# SKN 7500



Caseless Disc Diode

## **Rectifier Diodes**

#### **SKN 7500**

#### **Features**

- High current diode in a slim package without external case
- Metal pressure contacts for double or single side cooling
- Reverse voltage of 600 V
- Low power dissipation and low thermal resistance
- Available in matched groups for paralleling

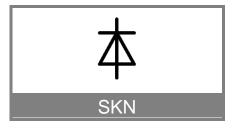
### **Typical Applications**

- Welding
- High current rectifiers
- Electroplating

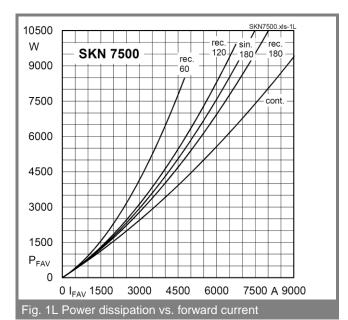
V <sub>RSM</sub>	V <sub>RRM</sub>	$I_{FRMS}$ = 11800 A (maximum value for cont. operation) $I_{FAV}$ = 7500 A (sin. 180; $T_c$ = 85°C)
600	600	SKN 7500/06

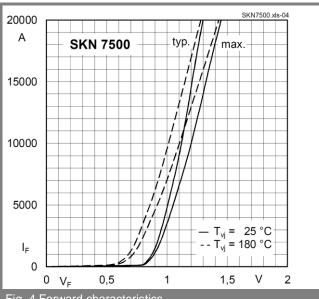
Symbol	Condition	Values	Units
I <sub>FAV</sub>	sin. 180 ; $T_c = 85  {}^{\circ}\text{C}$ sin. 180 ; $T_c = 100  {}^{\circ}\text{C}$	7500 6700	A A
Iғsм i²t	$\begin{split} T_{vj} &= 25^{\circ} \text{ C} \; ; \; 10 \text{ ms} \\ T_{vj} &= 180^{\circ} \text{ C} \; ; \; 10 \text{ ms} \\ T_{vj} &= 25^{\circ} \text{ C} \; ; \; 8,310 \text{ ms} \\ T_{vj} &= 180^{\circ} \text{ C} \; ; \; 8,310 \text{ ms} \end{split}$	60 50 18000 12500	kA kA kA <sup>2</sup> s kA <sup>2</sup> s
VF VF(TO) IT	$\begin{split} T_{vj} &= 25^{\circ} \text{ C, I}_F = 14 \text{ kA} \\ T_{vj} &= 180^{\circ} \text{ C} \\ T_{vj} &= 180^{\circ} \text{ C} \\ T_{vj} &= 25^{\circ} \text{ C; V}_R = V_{RRM} \\ T_{vj} &= 180^{\circ} \text{ C; V}_R = V_{RRM} \end{split}$	max. 1,30 max. 0,70 max. 0,038 max. 4 max. 100	V V mΩ mA mA
$R_{th(j\text{-c})}$ $R_{th(c\text{-s})}$ $T_{vj}$ $T_{stg}$	DSC <sup>1)</sup> SSC anode / SSC cathode <sup>1)</sup> DSC / SSC <sup>1)</sup>	9,0 12,4 / 33 5 / 10 -40+180 -40+180	K/kW K/kW K/kW °C °C
F	Mounting force ( SI units ) Mounting force ( US units )	24 30 54006750	kN lbs.
a m	approx.	5 * 9,81 78	m/s² g
Case	Disc Ø49,5 x 5,3 mm	E28	

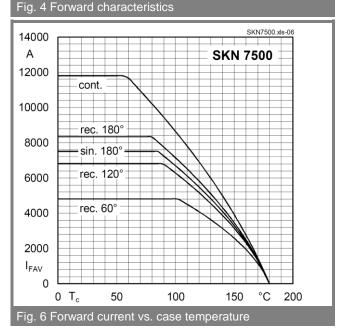
1) DSC = Double Side Cooling SSC = Single Side Cooling



## **SKN 7500**







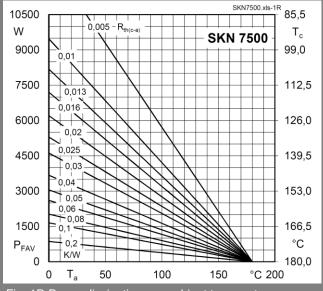


Fig. 1R Power dissipation vs. ambient temperature

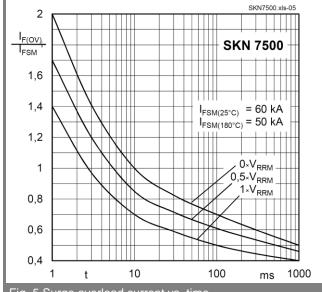
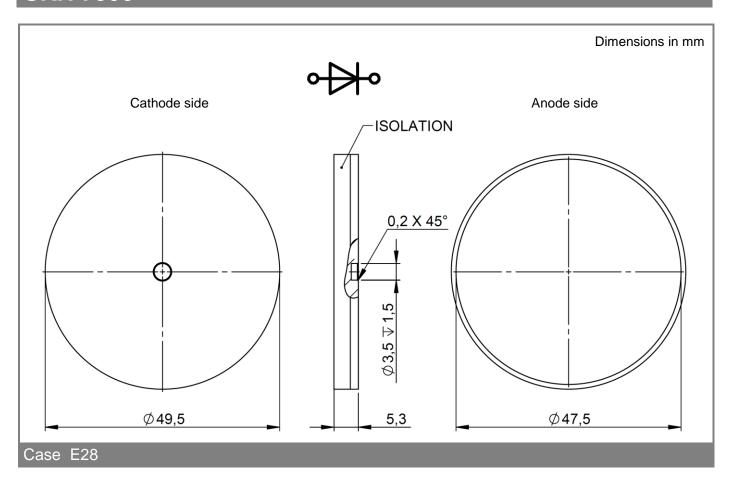


Fig. 5 Surge overload current vs. time



#### \*IMPORTANT INFORMATION AND WARNINGS

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