

SKN 100



Stud Diode

Rectifier Diode

SKN 100

SKR 100

Features

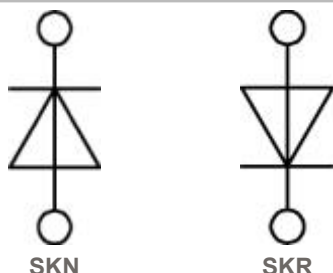
- Reverse voltages up to 1800 V
- Hermetic metal case with glass insulator
- Threaded stud ISO M12, M16 x 1,5
- SKN: anode to stud,
SKR: cathode to stud

Typical Applications

- All-purpose mean power rectifier diodes
- Cooling via heatsinks
- Non-controllable and half-controllable rectifier
- Free-wheeling diodes
- Recommended snubber network:
RC: 0,25 μ F, 50 Ω , ($P_R = 2$ W),
 $R_P = 50$ k Ω ($P_R = 20$ W)

V_{RSM} V	V_{RRM} V	$I_{FRMS} = 200$ A (maximum value for $I_{FAV} = 100$ A (sin. 180; T	
400	400	SKN 100/04	SKR 100/04
800	800	SKN 100/08	SKR 100/08
1200	1200	SKN 100/12	SKR 100/12
1400	1400	SKN 100/14	SKR 100/14
1600	1600	SKN 100/16	SKR 100/16
1800	1800	SKN 100/18	SKR 100/18

Symbol	Conditions	
I_{FAV} I_D	sin. 180; $T_c = 100$ °C K 1,1; $T_a = 45$ °C; B2 / B6 K 1,1F; $T_a = 35$ °C; B2 / B6	
I_{FSM} i^2t	$T_{vj} = 25$ °C; 10 ms $T_{vj} = 180$ °C; 10 ms $T_{vj} = 25$ °C; 8,3 ... 10 ms $T_{vj} = 180$ °C; 8,3 ... 10 ms	
V_F $V_{(TO)}$ r_T I_{RD} Q_{rr}	$T_{vj} = 25$ °C; $I_F = 400$ A $T_{vj} = 180$ °C $T_{vj} = 180$ °C $T_{vj} = 180$ °C; $V_{RD} = V_{RRM}$ $T_{vj} = 160$ °C; $-di_F/dt = 10$ A/ μ s	
$R_{th(j-c)}$ $R_{th(c-s)}$ T_{vj} T_{stg}		
V_{isol} M_s a m	to heatsink approx.	
Case		



Diagrams

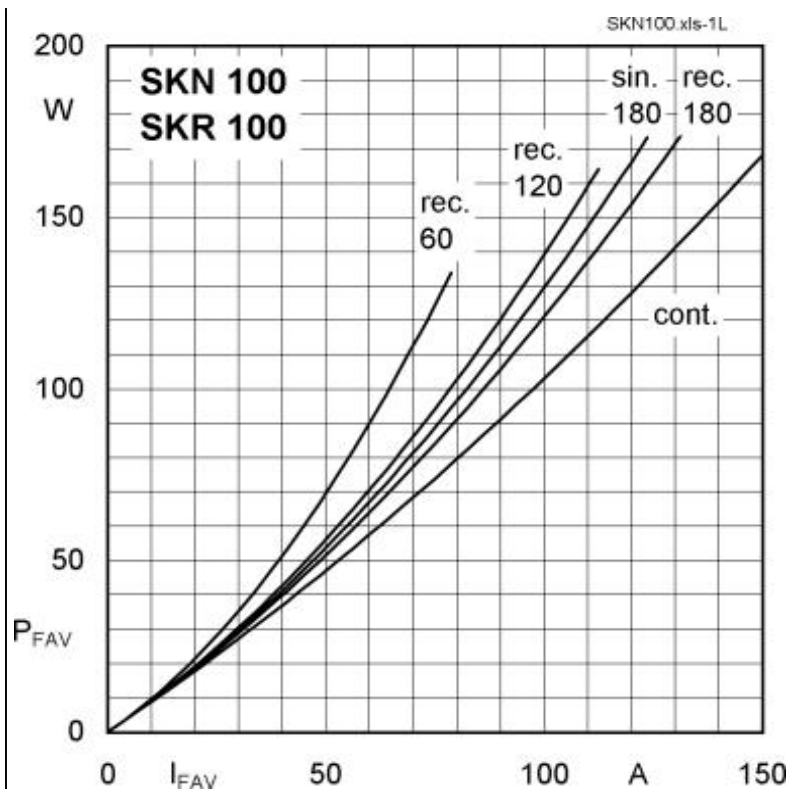


Fig. 1L Power dissipation vs. forward current

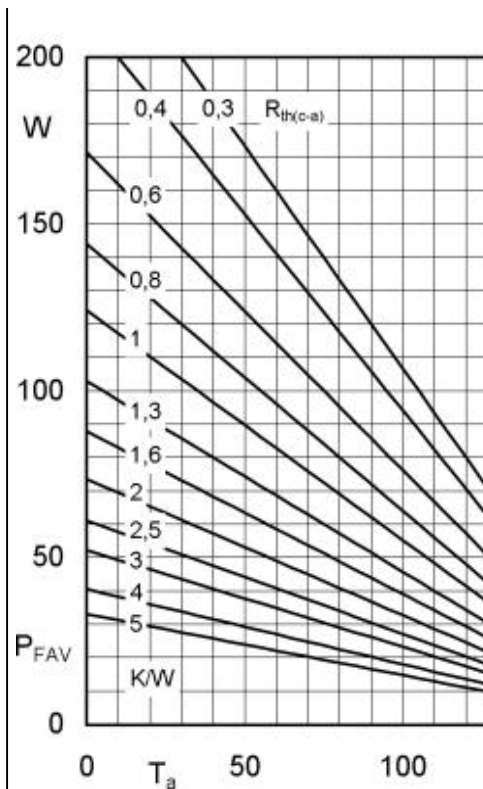


Fig. 1R Power dissipation vs. ambient temper

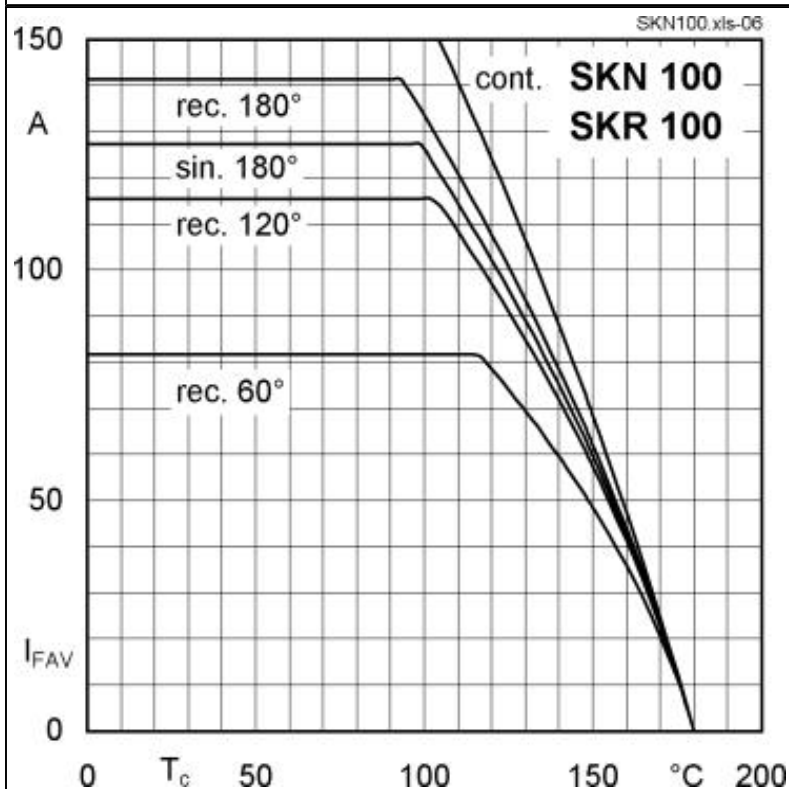


Fig. 2 Forward current vs. case temperature

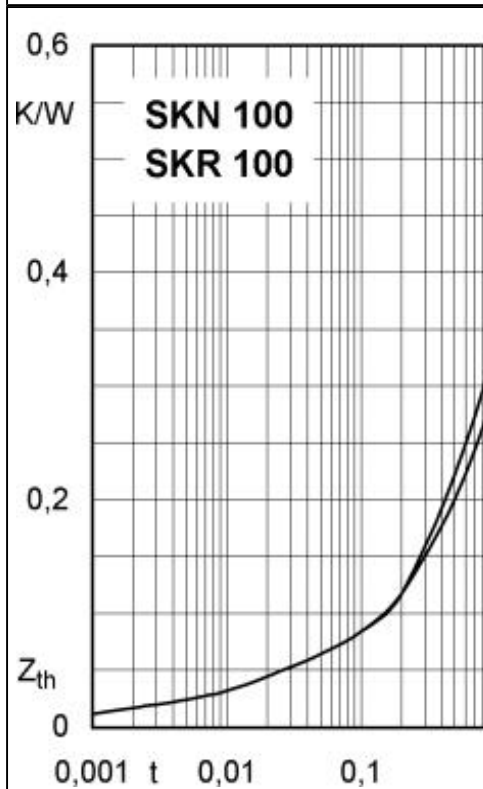


Fig. 4 Transient thermal impedance vs. time

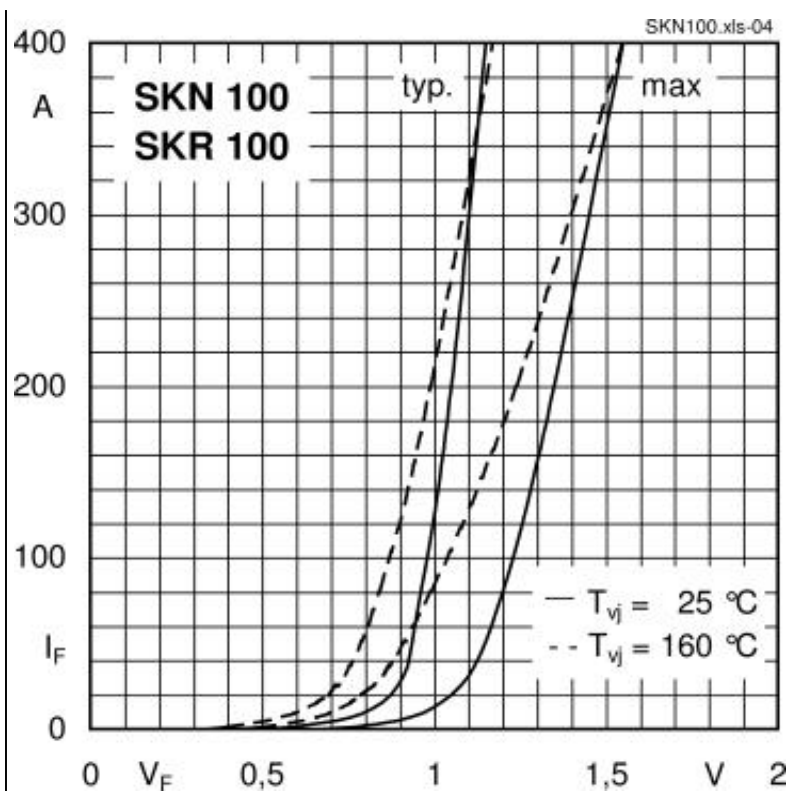


Fig. 5 Forward characteristics

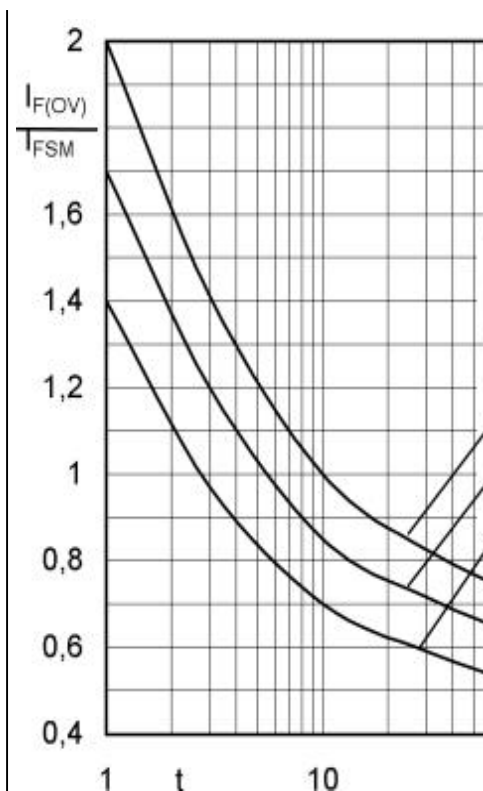
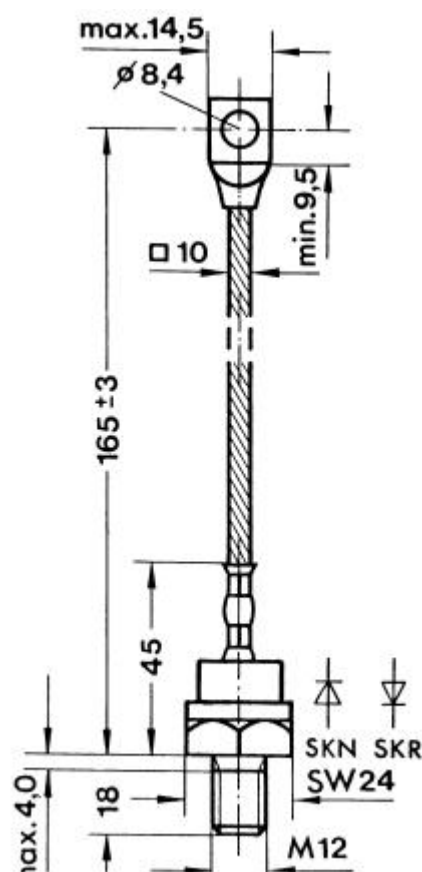


Fig. 6 Surge overload current vs. time

Cases / Circuits



Case E 13 (IEC 60191: A 9 MA; JEDEC DO-205 AC)
