

## Rectifier Diodes

**SKN 20**      **SKR 20**  
**SKNa 20**    **SKR 20**  
**SKN 26**      **SKR 26**

V <sub>RSM</sub> V <sub>RRM</sub>	I <sub>FRMS</sub> (maximum values for continuous operation) 40 A			
	I <sub>FAV</sub> (sin. 180; T <sub>case</sub> = 100 °C) 25 A			
V				
200	<b>SKN 20/02</b>	<b>SKR 20/02</b>	<b>SKN 26/02</b>	<b>SKR 26/02*</b>
400	<b>SKN 20/04</b>	<b>SKR 20/04</b>	<b>SKN 26/04</b>	<b>SKR 26/04*</b>
800	<b>SKN 20/08</b>	<b>SKR 20/08</b>	<b>SKN 26/08</b>	<b>SKR 26/08*</b>
1200	<b>SKN 20/12</b>	<b>SKR 20/12</b>	<b>SKN 26/12</b>	<b>SKR 26/12*</b>
1400	<b>SKN 20/14</b>	<b>SKR 20/14</b>	<b>SKN 26/14</b>	<b>SKR 26/14*</b>
1600	<b>SKN 20/16</b>	<b>SKR 20/16</b>	<b>SKN 26/16</b>	<b>SKR 26/16*</b>
<b>Avalanche Types</b>				
V <sub>(BR)min</sub> V	I <sub>FAV</sub> = 25 A (T <sub>case</sub> = 73 °C)			
1300	<b>SKNa 20/13</b>			
1700	<b>SKNa 20/17</b>			

Symbol	Conditions	SKN 20 SKR 20	SKNa 20	SKN 26 SKR 26
I <sub>FAV</sub>	sin. 180; T <sub>case</sub> = 93 °C = 100 °C = 125 °C	– 25 A 20 A	20 A 18 A 11 A	– 25 A 20 A
I <sub>FSM</sub>	T <sub>vj</sub> = 25 °C; 10 ms T <sub>vj</sub> = T <sub>vjmax</sub> ; 10 ms	375 A 320 A		
i <sup>2</sup> t	T <sub>vj</sub> = 25 °C; 8,3 ... 10 ms T <sub>vj</sub> = T <sub>vjmax</sub> ; 8,3 ... 10 ms	700 A <sup>2</sup> s 510 A <sup>2</sup> s		
P <sub>RSM</sub>	T <sub>vj</sub> > 250 °C; tp = 10 μs	–	6 kW	–
Q <sub>rr</sub>	T <sub>vj</sub> = 160 °C; $-\frac{di_F}{dt} = 10 \frac{A}{\mu s}$	typ. 20 μC		
I <sub>R</sub>	T <sub>vj</sub> = 25 °C; V <sub>R</sub> = V <sub>RRM</sub> V <sub>R</sub> = V <sub>(BR)min</sub> T <sub>vj</sub> = 180 °C; V <sub>R</sub> = V <sub>RRM</sub>	0,3 mA – 4 mA	– 10 μA –	0,3 mA – 4 mA
V <sub>F</sub>	T <sub>vj</sub> = 25 °C; I <sub>F</sub> = 60 A; max.	1,55 V		
V <sub>(TO)</sub>	T <sub>vj</sub> = T <sub>vjmax</sub>	0,85 V		
r <sub>T</sub>	T <sub>vj</sub> = T <sub>vjmax</sub>	11 mΩ		
R <sub>thjc</sub> R <sub>thch</sub> T <sub>vjmin</sub> T <sub>vjmax</sub> T <sub>stg</sub>		2 °C/W 1 °C/W – 40 °C 180 °C   150 °C   180 °C – 55 ... + 180 °C		
M a w	SI units/US units approx.	2,0 Nm/18 lb. in. 5 · 9,81 m/s <sup>2</sup> 10 g   8 g		
RC R <sub>p</sub>	P <sub>R</sub> = 1 W P <sub>R</sub> = 4 W	0,05 μF + 200 Ω 150 kΩ		
Case		E 9		E 8



### Features

- Reverse voltages up to 1600 V, Avalanche Types to 1700 V
- Hermetic metal cases with glass insulators
- Threaded studs ISO M6 (SKR 26 also 10 – 32 UNF)
- **SKN**: anode to stud  
**SKR**: cathode to stud

### Typical Applications

- All-purpose mean power rectifier diodes
  - Cooling via metal plates or heatsinks
  - Non-controllable and half-controllable rectifiers
  - Free-wheeling diodes
- Avalanche Types**
- DC supply for magnets or solenoids (brakes, valves, etc.)
  - Field coil supply for DC motors
  - Series connections for high voltage applications

\* available with UNF thread  
 10 – 32 UNF 2 A; e.g.  
 SKR 26/02 UNF

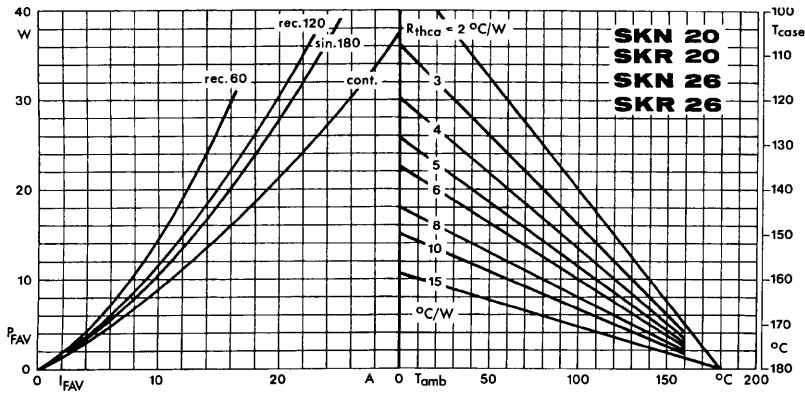


Fig. 1a Power dissipation vs. forward current and case temperature

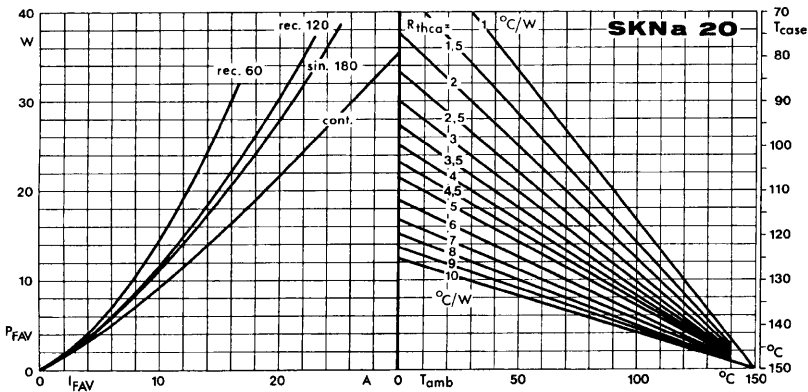


Fig. 1b Power dissipation vs. forward current and case temperature

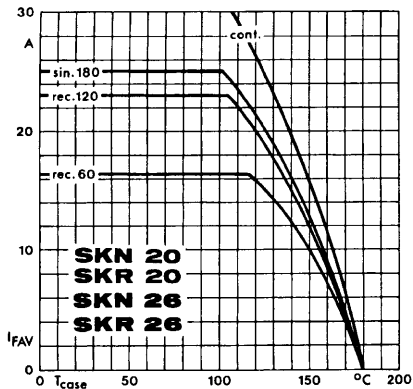


Fig. 3a Rated forward current vs. case temperature

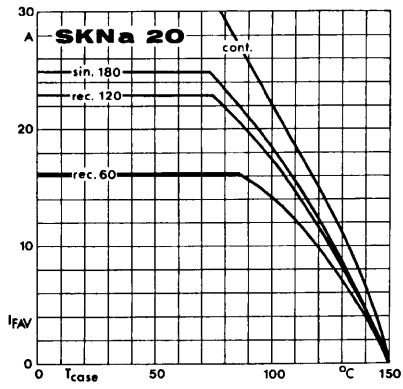


Fig. 3b Rated forward current vs. case temperature

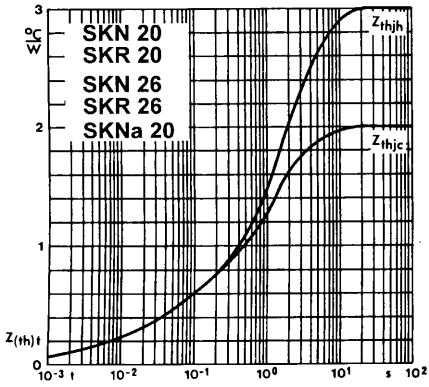


Fig. 5 Transient thermal impedance vs. time

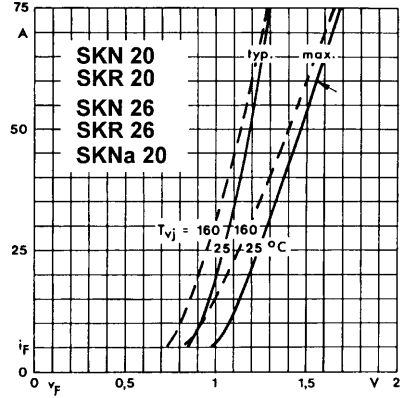


Fig. 6 Forward characteristics

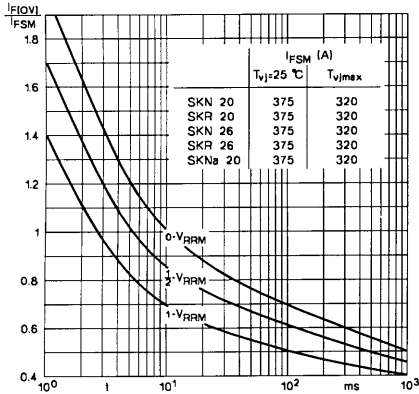


Fig. 7 Surge overload current vs. time

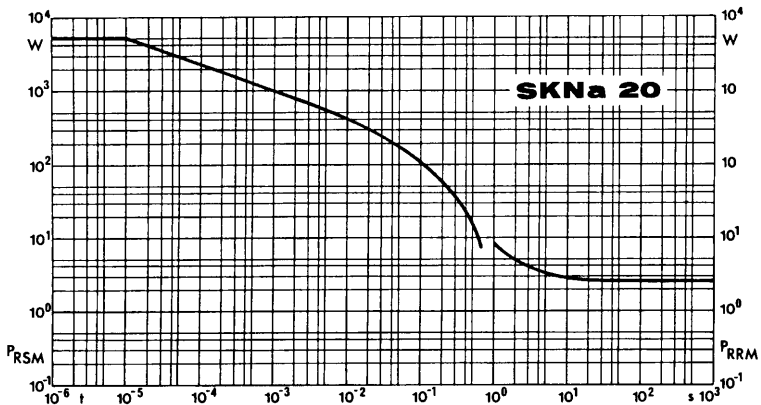
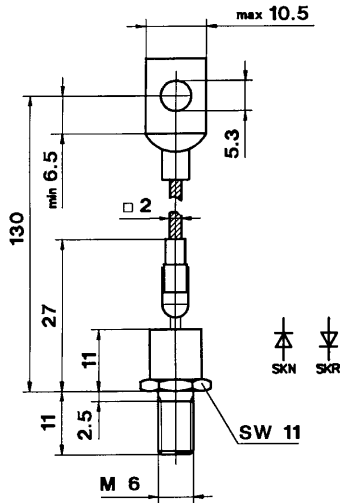


Fig. 11 Rated reverse power dissipation vs. time

**SKN 20**  
**SKR 20**  
**SKNa 20**

Case E 9

IEC: A 16 M\*  
 DIN 41 886: 102 A 2  
 BS 3934: SO-31



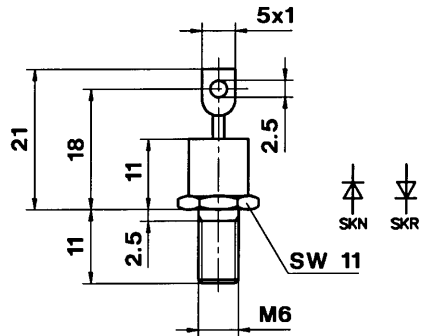
modified

Dimensions in mm

**SKN 26**  
**SKR 26**

Case E 8

IEC: A 4 M\*, A 3 U  
 DIN 41 886: 102 D 2\*  
 BS 3934: SO-10  
 JEDEC: DO-203 AA  
 (DO-4)



**(10-32 UNF 2A)**

\* modified

Dimensions in mm