

# 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 ISO M16 x1,5mm
- Also available with threaded stud 3/4"-16 UNF 2A (e.g. SKN 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  $\mu$ F, 20  $\Omega$  (PR = 2W),  
Rp: 25 K $\Omega$  (PR = 20 W)

$V_{RSM}$ V	$V_{RRM}$ V	$I_{FRMS} = 500$ A (maximum value for continuous operation) $I_{FAV} = 260$ A (sin. 180; $T_c = 119$ °C)	
2000	2000	SKN 262/20	SKR 262/20
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) °C	320 (240)	A
$I_D$	K 0,55; $T_a = 45$ °C; B2 / B6	340 / 480	A
	K 0,55F; $T_a = 35$ °C; B2 / B6	620 / 840	A
$I_{FSM}$	$T_{vj} = 25^\circ$ C ; 10 ms	6000	A
	$T_{vj} = 180^\circ$ C ; 10 ms	5000	A
$i^2t$	$T_{vj} = 25^\circ$ C ; 8,3...10 ms	180000	A <sup>2</sup> s
	$T_{vj} = 180^\circ$ C ; 8,3...10 ms	125000	A <sup>2</sup> s
$V_F$	$T_{vj} = 25^\circ$ C, $I_F = 750$ A	max. 1,4	V
$V_{(TO)}$	$T_{vj} = 180^\circ$ C	max. 0,85	V
$r_T$	$T_{vj} = 180^\circ$ C	max. 0,6	m $\Omega$
$I_{RD}$	$T_{vj} = 180^\circ$ C ; $V_R = V_{RRM}$	max. 60	mA
$Q_{rr}$	$T_{vj} = 160^\circ$ C, $-di_F/dt = 10$ A/ $\mu$ s	typ. 200	$\mu$ C
$R_{th(i-c)}$		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 <sup>2</sup>
m	approx.	260	g
Case			



SKN



SKR

# SKN 262, SKR 262

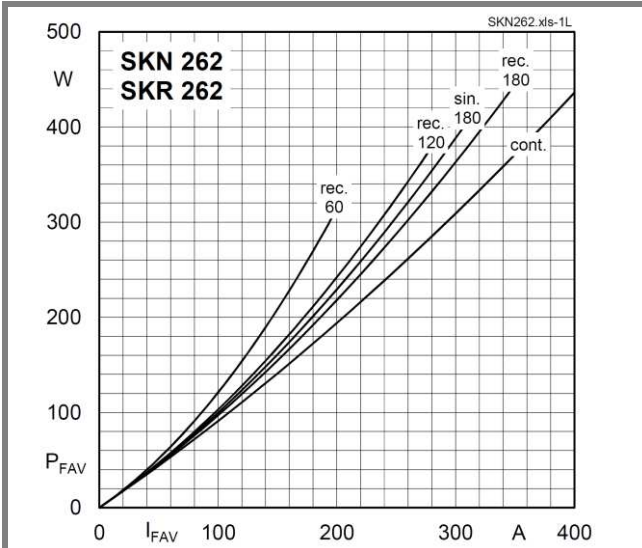


Fig. 1L Power dissipation vs. forward current

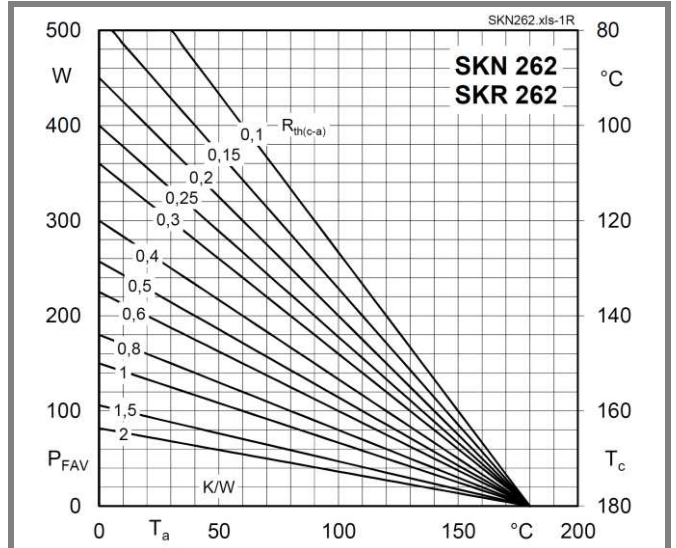


Fig. 1R Power dissipation vs. ambient temperature

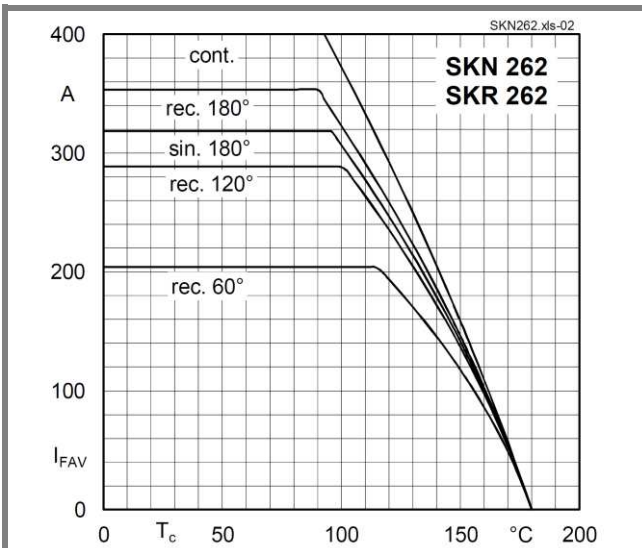


Fig. 2 Forward current vs. case temperature

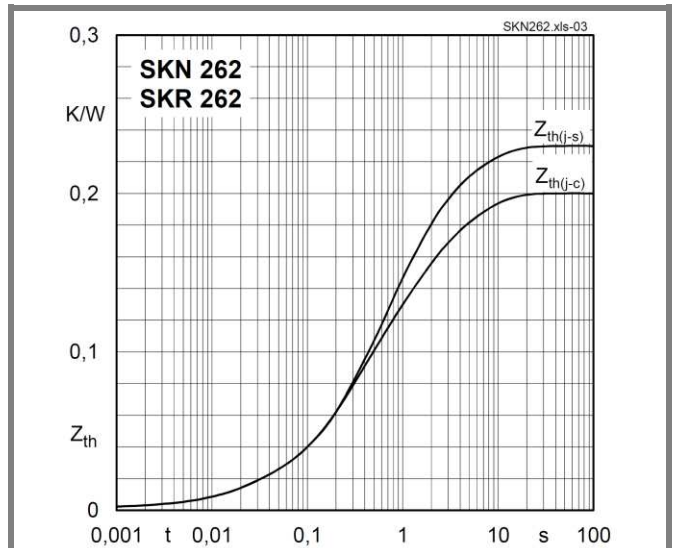


Fig. 3 Transient thermal impedance vs. time

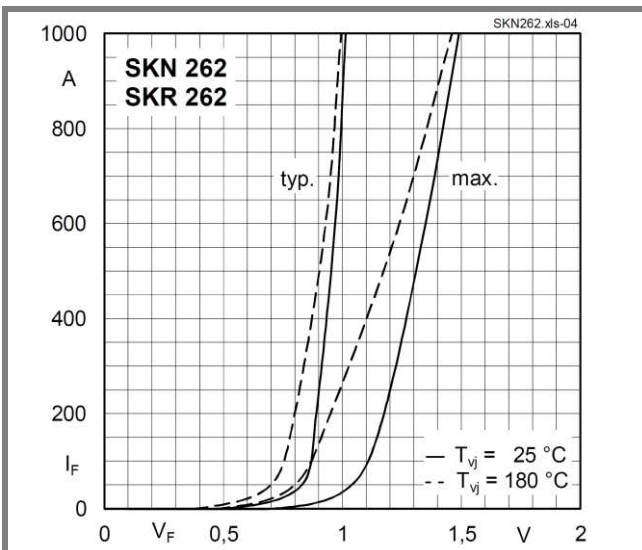


Fig. 4 Forward characteristics

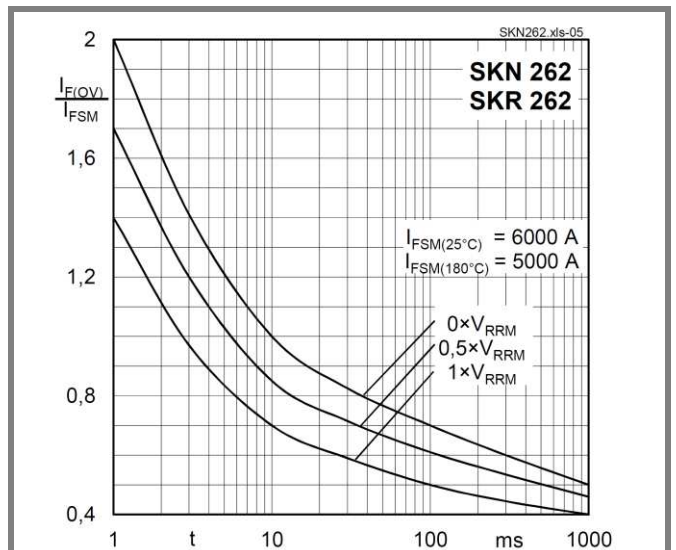
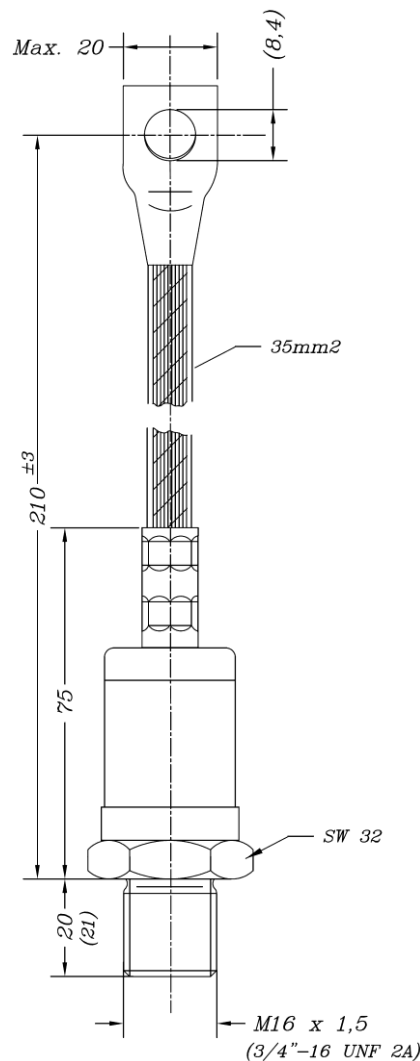


Fig. 5 Surge overload current vs. time



Case E45 (IEC 60191:A 15 M modified)

**\*IMPORTANT INFORMATION AND WARNINGS**

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