

# SKN 300



Stud Diode

$V_{RSM}$ V	$V_{RRM}$ V	$I_{FRMS} = 500$ A (maximum value for continuous operation) $I_{FAV} = 300$ A (sin. 180; $T_c = 124$ °C)	
400	400	SKN 300/04	SKR 300/04
800	800	SKN 300/08	SKR 300/08
1200	1200	SKN 300/12	SKR 300/12
1600	1600	SKN 300/16	SKR 300/16

## Rectifier Diode

**SKN 300**  
**SKR 300**

Preliminary data

### Features

- Reverse voltages up to 1600 V
- Hermetic metal cases with glass insulator
- Threaded stud M16 x 1,5 mm. Also 3/4"-16 UNF 2A and M20 x 1,5 mm options.
- **SKN**: anode to stud
- **SKR**: cathode to stud

### Typical Applications \*

- All purpose high power rectifier diodes
- Cooling via heatsinks
- Non-controllable and half-controllable rectifiers
- Free-wheeling diodes
- Recommended snubber network:  
RC: 1,0  $\mu$ F, 20  $\Omega$  ( $P_R = 2$ W),  
 $R_p$ : 25 K $\Omega$  ( $P_R = 20$  W)

Notes:

for 3/4"-16 UNF thread version  
add UNF and for M20 x 1,5 mm  
thread version add M20 at  
description's end.  
(e.g. SKR 300/04 M20)

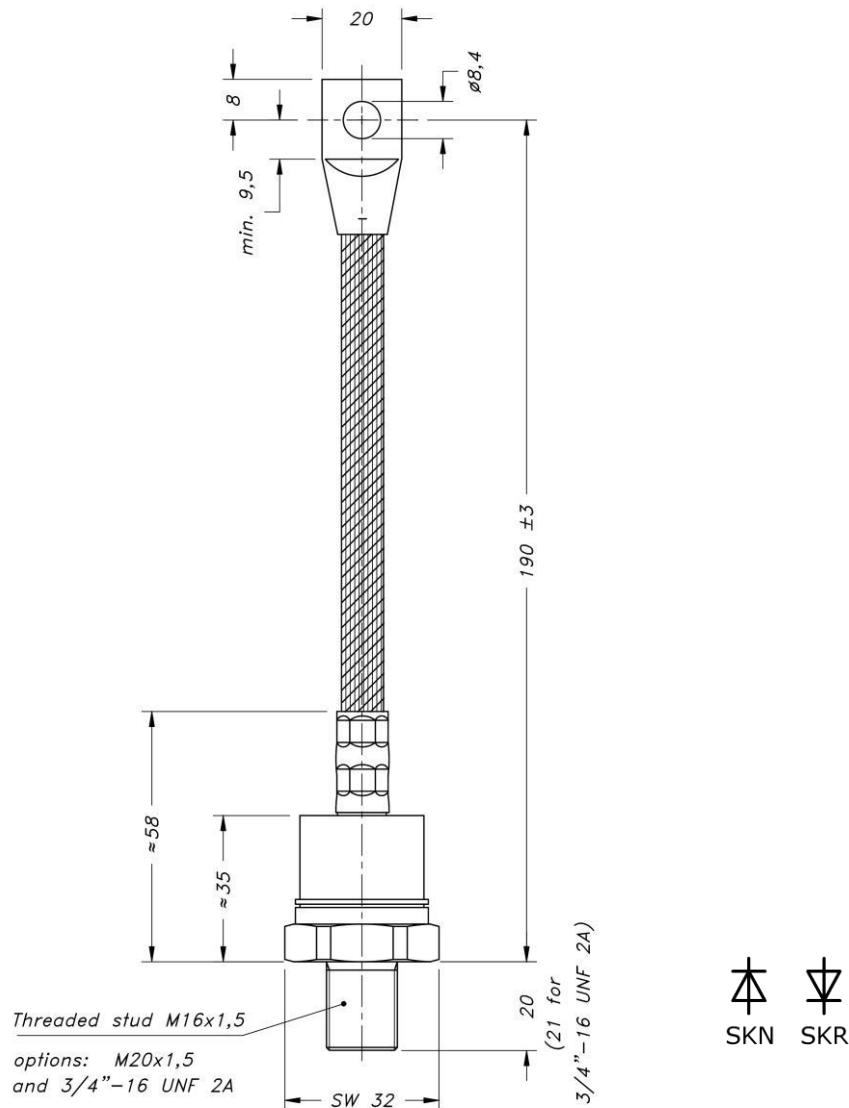
Symbol	Condition	Values	Units
$I_{FAV}$	sin. 180 ; $T_c = 135$ (120) °C	255 (315)	A
$I_{FSM}$	$T_{vj} = 25^\circ$ C ; 8,33 ms	6500	A
$i^2t$	$T_{vj} = 180^\circ$ C ; 8,33 ms	5400	A
	$T_{vj} = 25^\circ$ C ; 8,3...10 ms	211000	A <sup>2</sup> s
$V_F$	$T_{vj} = 25^\circ$ C, $I_F = 800$ A	max. 1,4	V
	$T_{vj} = 160^\circ$ C	max. 0,80	V
$r_T$	$T_{vj} = 160^\circ$ 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	200	$\mu$ C
$R_{th(j-c)}$		0,15	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.	250	g
Case		E 15	



SKN



SKR



## Case E15 (IEC 60191: A 15 M; JEDEC: DO-205 AB)

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