



Axial Lead Diode

Avalanche Diode

SKa 6

Features

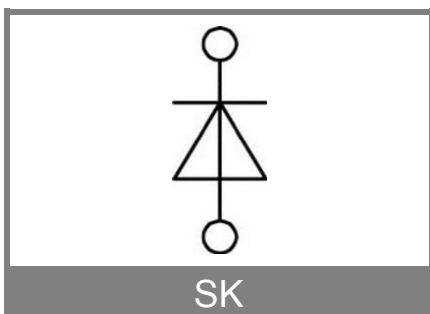
- Avalanche type reverse characteristic
- Reverse voltages up to 2000 V
- Tapped for automatic insertion
- Available with formed leads on request
- Plastic material used carries Underwriter Laboratories flammability classification 94V-0

Typical Applications

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

V_{RSM} V	$V_{(BR)min}$ V	$I_{FRMS} = 10$ A (maximum value for continuous operation) $I_{FAV} = 6$ A (sin. 180; $T_r = 46^\circ\text{C}$)
1300	1300	SKa 6/13
1700	1700	SKa 6/17
2000	2000	SKa 6/20

Symbol	Condition	Values	Units
I_{FAV}	$T_r = 46^\circ\text{C}$; $L = 10$ mm; sin. 180 $T_r = 100^\circ\text{C}$; $L = 10$ mm; sin. 180	6 3,1	A A
I_{FSM}	$T_{vj} = 25^\circ\text{C}$; 10 ms $T_{vj} = 150^\circ\text{C}$; 10 ms	375 320	A A
i^2t	$T_{vj} = 25^\circ\text{C}$; 8,3...10 ms $T_{vj} = 150^\circ\text{C}$; 8,3...10 ms	700 510	A^2s A^2s
V_F	$T_{vj} = 25^\circ\text{C}$, $I_F = 10$ A	max. 1,1	V
$V_{(TO)}$	$T_{vj} = 150^\circ\text{C}$	max. 0,85	V
r_T	$T_{vj} = 150^\circ\text{C}$	max. 11	$\text{m}\Omega$
I_R	$T_{vj} = 25^\circ\text{C}$; $V_R = V_{(BR)min}$	max. 10	μA
I_R	$T_{vj} = 150^\circ\text{C}$; $V_R = V_{(BR)min}$	max. 4	mA
P_{RSM}	$T_{vj} = 150^\circ\text{C}$, $t_p = 10$ μs	6	kW
$R_{th(j-r)}$	$L = 10$ mm	17	K/W
$R_{th(j-a)}$	PCB 50 x 50 mm	55	K/W
T_{vj}		-40...+150	$^\circ\text{C}$
T_{stg}		-40...+150	$^\circ\text{C}$
T_{SOLD}	max. 10s; $L > 9$ mm	250	$^\circ\text{C}$
a		5 * 9,81	m/s^2
m	approx.	1,7	g
Case	1000 diodes per reel	SK6	



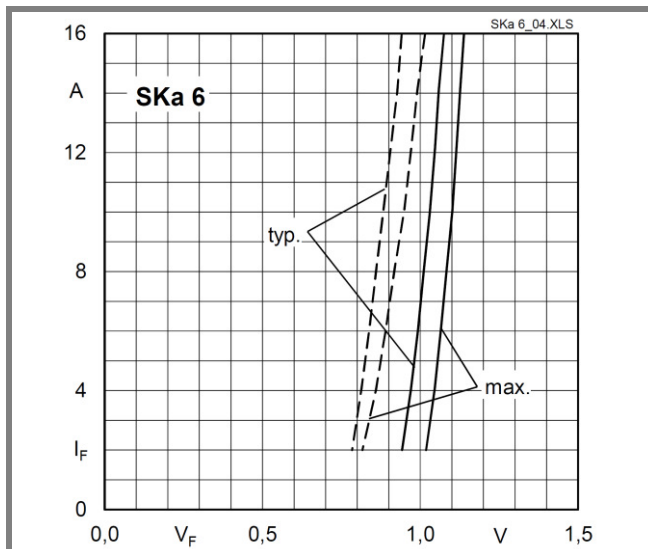


Fig. 6 Forward characteristics

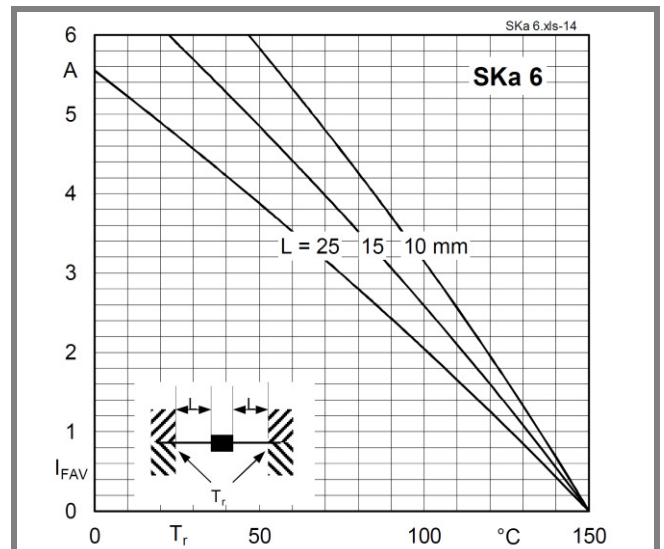


Fig. 14 Forward current vs. reference temperature

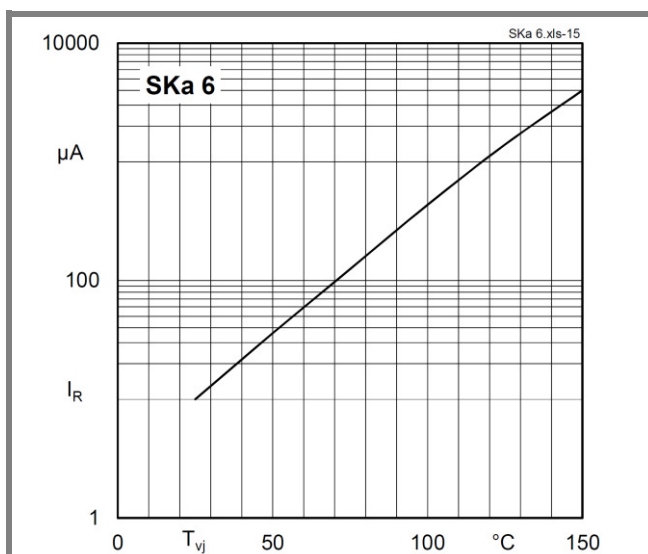


Fig. 15 Reverse current vs. junction temperature

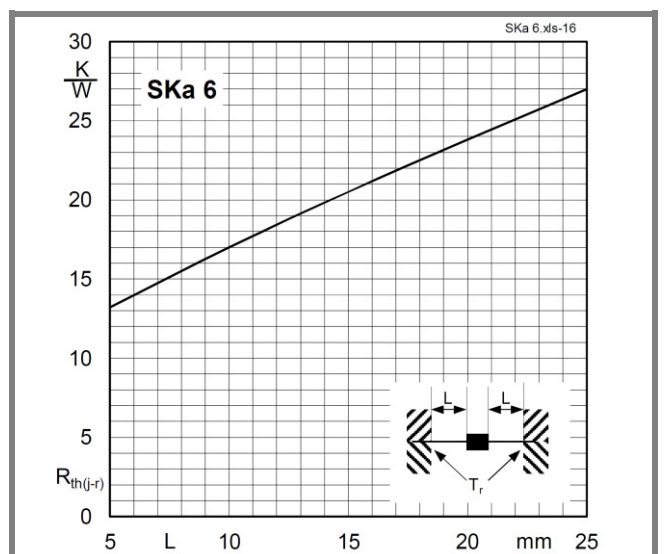
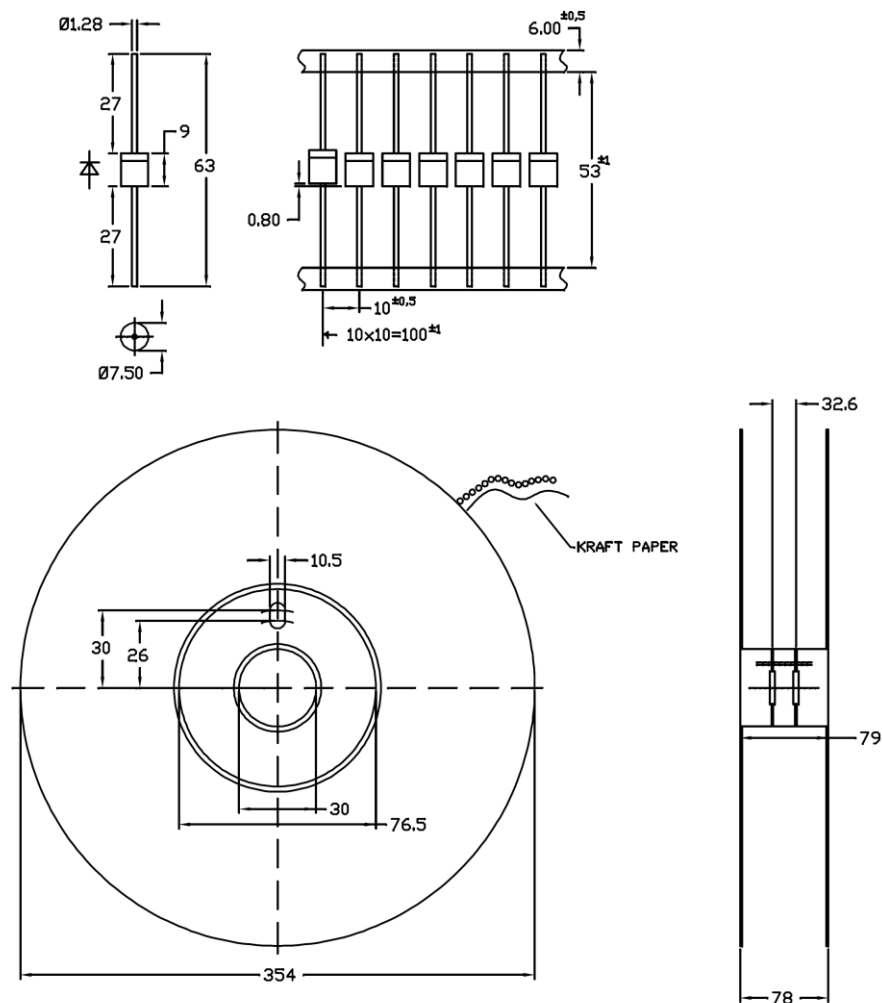


Fig. 16 Thermal resistance vs. lead length



Case SK6

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