

## Rectifier Diodes

SKN 20 SKR 20  
SKNa 20 SKR 26/04\*  
SKN 26 SKR 26

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

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> i <sup>2</sup> P <sub>RRM</sub>	T <sub>vj</sub> = 25 °C; 10 ms T <sub>vj</sub> = T <sub>vjmax</sub> ; 10 ms T <sub>vj</sub> = 25 °C; 8,3 ... 10 ms T <sub>vj</sub> = T <sub>vjmax</sub> ; 8,3 ... 10 ms T <sub>vj</sub> > 250 °C; t <sub>p</sub> = 10 μs		375 A 320 A 700 A <sup>2</sup> s 510 A <sup>2</sup> s	–
Q <sub>rr</sub> I <sub>R</sub>	T <sub>vj</sub> = 160 °C; – $\frac{di_F}{dt} = 10 \frac{A}{\mu s}$ 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	typ. 20 μC – 10 μA –	0,3 mA – 4 mA
V <sub>F</sub> V <sub>(TO)</sub> r <sub>T</sub>	T <sub>vj</sub> = 25 °C; I <sub>F</sub> = 60 A; max. T <sub>vj</sub> = T <sub>vjmax</sub> T <sub>vj</sub> = T <sub>vjmax</sub>		1,55 V 0,85 V 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

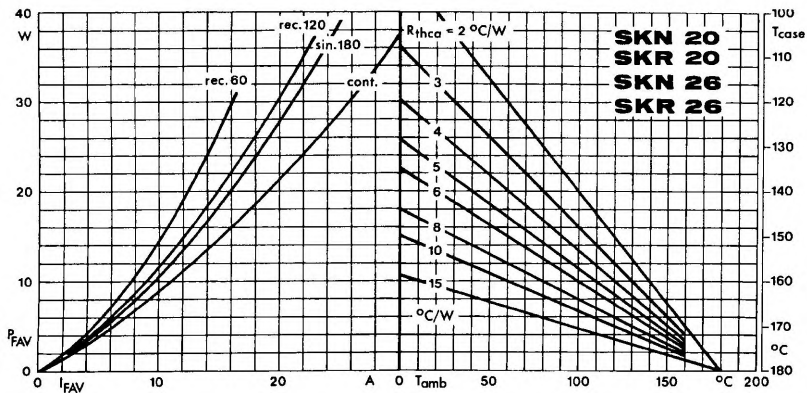


Fig. 1a Power dissipation vs. forward current and case temperature

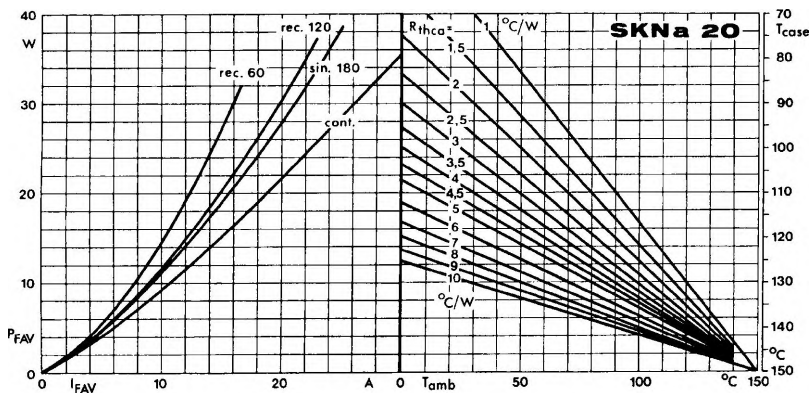


Fig. 1b Power dissipation vs. forward current and case temperature

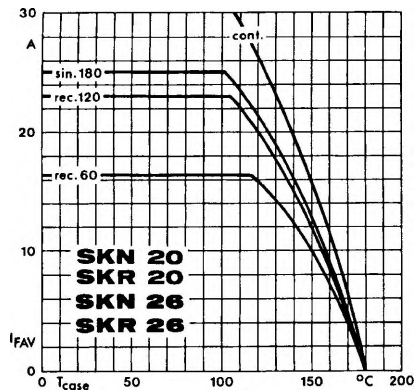


Fig. 3a Rated forward current vs. case temperature

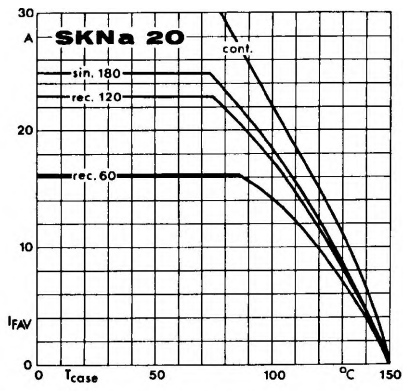


Fig. 3 b Rated forward current vs. case temperature

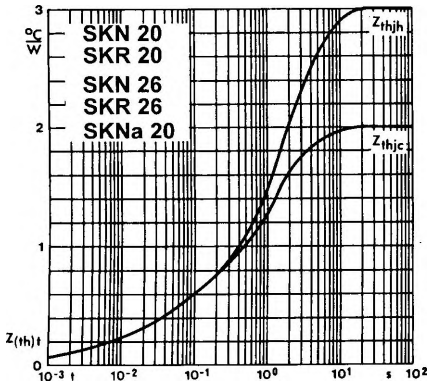


Fig. 5 Transient thermal impedance vs. time

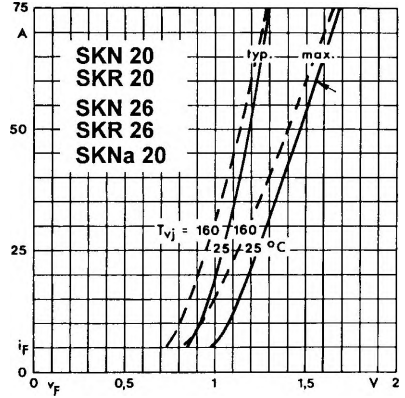


Fig. 6 Forward characteristics

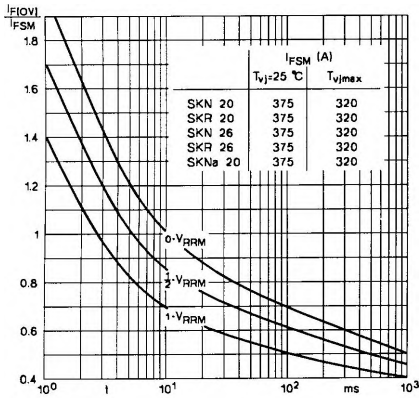


Fig. 7 Surge overload current vs. time

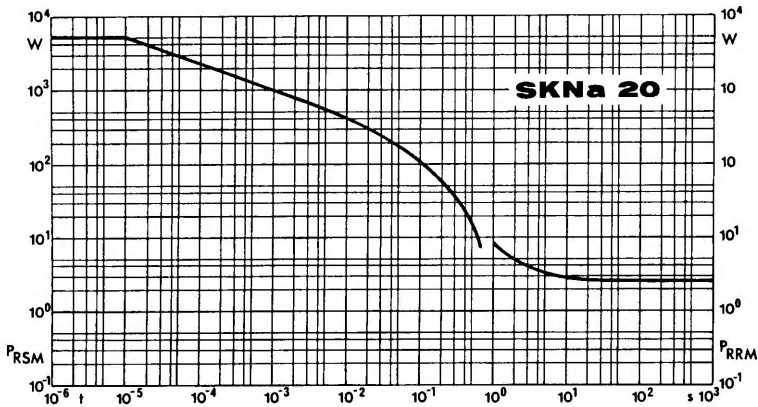
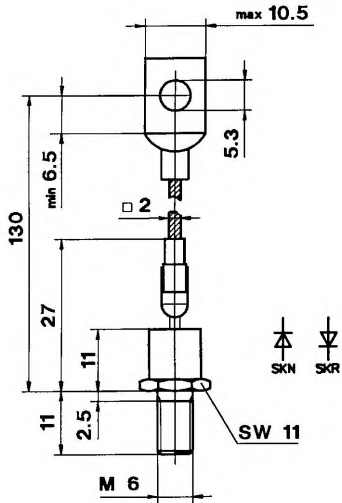


Fig. 11 Rated reverse power dissipation vs. time

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

Case E 9

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



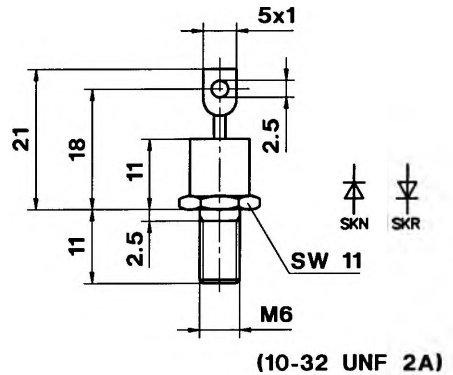
modified

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)



\* modified

Dimensions in mm