# SKN 320, SKR 320



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	Diod	Δ
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V <sub>RSM</sub>	V <sub>RRM</sub> V	I <sub>FRMS</sub> = 700 A (maximum value for continuous operation) I <sub>FAV</sub> = 320 A (sin. 180; T <sub>c</sub> = 120 °C)		
400	400	SKN 320/04	SKR 320/04	
800	800	SKN 320/08	SKR 320/08	
1200	1200	SKN 320/12	SKR 320/12	
1400	1400	SKN 320/14	SKR 320/14	
1600	1600	SKN 320/16	SKR 320/16	

## **Rectifier Diode**

SKN 320 SKR 320

### **Features**

- Reverse voltages up to 1600 V
- Hermetic metal case with glass insulator
- Cooling via heatsinks
- Threaded stud ISO M24 x 1,5mm (M20 x 1,5mm and ¾ -16UNF 2A available)<sup>2)</sup>
- SKN: anode to studSKR: cathode to stud

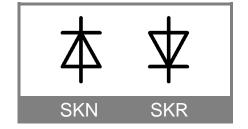
### **Typical Applications \***

- All purpose high power rectifier diodes
- Non-controllable and halfcontrollable rectifiers
- Free-wheeling diodes
- Recommended snubber network:

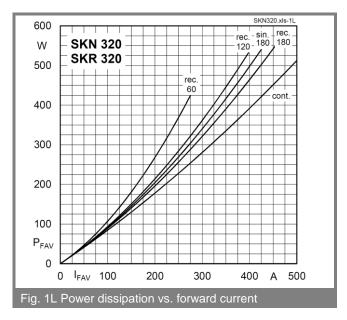
R<sub>C</sub>: 1  $\mu$ F, 20  $\Omega$  (P<sub>R</sub> = 2W), R<sub>p</sub>: 25 k $\Omega$  (P<sub>R</sub> = 20 W)

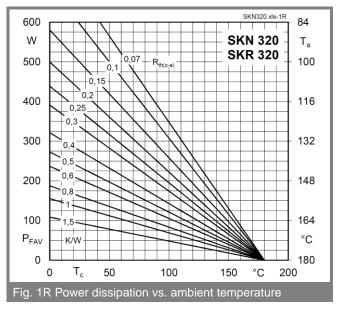
1) Mounting with grease-like thermal compound or joint contact compound 2) M24x1,5 is standard, "M20" or "UNF" should be added in description for M20x1,5 mm or ¾ - 16 UNF threads respectively. 3) To include silicone sleeve, "C/ ESPAG." Should be added in description.

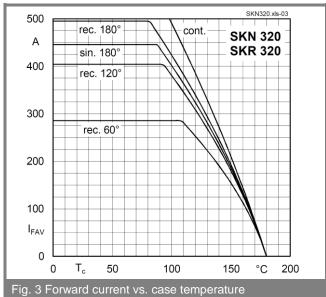
Symbol	Condition	Values	Units
IFAV I <sub>D</sub>	sin. 180 ; T <sub>C</sub> = 85 (100) °C P 1/120; T <sub>a</sub> = 50°C; B2 / B6 P 1/120F; T <sub>a</sub> = 40°C; B2 / B6	454 (400) 263 / 384 557 / 798	A A A
I <sub>FSM</sub> i <sup>2</sup> t	$\begin{split} T_{vj} &= 25^{o} \text{ C} \; ; \; 10 \text{ ms} \\ T_{vj} &= 180^{o} \text{ C} \; ; \; 10 \text{ ms} \\ T_{vj} &= 25^{o} \text{ C} \; ; \; 8,310 \text{ ms} \\ T_{vj} &= 180^{o} \text{ C} \; ; \; 8,310 \text{ ms} \end{split}$	9000 8000 405000 320000	A A A <sup>2</sup> s A <sup>2</sup> s
V <sub>F</sub> V <sub>(TO)</sub> r <sub>T</sub> I <sub>RD</sub> Q <sub>rr</sub>	$\begin{split} T_{vj} &= 25^{\circ} \text{ C, I}_F = 1000 \text{ A} \\ T_{vj} &= 180^{\circ} \text{ C} \\ T_{vj} &= 180^{\circ} \text{ C} \\ T_{vj} &= 180^{\circ} \text{ C ; V}_{RD} = \text{V}_{RRM} \\ T_{vj} &= 160^{\circ} \text{C, -di}_F/dt = 10 \text{ A/}\mu\text{s} \end{split}$	max. 1,35 max. 0,8 max. 0,45 max. 100 300	> mΩ mA μC
Rth(j-c) Rth(c-s) Tvj Tstg		0,16 0,015 -40+180 -40+180	K/W K/W °C °C
V <sub>isol</sub> M <sub>s</sub>	M24 Stud M20 Stud or ¾-16 UNF Stud M24 Stud (lubricated)¹¹ M20 Stud or ¾-16 UNF Stud (lubricated)¹¹ approx.	- 60 35 48 28 5 * 9,81 500	V~ Nm Nm Nm Nm m/s²
Case		E 16	

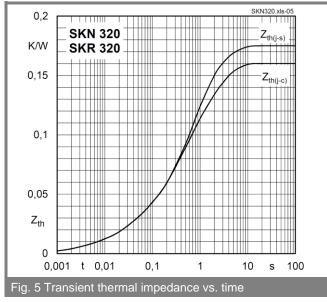


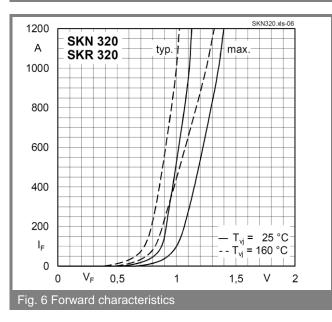
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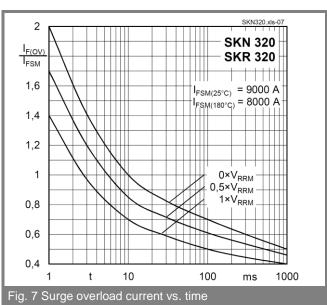




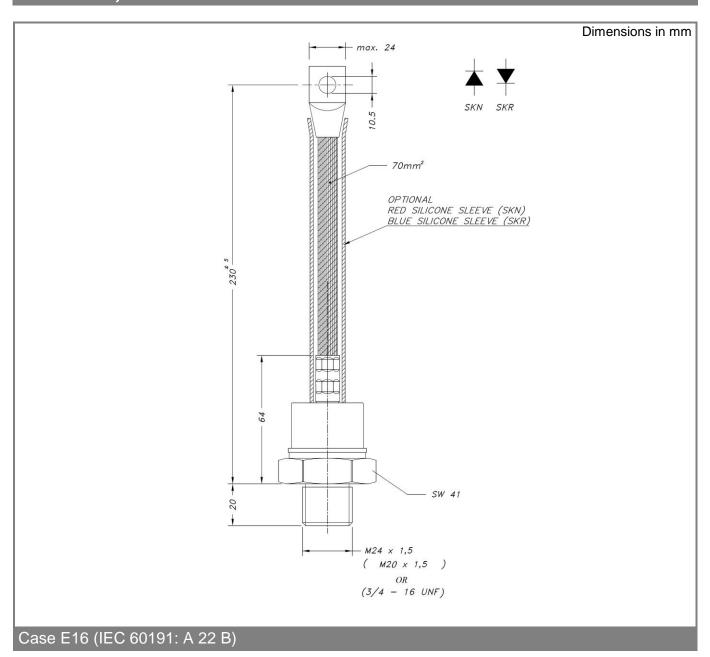








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