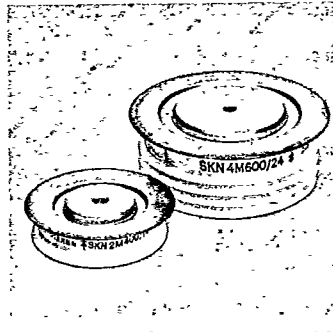


T-03-23

V _{RSM} V _{RRM} V	I _{FAV} (sin. 180; T _{case} = 85 °C)	
	400 A	700 A
800	SKN 2 M 400/08	—
1000	SKN 2 M 400/10	—
1200	SKN 2 M 400/12	SKN 4 M 600/12
1400	SKN 2 M 400/14	SKN 4 M 600/14
1500	SKN 2 M 400/15	—
1600	—	SKN 4 M 600/16
1800	—	SKN 4 M 600/18
2000	—	SKN 4 M 600/20
2200	—	SKN 4 M 600/22
2400	—	SKN 4 M 600/24

Fast Recovery Rectifier Diodes

SKN 2 M 400
SKN 4 M 600



Symbol	Conditions	SKN 2 M 400	SKN 4 M 600	Units
I _{FAV}	sin. 180; DSC (T _{case} = ...); 2000 Hz	400 (85 °C)	600 (95 °C)	A
	sin. 180; R _{thja} = 0,05 °C/W; T _{amb} = 35 °C; DSC	410	525	A
I _{FSM}	T _{vj} = 25 °C	7000	10 000	A
	T _{vj} = 140 °C	6000	9000	A
i _{2t}	T _{vj} = 25 °C	245 000	500 000	A ² s
	T _{vj} = 140 °C	180 000	405 000	A ² s
Q _{rr}	T _{vj} = 140 °C; I _{FM} = 500 A; -dI _F /dt = 100 A/μs	130	470	μC
I _{RM}	T _{vj} = 140 °C; I _{FM} = 500 A; -dI _F /dt = 100 A/μs	125	210	A
I _R	T _{vj} = 25 °C; V _R = V _{RRM}	4	10	mA
	T _{vj} = 140 °C; V _R = V _{RRM}	100	200	mA
t _{rr}	T _{vj} = 25 °C; I _{FM} = 400 A; -dI _F /dt = 50 A/μs	max. 2	max. 4	μs
V _F	T _{vj} = 25 °C; (I _F = ...); max.	1,95 (1300 A)	3,0 (3000 A)	V
V _(TO)	T _{vj} = 140 °C	1,25	1,35	V
r _T	T _{vj} = 140 °C	0,5	0,6	mΩ
R _{thjc} R _{thch}	DSC/SSC (Double-sided cooling/ single-sided cooling)	0,075/0,15 0,02/0,04	0,033/0,066 0,007/0,014	°C/W °C/W
T _{vj}		-40 ... + 140		°C
T _{stg}		-40 ... + 140		°C
F		4...5	13,5...16,5	kN
w	SI units	900...1100	3000...3500	lbs.
	US units	51	230	g
Case		E18	E19	

Features

- Small recovered charge
- Soft recovery
- Up to 2400 V reverse voltage
- Hermetic capsule type metal cases with ceramic insulators

Typical Applications

- Inverse diodes for GTO and asymmetric thyristors
- Inverters and choppers
- A. C. motor control
- Uninterruptible power supplies

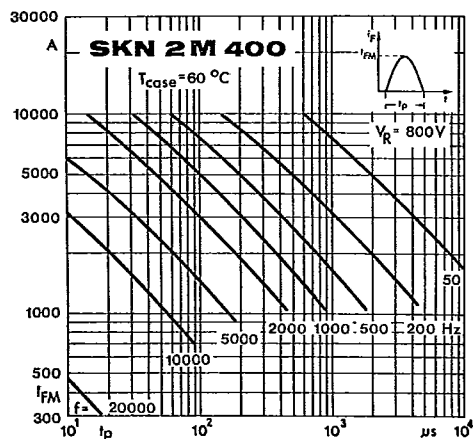


Fig. 1 a Rated sinusoidal peak forward current

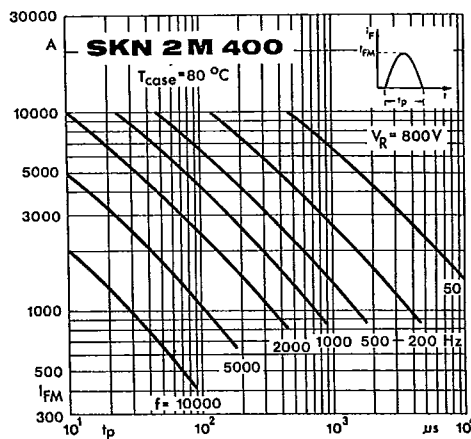


Fig. 1 b Rated sinusoidal peak forward current

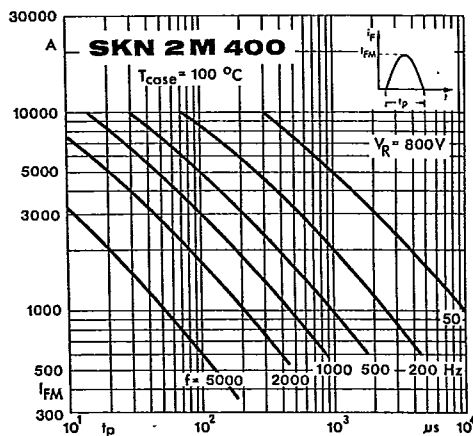


Fig. 1 c Rated sinusoidal peak forward current

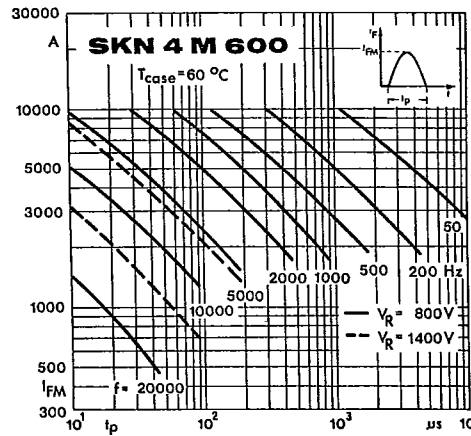


Fig. 1 d Rated sinusoidal peak forward current

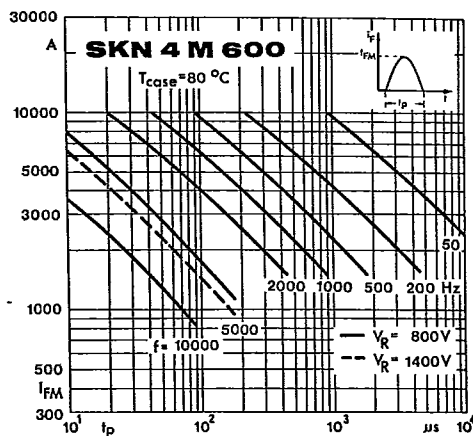


Fig. 1 e Rated sinusoidal peak forward current

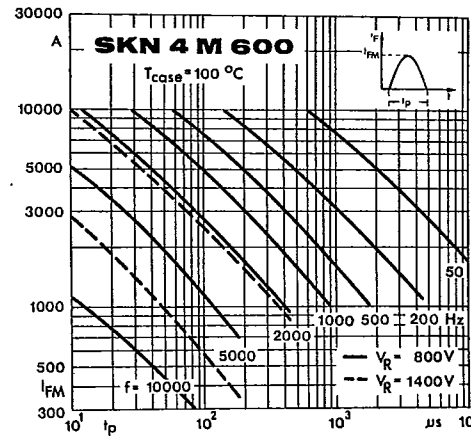


Fig. 1 f Rated sinusoidal peak forward current

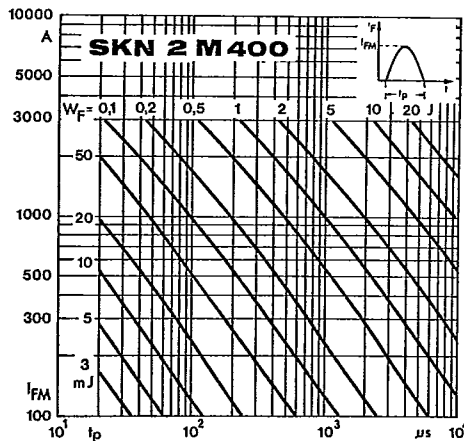


Fig. 2 a Forward energy dissipation, sinusoidal

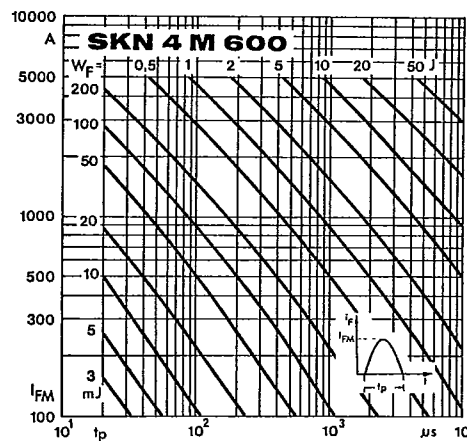


Fig. 2 b Forward energy dissipation, sinusoidal

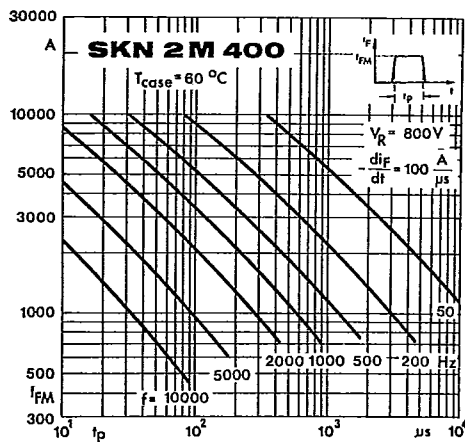


Fig. 3 a Rated rectangular peak forward current

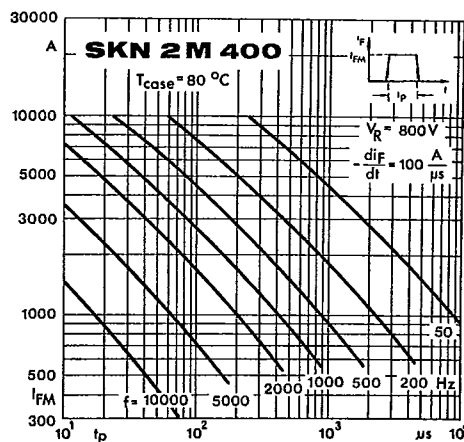


Fig. 3 b Rated rectangular peak forward current

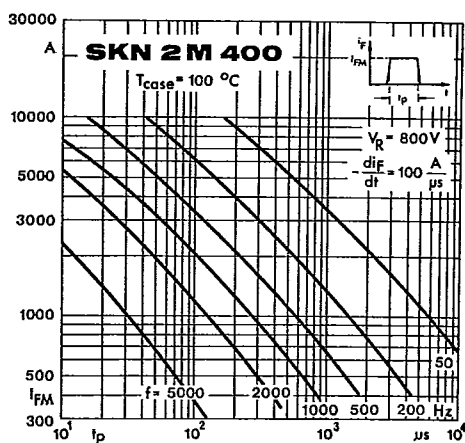


Fig. 3 c Rated rectangular peak forward current

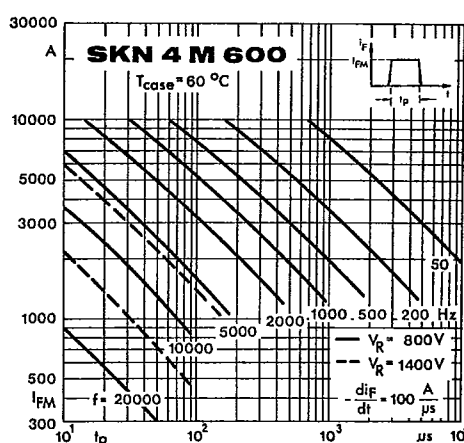


Fig. 3 d Rated rectangular peak forward current

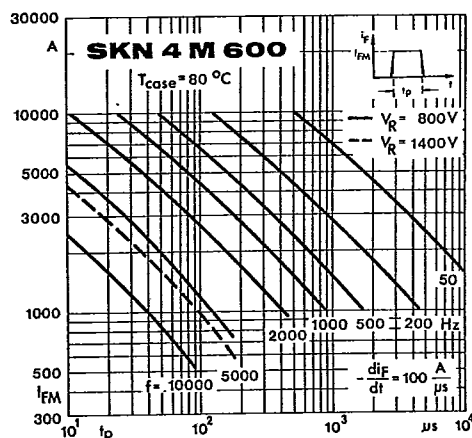


Fig. 3 e Rated rectangular peak forward current

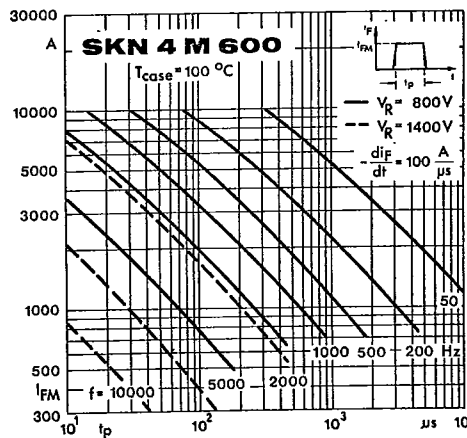


Fig. 3 f Rated rectangular peak forward current

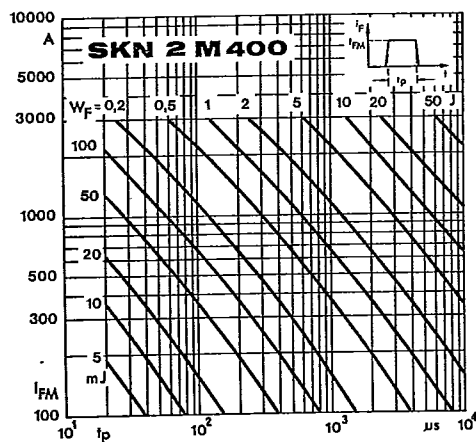


Fig. 4 a Forward energy dissipation, rectangular

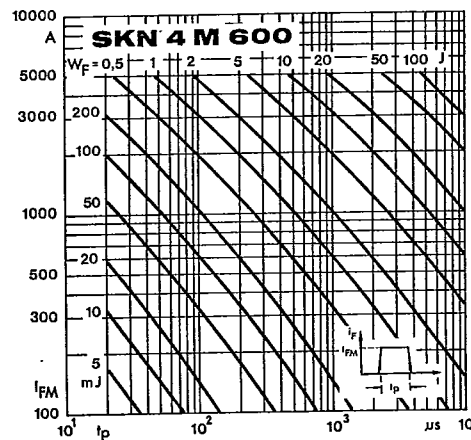


Fig. 4 b Forward energy dissipation, rectangular

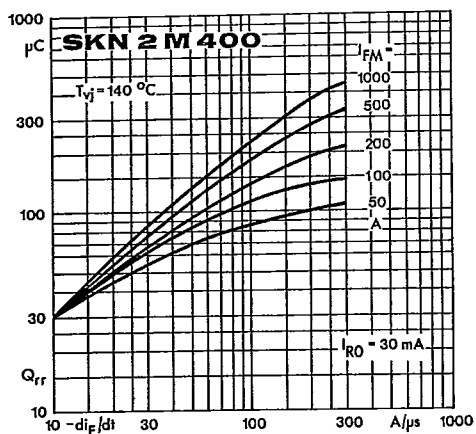


Fig. 5 a Recovered charge

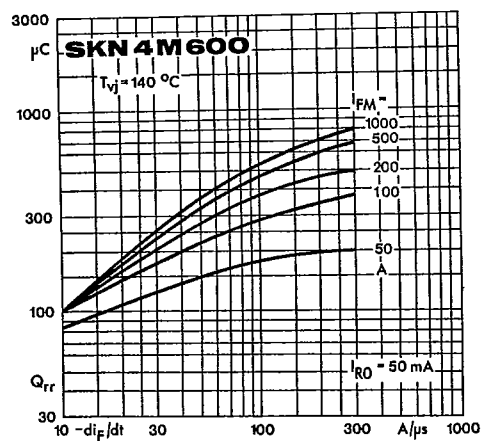


Fig. 5 b Recovered charge

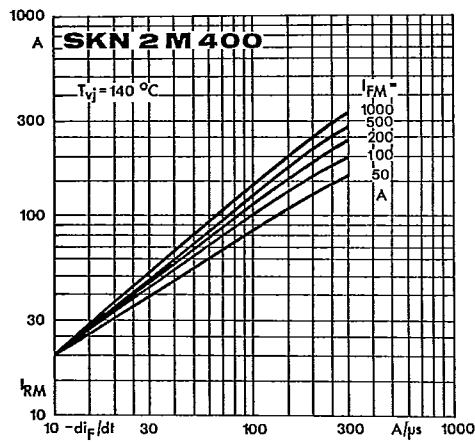


Fig. 6 a Peak reverse recovery current

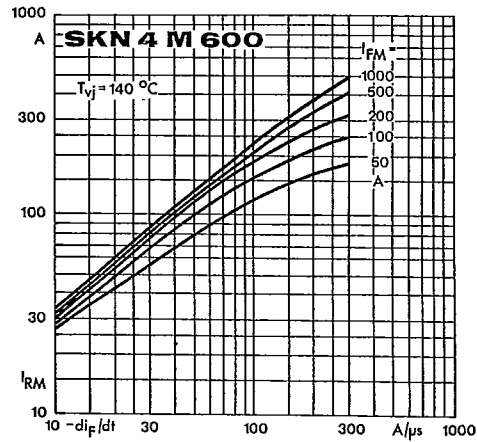


Fig. 6 b Peak reverse recovery current

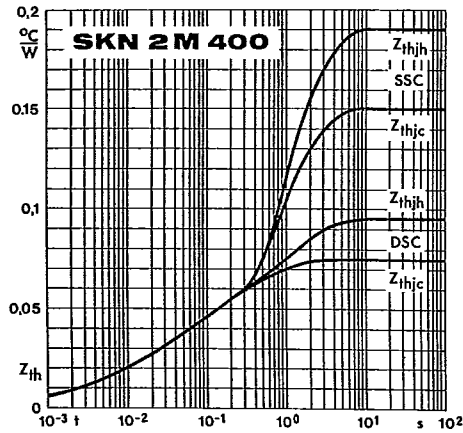


Fig. 7 a Transient thermal impedance

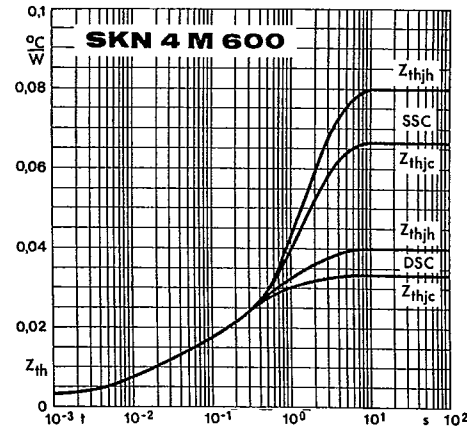


Fig. 7 b Transient thermal impedance

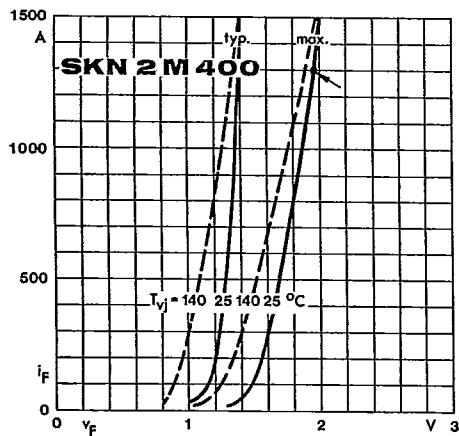


Fig. 8 a Forward characteristics

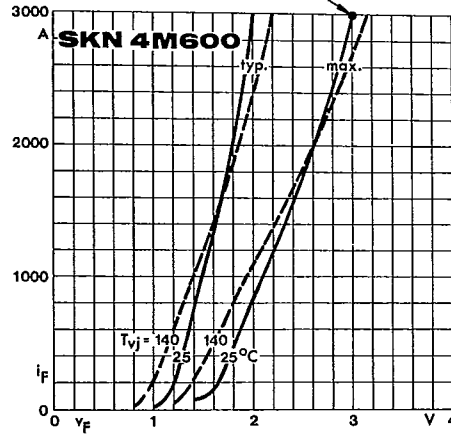


Fig. 8 b Forward characteristics

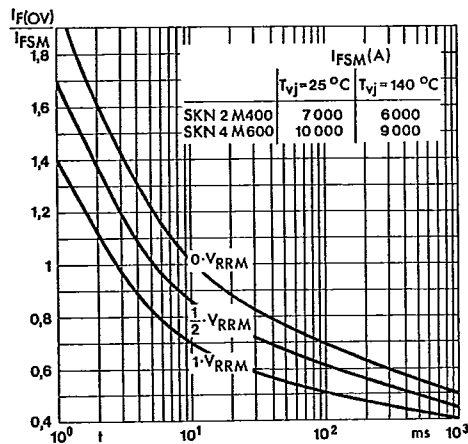
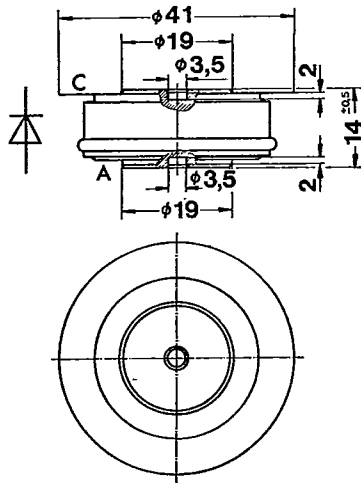


Fig. 9 Rated surge overload current

SKN 2 M 400

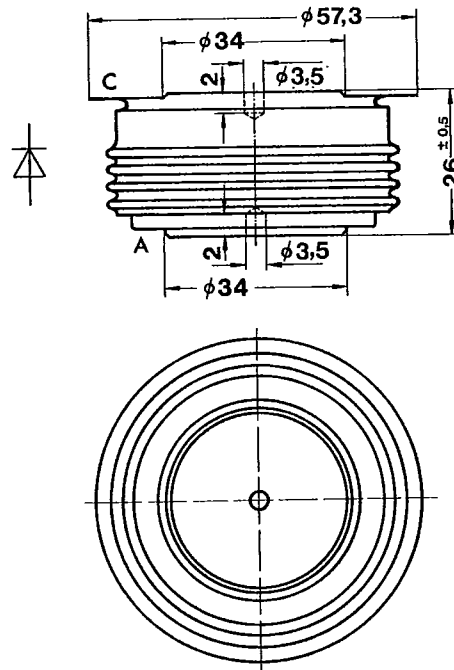
Case E 18

DIN 41 814: 151 A 2
JEDEC: DO-200 AA


Dimensions in mm

SKN 4 M 600

Case E 19

DIN 41 814: 153 C 2
JEDEC: DO-200 AB


Dimensions in mm