SKN 300

Stud Diode

Rectifier Diode

SKN 300
SKR 300

Preliminary data

Features

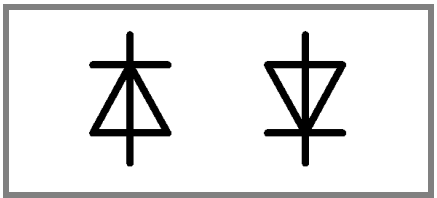
- Reverse voltages up to 1600 V
- Hermetic metal cases with glass insulator
- Threaded stud M16 x 1,5 mm. Also 3/4"–16 UNF 2A and M20 x 1,5 mm options.
- **SKN:** anode to stud
- **SKR:** cathode to stud

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 µF, 20 Ω (P_R = 2W),
  R_p: 25 KΩ (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)

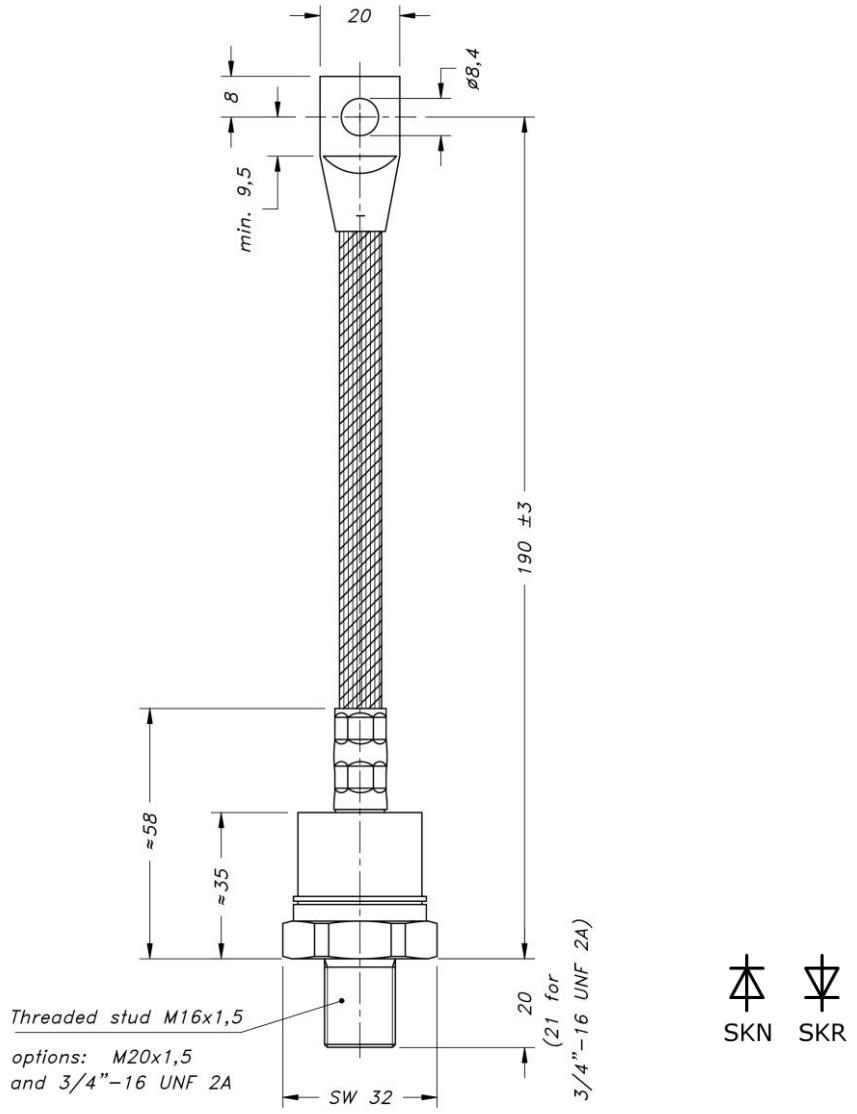


SKN SKR

V_{RSM} V	V_{RRM} V	I_{FRMS} = 500 A (maximum value for continuous operation) I_{FAV} = 300 A (sin. 180; T_c = 124 ºC)	
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

Symbol	Condition	Values	Units
I_{FAV}	sin. 180 ; T_C = 135 (120) ºC	255 (315)	A
I_{FSM}	T_{vj} = 25º C ; 8,33 ms	6500	A
	T_{vj} = 180º C ; 8,33 ms	5400	A
i^2t	T_{vj} = 25º C ; 8,3...10 ms	211000	A^2s
	T_{vj} = 180º C ; 8,3...10 ms	145000	A^2s
V_F	T_{vj} = 25º C, I_F = 800 A	max. 1,4	V
$V_{(TO)}$	T_{vj} = 160º C	max. 0,80	V
r_T	T_{vj} = 160º 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	200	µC
$R_{th(j-c)}$		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^2
m	approx.	250	g
Case		E 15	

Dimensions in mm



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

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