

Axial Lead Diode

Avalanche Diode

SKa 3

Features

- Avalanche type reverse characteristic
- Transient voltage proof within specified limits
- Taped for automatic insertion
- Available with formed leads on request
- Plastic material used carries Underwriter Laboratories flammability classification 94V-0

Typical Applications

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

$V_{(BR)min}$	$I_{FRMS} = 6,7 \text{ A}$ (maximum value for continuous operation)	C_{max}	R_{min}
V 1300	$I_{FAV} = 3 \text{ A}$ (sin. 180; $T_r = 90^\circ\text{C}$) SKa 3/13	μF 1600	Ω 2
1700	SKa 3/17	800	4

Symbol	Conditions	Values	Units
I_{FAV}	$T_r = 85^\circ\text{C}; L = 10 \text{ mm}; \sin. 180$	3,3	A
I_{FAV}	$T_a = 45^\circ\text{C}; \text{PCB } 50 \times 50 \text{ mm}$	1,8	A
I_{FSM}	$T_{vj} = 25^\circ\text{C}; 10 \text{ ms}$ $T_{vj} = 150^\circ\text{C}; 10 \text{ ms}$	180 150	A A
i^2t	$T_{vj} = 25^\circ\text{C}; 8,3 \dots 10 \text{ ms}$ $T_{vj} = 150^\circ\text{C}; 8,3 \dots 10 \text{ ms}$	162 112,5	A^2s A^2s
V_F	$T_{vj} = 25^\circ\text{C}; I_F = 10 \text{ A}$	max. 1,2	V
$V_{(TO)}$	$T_{vj} = 150^\circ\text{C}$	max. 0,85	V
r_T	$T_{vj} = 150^\circ\text{C}$	max. 30	$\text{m}\Omega$
I_{RD}	$T_{vj} = 150^\circ\text{C}; V_{RD} = V_{(BR)min}$	max. 600	μA
P_{RSM}	$T_{vj} = 150^\circ\text{C}; t_p = 10 \mu\text{s}$	1,8	kW
$R_{th(i-r)}$	$L = 10 \text{ mm}$	18	K/W
$R_{th(j-a)}$	$\text{PCB } 50 \times 50 \text{ mm}$	60	K/W
T_{vj}		- 40 ... + 150	$^\circ\text{C}$
T_{stg}		- 40 ... + 150	$^\circ\text{C}$
T_{sold}	max. 10 s; $L > 9 \text{ mm}$	250	$^\circ\text{C}$
V_{isol}		-	$\text{V} \sim$
a		5 * 9,81	m/s^2
m	approx.	1	g
Case	1500 diodes per reel	E 34	



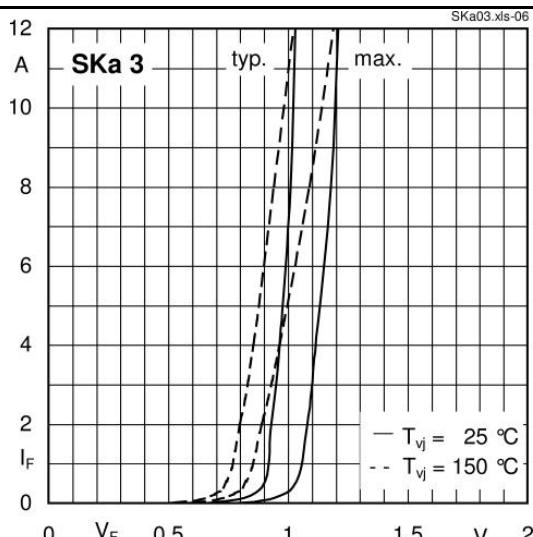


Fig. 5 Forward characteristics

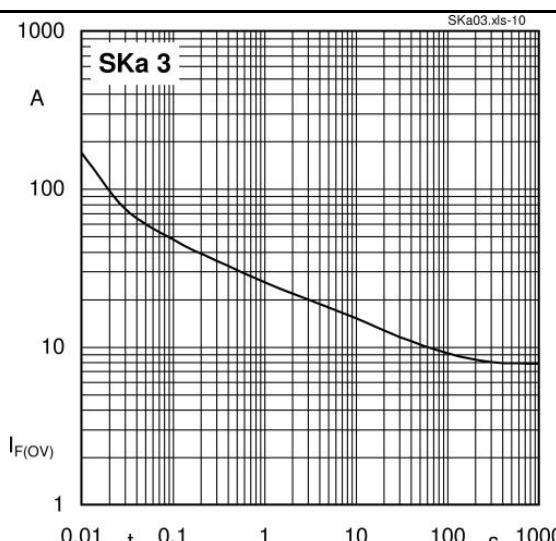


Fig. 8 Overload current vs. time

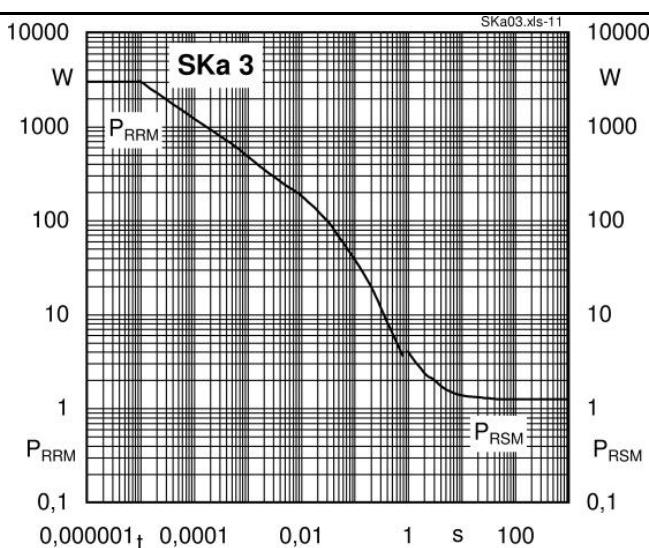


Fig. 9 Reverse power dissipation vs. time

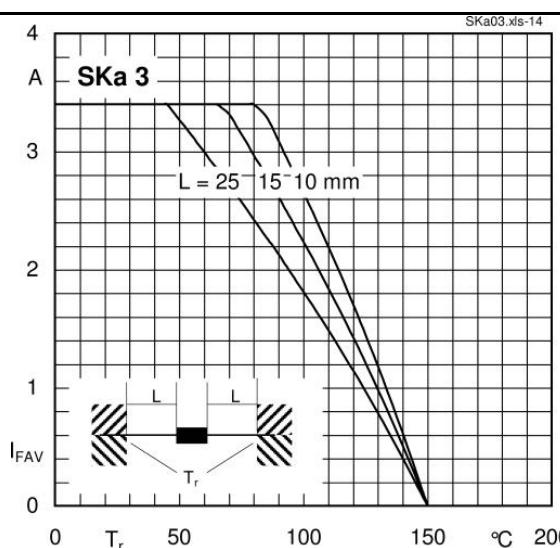


Fig. 12 Forward current vs. reference temperature

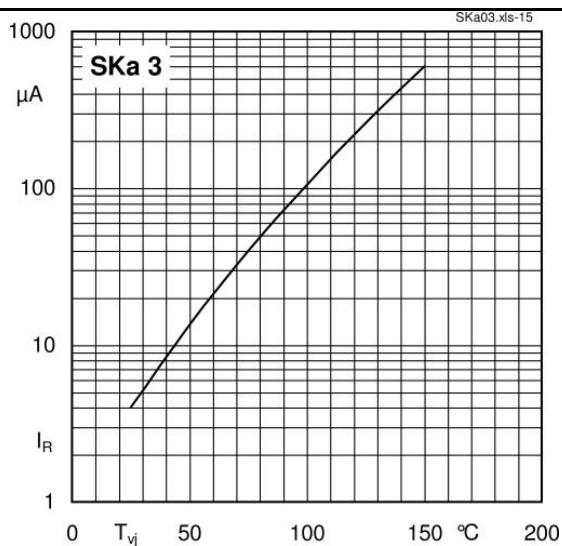


Fig. 13 Reverse current vs. junction temperature

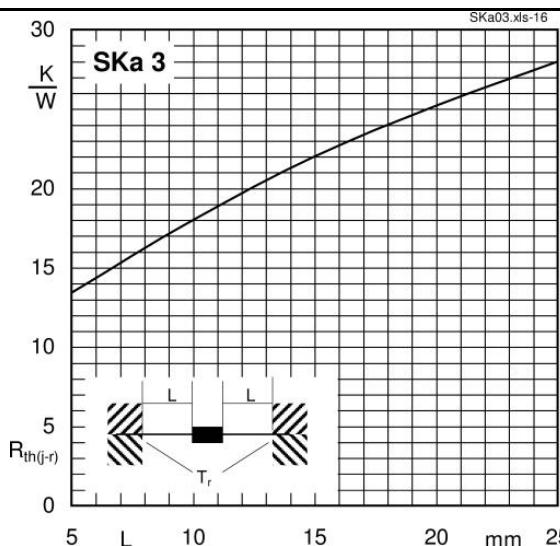
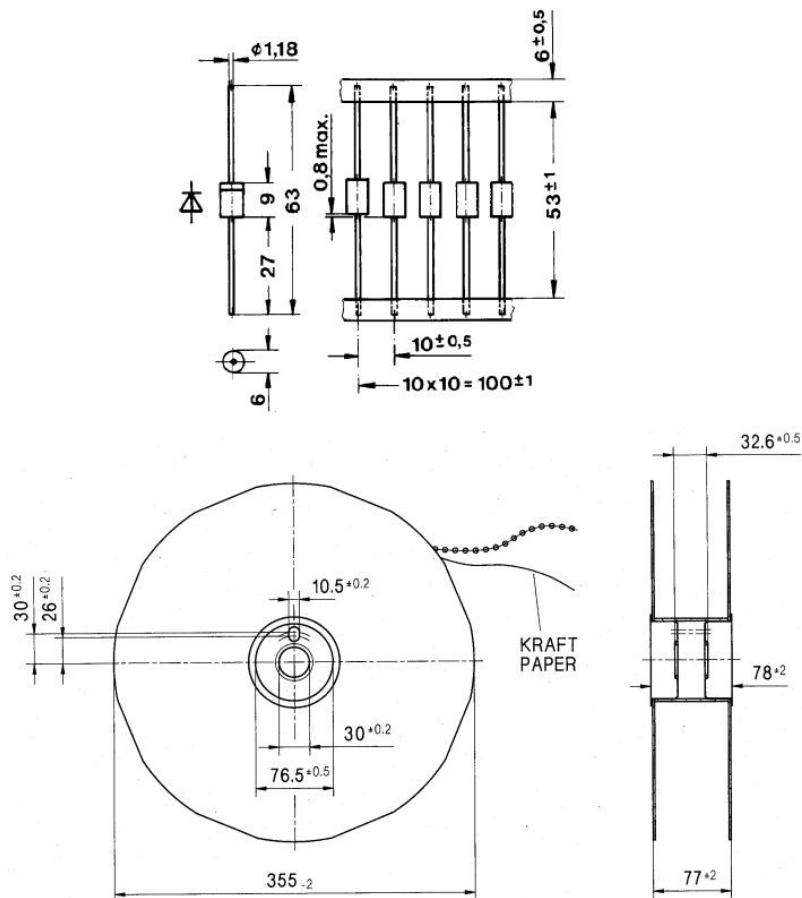


Fig. 14 Thermal resistance vs. lead length

Dimensions in mm



CASE E 34

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