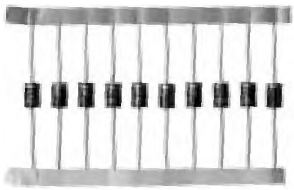
V_{RSM} V_{RRM}	I_{FRMS} (maximum values for continuous operation) 3 A			6,7 A		
	I_{FAV} (sin. 180; T_{amb} = 45 °C) 1,15 A			1,8 A		
V	Types	$C_{max.}$ µF	$R_{min.}$ Ω	Types	$C_{max.}$ µF	$R_{min.}$ Ω
1000	**SK 1/10**	500	4	**SK 3/10**	2000	1
1200	**SK 1/12**	400	6	**SK 3/12**	1600	2
1400	**SK 1/14**	300	8	**SK 3/14**	1200	3
1600	**SK 1/16**	200	10	**SK 3/16**	800	4
$V_{(BR)}$ min	**Avalanche Types**					
1300	**SKa 1/13**	400	6	**SKa 3/13**	1600	2
1700	**SKa 1/17**	200	10	**SKa 3/17**	800	4

Symbol	Conditions	SK 1 SKa 1	SK 3 SKa 3	Units
I_{FAV}	T_{ref} = 85 °C; L = 10 mm; sin. 180	1,45	3,3	A
	T_{amb} = 45 °C; p.c.b. 50 x 50 mm	1,15	1,8	A
I_{FSM}	T_{vj} = 25 °C; 10 ms	60	180	A
	T_{vj} = 150 °C; 10 ms	50	150	A
i^2t	T_{vj} = 25 °C; 8,3 . . . 10 ms	18	162	A^2s
	T_{vj} = 150 °C; 8,3 . . . 10 ms	12,5	112,5	A^2s
Q_{rr}	T_{vj} = 150 °C; $-\frac{di_F}{dt} = 10\frac{A}{\mu s}$;			
	I_F = 10 A; V_R = 100 V; typ.	10	25	µC
I_R	T_{vj} = 25 °C; $V_R = V_{RRM} / V_{(BR)min}$	4	4	µA
	T_{vj} = 150 °C; $V_R = V_{RRM} / V_{(BR)min}$	400	600	µA
P_{RSM}	SKa-Types only			
	T_{vj} = 150 °C; t_p = 10 µs	1	3	kW
V_F	T_{vj} = 25 °C; I_F = 10 A; max.	1,5	1,2	V
$V_{(TO)}$	T_{vj} = 150 °C	0,85	0,85	V
r_T	T_{vj} = 150 °C	75	30	mΩ
C_j	V_R = 0; f = 1 MHz; typ.	45	110	pF
R_{thjr}	L = 10 mm	40	18	°C/W
R_{thja}	p.c.b. 50 x 50 mm	85	60	°C/W
T_{vj}		– 40 ... + 150		°C
T_{stg}		– 40 ... + 150		°C
T_{solder}	max. 10 s; L ≥ 9 mm	250		°C
a		5 · 9,81		m/s^2
w	approx.	0,5	1	g

Rectifier Diodes

SK 1 **SK 3**
SKa 1 **SKa 3**



Features

- Axial lead diodes
- Taped for automatic insertion
- Available with formed leads on request
- Plastic material carries Underwriters Laboratories flammability classification 94V-0

SKa types

- Avalanche type reverse characteristics
- Minimum avalanche breakthrough voltages 1300 V and 1700 V
- Transient voltage proof within specified limits

Typical Applications

- All-purpose rectifier diodes
- For p.c.b. mounting

SKa types

- DC supply for magnets or solenoids (brakes, valves, etc.)
- Series connections for high voltage applications (dust precipitators)

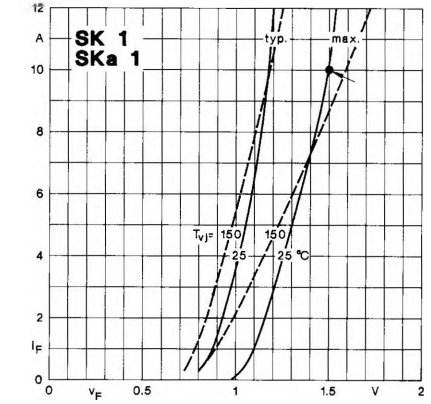


Fig. 6 a Forward characteristics

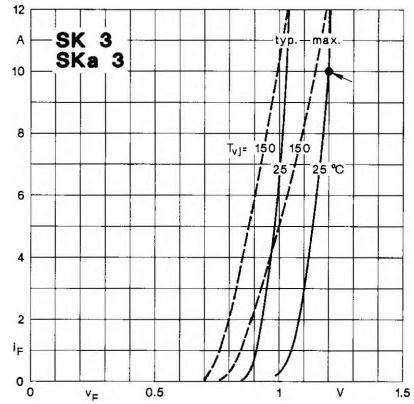


Fig. 6 b Forward characteristics

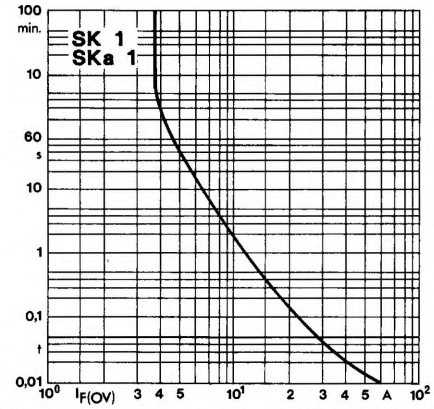


Fig. 10 a Rated overload current vs. time

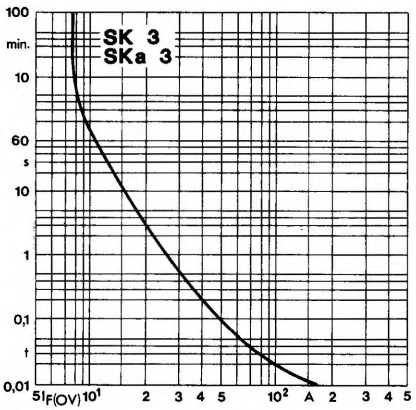


Fig. 10 b Rated overload current vs. time

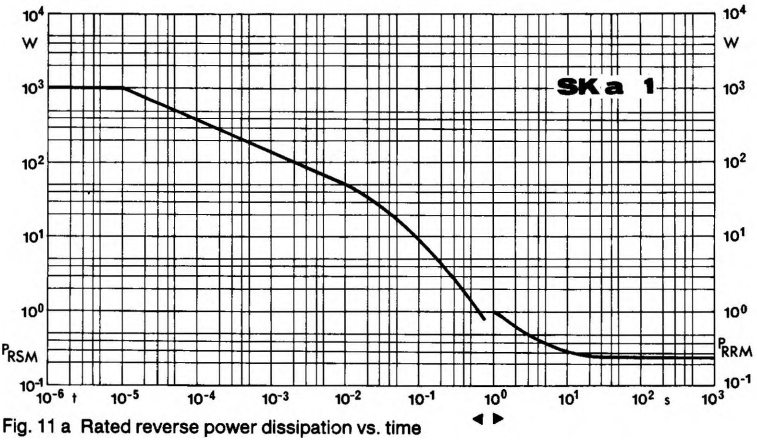


Fig. 11 a Rated reverse power dissipation vs. time

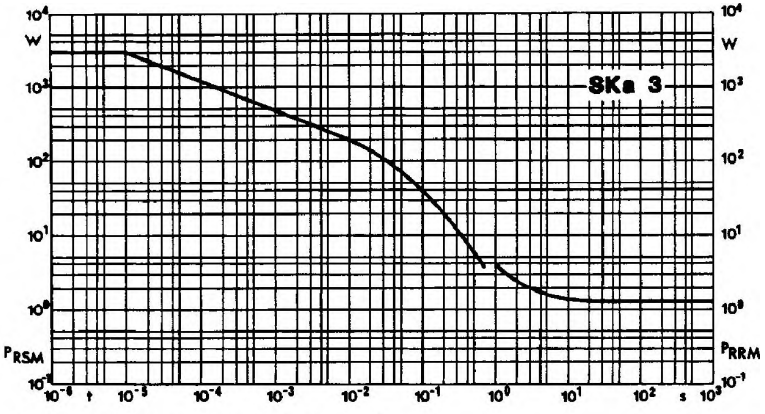


Fig. 11 b Rated reverse power dissipation vs. time

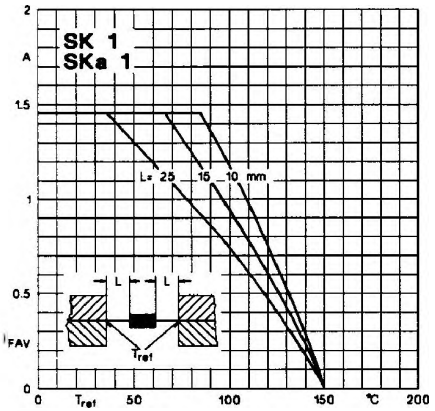


Fig. 14 a Rated forward current vs. reference temp.

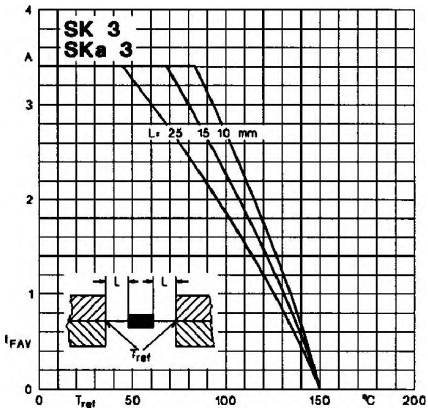


Fig. 14 b Rated forward current vs. reference temp.

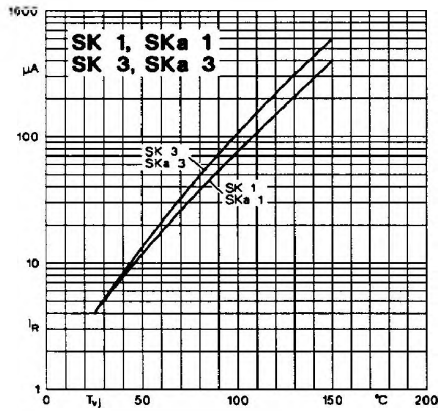


Fig. 15 Reverse current vs. virt. junction temp.

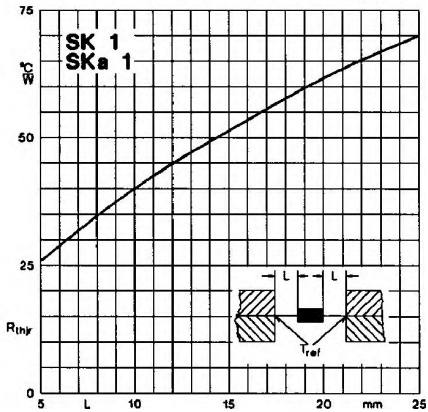


Fig. 16 a Thermal resistance vs. lead length

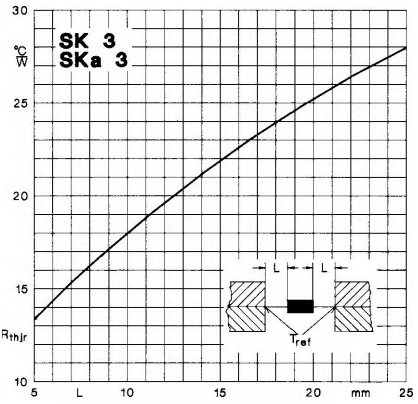
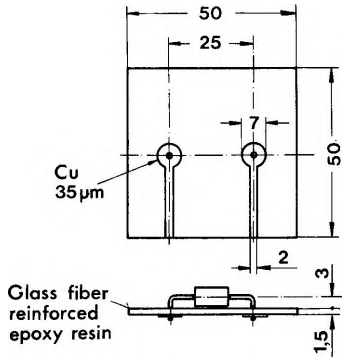


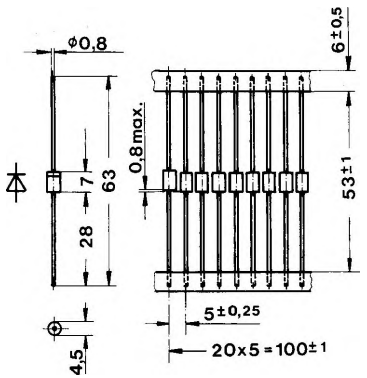
Fig. 16 b Thermal resistance vs. lead length

P.C.B. for R_{thja} = 85 °C/W (SK 1)
R_{thja} = 60 °C/W (SK 3)



SK 1
SKa 1

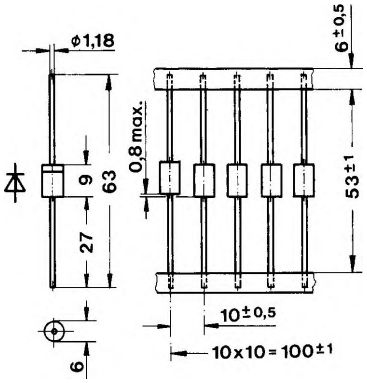
Case E 33



3500 diodes per reel

SK 3
SKa 3

Case E 34



1500 diodes per reel

Reel dimensions page B 8 – 2

Dimensions in mm