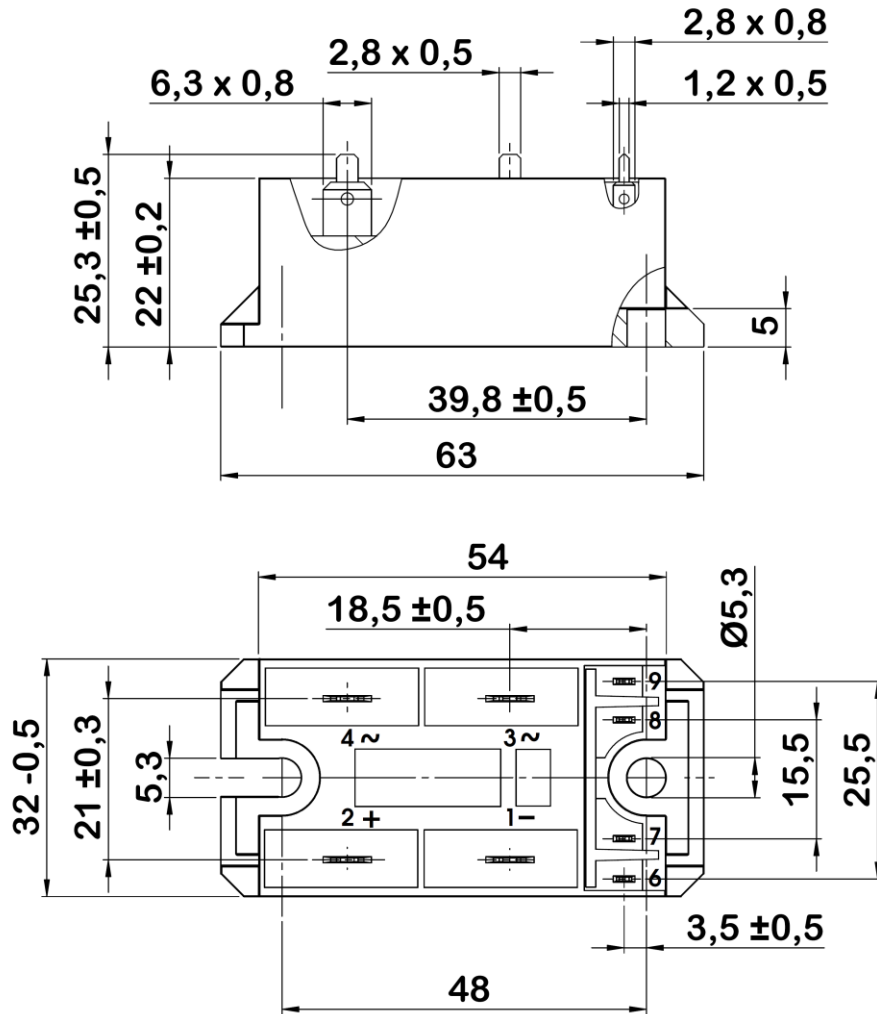


Fig. 6 Surge overload characteristics vs. time

Dimensions in millimeters



Case G 27

**\*IMPORTANT INFORMATION AND WARNINGS**

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