

# SKNa 26, SKRa 26



Stud Diode

## Avalanche Diode

**SKNa 26**  
**SKRa 26**

### Features

- Avalanche type reverse characteristic up to 2000 V
- Hermetic metal case with glass insulator
- Threaded stud ISO M6 (also 10-32 UNF 2A and M5)<sup>1)</sup>
- Cooling via metal plates or heat sinks
- **SKN**: anode to stud
- **SKR**: cathode to stud

### Typical Applications\*

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

1) M6x1 is standard; "UNF" should be added in description for 10-32 UNF 2A thread, or "M5" should be added in description for M5x0,8 thread.

2) Mounting with grease-like thermal compound or joint contact compound

$V_{(BR)min}$	$I_{FRMS} = 40 \text{ A}$ (maximum value for continuous operation) $I_{FAV} = 26 \text{ A}$ (sin. 180; $T_c = 69 \text{ }^\circ\text{C}$ )		$C_{max}$	$R_{min}$
V			$\mu\text{F}$	$\Omega$
1300	SKNa 26/13	SKRa 26/13		
1700	SKNa 26/17	SKRa 26/17		
1800	SKNa 26/18	SKRa 26/18		
2000	SKNa 26/20	SKRa 26/20		

Symbol	Conditions	Values	Units
$I_{FAV}$	sin. 180; $T_c = 86 (101) \text{ }^\circ\text{C}$	22 (18)	A
$I_D$	K 9; $T_a = 45 \text{ }^\circ\text{C}$ ; B2 / B6 K 3; $T_a = 45 \text{ }^\circ\text{C}$ ; B2 / B6	17 / 24 30 / 42	A A
$I_{FSM}$	$T_{vj} = 25 \text{ }^\circ\text{C}$ ; 10 ms $T_{vj} = 150 \text{ }^\circ\text{C}$ ; 10 ms	375 320	A A
$i^2t$	$T_{vj} = 25 \text{ }^\circ\text{C}$ ; 8,3...10 ms $T_{vj} = 150 \text{ }^\circ\text{C}$ ; 8,3...10 ms	700 510	$\text{A}^2\text{s}$ $\text{A}^2\text{s}$
$V_F$	$T_{vj} = 25 \text{ }^\circ\text{C}$ ; $I_F = 60 \text{ A}$	max. 1,55	V
$V_{(TO)}$	$T_{vj} = 150 \text{ }^\circ\text{C}$	max. 0,85	V
$r_T$	$T_{vj} = 150 \text{ }^\circ\text{C}$	max. 11	$\text{m}\Omega$
$I_R$	$T_{vj} = 25 \text{ }^\circ\text{C}$ ; $V_R = V_{(BR)min}$	max. 10	$\mu\text{A}$
$P_{RSM}$	$T_{vj} = 150 \text{ }^\circ\text{C}$ ; $t_p = 10 \text{ }\mu\text{s}$	6	kW
$R_{th(j-c)}$		2	K/W
$R_{th(c-s)}$		1	K/W
$T_{vj}$		-40...+150	$^\circ\text{C}$
$T_{stg}$		-55...+180	$^\circ\text{C}$
$V_{isol}$		-	V~
$M_s$	M6 M6 (lubricated) <sup>2)</sup> M5 or or 10-32 UNF 2A M5 or or 10-32 UNF 2A (lubricated) <sup>2)</sup>	2 1,5 1,5 1,1	Nm Nm Nm Nm
a		5 * 9,81	$\text{m/s}^2$
m	approx.	7	g
Case		E 8	



SKN



SKR

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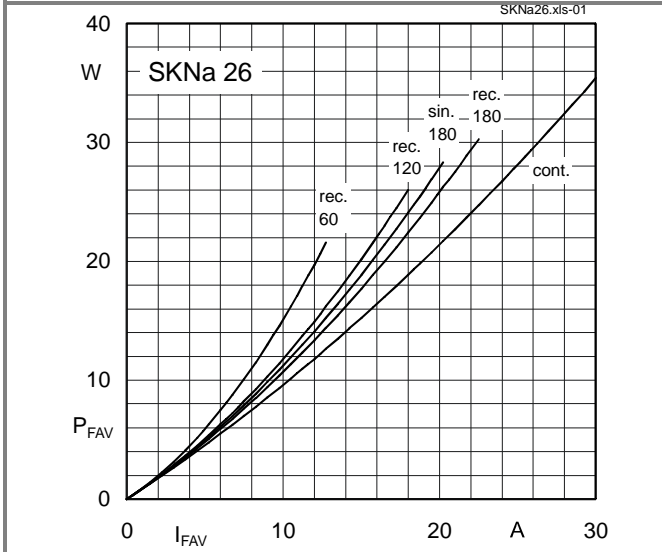


Fig. 1L Power dissipation vs. forward current

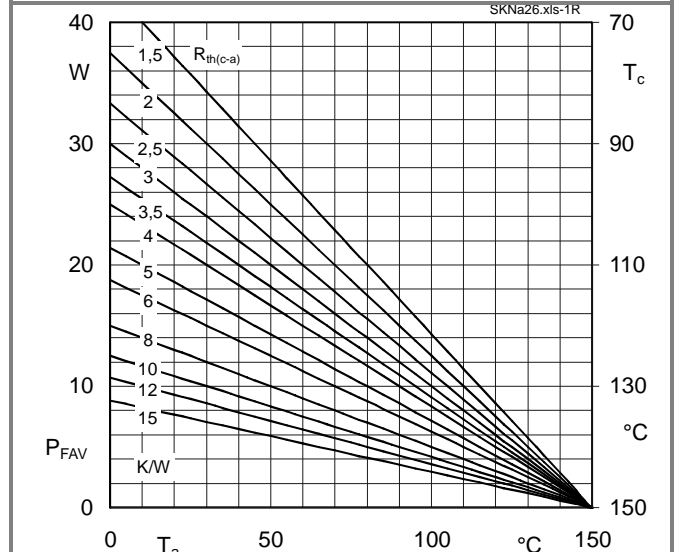


Fig. 1R Power dissipation vs. ambient temperature

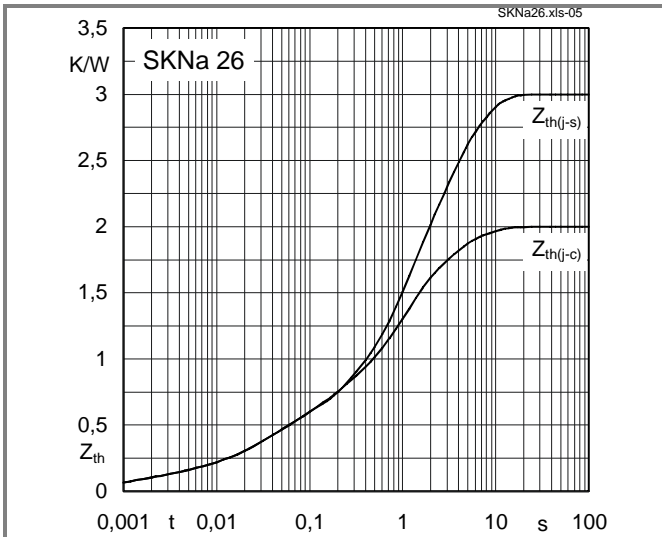


Fig. 4 Transient thermal impedance vs. time

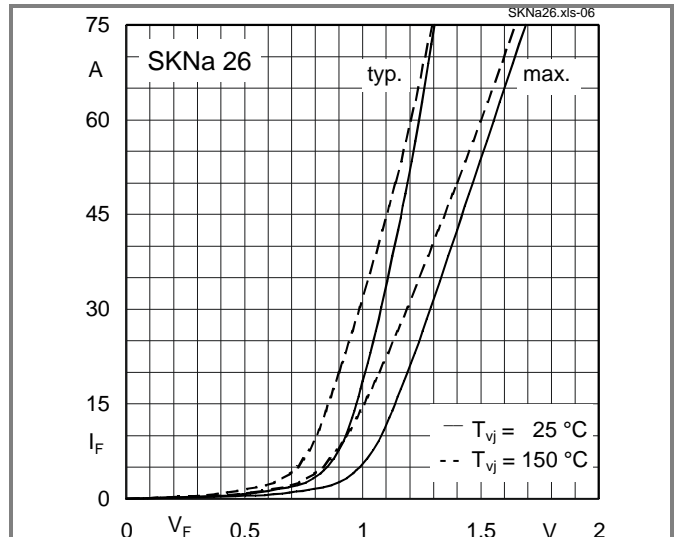


Fig. 5 Forward characteristics

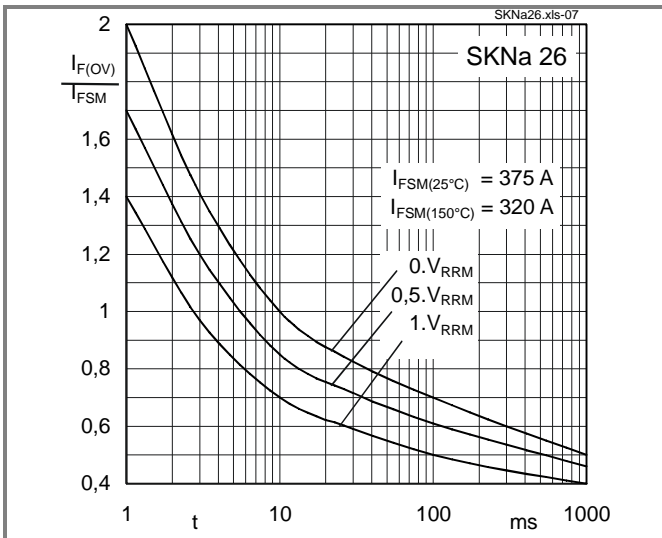


Fig. 6 Rated surge overload current vs. time

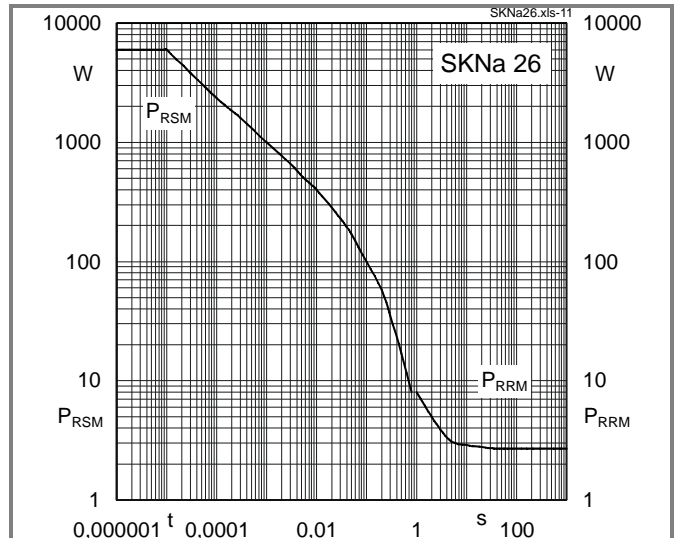
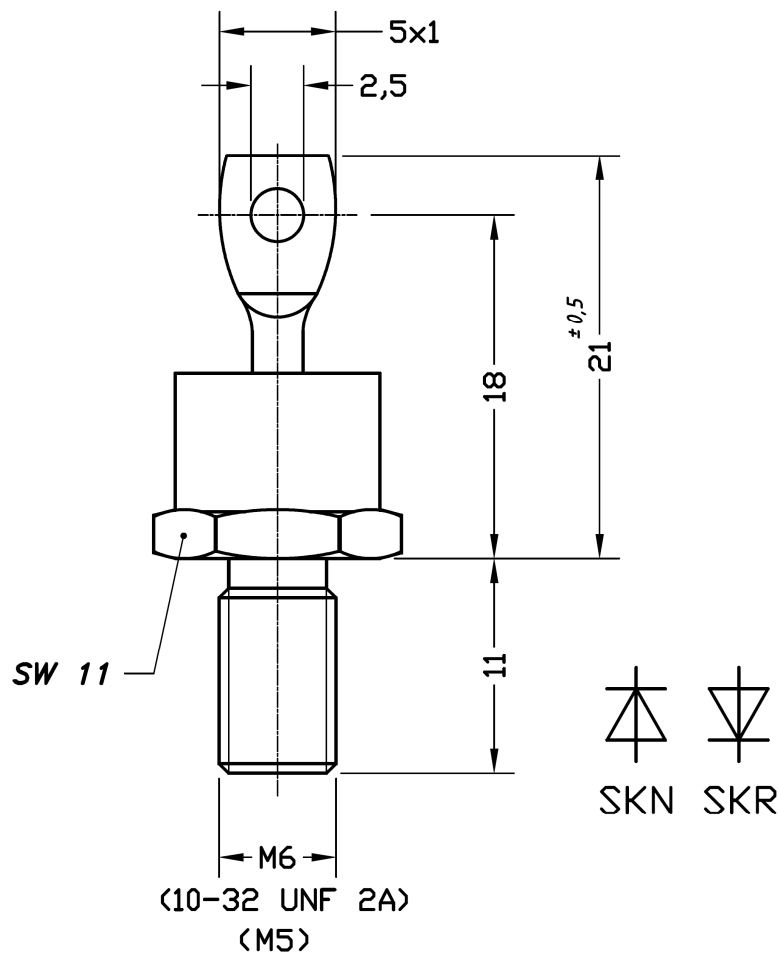


Fig. 9 Reverse power dissipation vs. time



Case E 8 (IEC 60191: A 4 M modified, A 3 U; JEDEC: DO-203 AA)

**\*IMPORTANT INFORMATION AND WARNINGS**

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