

# 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 10-21 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)

<sup>1)</sup> 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.



SKN



SKR

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

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

# SKNa 26, SKRa 26

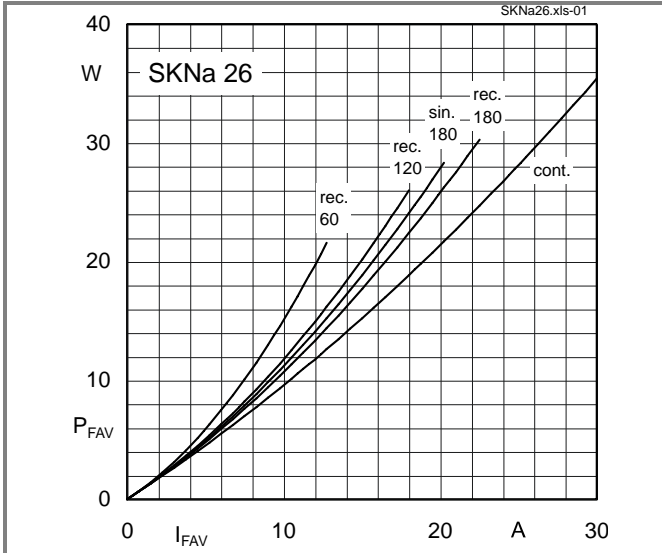


Fig. 1L Power dissipation vs. forward current

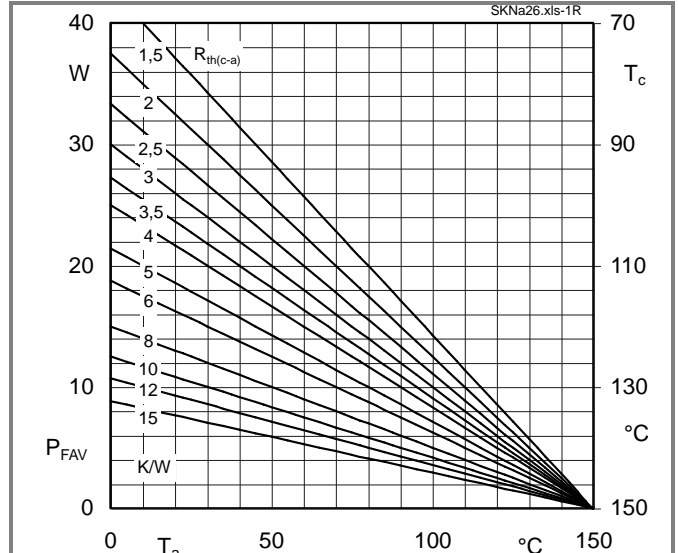


Fig. 1R Power dissipation vs. ambient temperature

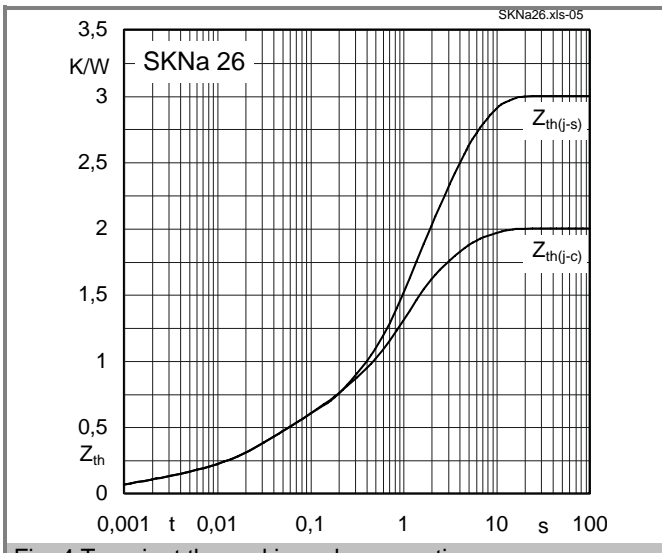


Fig. 4 Transient thermal impedance vs. time

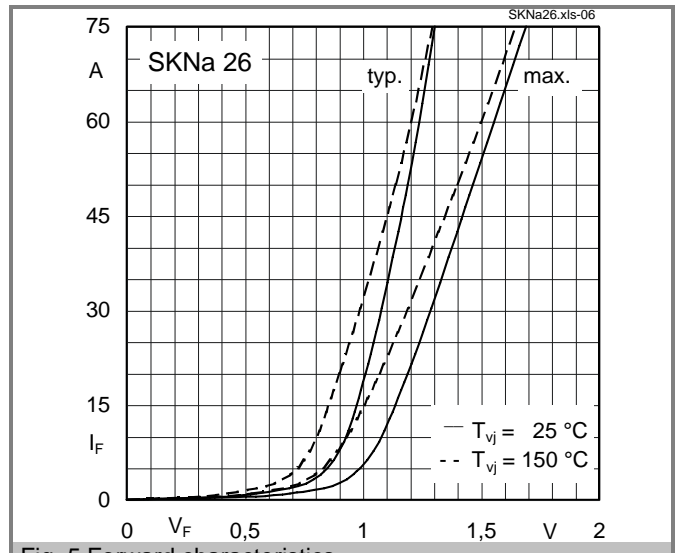


Fig. 5 Forward characteristics

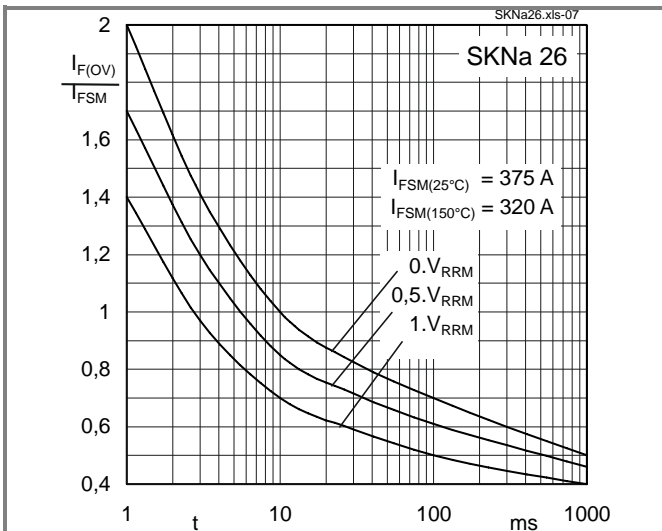


Fig. 6 Rated surge overload current vs. time

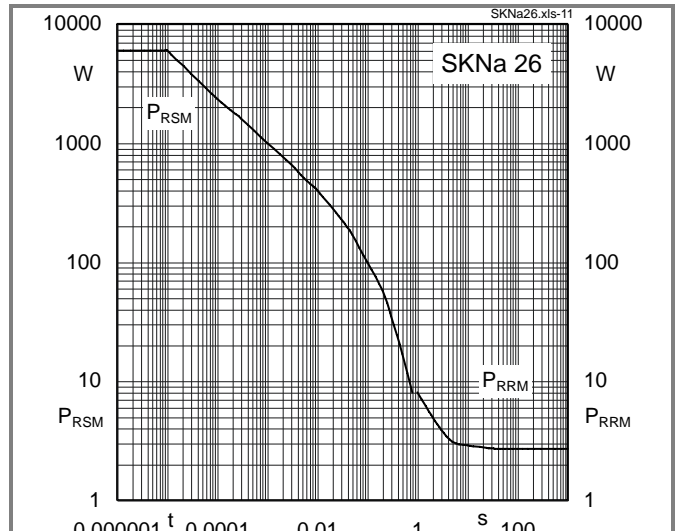
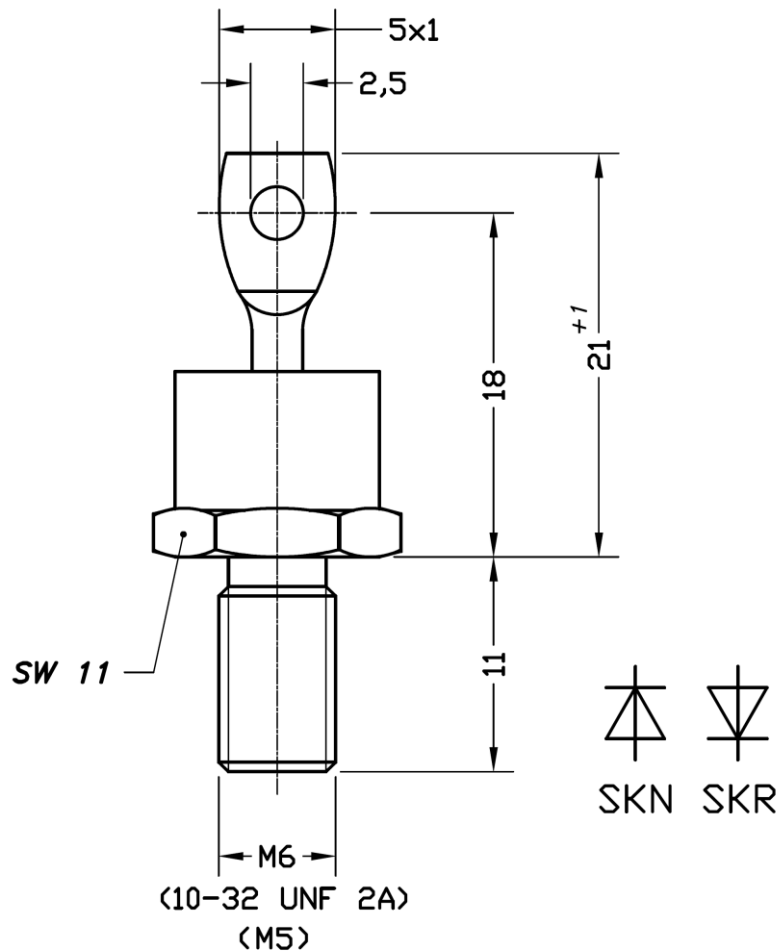


Fig. 9 Reverse power dissipation vs. time



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

### \*IMPORTANT INFORMATION AND WARNINGS

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