V_{RSM} V_{RRM}	I_{FRMS} (maximum values for continuous operation) 80 A		150 A			
	I_{FAV} (sin. 180; T_{case} = . . .) 50 A (118 °C)		95 A (100 °C)			
V						
200	SKN45/02	SKR45/02	SKN70/02	SKR70/02	SKN71/02*	SKR71/02*
400	SKN45/04	SKR45/04	SKN70/04	SKR70/04	SKN71/04*	SKR71/04*
800	SKN45/08	SKR45/08	SKN70/08	SKR70/08	SKN71/08*	SKR71/08*
1200	SKN45/12	SKR45/12	SKN70/12	SKR70/12	SKN71/12*	SKR71/12*
1400	SKN45/14	SKR45/14	SKN70/14	SKR70/14	SKN71/14	SKR71/14*
1600	SKN45/16	SKR45/16	SKN70/16	SKR70/16	SKN71/16*	SKR71/16*

Symbol	Conditions	SKN 45 SKR 45	SKN 70 SKR 70	SKN 71 SKR 71
I_{FAV}	sin. 180; T_{case} = 100 °C		95 A	
	= 118 °C	50 A		
	= 125 °C	45 A	70 A	
I_{FSM}	T_{vj} = 25 °C; 10 ms	700 A	1150 A	
	T_{vj} = 180 °C; 10 ms	600 A	1000 A	
i^2t	T_{vj} = 25 °C; 8,3 ... 10 ms	2500 A^2s	6600 A^2s	
	T_{vj} = 180 °C; 8,3 ... 10 ms	1800 A^2s	5000 A^2s	
Q_{rr}	T_{vj} = 160 °C; $-\frac{di_F}{dt} = 10\frac{A}{\mu s}$	typ. 70 µC	typ. 70 µC	
I_R	T_{vj} = 25 °C; $V_R = V_{RRM}$	0,6 mA	0,6 mA	
	T_{vj} = 180 °C; $V_R = V_{RRM}$	10 mA	10 mA	
V_F	T_{vj} = 25 °C; (I_F = . . .); max.	1,6 V (150 A)	1,5 V (200 A)	
$V_{(TO)}$	T_{vj} = 180 °C	0,85 V	0,85 V	
r_T	T_{vj} = 180 °C	5 mΩ	3 mΩ	
R_{thjc}		0,85 °C/W	0,55 °C/W	
R_{thch}		0,25 °C/W	0,2 °C/W	
T_{vj}		– 40 ... + 180 °C		
T_{stg}		– 55 ... + 180 °C		
M	M 8 / 1/4-28 UNF 2 A (SI units / US units)	4 Nm/35 lb. in.		
		2,5 Nm/22 lb. in.		
a		5 · 9,81 m/s^2		
w	approx.	30 g		
RC	(P_R = . . .)	0,1 µ +100 Ω (1 W)	0,1 µF +100 Ω (2 W)	
R_p	P_R = 6 W	80 kΩ	80 kΩ	
Case		E 12	E 12	E 11

Rectifier Diodes

SKN 45 SKR 45
SKN 70 SKR 70
SKN 71 SKR 71

Features

- Reverse voltages up to 1600 V
- Hermetic metal cases with glass insulators
- Threaded studs ISO M8 (SKN/R 71 also 1/4-28 UNF)
- **SKN**: anode to stud
  SKR: cathode to stud

Typical Applications

- All-purpose mean power rectifier diodes
- Cooling via heatsinks
- Non-controllable and half-controllable rectifiers
- Free-wheeling diodes

* available with UNF thread 1/4-28 UNF 2 A; e.g. SKN 71/02 UNF

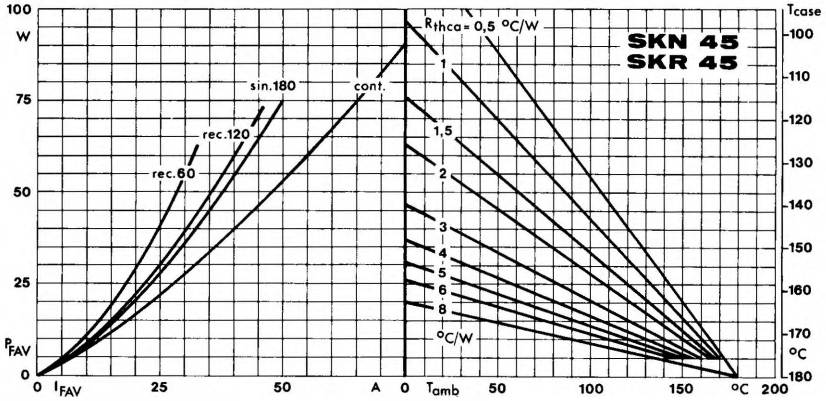


Fig. 1 a Power dissipation vs. forward current and case temperature

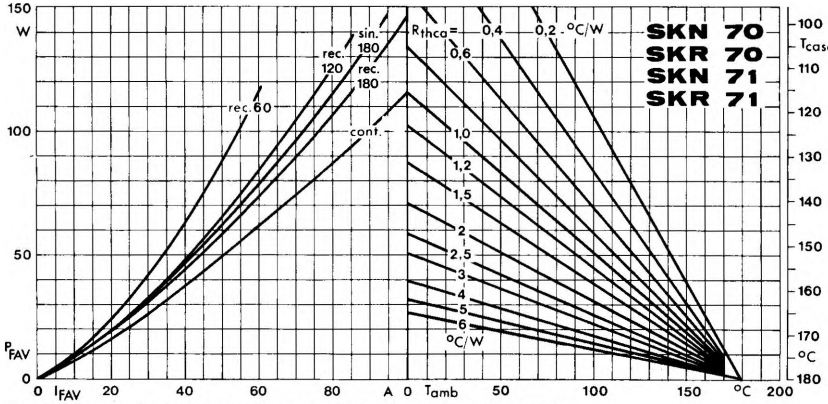


Fig. 1 b Power dissipation vs. forward current and case temperature

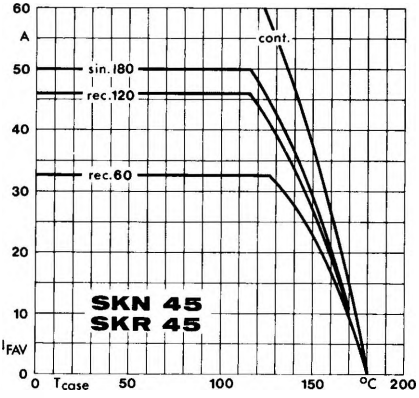


Fig. 3 a Rated forward current vs. case temperature

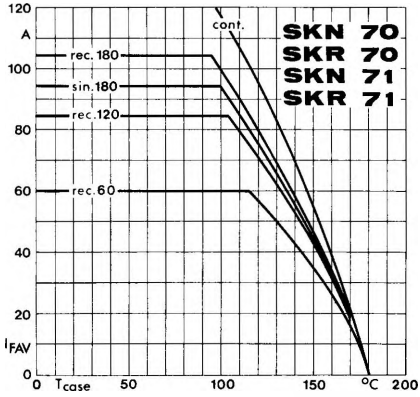


Fig. 3 b Rated forward current vs. case temperature

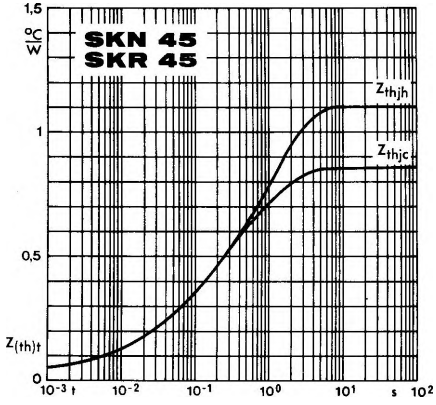


Fig. 5 a Transient thermal impedance vs. time

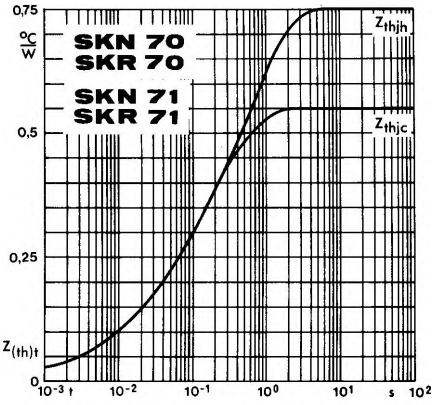


Fig. 5 b Transient thermal impedance vs. time

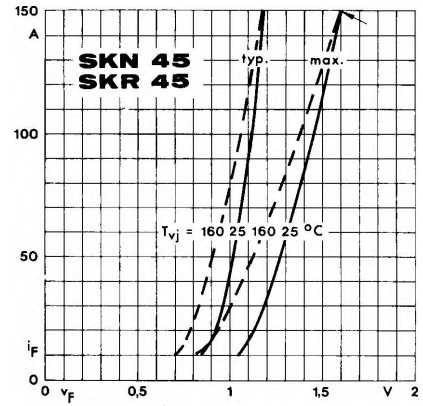


Fig. 6 a Forward characteristics

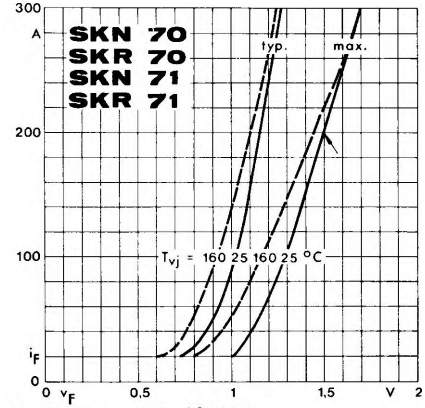


Fig. 6 b Forward characteristics

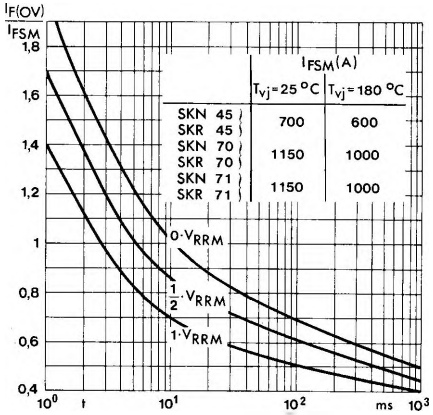
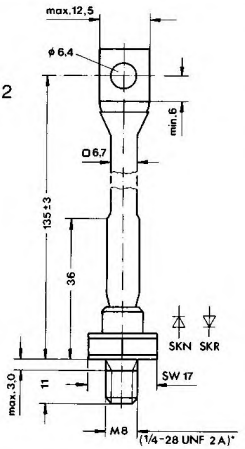


Fig. 7 Surge overload current vs. time

SKN 45, SKR 45
SKN 70, SKR 70

Case E 12

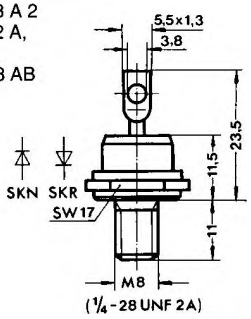
IEC: A 16 U; A 17 M B 2
DIN 41 886: 103 A 2
BS 3934: SO-32 A,
SO-32 B



SKN 71
SKR 71

Case E 11

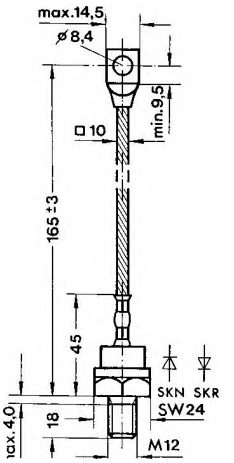
IEC: A 16 U; A 17 M B 2
DIN 41 886: 103 A 2
BS 3934: SO-32 A,
SO-32 B
JEDEC: DO-203 AB
(DO-5)



SKN 100
SKR 100

Case E 13

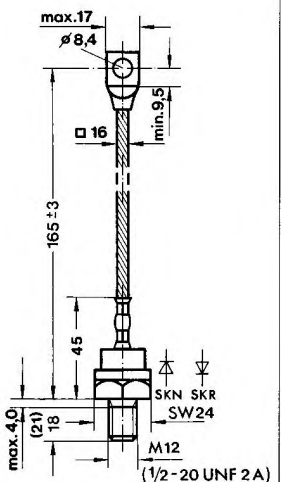
IEC: A 9 MA[1)]
DIN 41 887: 105 B 2[1)]
BS 3934: SO-29 B
JEDEC: DO-205 AC



SKN 130
SKR 130

Case E 14

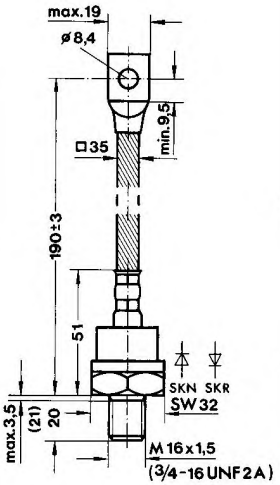
IEC: A 9 MA[1)]
DIN 41 887: 105 B 2[1)]
BS 3934: SO-29 B
JEDEC: DO-205 AC
(DO-30)[2)]



SKN 240
SKR 240

Case E 15

IEC: A 15 M
DIN 41 887: 106 B 2
BS 3934: SO-42
JEDEC: DO-205 AB
(DO-9)



[1)] modified
[2)] available with thread 1/2-20 UNF 2 A or 3/8-28 UNF 2 A

Dimensions in mm