

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

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

V_{RSM} V	V_{RRM} V	$I_{FRMS} = 11800$ A (maximum value for cont. operation) $I_{FAV} = 7500$ A (sin. 180; $T_c = 85^\circ\text{C}$)
600	600	SKN 7500/06

Symbol	Condition	Values	Units
I_{FAV}	sin. 180 ; $T_c = 85^\circ\text{C}$ sin. 180 ; $T_c = 100^\circ\text{C}$	7500 6700	A A
I_{FSM}	$T_{vj} = 25^\circ\text{C}$; 10 ms $T_{vj} = 180^\circ\text{C}$; 10 ms	60 50	kA kA
i^2t	$T_{vj} = 25^\circ\text{C}$; 8,3...10 ms $T_{vj} = 180^\circ\text{C}$; 8,3...10 ms	18000 12500	kA^2s kA^2s
V_F	$T_{vj} = 25^\circ\text{C}$, $I_F = 14$ kA	max. 1,30	V
$V_{F(TO)}$	$T_{vj} = 180^\circ\text{C}$	max. 0,70	V
r_T	$T_{vj} = 180^\circ\text{C}$	max. 0,038	$\text{m}\Omega$
I_{RD}	$T_{vj} = 25^\circ\text{C}$; $V_R = V_{RRM}$ $T_{vj} = 180^\circ\text{C}$; $V_R = V_{RRM}$	max. 4 max. 100	mA mA
$R_{th(j-c)}$	DSC ¹⁾ SSC anode / SSC cathode ¹⁾	9,0 12,4 / 33	K/kW K/kW
$R_{th(c-s)}$	DSC / SSC ¹⁾	5 / 10	K/kW
T_{vj}		-40...+180	$^\circ\text{C}$
T_{stg}		-40...+180	$^\circ\text{C}$
F	Mounting force (SI units) Mounting force (US units)	24 ... 30 5400...6750	kN lbs.
a		5 * 9,81	m/s^2
m	approx.	78	g
Case	Disc $\varnothing 49,5 \times 5,3$ mm	E28	



SKN

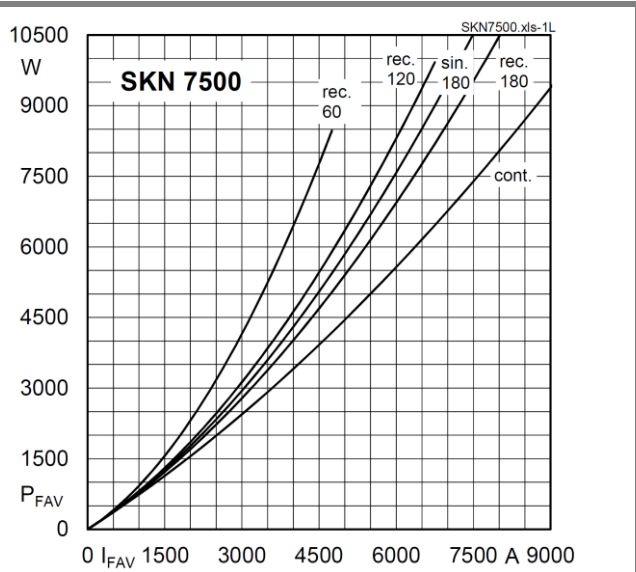


Fig. 1L Power dissipation vs. forward current

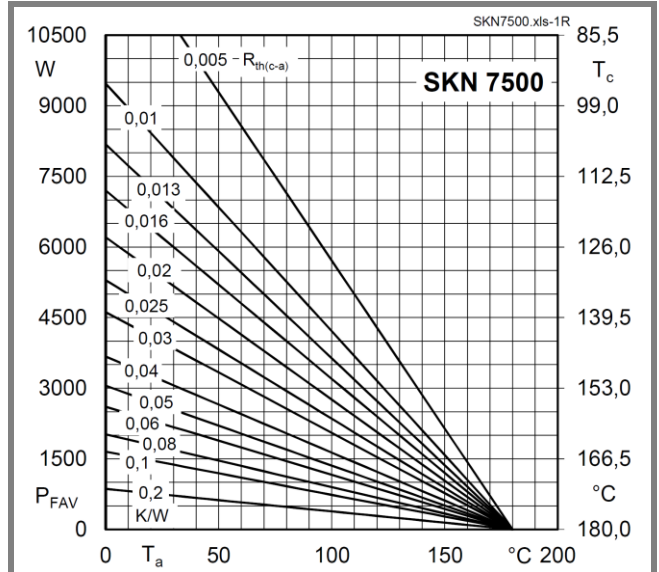


Fig. 1R Power dissipation vs. ambient temperature

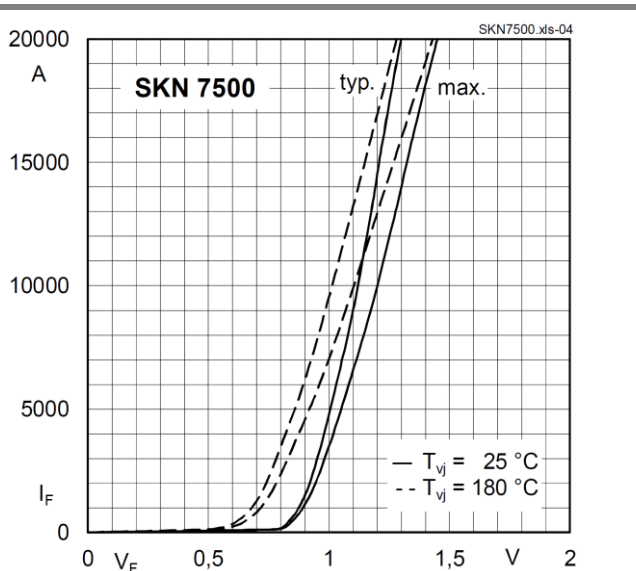


Fig. 4 Forward characteristics

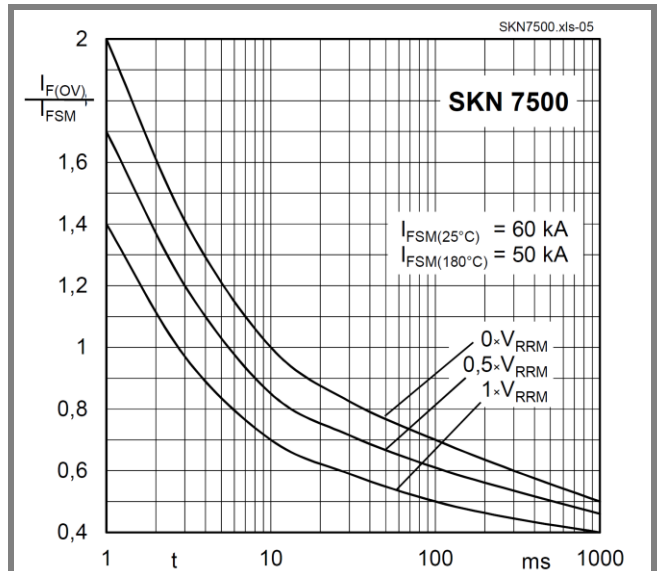


Fig. 5 Surge overload current vs. time

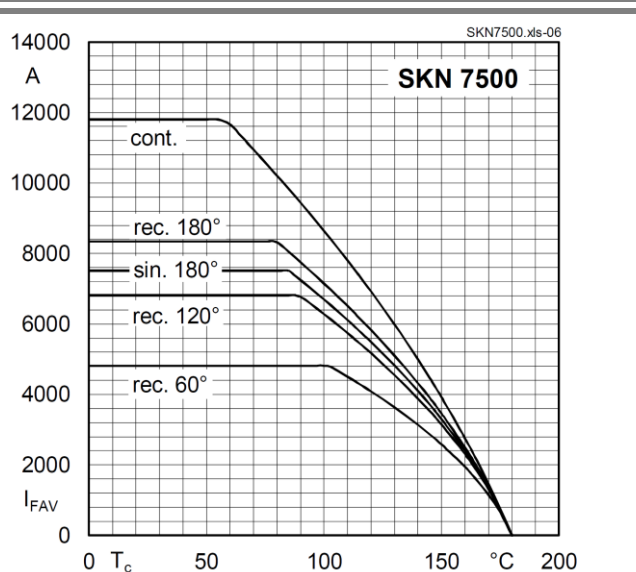
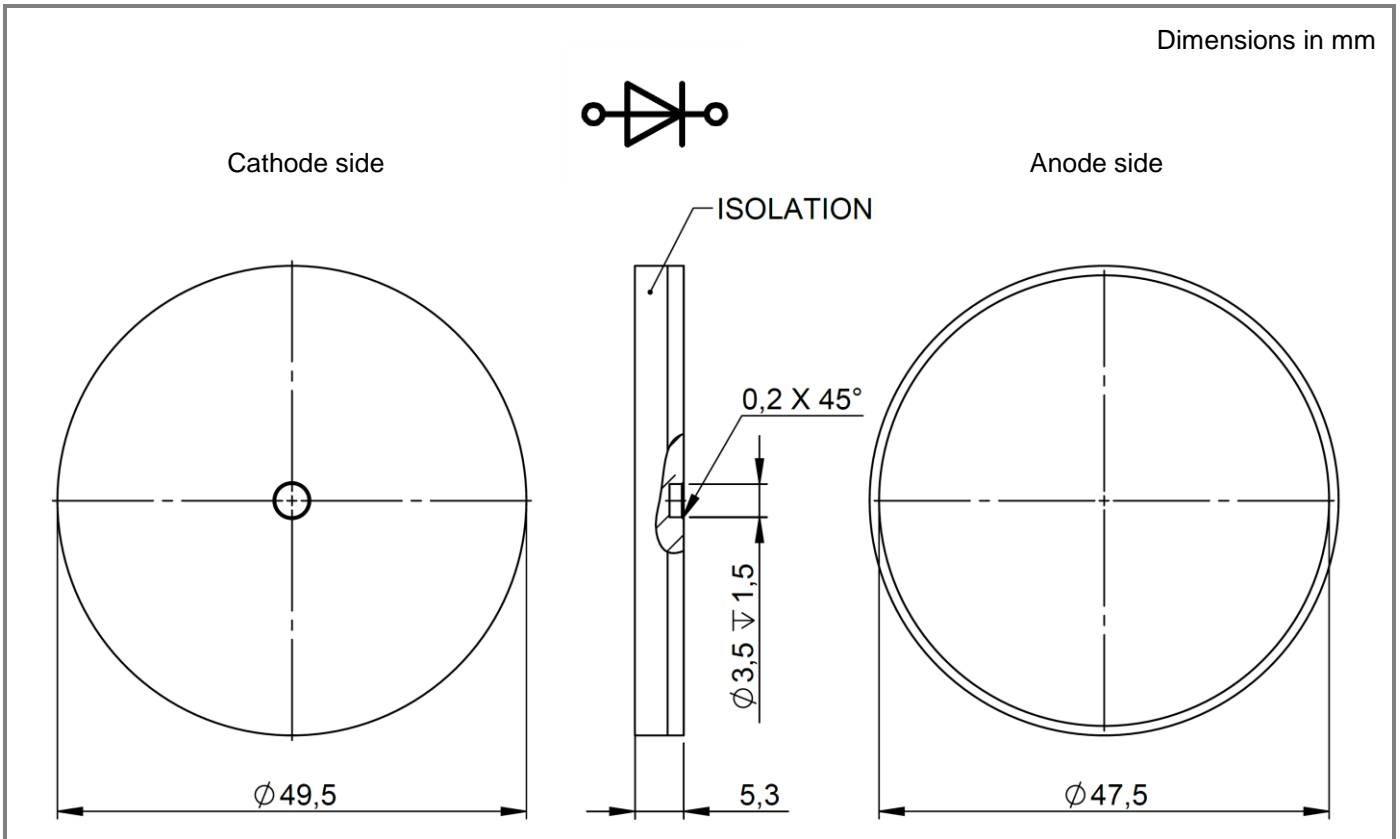


Fig. 6 Forward current vs. case temperature



Case E28

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