

## Stud Diode

## Rectifier Diode

**SKN 130**

**SKR 130**

### Features

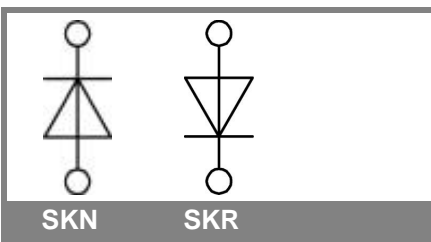
- Reverse voltages up to 1800 V
- Hermetic metal case with glass insulator
- Threaded stud ISO M12 x 1,5 (SKR 130 also 1/2 - 20 UNF or 3/8 - 24 UNF)
- SKN: anode to stud, SKR: cathode to stud

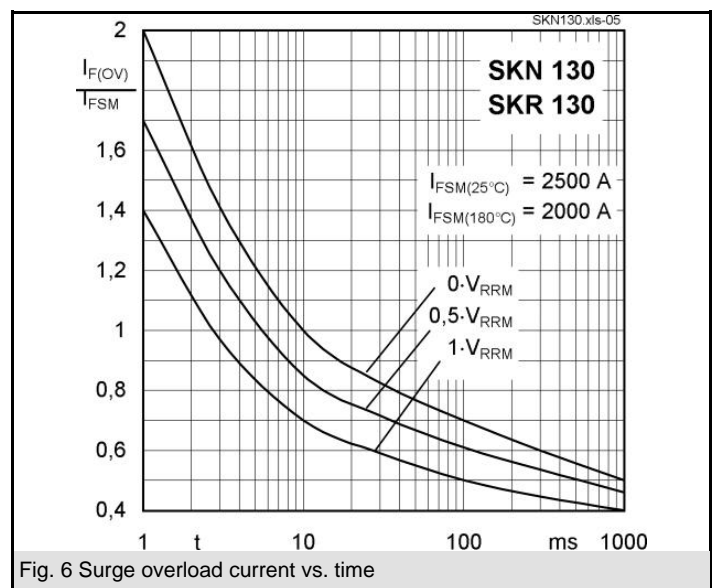
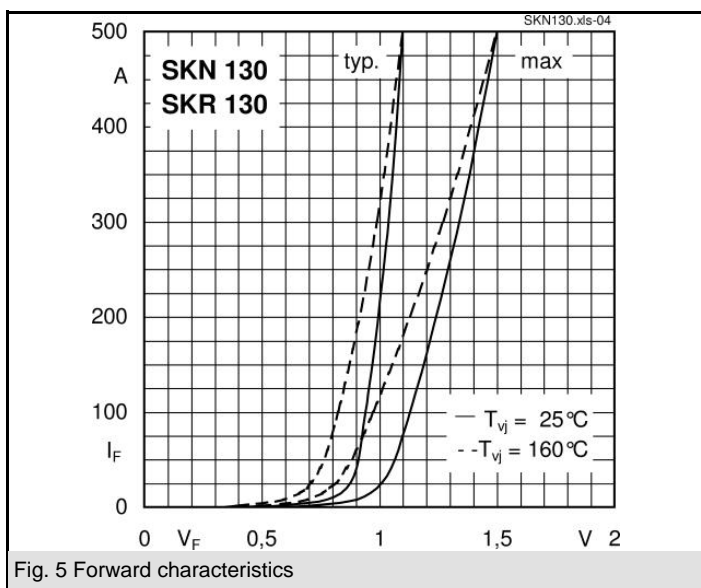
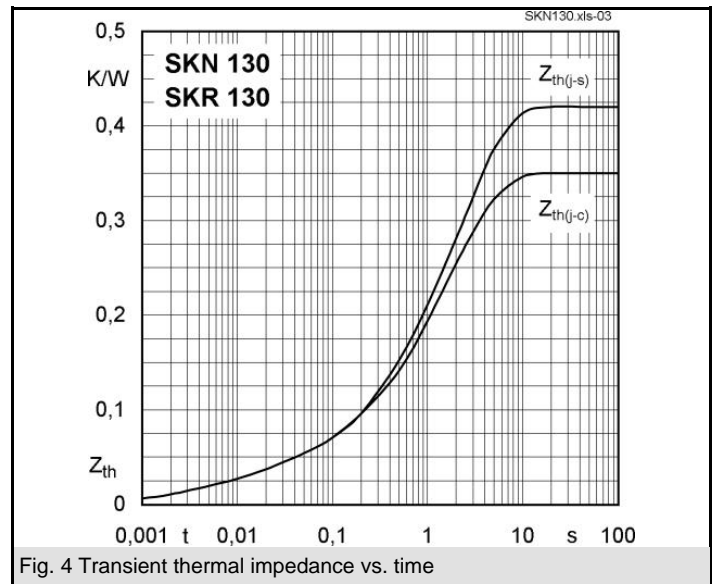
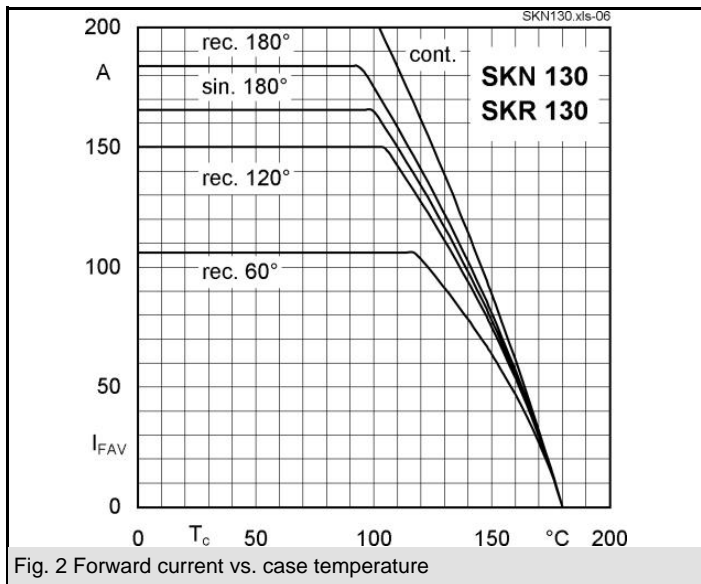
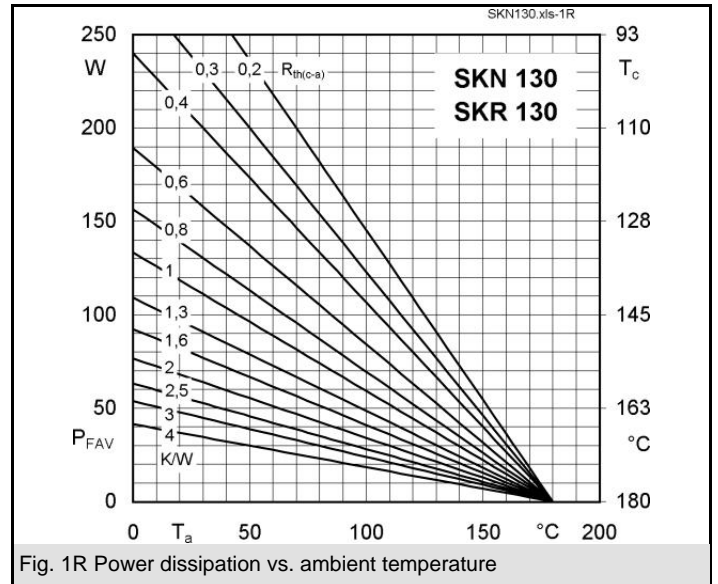
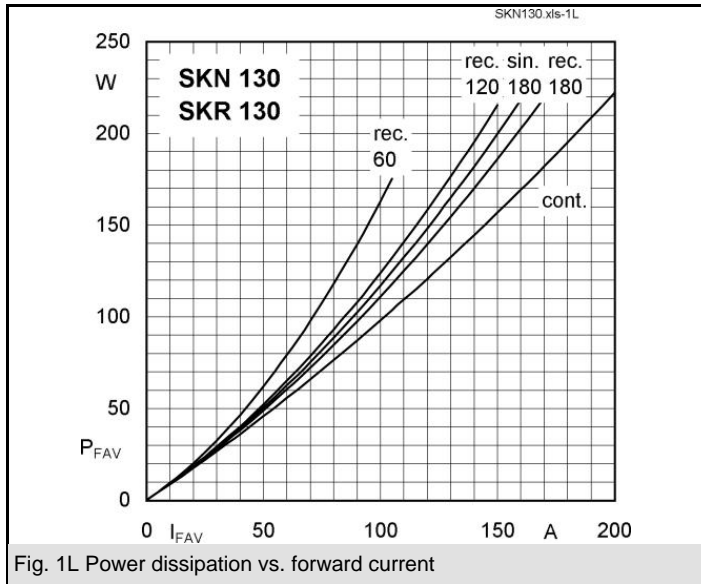
### Typical Applications

- All-purpose mean power rectifier diodes
- Cooling via heatsinks
- Non-controllable and half-controllable 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)

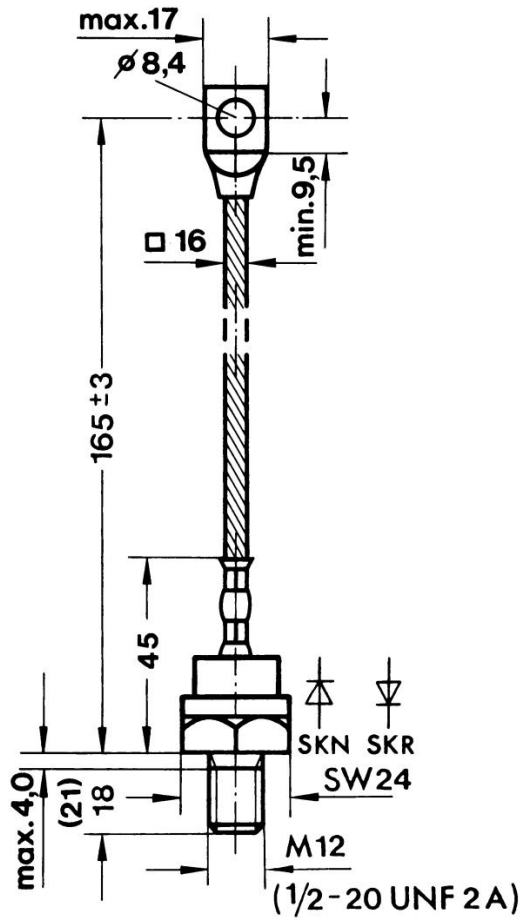
$V_{RSM}$ V	$V_{RRM}$ V	$I_{FRMS} = 260$ A (maximum value for continuous operation) $I_{FAV} = 130$ A (sin. 180; $T_c = 125$ °C)	
400	400	SKN 130/04	SKR 130/04
800	800	SKN 130/08	SKR 130/08
1200	1200	SKN 130/12	SKR 130/12
1400	1400	SKN 130/14	SKR 130/14
1600	1600	SKN 130/16	SKR 130/16
1800	1800	SKN 130/18	SKR 130/18

Symbol	Conditions	Values	Units
$I_{FAV}$	sin. 180; $T_c = 100$ °C	165	A
$I_D$	K 1,1; $T_a = 45$ °C; B2 / B6	160 / 225	A
	K 1,1F; $T_a = 35$ °C; B2 / B6	290 / 405	A
$I_{FSM}$	$T_{vj} = 25$ °C; 10 ms	2500	A
	$T_{vj} = 180$ °C; 10 ms	2000	A
$i^2t$	$T_{vj} = 25$ °C; 8,3 ... 10 ms	31000	A <sup>2</sup> s
	$T_{vj} = 180$ °C; 8,3 ... 10 ms	20000	A <sup>2</sup> s
$V_F$	$T_{vj} = 25$ °C; $I_F = 500$ A	max. 1,5	V
$V_{(TO)}$	$T_{vj} = 180$ °C	max. 0,85	V
$r_T$	$T_{vj} = 180$ °C	max. 1,3	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
$R_{th(j-c)}$		0,35	K/W
$R_{th(c-s)}$		0,08	K/W
$T_{vj}$		- 40 ... + 180	°C
$T_{stg}$		- 55 ... + 180	°C
$V_{isol}$		-	V~
$M_s$	to heatsink	10	Nm
$a$		5 * 9,81	m/s <sup>2</sup>
$m$	approx.	100	g
Case		E 14	





Dimensions in mm



Case E 14 (IEC 60191: A 9 MA modified; JEDEC: DO-205 AC)

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