SKN 321, SKR 321

Stud Diode

Rectifier Diode

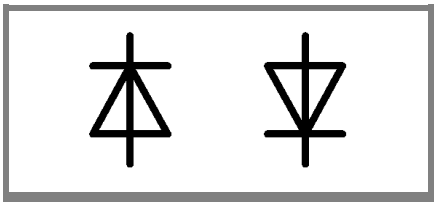
SKN 321/16
SKR 321/16

Features

- Reverse voltage of 1600 V
- Hermetic metal cases with glass insulator and additional stud terminal.
- Threaded stud M24 x 1,5
- **SKN:** anode to stud
- **SKR:** cathode to stud

Typical Applications *

- All-purpose mean power rectifier diodes
- Cooling via heatsinks
- Non-controllable and half-controllable rectifiers
- Free-wheeling diodes
- Rotating diodes
- Recommended snubber network:
  RC: 1 µF, 20 Ω (P_R = 2W),
  R_p: 25 KΩ (P_R = 20 W)



SKN SKR

V_{RSM} V	V_{RRM} V	I_{FRMS} = 700 A (maximum value for continuous operation) I_{FAV} = 320 A (sin. 180; T_c = 125 ºC)	
1600	1600	SKN 321/16	SKR 321/16

Symbol	Condition	Values	Units
I_{FAV} I_D	sin. 180; T_C = 85 (100) ºC P 1/200; T_a = 45º C; B2/B6 K 0,55F; T_a = 35º C; B2/B6	445 (420) 480 / 690 760 / 1080	A A A
I_{FSM} i^2t	T_{vj} = 25º C ; 10 ms T_{vj} = 180º C ; 10 ms T_{vj} = 25º C ; 8,3...10 ms T_{vj} = 180º C ; 8,3...10 ms	9000 8000 400000 300000	A A A^2s A^2s
V_F $V_{(TO)}$ r_T I_{RD} Q_{rr}	T_{vj} = 25º C, I_F = 1000 A T_{vj} = 180º C T_{vj} = 180º C T_{vj} = 180º C ; $V_R = V_{RRM}$ T_{vj} = 160°C, -di_F/dt = 10 A/µs	Max. 1,35 Max 0,8 Max 0,45 Max. 100 300	V V mΩ mA µC
$R_{th(j-c)}$ $R_{th(c-s)}$ T_{vj} T_{stg}		0,16 0,015 -40...+180 -55...+180	K/W K/W °C °C
V_{isol} M_s m	 to heatsink to terminal approx.	- 60 10 330	V~ Nm Nm g
Case		Special	

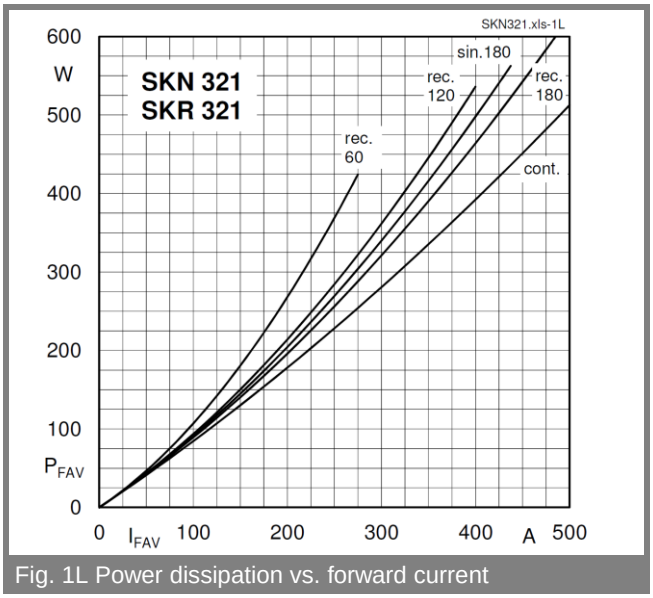


Fig. 1L Power dissipation vs. forward current

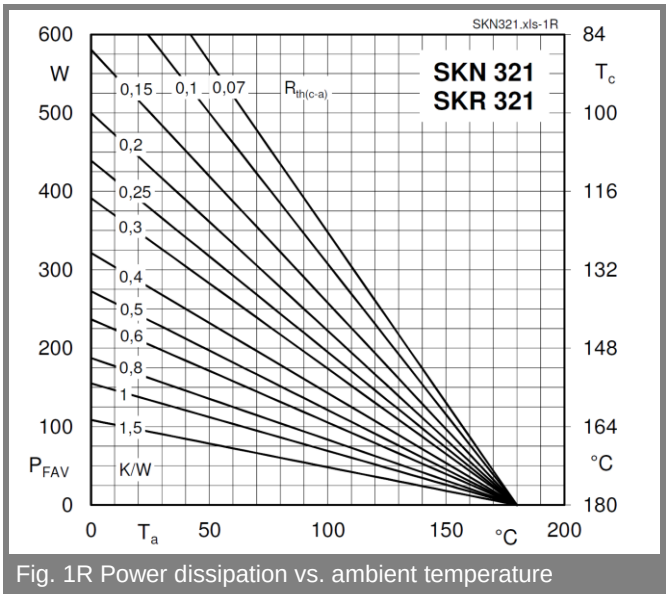


Fig. 1R Power dissipation vs. ambient temperature

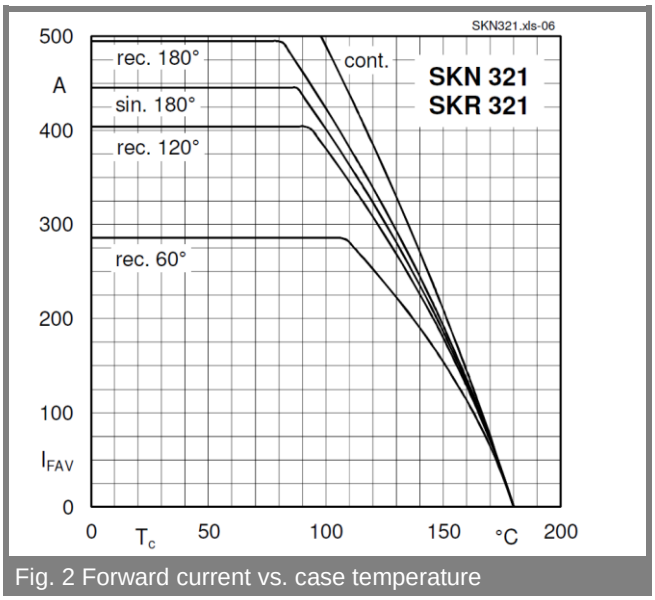


Fig. 2 Forward current vs. case temperature

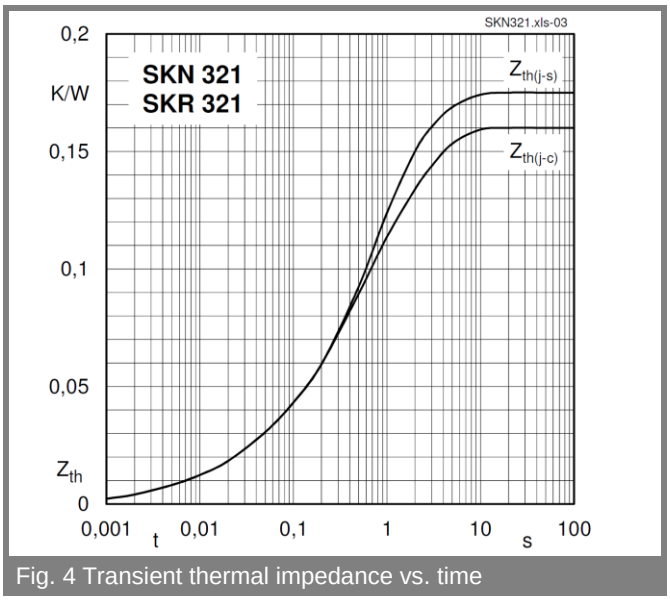


Fig. 4 Transient thermal impedance vs. time

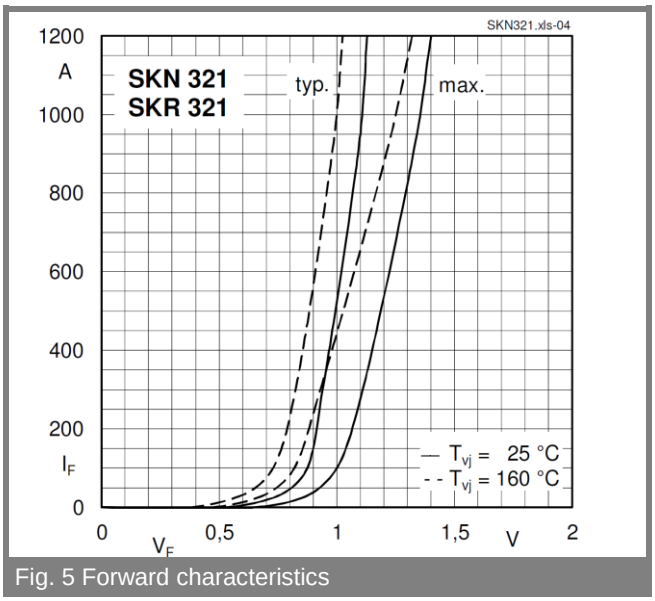


Fig. 5 Forward characteristics

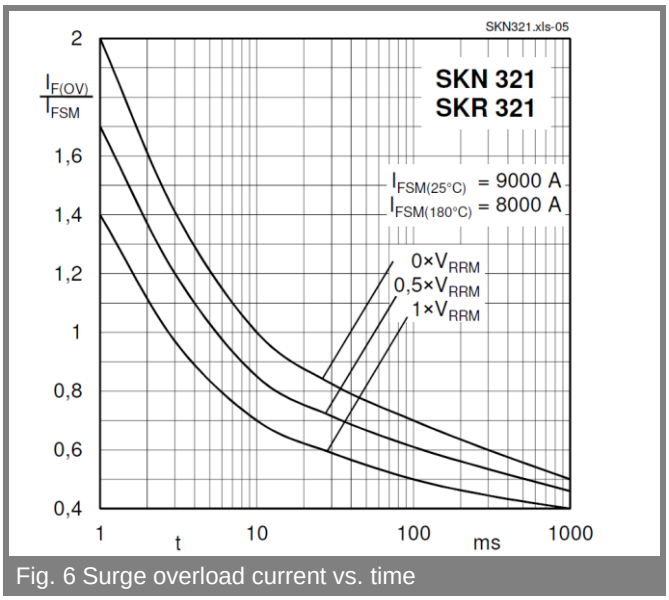
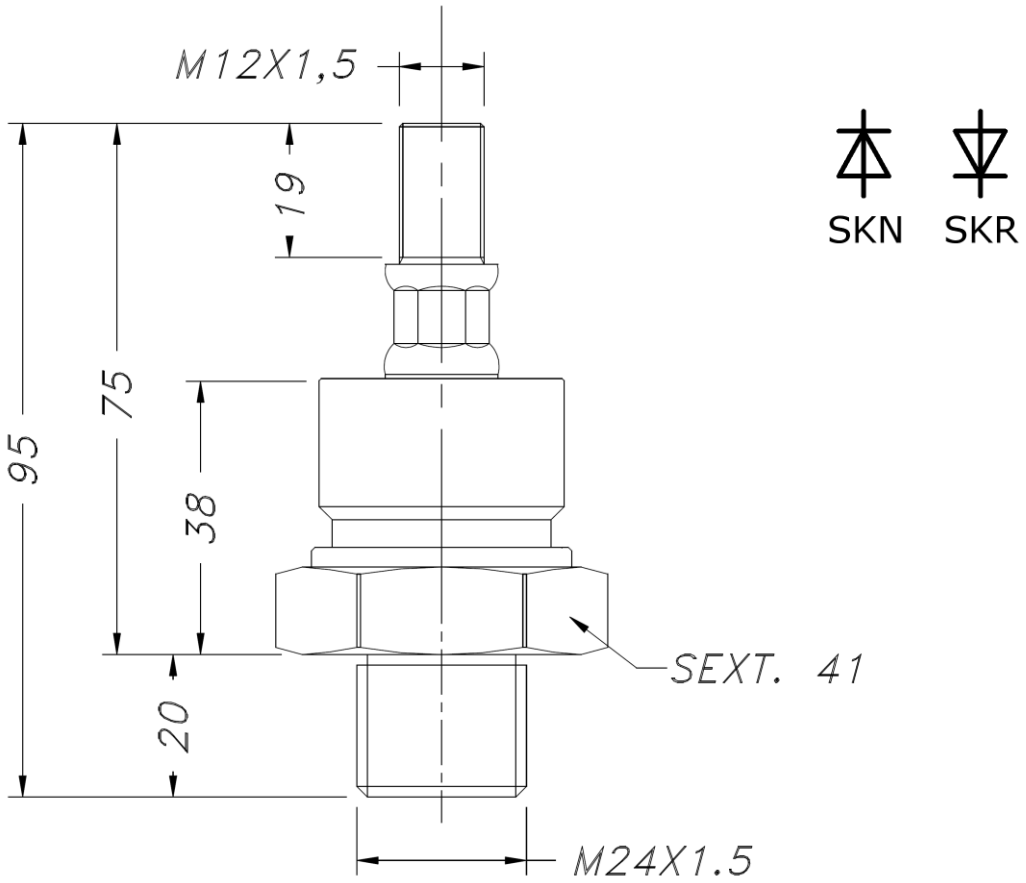


Fig. 6 Surge overload current vs. time

Dimensions in mm



Case : Special Type – M24 x 1,5mm

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