

Stud Diode

Rectifier Diode

SKN 70

SKR 70

Features

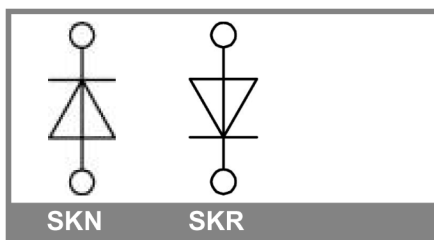
- Reverse voltages up to 1600 V
- Hermetic metal case with glass insulator
- Threaded stud ISO M8
- SKN: anode to stud,
SKR: cathode to stud

Typical Applications

- All-purpose mean power rectifier diodes
- Cooling via heatsinks
- Non-controllable and half-controllable rectifiers
- Free-wheeling diodes
- Recommended snubber network:
RC: 0,1 μ F, 100 Ω ($P_R = 2$ W)
 $R_P = 80$ k Ω ($P_R = 6$ W)

| V_{RSM} V | V_{RRM} V | $I_{FRMS} = 150$ A (maximum value for continuous operation) $I_{FAV} = 70$ A (sin. 180; $T_c = 125$ °C) | |
|----------------|----------------|--|-----------|
| 400 | 400 | SKN 70/04 | SKR 70/04 |
| 800 | 800 | SKN 70/08 | SKR 70/08 |
| 1200 | 1200 | SKN 70/12 | SKR 70/12 |
| 1400 | 1400 | SKN 70/14 | SKR 70/14 |
| 1600 | 1600 | SKN 70/16 | SKR 70/16 |

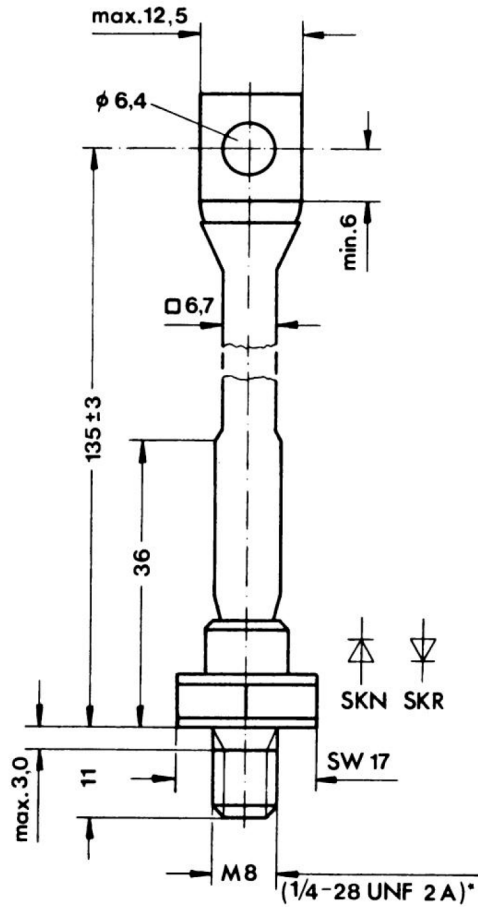
| Symbol | Conditions | Values | Units |
|---------------|---|----------------|------------------|
| I_{FAV} | sin. 180; $T_c = 100$ °C | 95 | A |
| I_D | K 1,1; $T_a = 45$ °C; B2 / B6 | 112 / 159 | A |
| | K 1,1F; $T_a = 35$ °C; B2 / B6 | 174 / 246 | A |
| I_{FSM} | $T_{vj} = 25$ °C; 10 ms | 1150 | A |
| | $T_{vj} = 180$ °C; 10 ms | 1000 | A |
| i^2t | $T_{vj} = 25$ °C; 8,3 ... 10 ms | 6600 | A ² s |
| | $T_{vj} = 180$ °C; 8,3 ... 10 ms | 5000 | A ² s |
| V_F | $T_{vj} = 25$ °C; $I_F = 200$ A | max. 1,5 | V |
| $V_{(TO)}$ | $T_{vj} = 180$ °C | max. 0,85 | V |
| r_T | $T_{vj} = 180$ °C | max. 3 | m Ω |
| I_{RD} | $T_{vj} = 180$ °C; $V_{RD} = V_{RRM}$ | max. 10 | mA |
| Q_{rr} | $T_{vj} = 160$ °C; $-di_F/dt = 10$ A/ μ s | 70 | μ C |
| $R_{th(j-c)}$ | | 0,55 | K/W |
| $R_{th(c-s)}$ | | 0,2 | K/W |
| T_{vj} | | - 40 ... + 180 | °C |
| T_{stg} | | - 55 ... + 180 | °C |
| V_{isol} | | - | V~ |
| M_s | to heatsink | 4 | Nm |
| a | | 5 * 9,81 | m/s ² |
| m | approx. | 30 | g |
| Case | | E 12 | |



SKN

SKR

Dimensions in mm



Case E 12 (IEC 60191: A 16 U, A 17 MB 2; JEDEC: SO-32 A, SO-32 B)

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