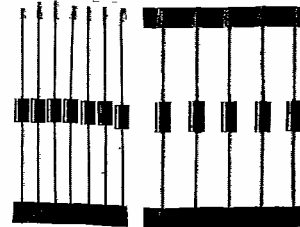


V <sub>RSM</sub> V <sub>RRM</sub>  V	I <sub>FRMS</sub> (maximum values for continuous operation)	
	3 A	6,7 A
	I <sub>FAV</sub> (sin. 180, T <sub>ref</sub> = 105 °C, L = 10 mm)	
	1,9 A	4,3 A
100	SK 1 G 01	SK 3 G 01
200	SK 1 G 02	SK 3 G 02
400	SK 1 G 04	SK 3 G 04
600	SK 1 G 06	SK 3 G 06
800	SK 1 G 08	SK 3 G 08
1000	SK 1 G 10	SK 3 G 10
1200	SK 1 G 12 *	SK 3 G 12

## Rectifier Diodes

SK 1 G T-01-15  
SK 3 G



Symbol	Conditions	SK 1 G	SK 3 G
I <sub>FAV</sub>	T <sub>ref</sub> = 130 °C; L = 10 mm; sin. 180 T <sub>amb</sub> = 45 °C; sin. 180; p.c.b. 50 x 50 mm	1,3 A 1,5 A	3 A 2,1 A
I <sub>FSM</sub>	T <sub>vj</sub> = 25 °C; 10 ms T <sub>vj</sub> = 175 °C; 10 ms	58 A 50 A	200 A 150 A
i <sup>2</sup> <sub>t</sub>	T <sub>vj</sub> = 25 °C; 8,3 ... 10 ms T <sub>vj</sub> = 175 °C; 8,3 ... 10 ms	16,8 A <sup>2</sup> s 12,5 A <sup>2</sup> s	200 A <sup>2</sup> s 110 A <sup>2</sup> s
Q <sub>rr</sub>	T <sub>vj</sub> = 150 °C; - $\frac{dI_F}{dt} = 10 \frac{A}{\mu s}$ ; I <sub>F</sub> = 10 A; V <sub>R</sub> = 100 V; typ.	15 μC	25 μC
I <sub>R</sub>	T <sub>vj</sub> = 25 °C; V <sub>R</sub> = V <sub>RRM</sub> T <sub>vj</sub> = 150 °C; V <sub>R</sub> = V <sub>RRM</sub>	4 μA 0,2 mA	4 μA 0,25 mA
V <sub>F</sub>	T <sub>vj</sub> = 25 °C; (I <sub>F</sub> = ...); max	1,1 V (1 A)	1,1 V (3 A)
V <sub>(TO)</sub>	T <sub>vj</sub> = 175 °C	0,85 V	0,85 V
r <sub>T</sub>	T <sub>vj</sub> = 175 °C	75 mΩ	30 mΩ
C <sub>j</sub>	V <sub>R</sub> = 0; f = 1 MHz; typ. V <sub>R</sub> = 4 V; f = 1 MHz; typ.	45 pF 20 pF	100 pF
R <sub>thjr</sub>	L = 10 mm	30 °C/W	14 °C/W
R <sub>thja</sub>	p.c.b. 50 x 50 mm	75 °C/W	60 °C/W
T <sub>vj</sub>		- 40 ... + 175 °C	- 40 ... + 175 °C
T <sub>stg</sub>		- 55 ... + 175 °C	- 55 ... + 175 °C
T <sub>solder</sub>	max. 10 s, L = 9 mm	280 °C	280 °C
a		5 · 9,81 m/s <sup>2</sup>	5 · 9,81 m/s <sup>2</sup>
w	approx.	0,5 g	1 g
Case		E 33	E 29

## Features

- Axial lead diodes, taped
- Glass passivated silicon chip
- Void-free moulded plastic acc. to Underwriters Laboratory (UL) flammability classification 94 V-0
- Polarity: Band denotes cathode terminal
- Peak inverse voltage up to 1200 V
- High surge current of 200 A
- Available with formed leads on request

## Typical Applications

- General purpose rectifier diodes for high quality requirement
- For printed circuit board mounting

\* Available in limited quantities

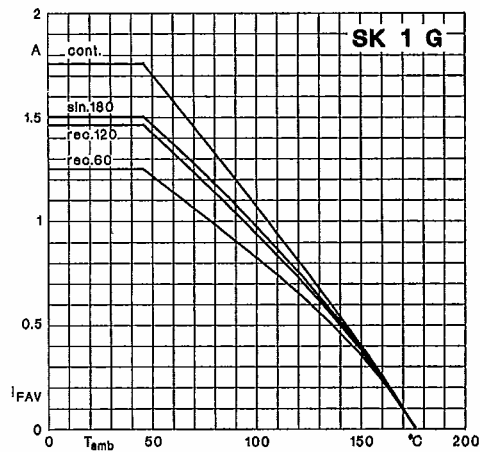


Fig. 4 Rated forward current vs. ambient temperature

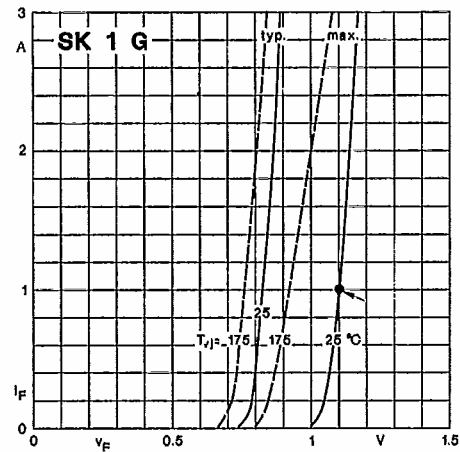


Fig. 6 a Forward characteristics

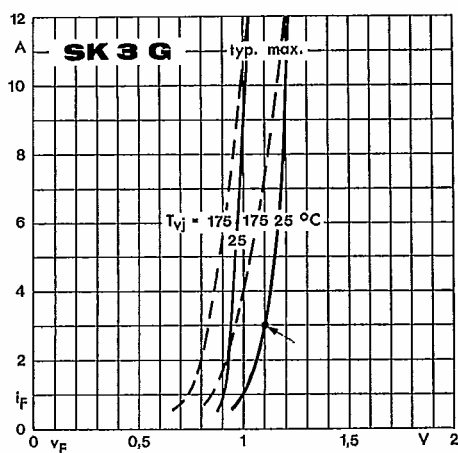


Fig. 6 b Forward characteristics

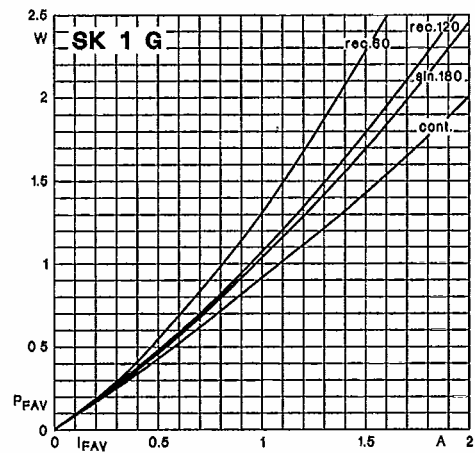


Fig. 8 Power dissipation vs. forward current

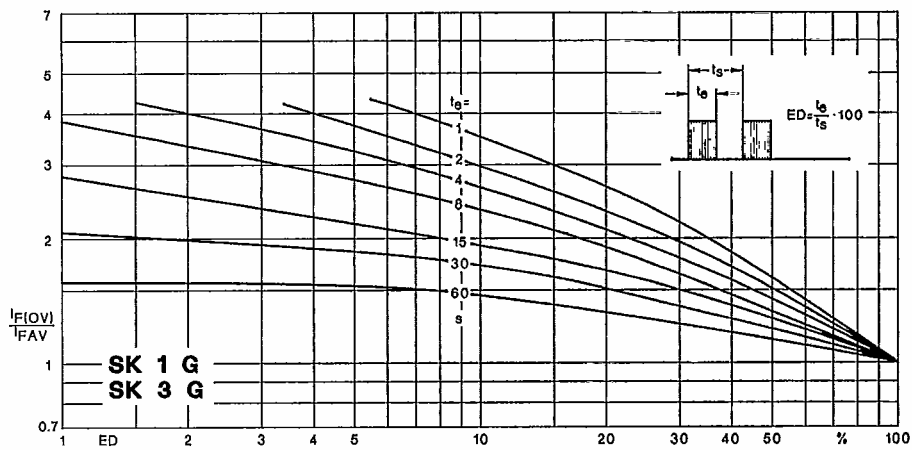


Fig. 9 Rated overload current vs. duty cycle

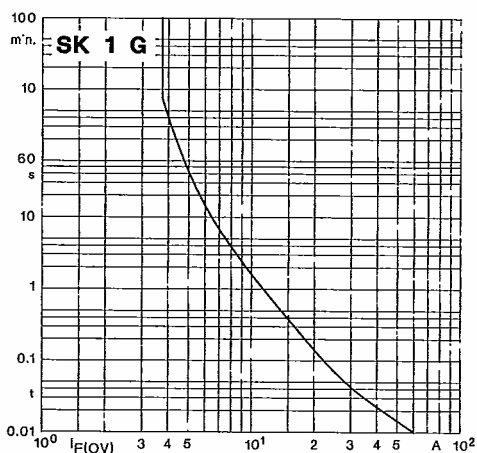


Fig. 10 Rated overload current vs. time

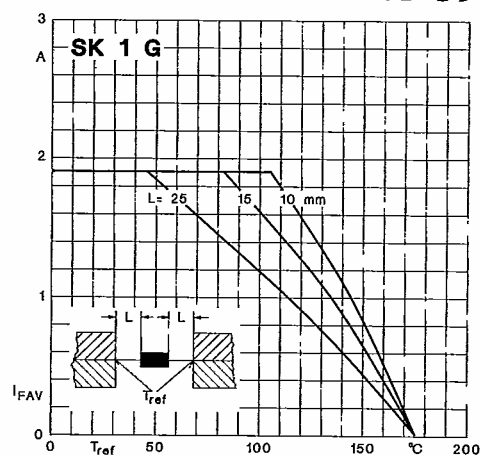


Fig. 14 a Rated forward current vs. reference temp.

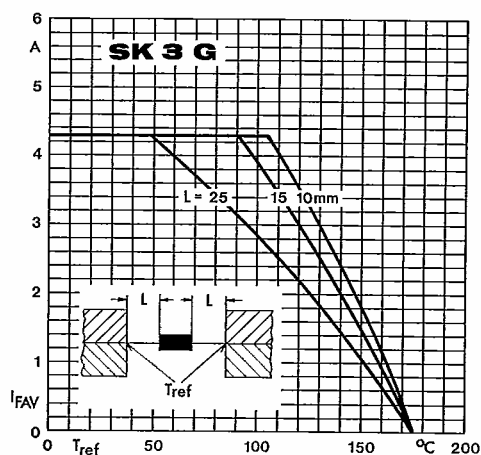


Fig. 14 b Rated forward current vs. reference temp.

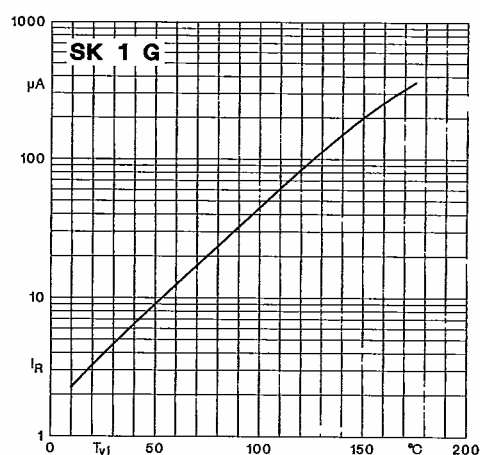


Fig. 15 a Reverse current vs. virtual junction temp.

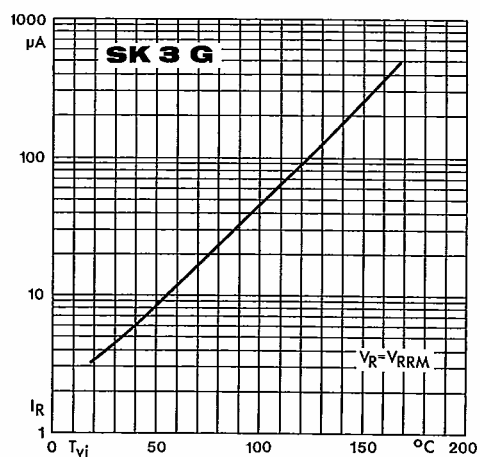


Fig. 15 b Reverse current vs. virt. junction temp.

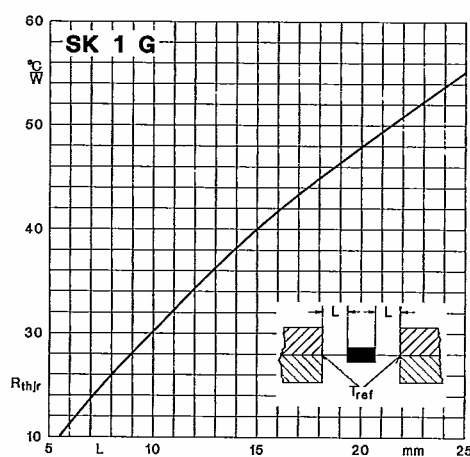


Fig. 16 a Thermal resistance vs. lead length

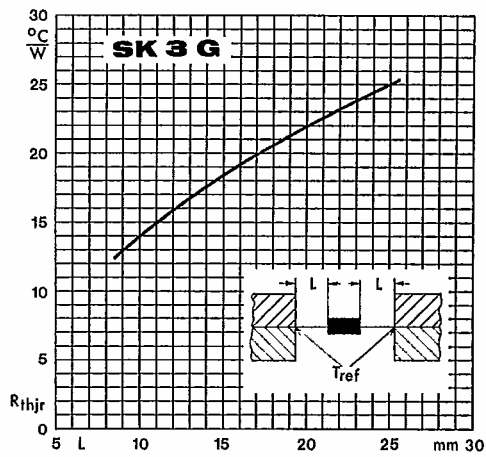
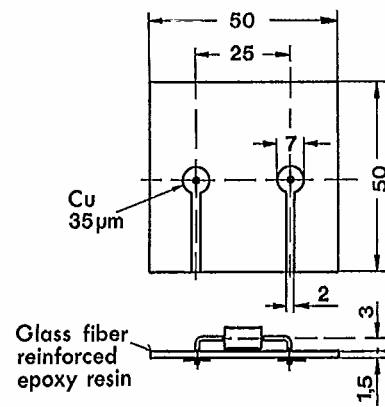
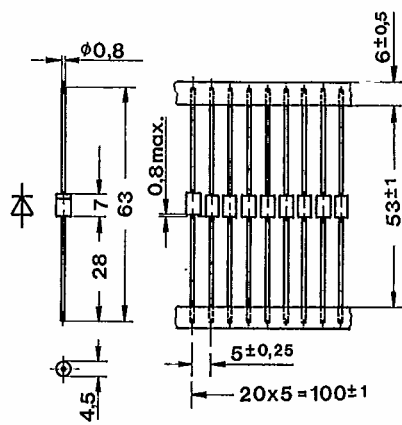


Fig. 16 b Thermal resistance vs. lead length

P.C.B. for  $R_{thja} = 60/75$  °C/W



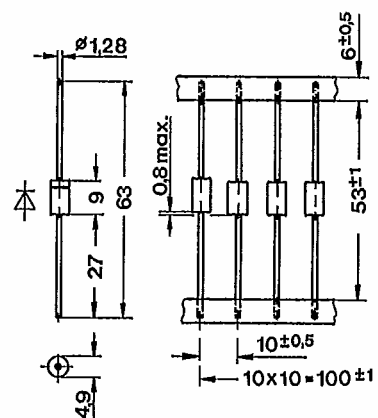
**SK 1 G**  
Case E 33



3500 diodes per reel

Reel dimensions page B 8 – 2

**SK 3 G**  
Case E 29



2000 diodes per reel

Dimensions in mm