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 halfcontrollable rectifiers
- Free-wheeling diodes
- Recommended snubber network:

RC: $1.0 \mu F$, $20 \Omega (P_R = 2W)$, R_p : 25 K Ω (P_R = 20 W)

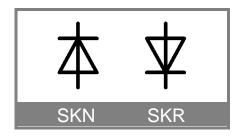
Notes:

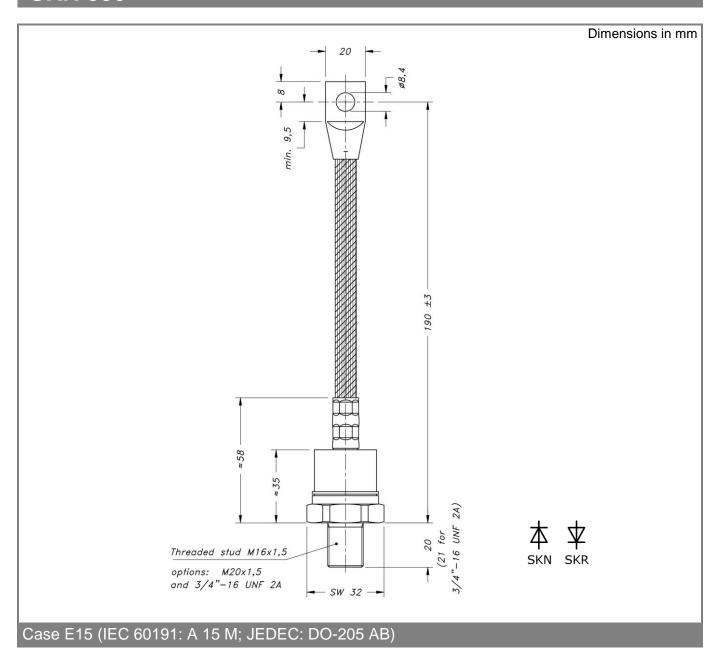
for 3/4"-16 UNF thread version add UNF and for M20 x 1,5 mm thread version add M20 at description's end.

(e.g. SKR 300/04 M20)

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

Symbol	Condition	Values	Units
I _{FAV}	sin. 180 ; T _C = 135 (120) °C	255 (315)	Α
I _{FSM}	T_{vj} = 25° C; 8,33 ms T_{vi} = 180° C; 8,33 ms T_{vj} = 25° C; 8,310 ms T_{vi} = 180° C; 8,310 ms	6500 5400 211000 145000	A A A ² s A ² s
$V_F \\ V_{(TO)} \\ r_T \\ I_{RD} \\ Q_{rr}$	$\begin{split} T_{vj} &= 25^{\circ} \text{ C, } I_{F} = 800 \text{ A} \\ T_{vj} &= 160^{\circ} \text{ C} \\ T_{vj} &= 160^{\circ} \text{ C} \\ T_{vj} &= 180^{\circ} \text{ C ; } V_{R} = V_{RRM} \\ T_{vj} &= 160^{\circ} \text{ C, } -di_{F}/dt = 10 \text{ A/}\mu\text{s} \end{split}$	max. 1,4 max. 0,80 max. 0,6 max. 60 200	V V mΩ mA μC
$\begin{array}{c} R_{th(j\text{-}c)} \\ R_{th(c\text{-}s)} \\ T_{vi} \\ T_{stg} \end{array}$		0,15 0,03 -40+180 -55+180	K/W K/W °C °C
V _{isol} M _s	to heatsink (SI units) to heatsink (US units) approx.	- 30 270 5 * 9,81 250	V~ Nm lb.in. m/s ² g
Case		E 15	





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