

# SKN 175, SKR 175



Stud Diode

## Rectifier Diode

SKN 175  
SKR 175

### Features

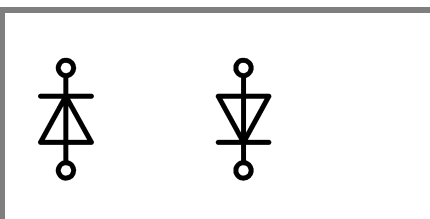
- Reverse voltages up to 800 V
- Hermetic metal case with glass insulator
- Low power dissipation
- Threaded stud ISO M12 x 1,5 also available with 1/2" - 20 UNF and 3/8" - 24 UNF
- SKN: anode to stud, SKR: cathode to stud

### Typical Applications

- All-purpose mean power rectifier diodes
- Cooling via heatsinks
- Non-controllable and half-controllable rectifiers
- Free-wheeling diodes
- Recommended snubber network:  
RC: 0,33  $\mu$ F, 33  $\Omega$  ( $P_R = 2$  W),  
 $R_P = 50$  K $\Omega$  ( $P_R = 20$  W)

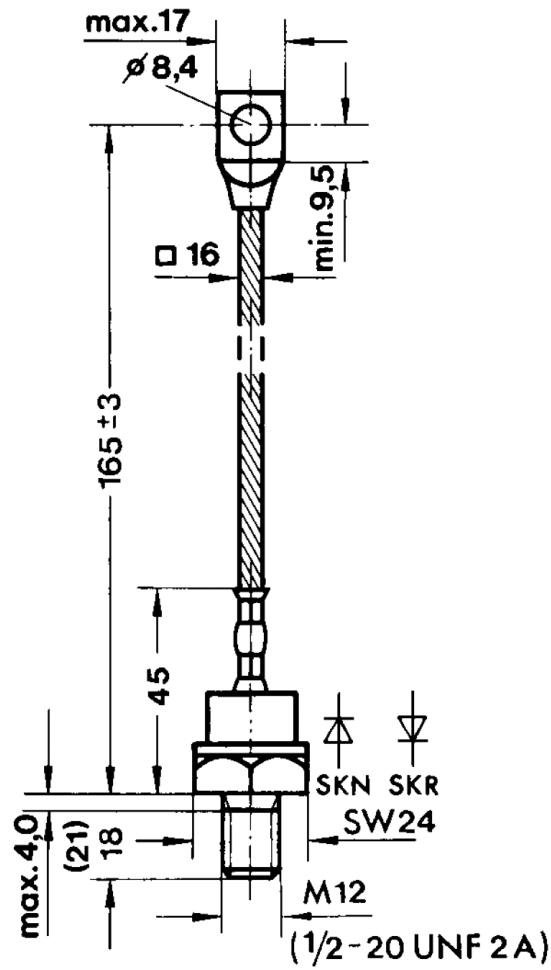
$V_{RSM}$ V	$V_{RRM}, V_{DRM}$ V	$I_{TRMS} = 260$ A (maximum value for continuous operation) $I_{TAV} = 165$ A (sin. 180; $T_c = 114$ °C)	
200	200	SKN 175/02	SKR 175/02
400	400	SKN 175/04	SKR 175/04
800	800	SKN 175/08	SKR 175/08

Symbol	Condition	Values	Units	
$I_{FAV}$	sin. 180 ; $T_c = 130$ °C	134	A	
$I_{FSM}$	$T_{vj} = 25$ °C ; 10 ms	4000	A	
	$T_{vj} = 180$ °C ; 10 ms	3300	A	
	$T_{vj} = 25$ °C ; 8,3 ...10 ms	80000	A <sup>2</sup> s	
$i^2t$	$T_{vj} = 180$ °C ; 8,3 ...10 ms	54500	A <sup>2</sup> s	
	$T_{vj} = 25$ °C ; $I_F = 500$ A	max. 1,3	V	
$V_{T(TO)}$	$T_{vj} = 180$ °C	0,80	V	
$r_T$	$T_{vj} = 180$ °C	1,0	m $\Omega$	
$I_R$	$T_{vj} = 180$ °C ; $V_R = V_{RRM}$	max. 22	mA	
	$T_{vj} = 25$ °C ; $V_R = V_{RRM}$	max. 1	mA	
$Q_{rr}$	$T_{vj} = 160$ °C ; - $di_F/dt = 10$ A/ $\mu$ s	typ. 80	$\mu$ C	
$R_{th(j-c)}$		0,25	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	SI units	10	Nm
		US units	90	lb.in
a	approx.		5 * 9,81	m/s <sup>2</sup>
			100	G
Case		E 14		



SKN

SKR



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

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