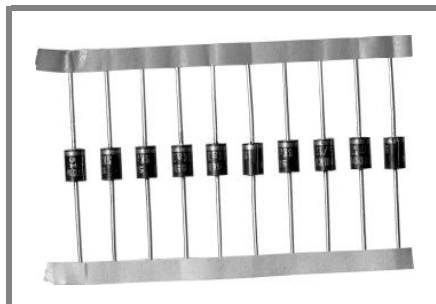




Axial Lead Diode

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	$I_{FAV} = 3 \text{ A}$ (sin. 180; $T_r = 90 \text{ °C}$)	μF	Ω
1300	SKa 3/13	1600	2
1700	SKa 3/17	800	4

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



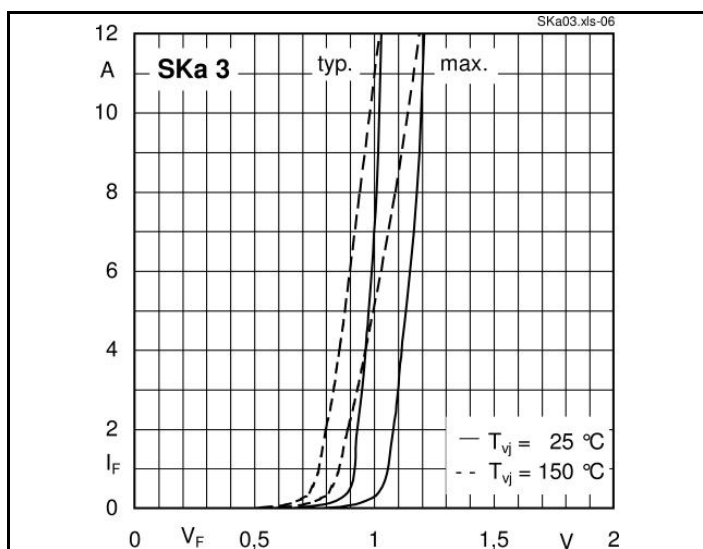


Fig. 5 Forward characteristics

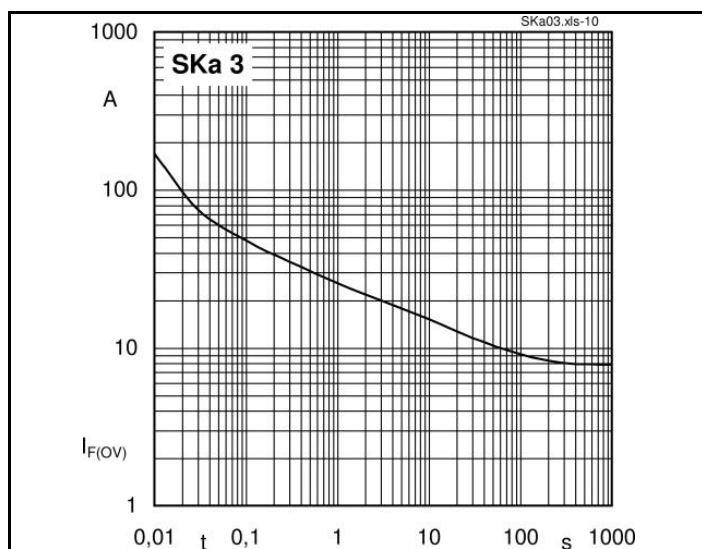


Fig. 8 Overload current vs. time

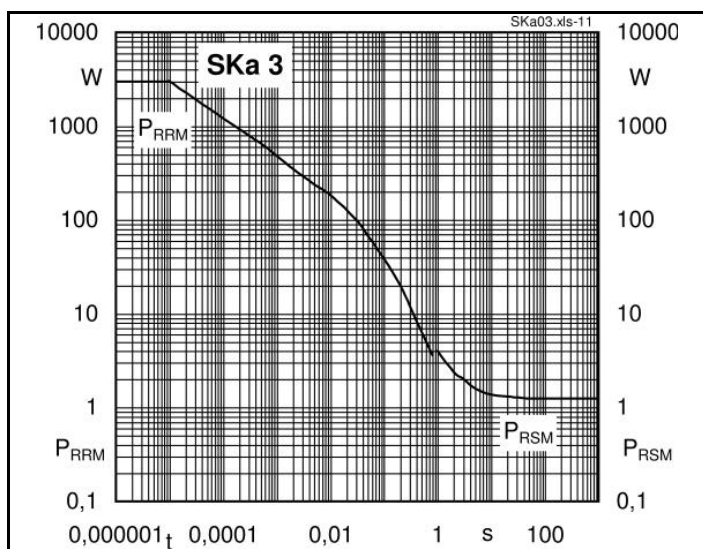


Fig. 9 Reverse power dissipation vs. time

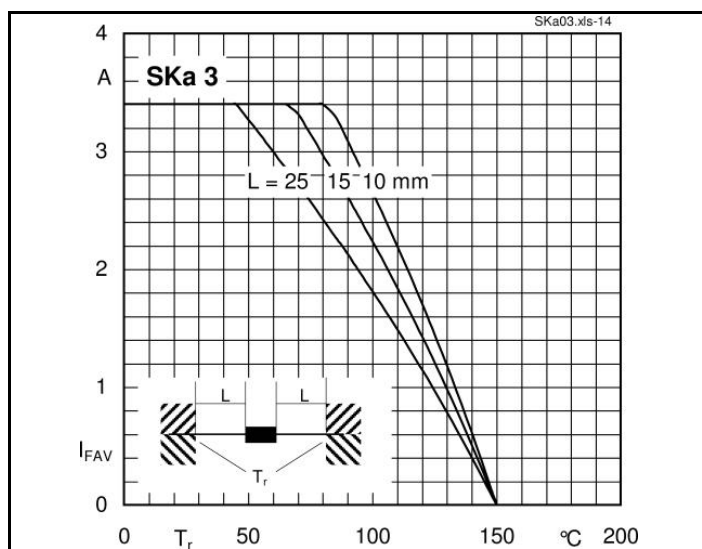


Fig. 12 Forward current vs. reference temperature

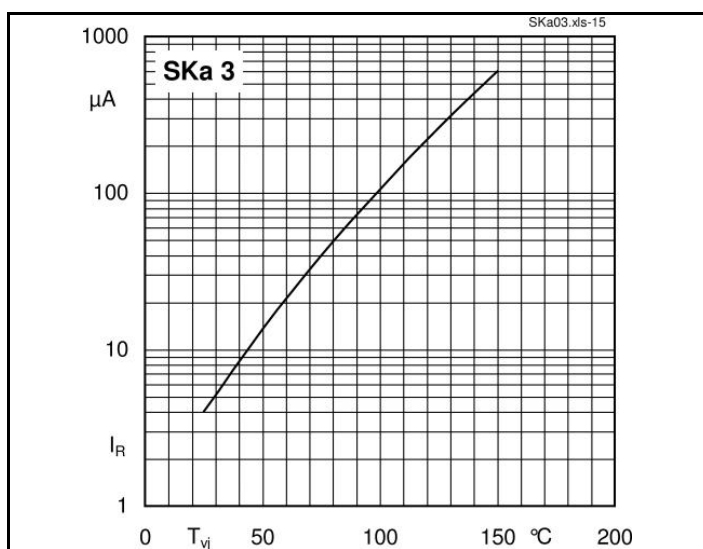


Fig. 13 Reverse current vs. junction temperature

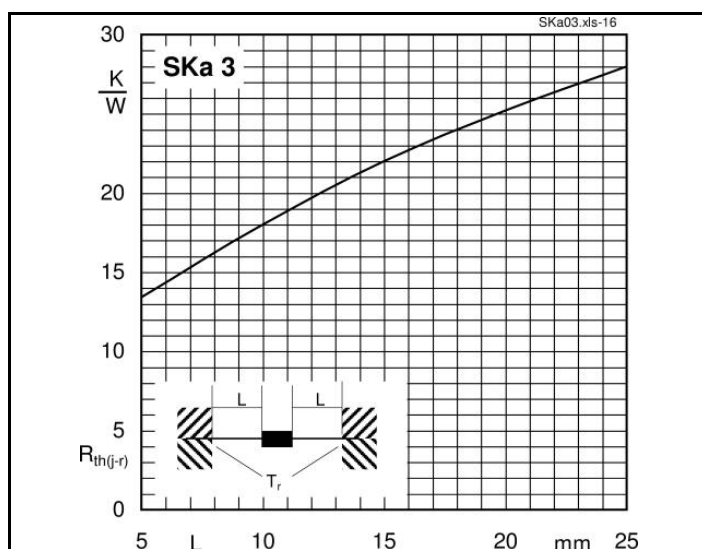
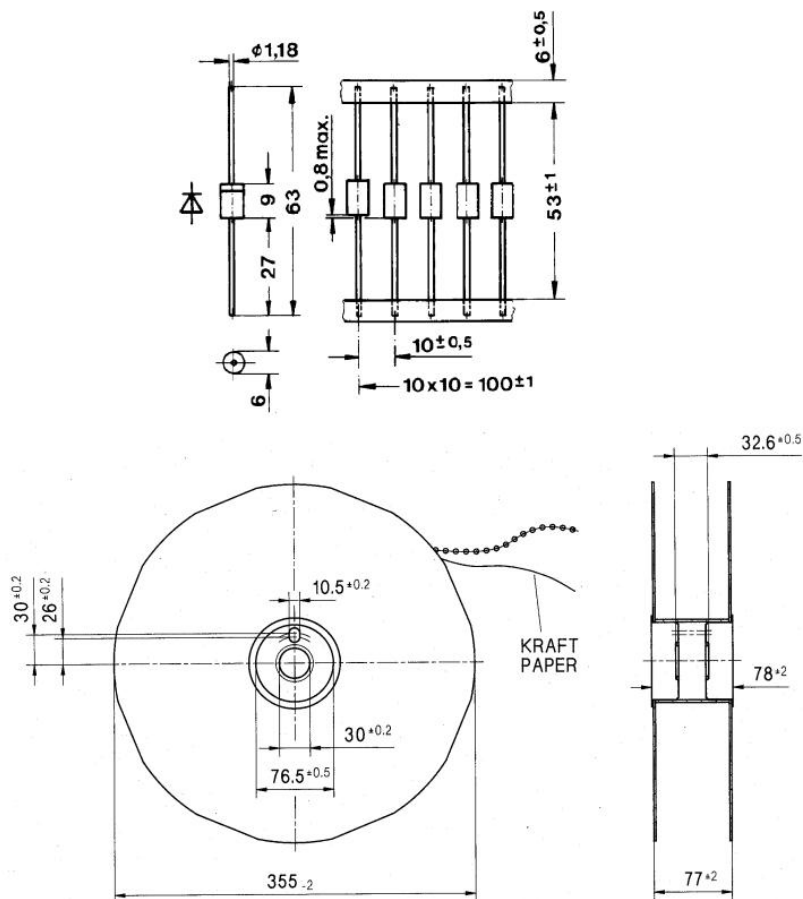


Fig. 14 Thermal resistance vs. lead length

Dimensions in mm



CASE E 34

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