

# SKN 150



**Stud Diode**

## Rectifier Diode

### SKN 150

#### Features

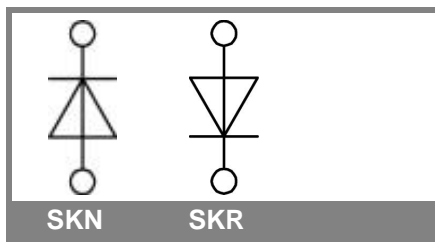
- Reverse voltages up to 800 V
- Low forward drop
- Hermetic metal case with glass insulator
- Threaded stud ISO M12 x 1,5 (also 1/2 - 20 UNF or 3/8 - 24 UNF)
- Cooling via heatsinks
- SKN: anode to stud, SKR: cathode to stud

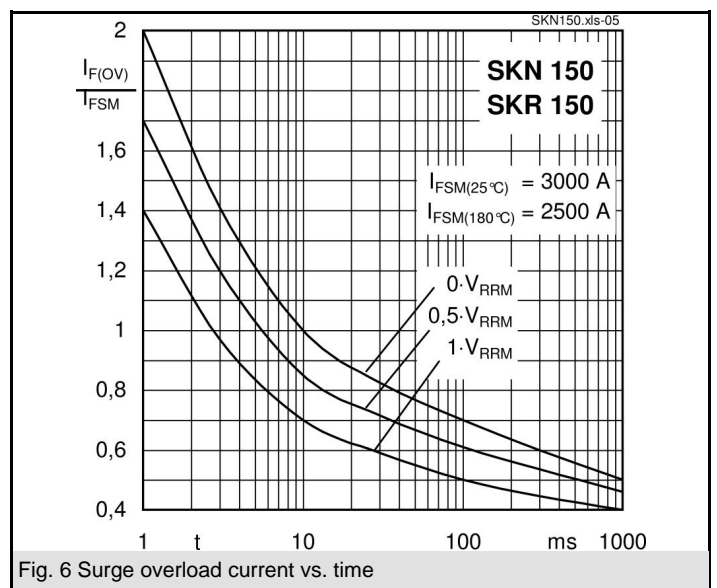
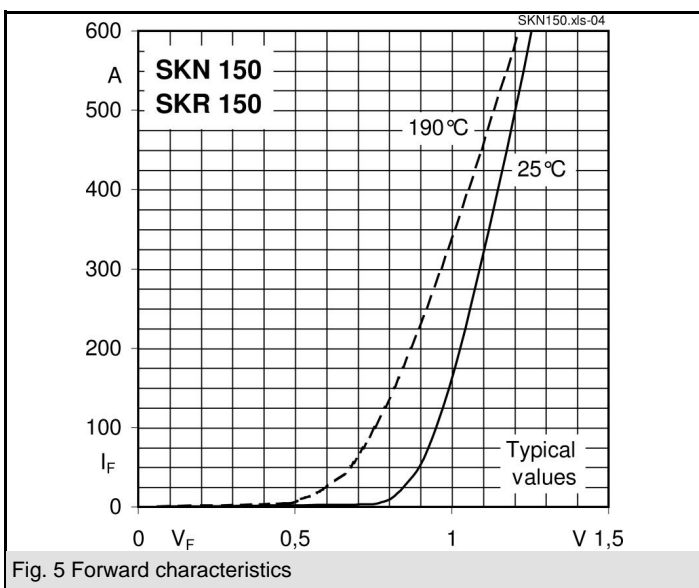
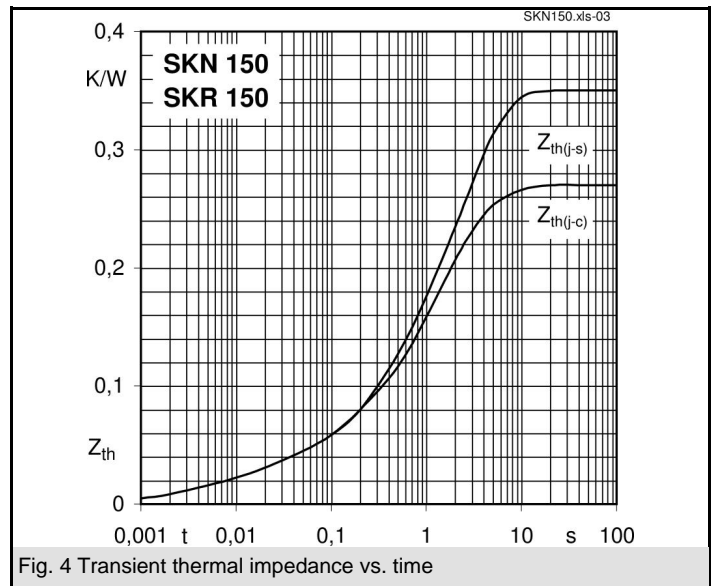
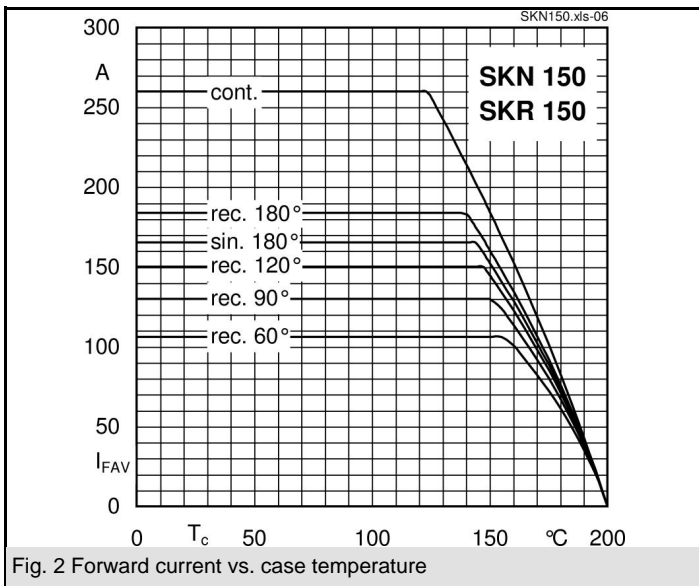
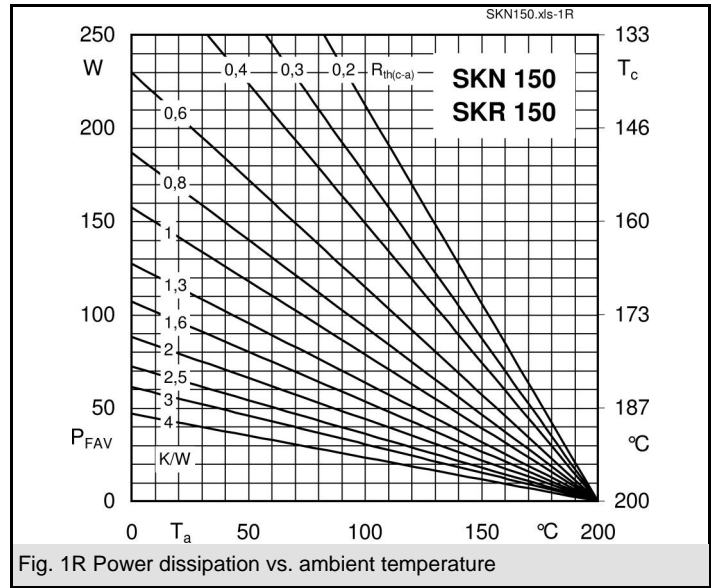
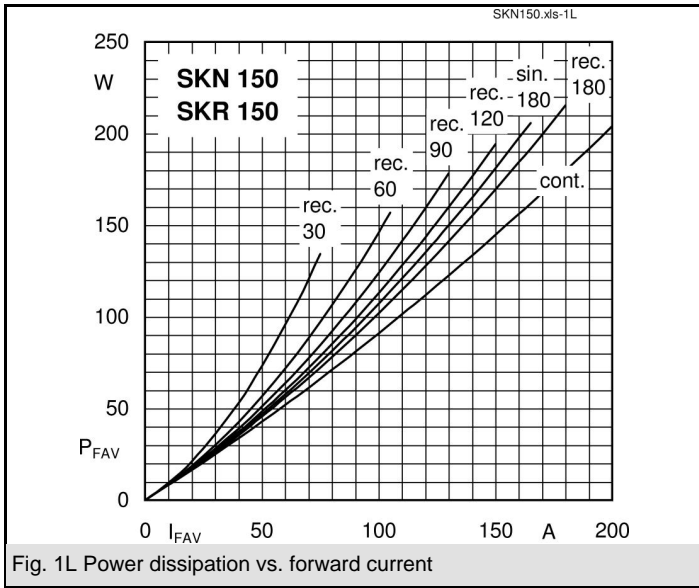
#### Typical Applications

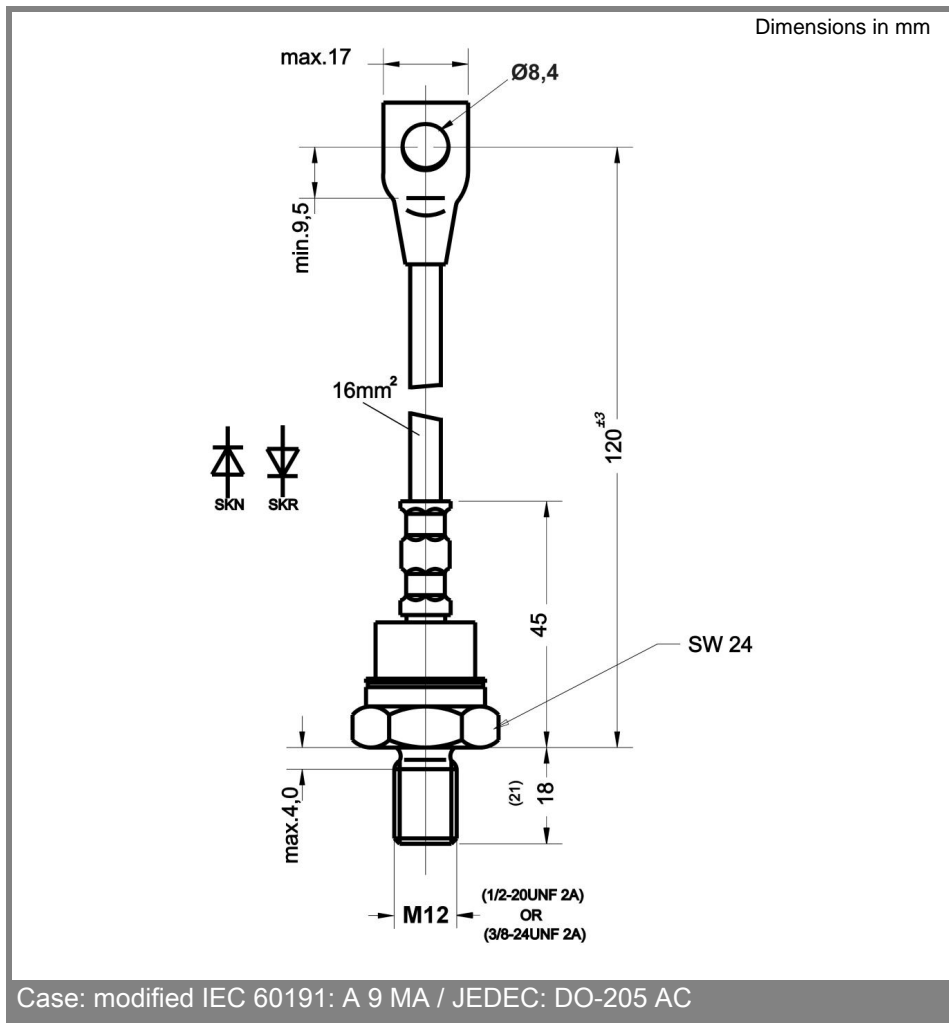
- All-purpose mean power rectifier diodes
- Cooling via heatsinks
- Non-controllable and half-controllable rectifier
- Free-wheeling diodes
- Recommended snubber network:  
RC: 0,25  $\mu$ F, 50  $\Omega$ , ( $P_R = 2$  W),  
 $R_P = 50$  k $\Omega$  ( $P_R = 20$  W)

$V_{RSM}$ V	$V_{RRM}$ V	$I_{FRMS} = 260$ A (maximum value for continuous operation) $I_{FAV} = 165$ A (sin. 180; $T_c = 144$ °C)	
200	200	SKN 150/02	SKR 150/02
400	400	SKN 150/04	SKR 150/04
800	800	SKN 150/08	SKR 150/08

Symbol	Conditions	Values	Units
$I_{FAV}$	sin. 180; $T_c = 144$ (150) °C	165 (150)	A
$I_D$	K 1,1; $T_a = 45$ °C; B2 / B6	225 / 320	A
	K 1,1F; $T_a = 60$ °C; B2 / B6	330 / 450	A
$I_{FSM}$	$T_{vj} = 25$ °C; 10 ms	3000	A
	$T_{vj} = 180$ °C; 10 ms	2500	A
$i^2t$	$T_{vj} = 25$ °C; 8,3 ... 10 ms	45000	A <sup>2</sup> s
	$T_{vj} = 180$ °C; 8,3 ... 10 ms	31000	A <sup>2</sup> s
$V_F$	$T_{vj} = 25$ °C; $I_F = 500$ A	max. 1,25	V
$V_{(TO)}$	$T_{vj} = 180$ °C	max. 0,8	V
$r_T$	$T_{vj} = 180$ °C	max. 1,1	m $\Omega$
$I_{RD}$	$T_{vj} = 180$ °C; $V_{RD} = V_{RRM}$	max. 22	mA
$Q_{rr}$	$T_{vj} = 160$ °C; $-di_F/dt = 10$ A/ $\mu$ s	120	$\mu$ C
$R_{th(j-c)}$		0,27	K/W
$R_{th(c-s)}$		0,08	K/W
$T_{vj}$		- 40 ... + 200	°C
$T_{stg}$		- 55 ... + 200	°C
$V_{isol}$		-	V~
$M_s$	to heatsink (SI units)	10	Nm
.	to heatsink (US units)	90	lb.in.
a		5 * 9,81	m/s <sup>2</sup>
m	approx.	90	g
Case			







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