V_{RSM} V_{RRM} V	I_{FAV} (sin. 180; T_{case} = 75 °C) 1550 A	2000 A
400	**SKN 1500/04**	–
600	–	**SKN 2000/06**
1200	**SKN 1500/12**	**SKN 2000/12**
1600	**SKN 1500/16**	**SKN 2000/16**
2000	**SKN 1500/20**	**SKN 2000/20**
2400	**SKN 1500/24**	**SKN 2000/24**
2900	**SKN 1500/29**	–

Rectifier Diodes

SKN 1500
SKN 2000

Symbol	Conditions	SKN 1500	SKN 2000
I_{FAV}	sin.180; T_{case} = 75 °C;DSC[1)]	1550 A	2000 A
I_{FSM}	T_{vj} = 25 °C; 10 ms T_{vj} =175 °C; 10 ms	19 kA 16 kA	30 kA 25 kA
i^2t	T_{vj} = 25 °C; 8,3 ... 10 ms T_{vj} =175 °C; 8,3 ... 10 ms	1800 kA^2s 1280 kA^2s	4500 kA^2s 3120 kA^2s
I_R	T_{vj} =175 °C;V_R = V_{RRM}	50 mA	50 mA
V_F	T_{vj} = 25 °C; (I_F = . . .); max.	1,3 V (1800 A)	1,3 V (3400 A)
$V_{(TO)}$ r_T	T_{vj} = 175 °C T_{vj} = 175 °C	0,85 V 0,25 mΩ	0,85 V 0,15 mΩ
R_{thjc}	DSC[1)] SSC[1)]	0,033 °C/W 0,066 °C/W	0,025 °C/W 0,050 °C/W
R_{thch}	DSC[1)] SSC[1)]	0,007 °C/W 0,014 °C/W	0,005 °C/W 0,010 °C/W
T_{vj} T_{stg}		–40 ...+ 175 °C –40 ...+ 200 °C	
F	SI units US units	12 ... 13,5 kN 2700 ... 3040 lbs.	17,5 ... 20 kN 3950 ... 4500 lbs.
w		300 g	530 g
Case		E 20	E 21

Features

- Capsule type metal-ceramic packages with precious metal pressure contacts
- High voltage grades available

Typical Applications

- All-purpose high power rectifier diodes
- Industrial high power drives and medium traction applications

[1)] DSC = Double sided cooling; SSC = Single sided cooling

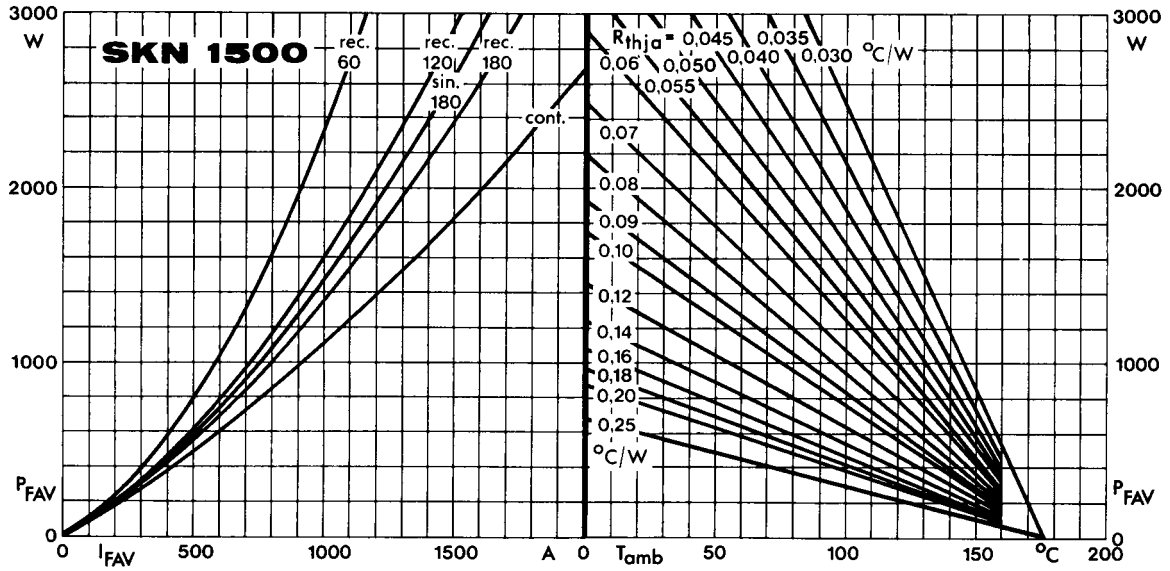


Fig. 2 a Power dissipation vs. forward current and ambient temperature

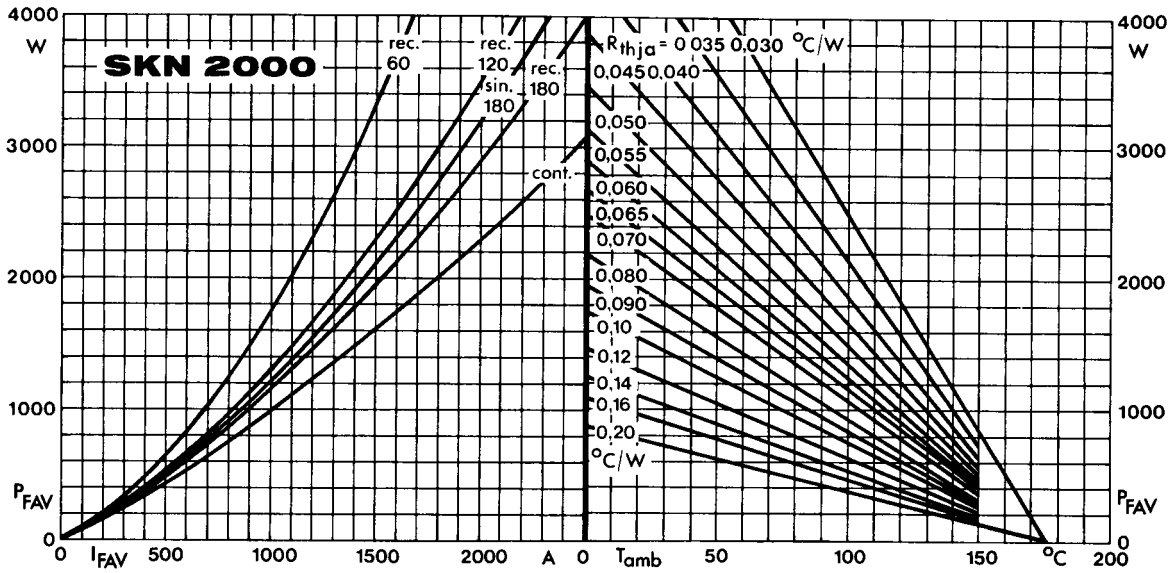


Fig. 2 b Power dissipation vs. forward current and ambient temperature

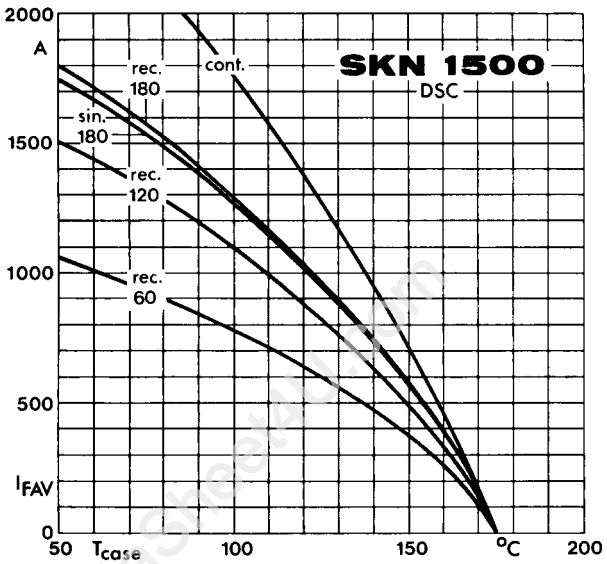


Fig. 3 a Rated forward current vs. case temperature

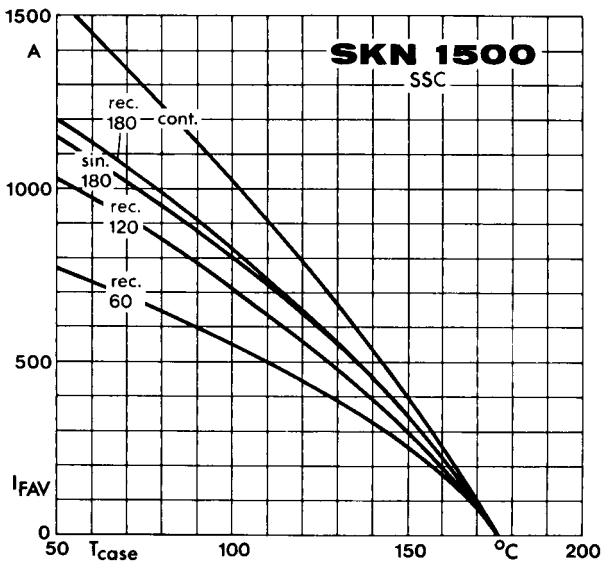


Fig. 3 b Rated forward current vs. case temperature

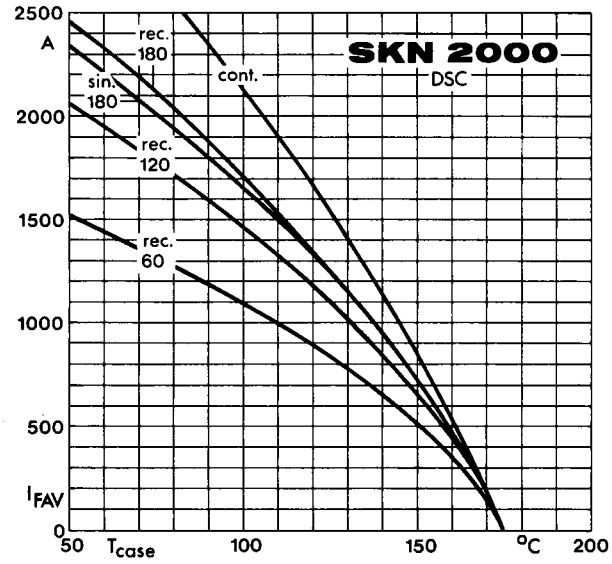


Fig. 3 c Rated forward current vs. case temperature

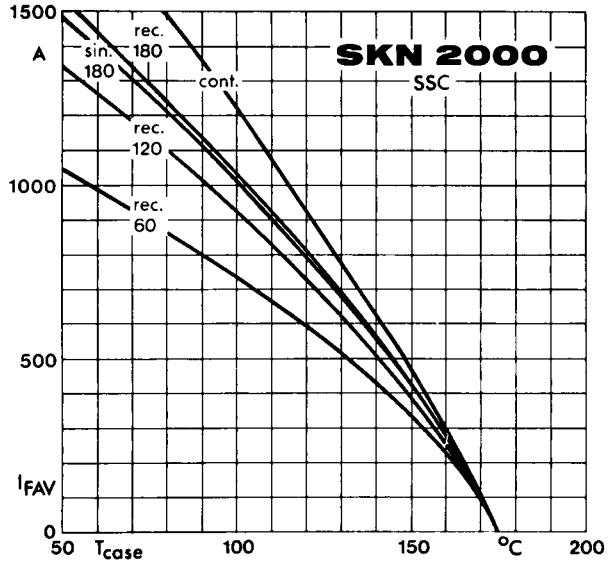


Fig. 3 d Rated forward current vs. case temperature

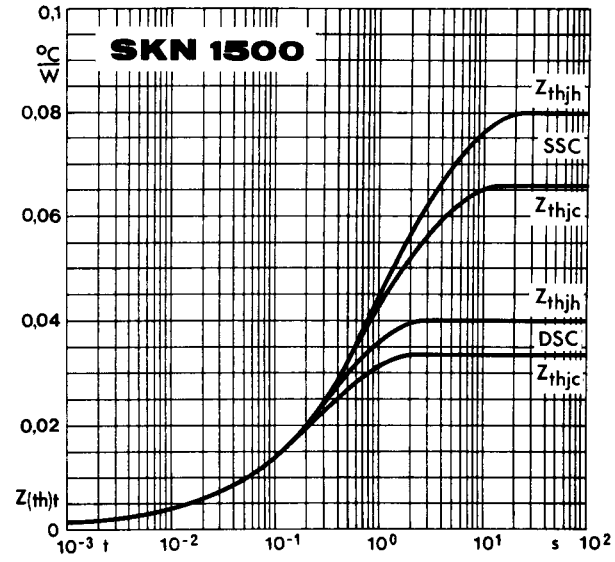


Fig. 5 a Transient thermal impedance vs. time

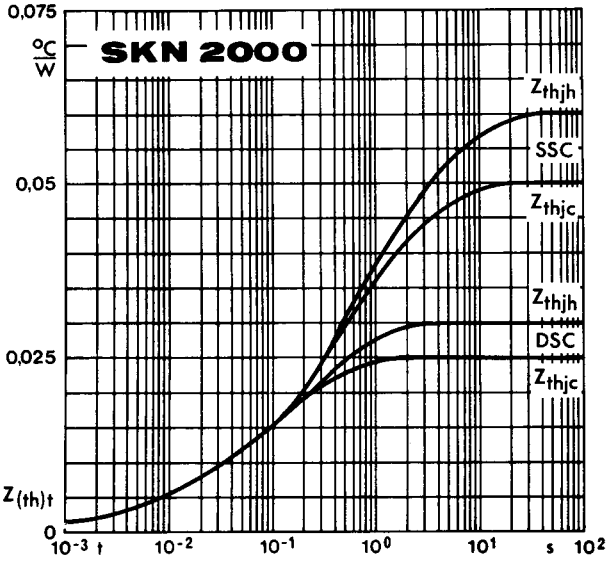


Fig. 5 b Transient thermal impedance vs. time

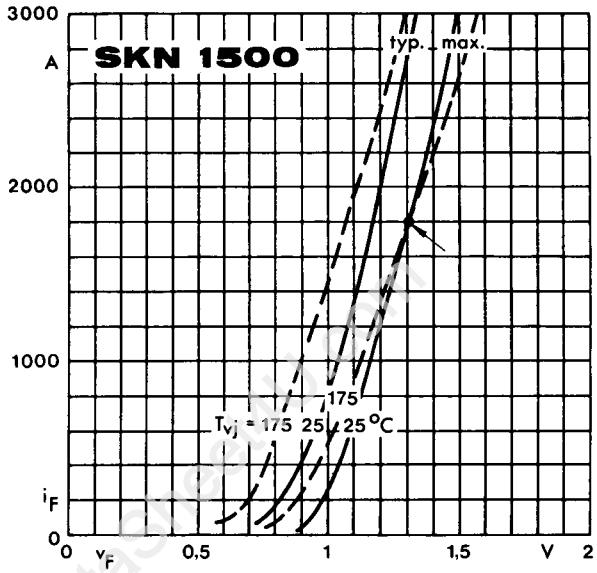


Fig. 6 a Forward characteristics

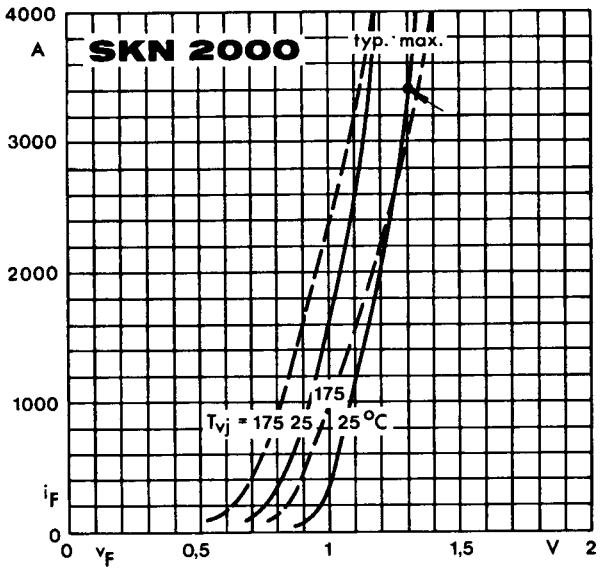


Fig. 6 b Forward characteristics

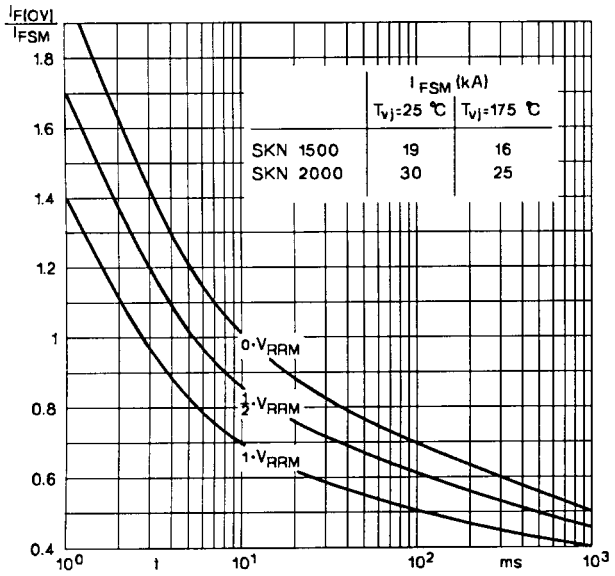
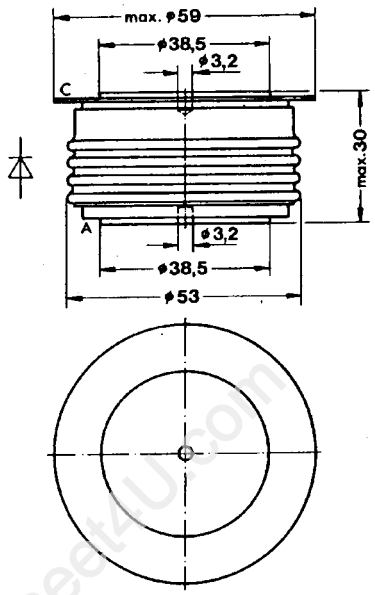


Fig. 7 Surge overload current vs. time

SKN 1500

Case E 20

JEDEC:
DO-200 AB

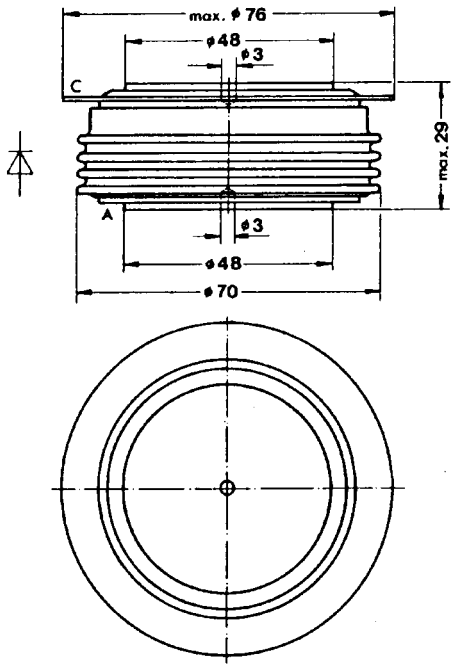


Dimensions in mm

SKN 2000

Case E 21

JEDEC:
DO-200 AC



Dimensions in mm