SKN 262, SKR 262

Stud Diode

Rectifier Diode

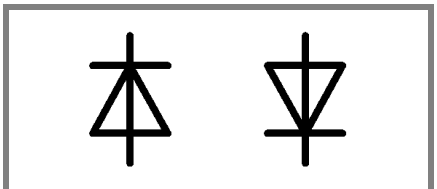
SKN 262
SKR 262

Features

- Reverse voltages up to 2800 V
- Hermetic metal case with ceramic insulator with extra-long creepage distances
- Threaded stud M16 x 1,5 mm
- Also available with threaded studs M20 x 1,5 mm (e.g. SKN 262/22 M20 and 3/4”-16 UNF 2A (e.g. SKR 262/24 UNF)
- **SKN:** anode to stud
- **SKR:** cathode to stud

Typical Applications *

- High voltage rectifier diode, especially for traction applications
- Cooling via heatsinks
- Non-controllable and half-controllable rectifiers
- Free-wheeling diodes
- Recommended snubber network:
  RC: 1,0 µF, 20 Ω (PR = 2W),
  Rp: 25 KΩ (PR = 20 W)



SKN SKR

V_{RSM} V	V_{RRM} V	I_{FRMS} = 500 A (maximum value for continuous operation) I_{FAV} = 260 A (sin. 180; T_c = 119 ºC)	
2000	2000	SKN 262/20	SKR 262/20
2200	2200	SKN 262/22	SKR 262/22
2400	2400	SKN 262/24	SKR 262/24
2800	2800	SKN 262/28	SKR 262/28

Symbol	Condition	Values	Units
I_{FAV}	sin. 180 ; T_C = 100 (125) ºC	320 (240)	A
I_D	K 0,55; T_a = 45 ºC; B2 / B6	340 / 480	A
	K 0,55F; T_a = 35 ºC; B2 / B6	620 / 840	A
I_{FSM}	T_{vj} = 25º C ; 10 ms	6000	A
	T_{vj} = 180º C ; 10 ms	5000	A
i^2t	T_{vj} = 25º C ; 8,3...10 ms	180000	A^2s
	T_{vj} = 180º C ; 8,3...10 ms	125000	A^2s
V_F	T_{vj} = 25º C, I_F = 750 A	max. 1,4	V
$V_{(TO)}$	T_{vj} = 180º C	max. 0,85	V
r_T	T_{vj} = 180º C	max. 0,6	mΩ
I_{RD}	T_{vj} = 180º C ; V_R = V_{RRM}	max. 60	mA
Q_{rr}	T_{vj} = 160°C, -di_F/dt = 10 A/µs	typ. 200	µC
$R_{th(j-c)}$		0,2	K/W
$R_{th(c-s)}$		0,03	K/W
T_{vj}		-40...+180	°C
T_{stg}		-55...+180	°C
V_{isol}		-	V~
M_s	to heatsink (SI units)	30	Nm
	to heatsink (US units)	270	lb.in.
a		5 * 9,81	m/s^2
m	approx.	260	g
Case			

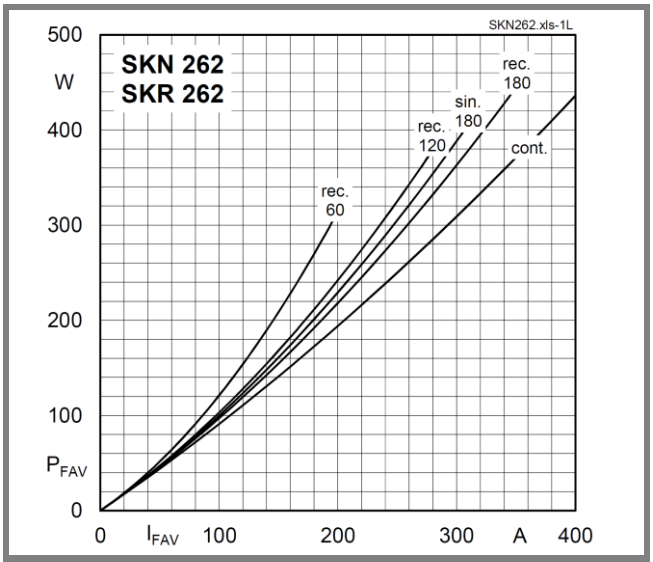


Fig. 1L Power dissipation vs. forward current

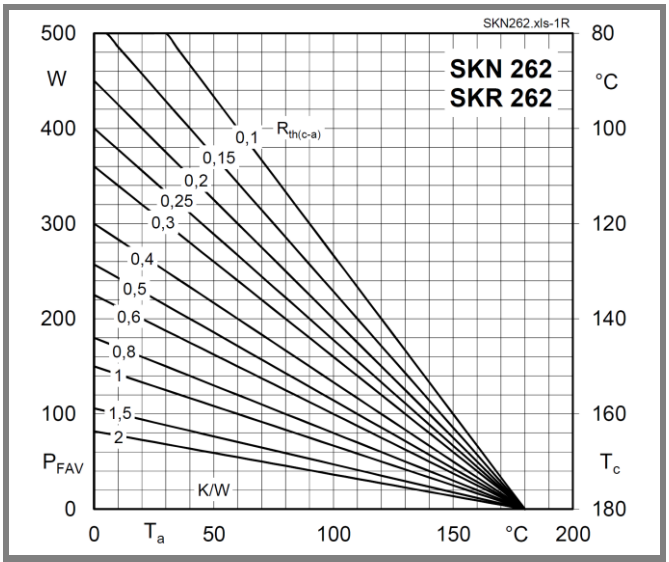


Fig. 1R Power dissipation vs. ambient temperature

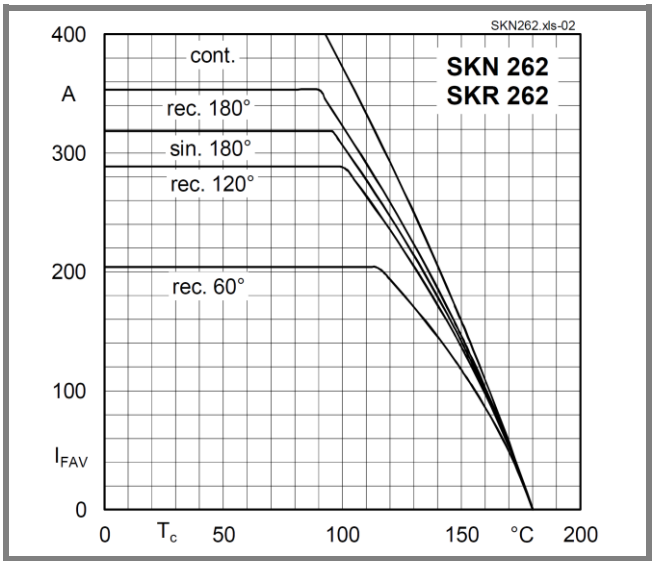


Fig. 2 Forward current vs. case temperature

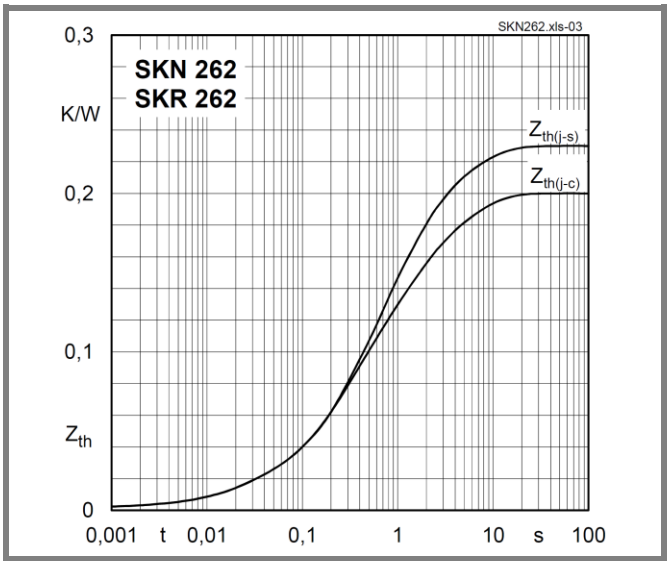


Fig. 3 Transient thermal impedance vs. time

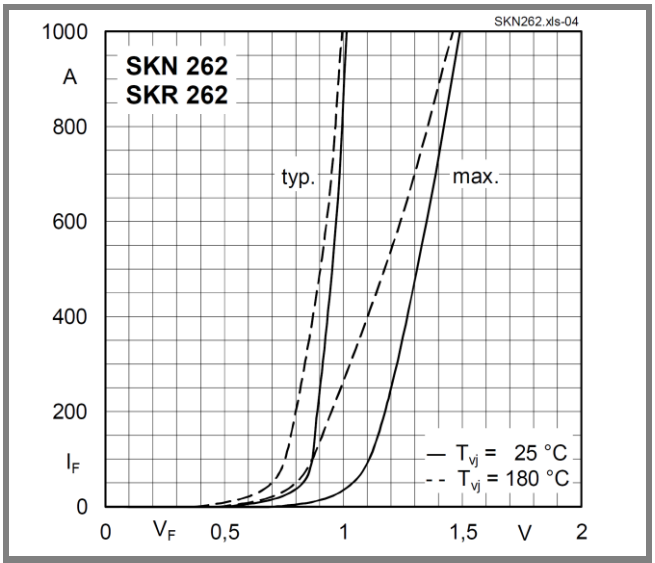


Fig. 4 Forward characteristics

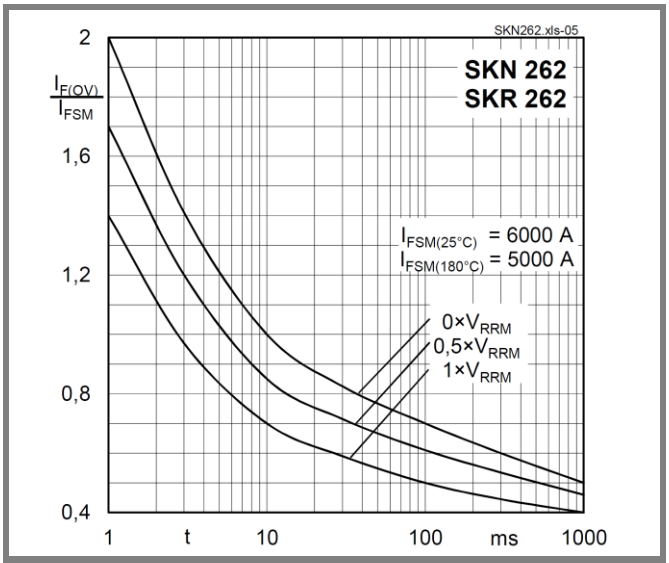
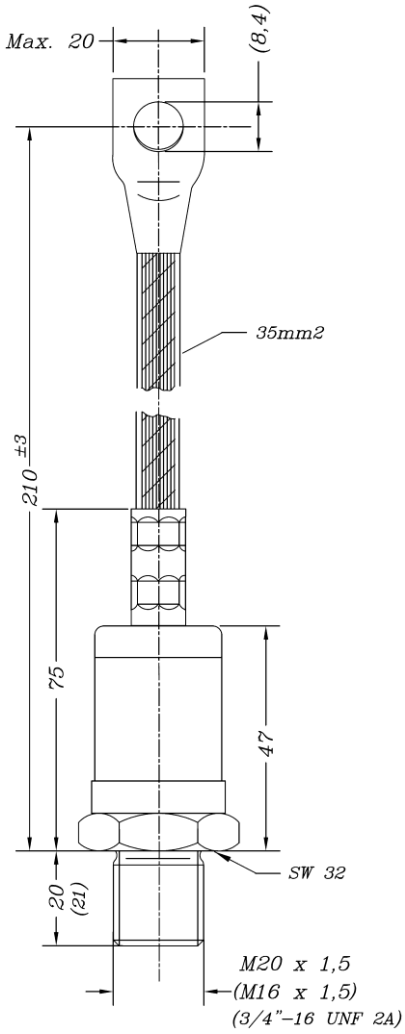


Fig. 5 Surge overload current vs. time

Dimensions in mm



Case E45 (IEC 60191:A 15 M modified)

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