SKN 11000

Disc Diode

Rectifier Diodes

SKN 11000

Features

- High current rectifier diode in a slim package for lowest thermal resistance
- Capsule type metal-ceramic package with precious metal pressure contacts
- Low power dissipation and low thermal resistance
- Especially suited for water cooling and welding
- Available in matched groups for paralleling

Typical Applications

- Welding
- High current rectifiers
- Electroplating

1) DSC = Double Side Cooling
SSC = Single Side Cooling

SKN

V_{RSM} V	V_{RRM} V	I_{FRMS} = 18500 A (maximum value for cont. operation) I_{FAV} = 11500 A (sin. 180; T_c = 85ºC)
400	400	SKN 11000/04

Symbol	Condition	Values	Units
I_{FAV}	sin. 180; T_c = 85 ºC sin. 180; T_c = 100 ºC	11500 10250	A A
I_{FSM} i^2t	T_{vj} = 25º C; 10 ms T_{vj} = 180º C; 10 ms T_{vj} = 25º C; 8,3...10 ms T_{vj} = 180º C; 8,3...10 ms	100 85 50000 36100	kA kA kA^2s kA^2s
V_F $V_{F(TO)}$ r_T I_{RD}	T_{vj} = 25º C, I_F = 14 kA T_{vj} = 180º C T_{vj} = 180º C T_{vj} = 25º C; V_R = V_{RRM} T_{vj} = 180º C; V_R = V_{RRM}	max. 1,2 max. 0,68 max. 0,032 max. 4 max. 100	V V mΩ mA mA
$R_{th(j-c)}$ $R_{th(c-s)}$ T_{vj} T_{stg}	DSC 1) SSC 1) DSC / SSC 1)	5,2 10,5 3 / 6 -40...+180 -40...+180	K/kW K/kW K/kW °C °C
F a m	Mounting force (SI units) Mounting force (US units) approx.	39…48 8800…10800 5 * 9,81 215	kN lbf m/s² g
Case	Disc Ø75 x Ø57 x 8 mm	E36	

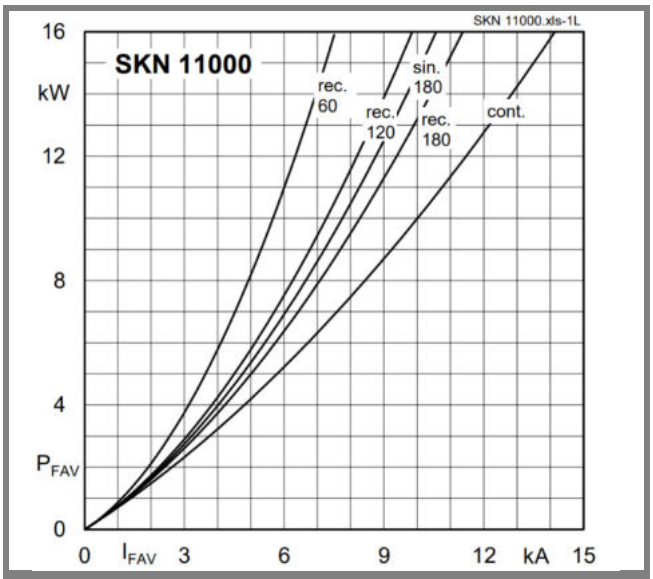


Fig. 1L Power dissipation vs. forward current

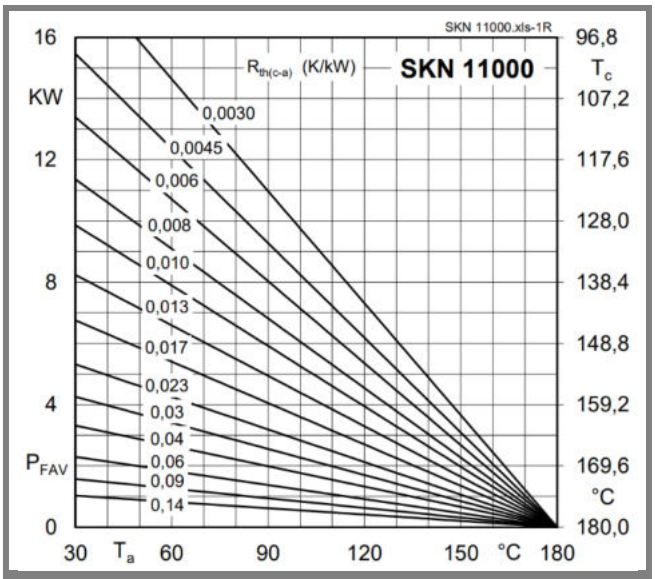


Fig. 1R Power dissipation vs. ambient temperature

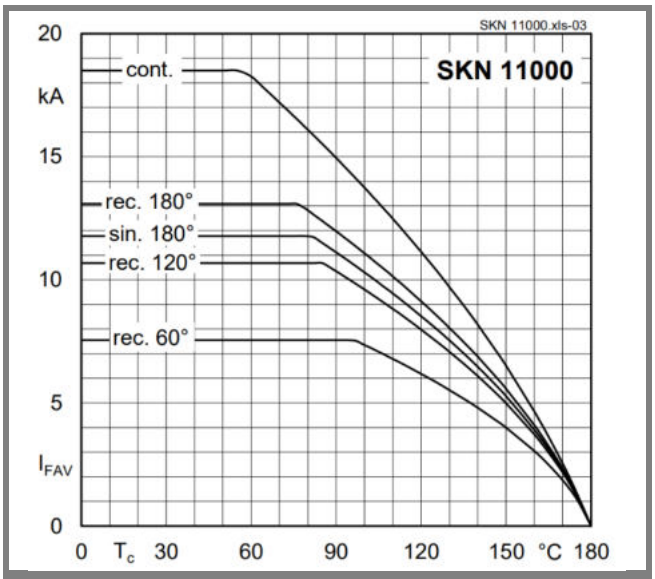


Fig. 3 Forward current vs. case temperature

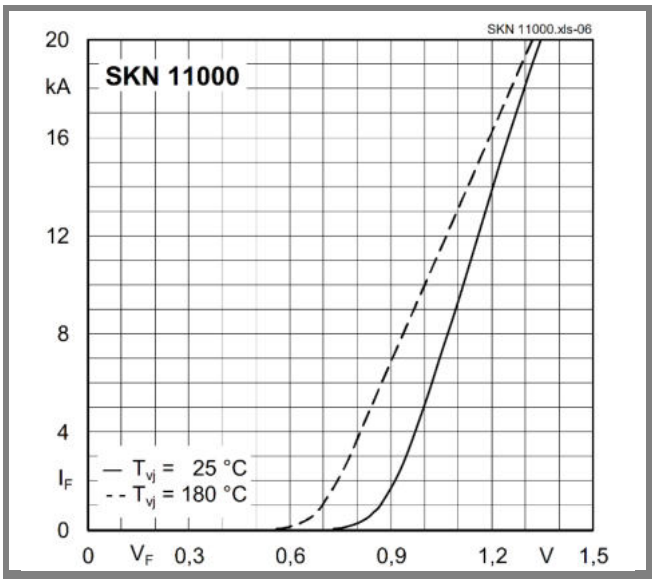


Fig. 6 Forward characteristics (maximum)

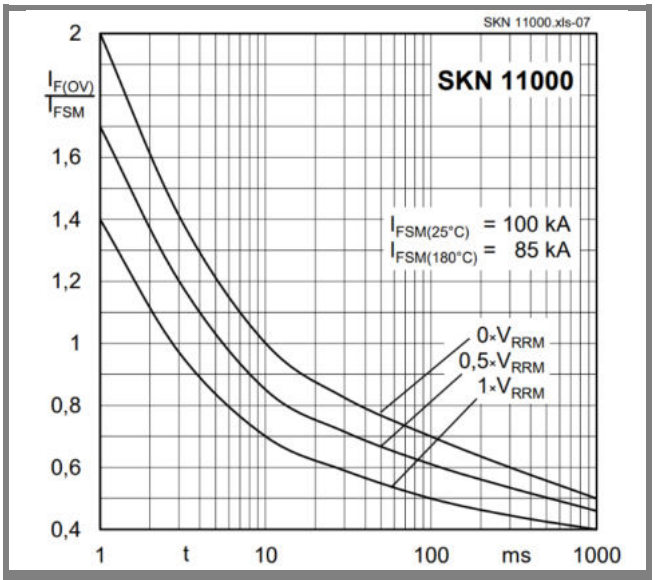
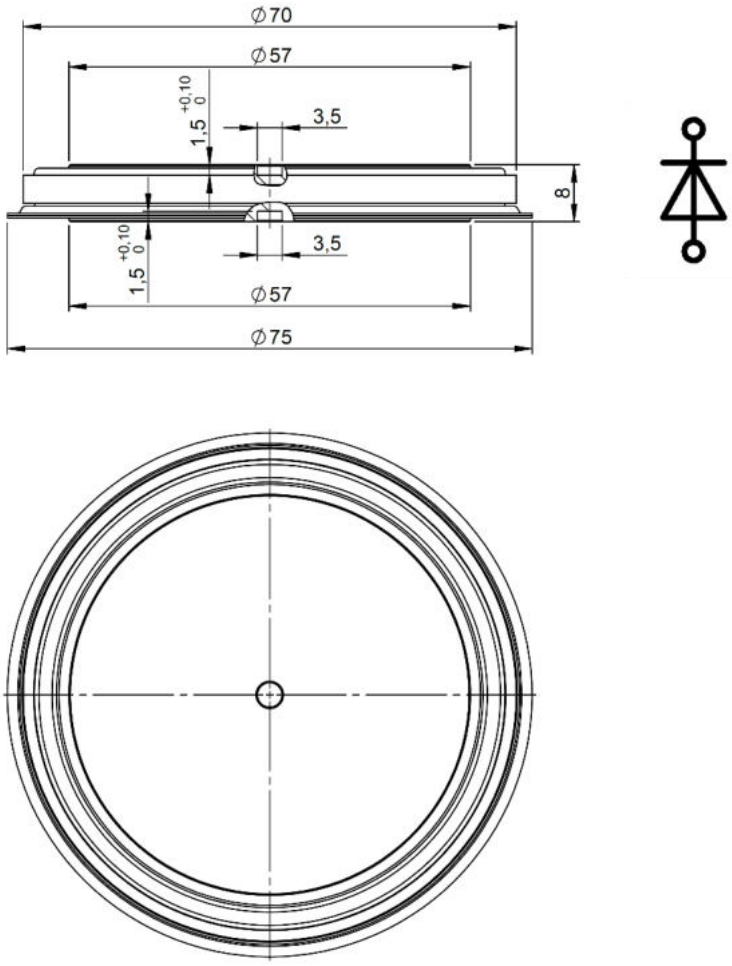


Fig. 7 Surge overload current vs. time

Dimensions in mm



Case E36

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