

SKN 240, SKR 240



Stud Diode

Rectifier Diode

SKN 240

SKR 240

Features

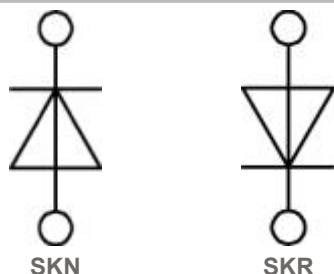
- Reverse voltages up to 1800 V
- Hermetic metal case with glass insulator
- Threaded stud ISO M16 x 1,5
- SKN / SKR 240/04 ... /16 also available with threaded stud 3/4 - 16 UNF (e.g. SKR 240/12 UNF)
- SKN: anode to stud, SKR: cathode to stud

Typical Applications

- All-purpose mean power rectifier diodes
- Cooling via heatsinks
- Non-controllable and half-controllable rectifiers
- Free-wheeling diodes
- Recommended snubber network:
RC: 0,5 μ F, 30 Ω ($P_R = 2W$),
 $R_P = 50$ k Ω ($P_R = 20$ W)

V_{RSM} V	V_{RRM} V	$I_{FRMS} = 500$ A (maximum value for $I_{FAV} = 240$ A (sin. 180; T	
400	400	SKN 240/04	SKR 240/04
800	800	SKN 240/08	SKR 240/08
1200	1200	SKN 240/12	SKR 240/12
1400	1400	SKN 240/14	SKR 240/14
1600	1600	SKN 240/16	SKR 240/16
1800	1800	SKN 240/18	SKR 240/18

Symbol	Conditions	
I_{FAV}	sin. 180; $T_c = 100$ °C	
I_D	K 0,55; $T_a = 45$ °C; B2 / B6 K 0,55F; $T_a = 35$ °C; B2 / B6	
I_{FSM}	$T_{vj} = 25$ °C; 10 ms $T_{vj} = 180$ °C; 10 ms	
i^2t	$T_{vj} = 25$ °C; 8,3 ... 10 ms $T_{vj} = 180$ °C; 8,3 ... 10 ms	
V_F	$T_{vj} = 25$ °C; $I_F = 750$ A	
$V_{(TO)}$	$T_{vj} = 180$ °C	
r_T	$T_{vj} = 180$ °C	
I_{RD}	$T_{vj} = 180$ °C; $V_{RD} = V_{RRM}$	
Q_{rr}	$T_{vj} = 160$ °C; $-di_F/dt = 10$ A/ $\square$ s	
$R_{th(j-c)}$		
$R_{th(c-s)}$		
T_{vj}		
T_{stg}		
V_{isol}		
M_s	to heatsink	
a		
m	approx.	
Case		



Diagrams

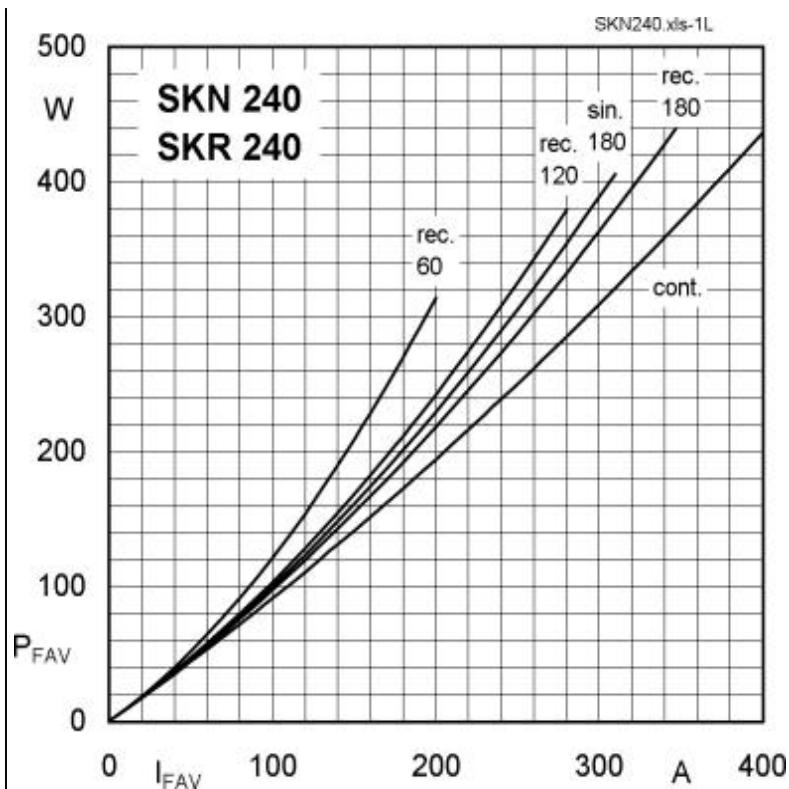


Fig. 1L Power dissipation vs. forward current

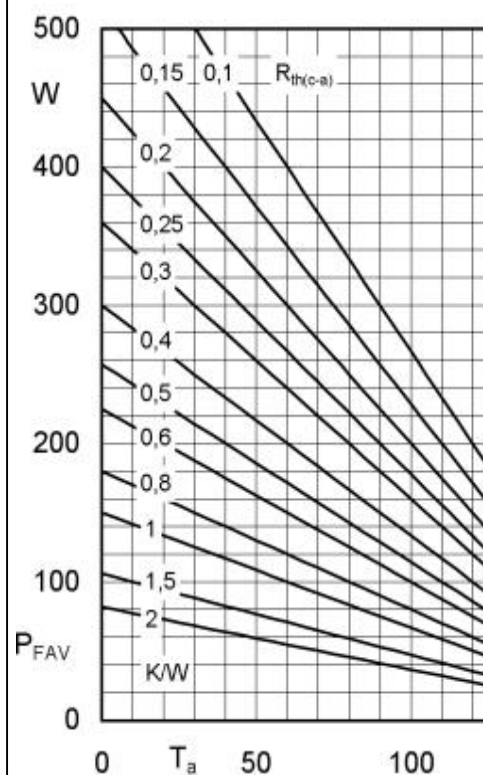


Fig. 1R Power dissipation vs. ambient temper

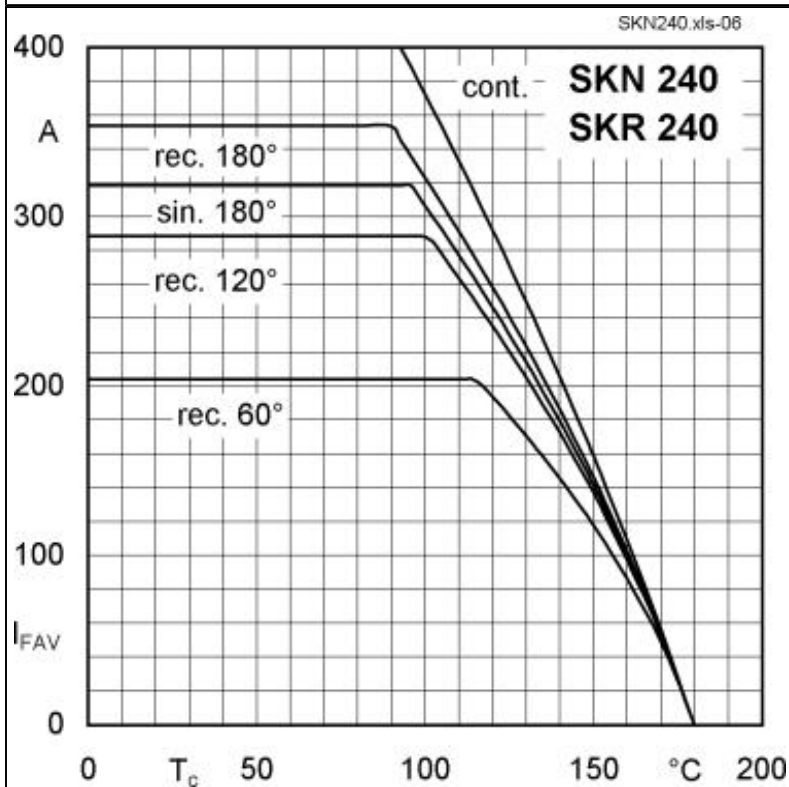


Fig. 2 Forward current vs. case temperature

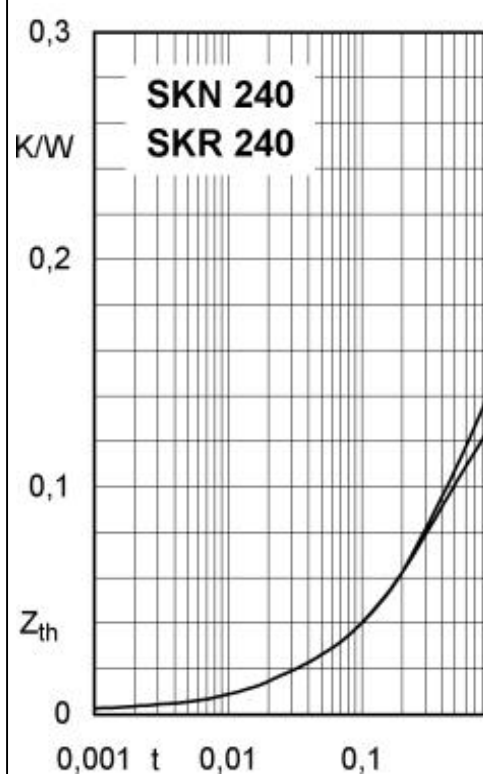


Fig. 4 Transient thermal impedance vs. time

Case E 15 (IEC 60191: A 15 M; JEDEC: DO-205 AB)
