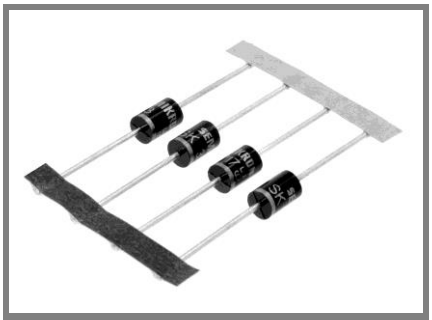
SKa 3



Axial Lead Diode

Avalanche Diode

SKa 3

Features

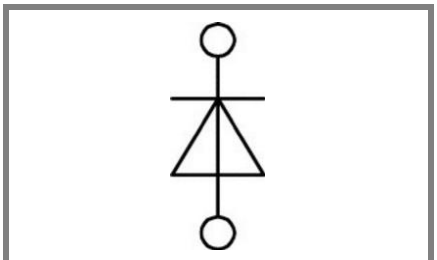
- Avalanche type reverse characteristic
- Transient voltage proof within specified limits
- Taped for automatic insertion
- Available with formed leads on request
- Plastic material meets UL 94V-0 flammability classification

Typical Applications

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

$V_{(BR)min}$ V	I_{FRMS} = 6,7 A (maximum value for continuous operation) I_{FAV} = 3 A (sin. 180; T_r = 90°C)	C_{max} µF	R_{min} Ω
1300	SKa 3/13	1600	2
1700	SKa 3/17	800	4
2000	SKa 3/20	500	6

Symbol	Condition	Values	Units
I_{FAV}	T_r = 85°C; L = 10 mm; sin. 180	3,3	A
	Ta = 45°C; PCB 50 x 50 mm	1,8	A
I_{FSM}	T_{vj} = 25°C ; 10 ms	180	A
	T_{vj} = 150°C ; 10 ms	150	A
i^2t	T_{vj} = 25°C ; 8,3...10 ms	162	A^2s
	T_{vj} = 150°C ; 8,3...10 ms	112,5	A^2s
V_F	T_{vj} = 25°C, I_F = 10 A	max. 1,2	V
$V_{(TO)}$	T_{vj} = 150°C	max. 0,85	V
r_T	T_{vj} = 150°C	max. 30	mΩ
I_R	T_{vj} = 150°C ; V_{RD} = $V_{(BR)min}$	max. 600	µA
P_{RSM}	T_{vj} = 150°C; t_p = 10 µs	1,8	kW
$R_{th(j-r)}$	L = 10 mm	18	K/W
$R_{th(j-a)}$	PCB 50 x 50 mm	60	K/W
T_{vj}		-40...+150	°C
T_{stg}		-40...+150	°C
T_{SOLD}	max. 10 s; L > 9 mm	250	°C
a		5 * 9,81	m/s^2
m	approx.	1	g
Case	1500 diodes per reel	E34	



SK

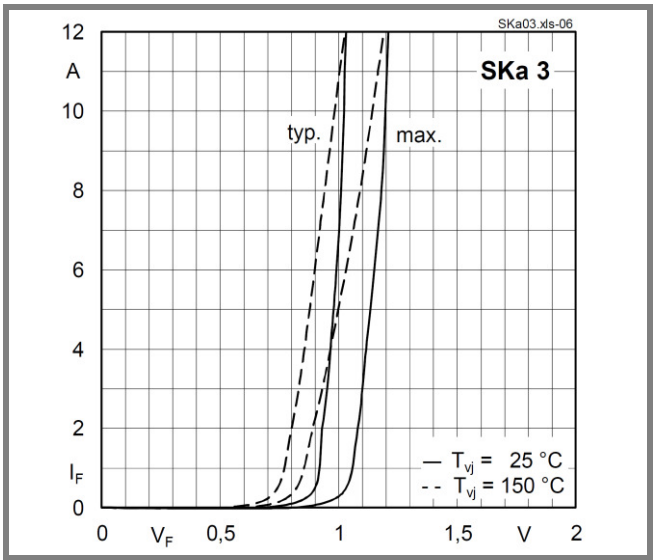


Fig. 6 Forward characteristics

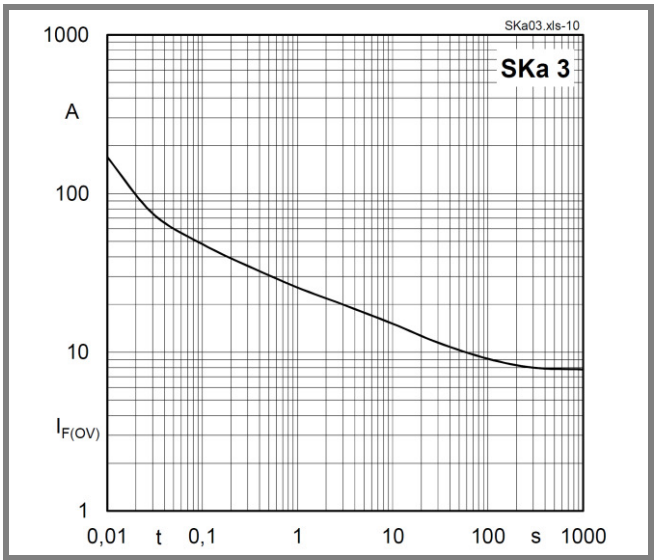


Fig. 10 Overload current vs. time

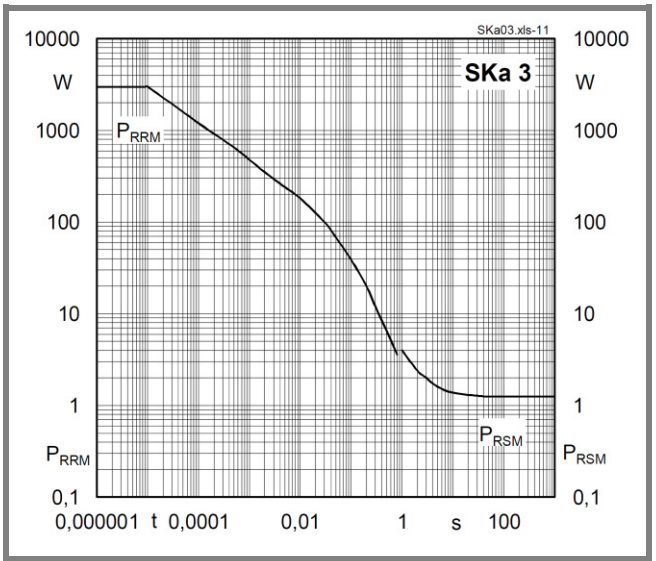


Fig. 11 Reverse power dissipation vs. time

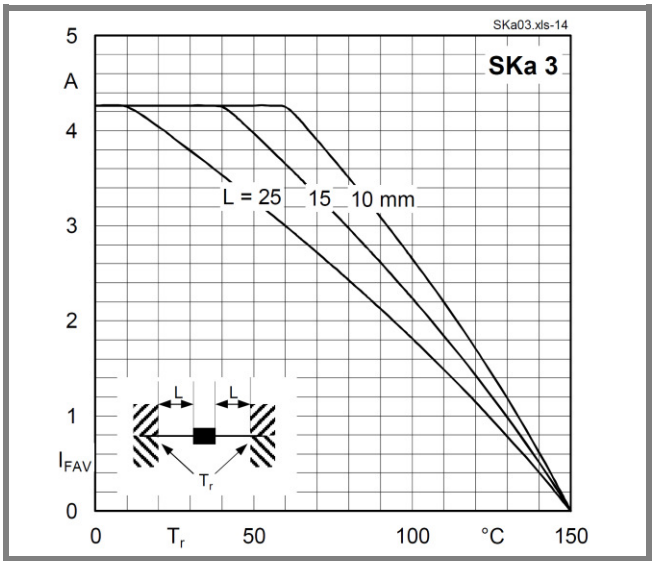


Fig. 14 Forward current vs. reference temperature

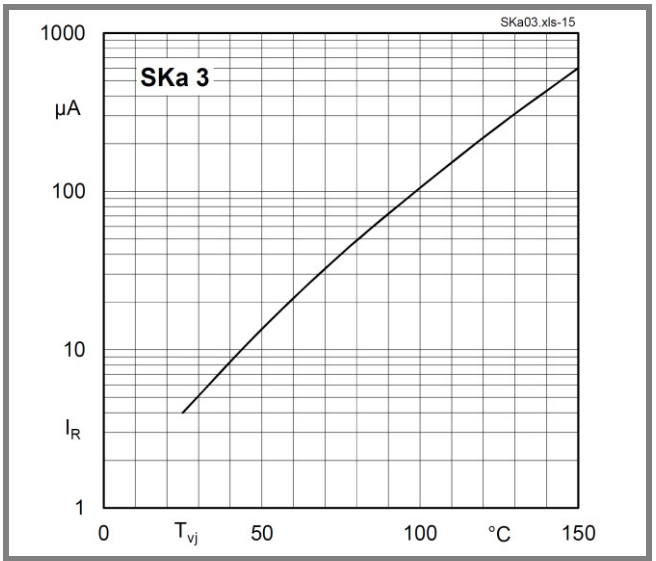


Fig. 15 Reverse current vs. junction temperature

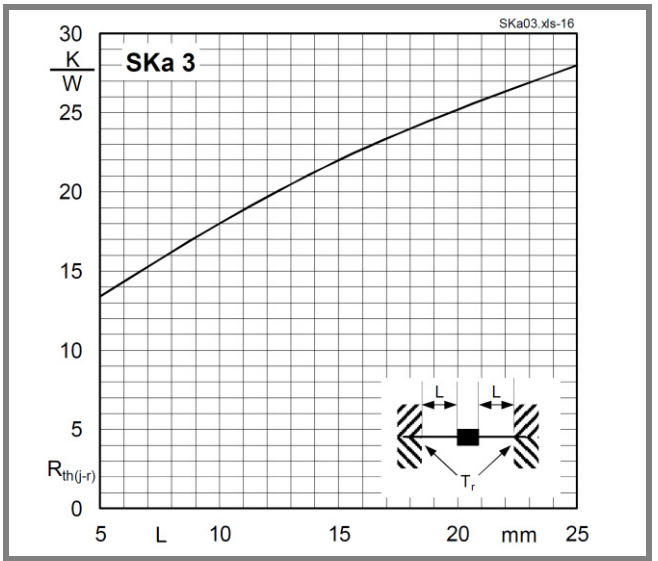
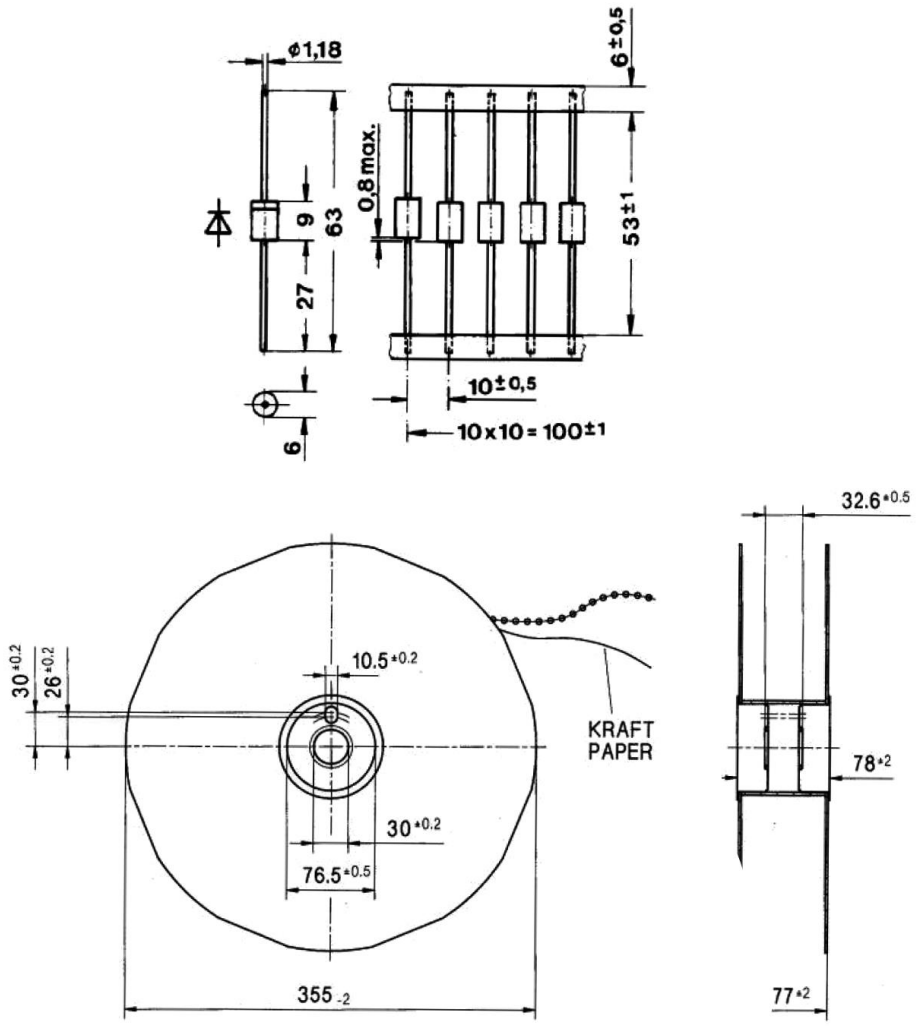


Fig. 16 Thermal resistance vs. lead lenght

Dimensions in mm



Case E34

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