V_{RSM} V_{RRM}	I_{FAV} (sin. 180; T_{case} = ...)	
V	4000 A (50 °C)	6000 A (85 °C)
200	**SKN 4000/02**	**SKN 6000/02**
400	**SKN 4000/04**	**SKN 6000/04**
600	**SKN 4000/06**	**SKN 6000/06**

Symbol	Conditions	SKN 4000	SKN 6000	Units
I_{FAV}	sin. 180; T_{case} = 50 °C; DSC[1)]	4 000		A
	85 °C; DSC[1)]	3 200	6 000	A
	100 °C; DSC[1)]	2 740	5 400	A
I_{FSM}	T_{vj} = 25 °C; 10 ms	60		kA
	T_{vj} = 180 °C; 10 ms	50		kA
i^2t	T_{vj} = 25 °C; 8,3 ... 10 ms	18 000		kA^2s
	T_{vj} = 180 °C; 8,3 ... 10 ms	12 500		kA^2s
I_R	T_{vj} = 25 °C; V_R = V_{RRM}	4		mA
	T_{vj} = 180 °C; V_R = V_{RRM}	100		mA
V_F	T_{vj} = 25 °C; I_F = 14 kA; max.	1,3 [2)]		V
$V_{(TO)}$	T_{vj} = 180 °C	0,7		V
r_T	T_{vj} = 180 °C	0,04		mΩ
R_{thjc}	DSC[1)]	0,030	0,012	°C/W
	SSC[1)]	0,060	0,024	°C/W
R_{thch}	DSC[1)]	0,005		°C/W
	SSC[1)]	0,010		°C/W
T_{vj}		– 40 ... + 180		°C
T_{stg}		– 40 ... + 150		°C
F	SI units	24 ... 30		kN
	US units	5400 ... 6750		lbs.
w		129	130	g
Case		E 35		

Rectifier Diodes

SKN 4000
SKN 6000

Features

- Capsule type metal-ceramic packages with precious metal pressure contacts
- Medium voltage, high current rectifier diodes with slim package for lowest thermal resistance. Low power dissipation. Especially suited for water cooling. Forward selections for paralleling available

Typical Applications

- Welding
- Electroplating

[1)] DSC = double sided cooling
SSC = single sided cooling
[2)] For parallel connections selected devices are available on request

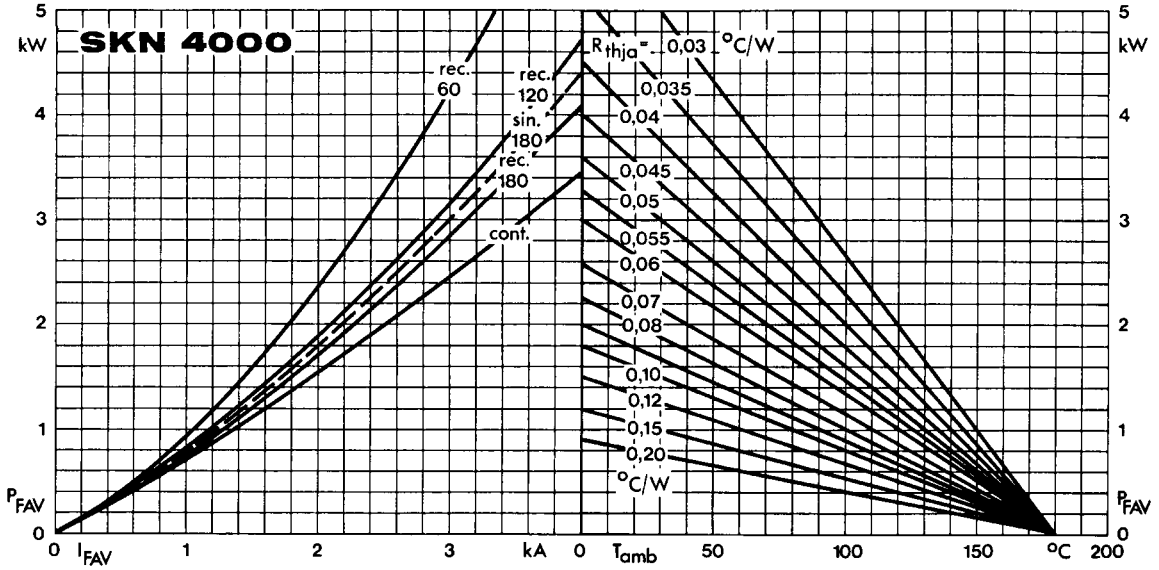


Fig. 2 a Power dissipation vs. forward current and ambient temperature

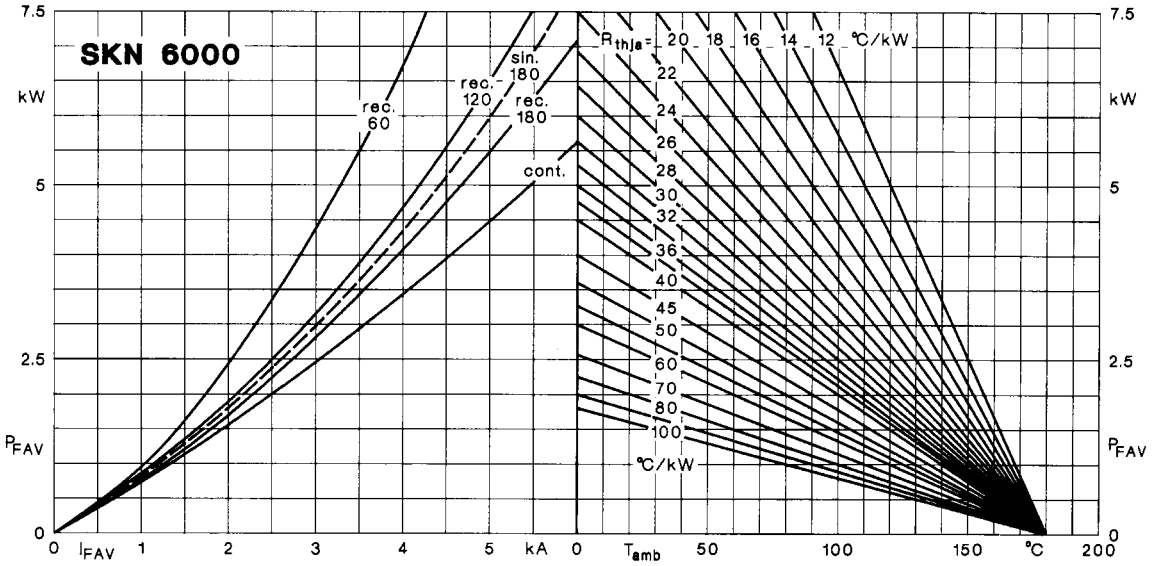


Fig. 2 b Power dissipation vs. forward current and ambient temperature

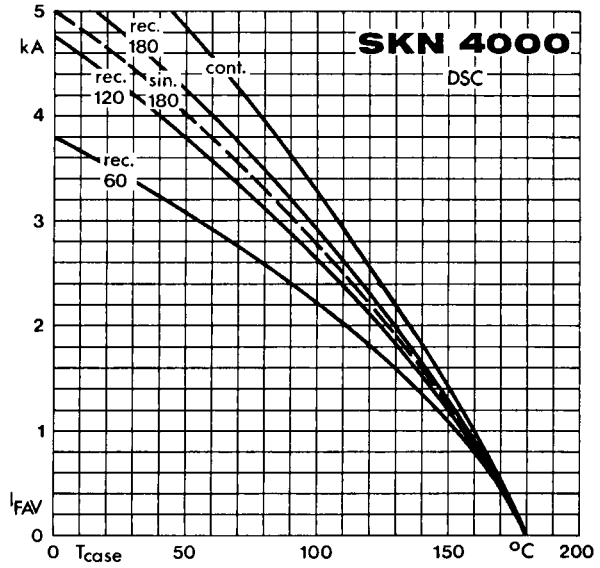


Fig. 3 a Rated forward current vs. case temperature

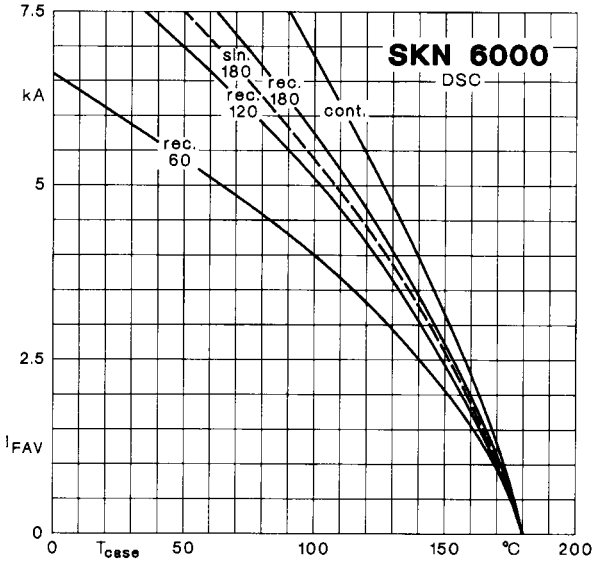


Fig. 3 b Rated forward current vs. case temperature

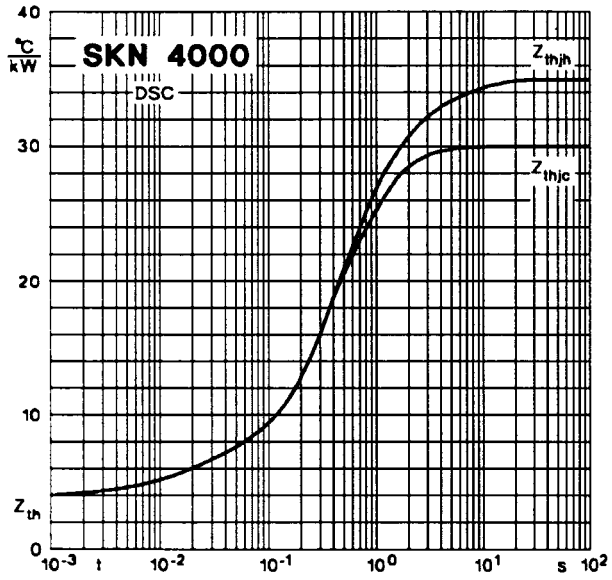


Fig. 5 a Transient thermal impedance vs. time

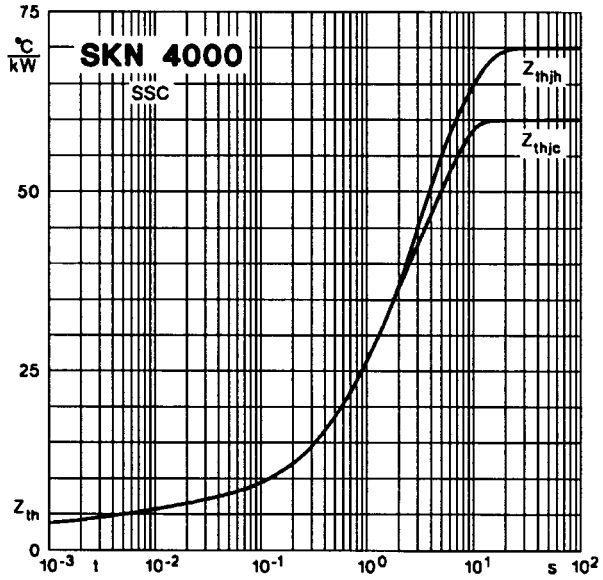


Fig. 5 b Transient thermal impedance vs. time

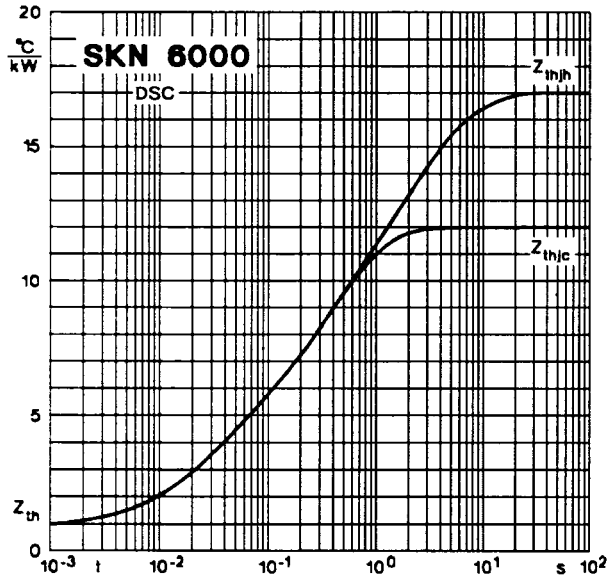


Fig. 5 c Transient thermal impedance vs. time

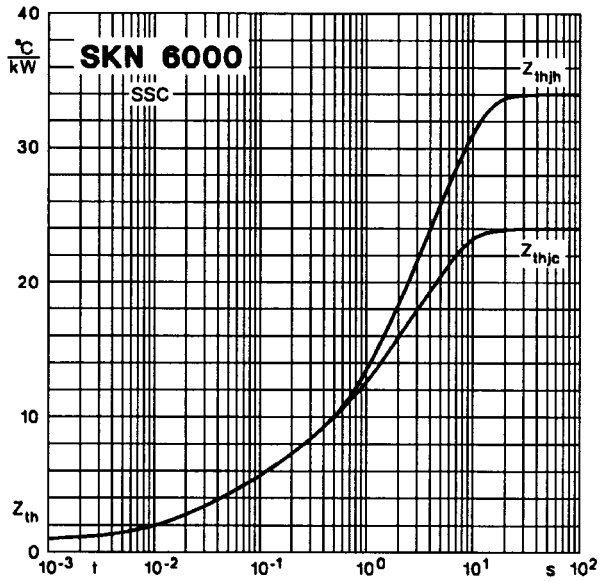


Fig. 5 d Transient thermal impedance vs. time

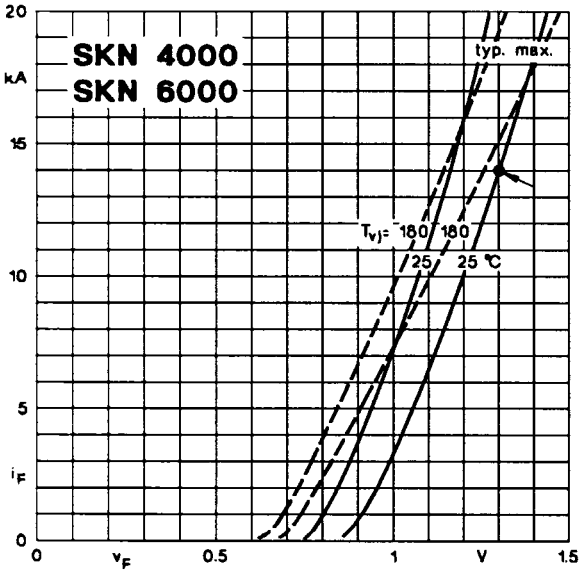


Fig. 6 Forward characteristics

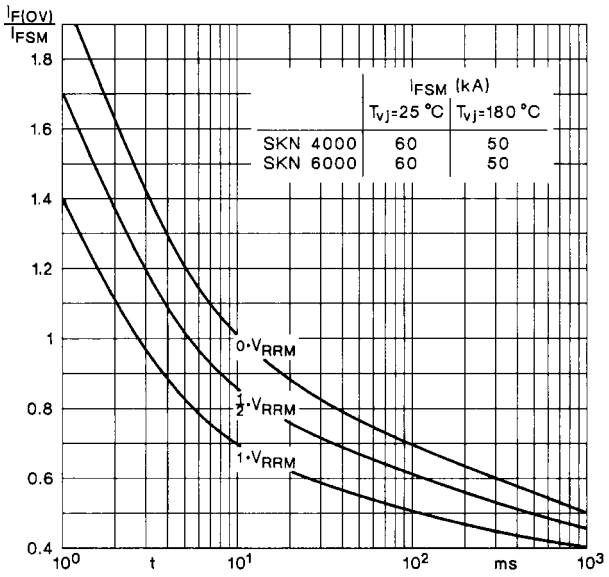


Fig. 7 Surge overload current vs. time

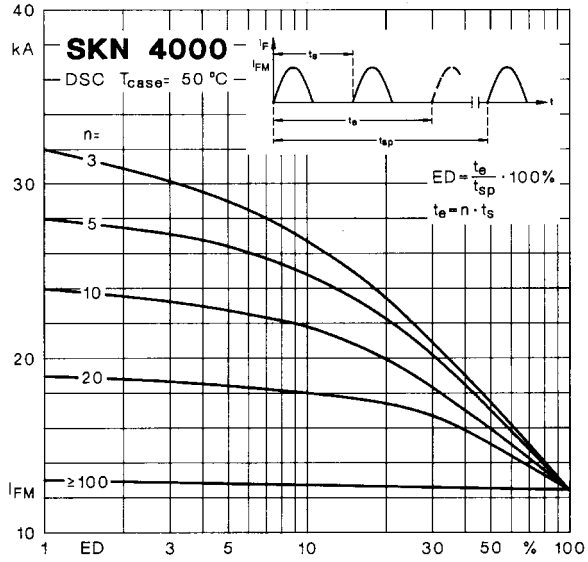


Fig. 12 a Rated peak forward current vs. duty cycle

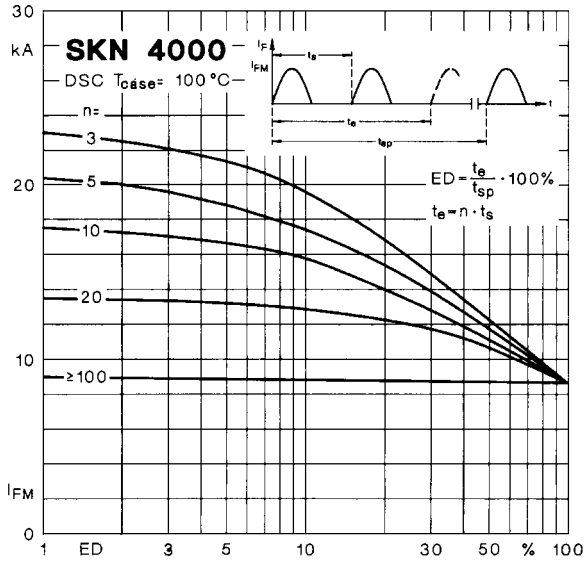


Fig. 12 b Rated peak forward current vs. duty cycle

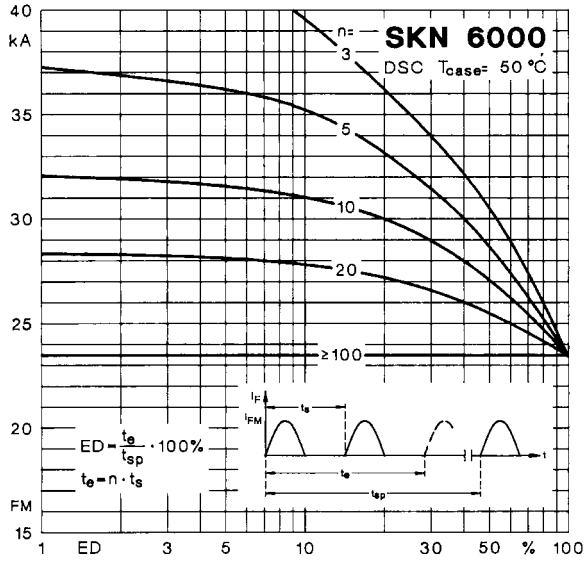


Fig. 12 c Rated peak forward current vs. duty cycle

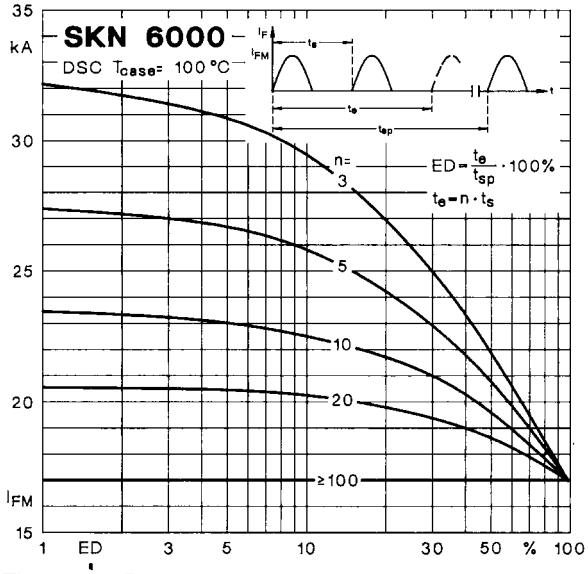


Fig. 12 d Rated peak forward current vs. duty cycle

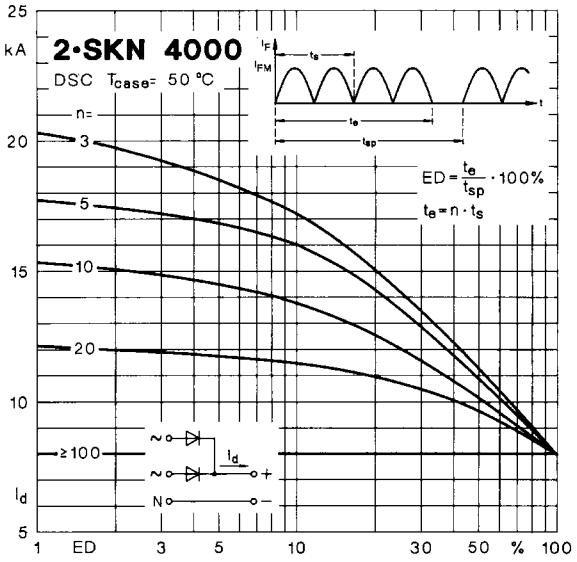


Fig. 13 a Rated direct output current vs. duty cycle

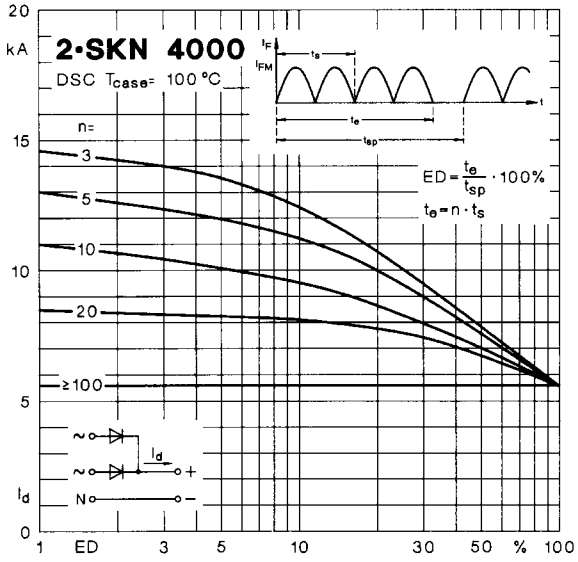


Fig. 13 b Rated direct current vs. duty cycle

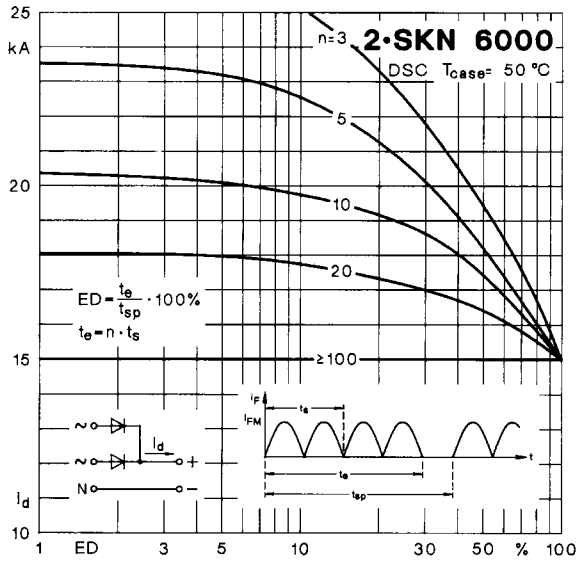


Fig. 13 c Rated direct output current vs. duty cycle

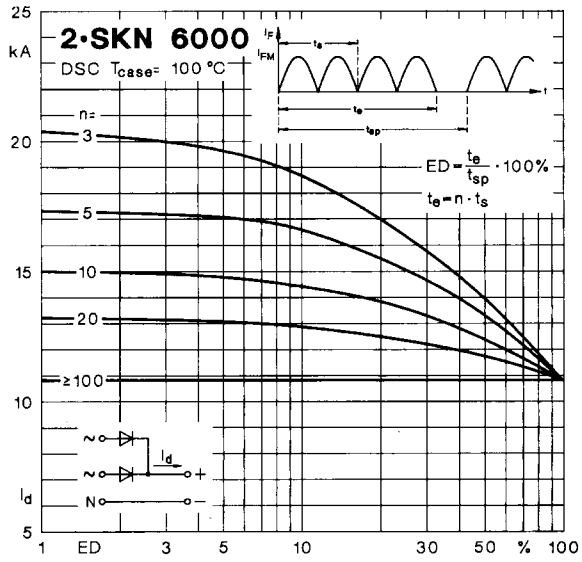
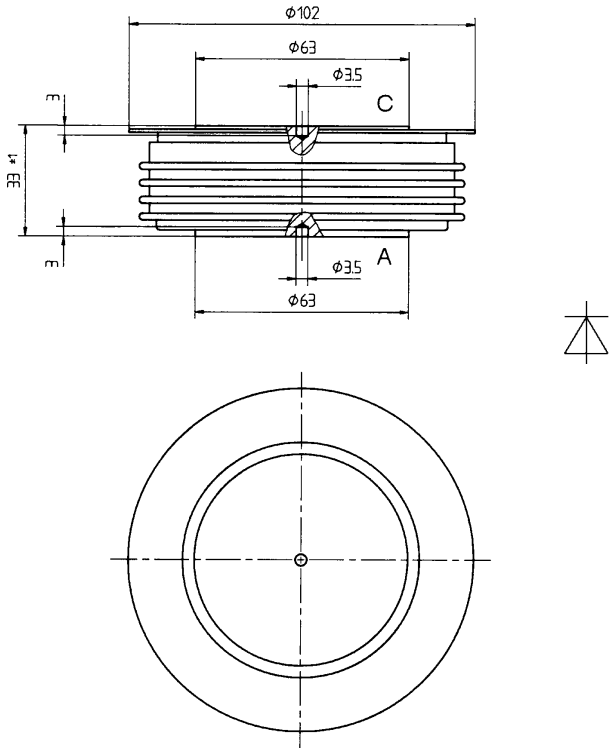


Fig. 13 d Rated direct current vs. duty cycle

SKN 3000
SKN 3400

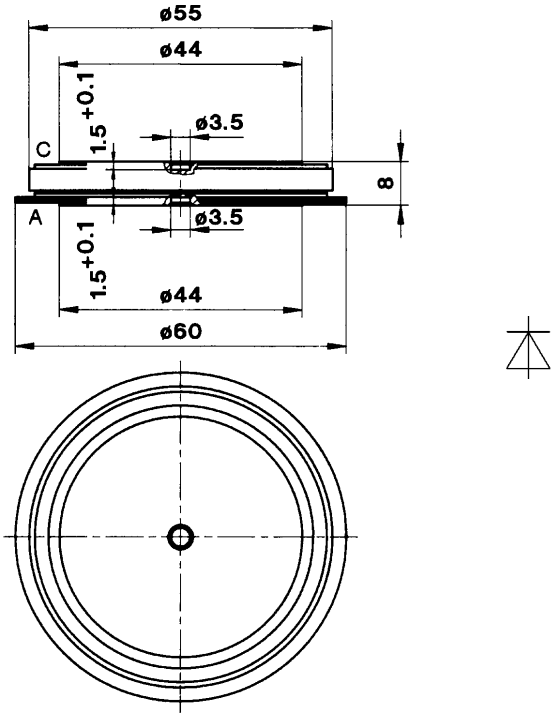
Case E 37



Dimensions in mm

SKN 4000
SKN 6000

Case E 35



Dimensions in mm