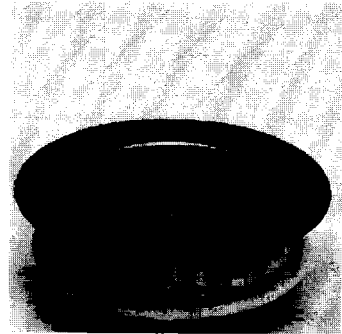


V_{RSM} V_{RRM} V	I_{FAV} (sin. 180; $T_{case} = 85^\circ\text{C}$)	
	400 A	445 A
600	-	SKN 341 F 06
800	SKN 340 F 08	SKN 341 F 08
1000	-	SKN 341 F 10
1200	SKN 340 F 12	SKN 341 F 12
1400	SKN 340 F 14	-
1600	SKN 340 F 16	-
1800	SKN 340 F 18	-

Fast Recovery Rectifier Diodes

SKN 340 F
SKN 341 F



Symbol	Conditions	SKN 340 F	SKN 341 F	Units
I_{FAV}	sin. 180; DSC ($T_{case} = \dots$); 2000 Hz	340 (100 °C)	340 (106 °C)	A
	sin. 180; $R_{thha} = 0,05^\circ\text{C/W}$; $T_{amb} = 35^\circ\text{C}$; DSC	360	390	A
I_{FSM}	$T_{vj} = 25^\circ\text{C}$ 10 ms	4 000	5 000	A
	$T_{vj} = 150^\circ\text{C}$ 10 ms	3 500	4 500	A
i^2t	$T_{vj} = 25^\circ\text{C}$ 10 ms	80 000	125 000	A^2s
	$T_{vj} = 150^\circ\text{C}$ 10 ms	61 250	101 250	A^2s
Q_{rr}	$T_{vj} = 150^\circ\text{C}$; $I_{FM} = 300\text{ A}$; $-\frac{di_F}{dt} = 100 \frac{\text{A}}{\mu\text{s}}$	165	55	μC
I_{RM}	$T_{vj} = 150^\circ\text{C}$; $I_{FM} = 300\text{ A}$; $-\frac{di_F}{dt} = 100 \frac{\text{A}}{\mu\text{s}}$	150	70	A
I_R	$T_{vj} = 25^\circ\text{C}$; $V_R = V_{RRM}$	4	4	mA
	$T_{vj} = 150^\circ\text{C}$; $V_R = V_{RRM}$	20	20	mA
t_{rr}	$T_{vj} = 150^\circ\text{C}$; $I_{FM} = 300\text{ A}$; $-\frac{di_F}{dt} = 100 \frac{\text{A}}{\mu\text{s}}$	2,2	1,6	μs
V_F	$T_{vj} = 25^\circ\text{C}$; $I_F = 1000\text{ A}$; max.	2,55	2,45	V
$V_{(TO)}$	$T_{vj} = 150^\circ\text{C}$	1,1	0,95	V
r_T	$T_{vj} = 150^\circ\text{C}$	1	0,9	$\text{m}\Omega$
R_{thjc} R_{thch}	DSC/SSC (Double-sided cooling/ single-sided cooling)	0,075/0,15		$^\circ\text{C/W}$
T_{vj}		-40 ... + 150		$^\circ\text{C}$
T_{stg}		-40 ... + 150		$^\circ\text{C}$
F	SI units	4...5		kN
	US units	900...1100		lbs.
w		51		g
Case		E18		

Features

- Small recovered charge
- Soft recovery
- Up to 1800 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

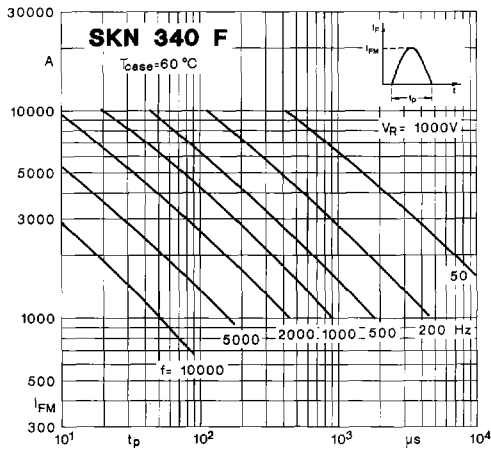


Fig. 1 a Rated sinusoidal peak forward current

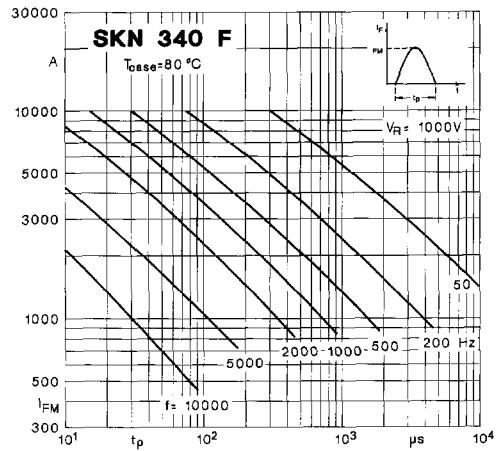


Fig. 1 b Rated sinusoidal peak forward current

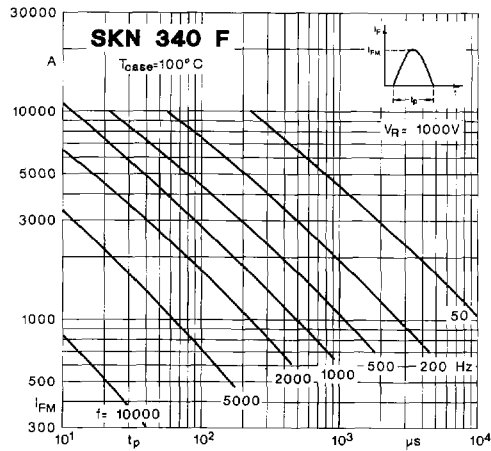


Fig. 1 c Rated sinusoidal peak forward current

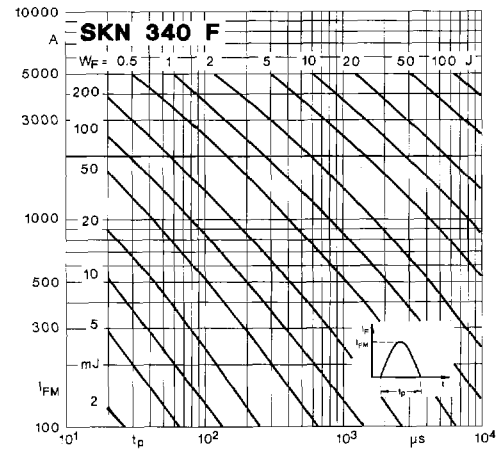


Fig. 2 a Forward energy dissipation, sinusoidal

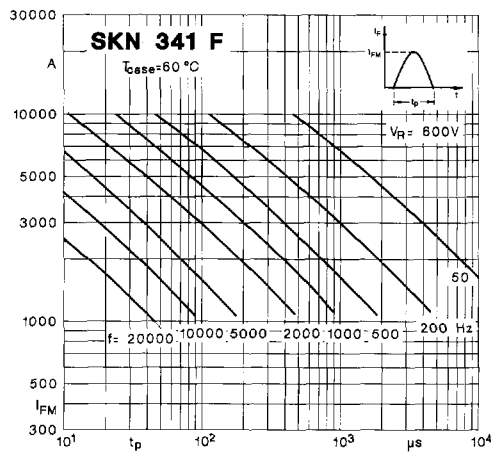


Fig. 1 d Rated sinusoidal peak forward current

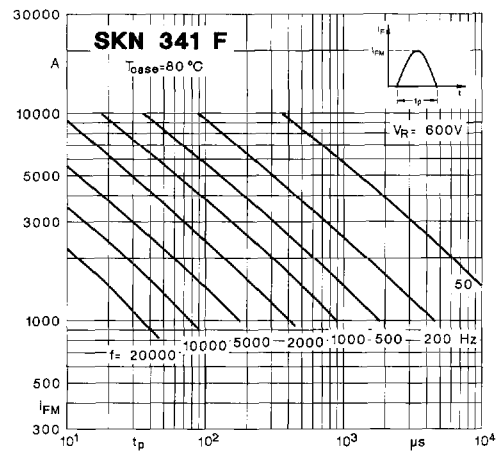


Fig. 1 e Rated sinusoidal peak forward current

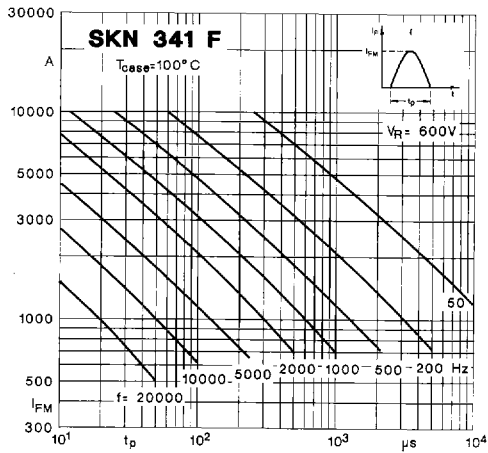


Fig. 1 f Rated sinusoidal peak forward current

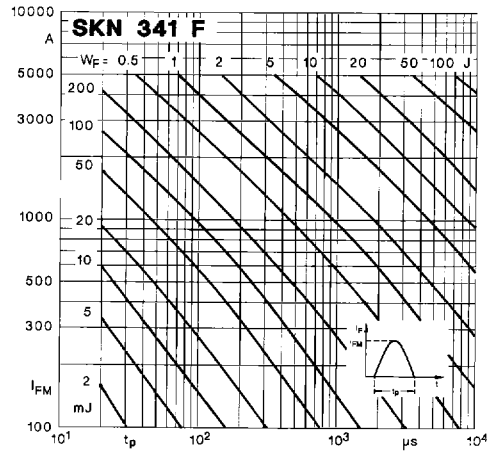


Fig. 2 b Forward energy dissipation, sinusoidal

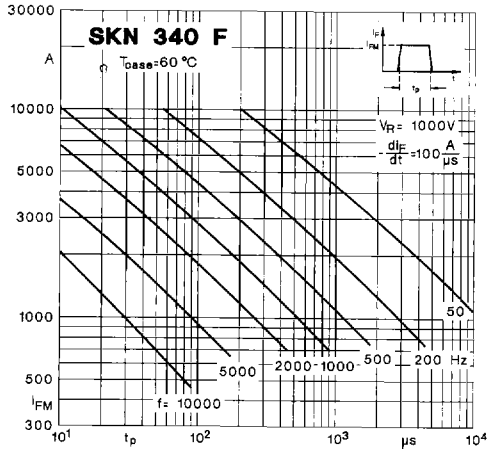


Fig. 3 a Rated rectangular peak forward current

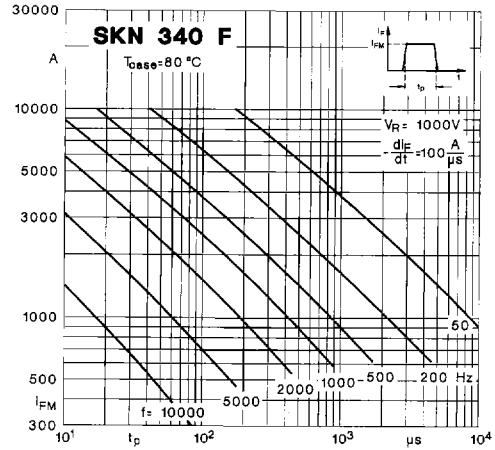


Fig. 3 b Rated rectangular peak forward current

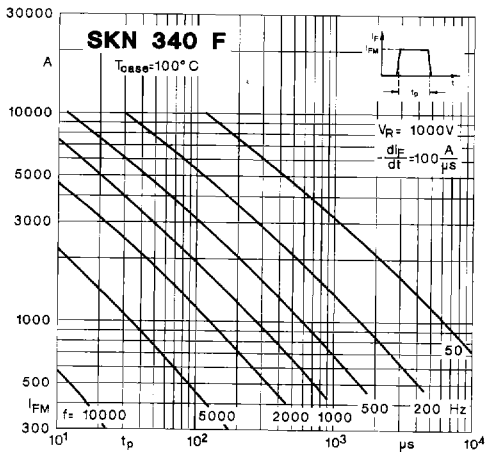


Fig. 3 c Rated rectangular peak forward current

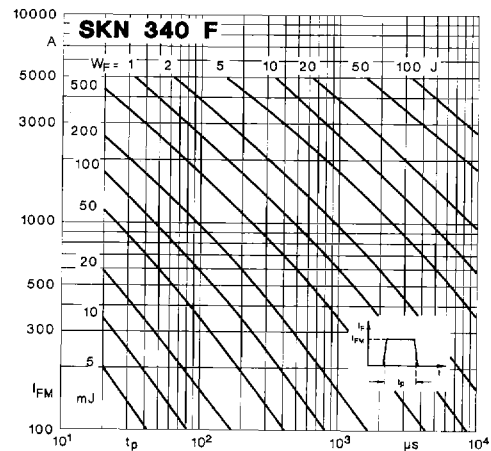


Fig. 4 a Forward energy dissipation, rectangular

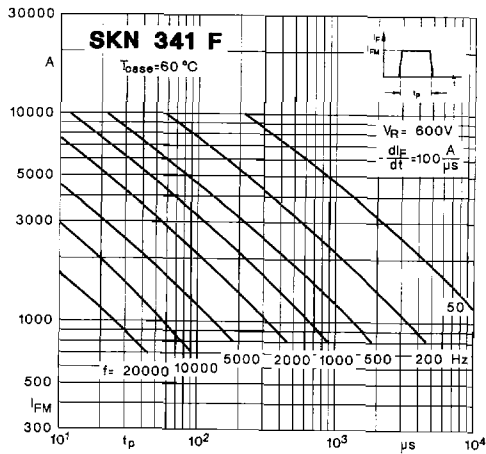


Fig. 3 d Rated rectangular peak forward current

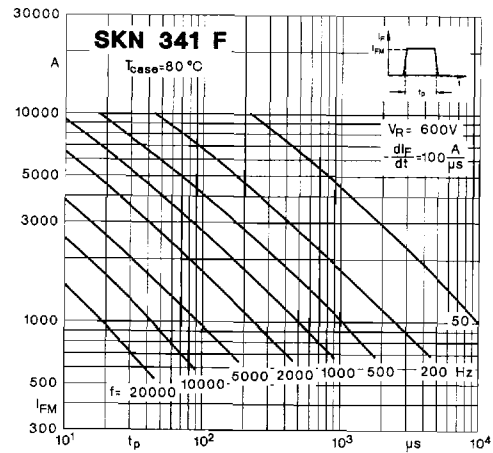


Fig. 3 e Rated rectangular peak forward current

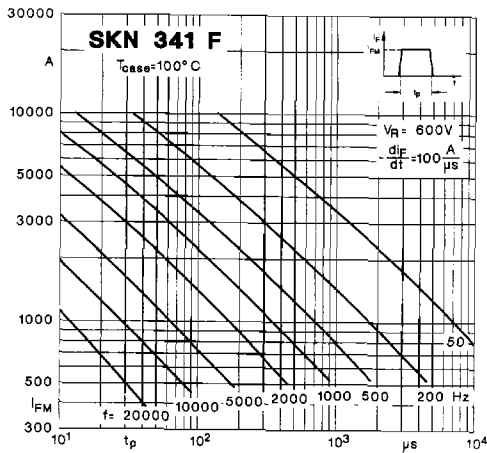


Fig. 3 f Rated rectangular peak forward current

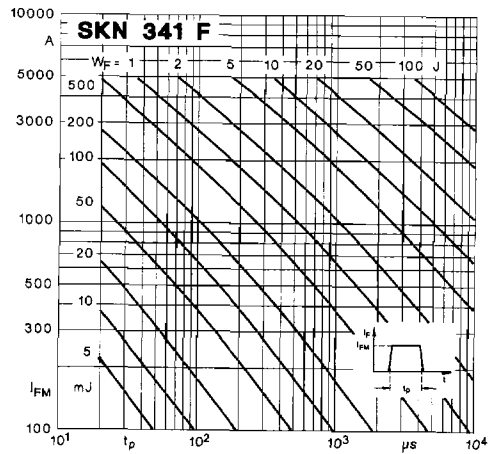


Fig. 4 b Forward energy dissipation, rectangular

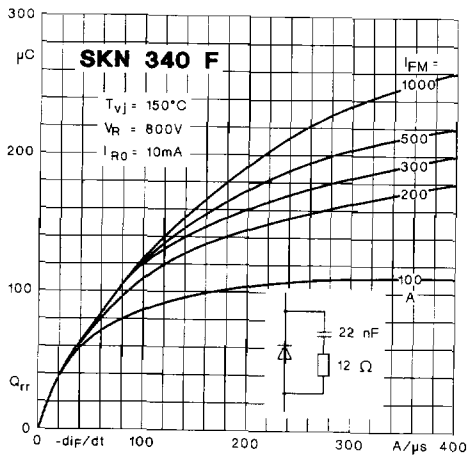


Fig. 5 a Recovered charge

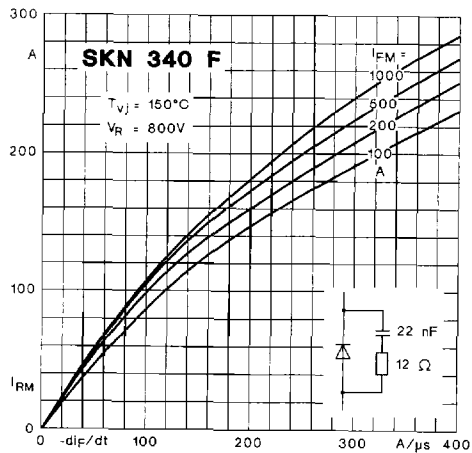


Fig. 6 a Peak reverse recovery current

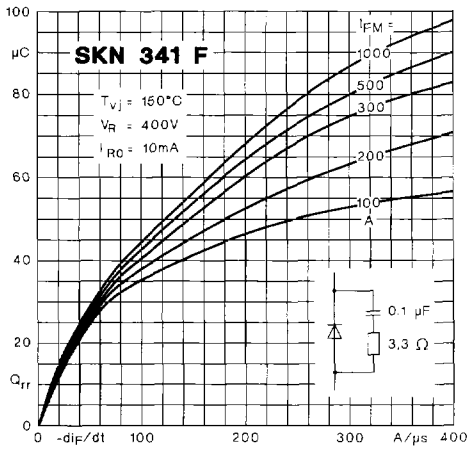


Fig. 5 b Recovered charge

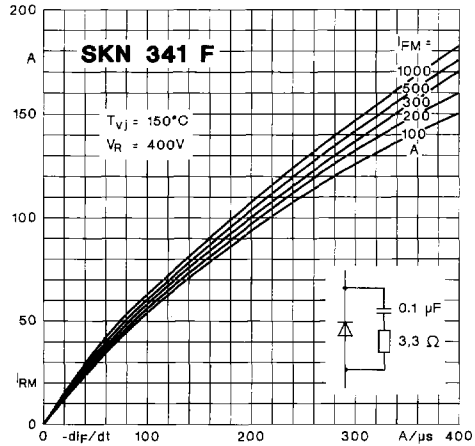


Fig. 6 b Peak reverse recovery current

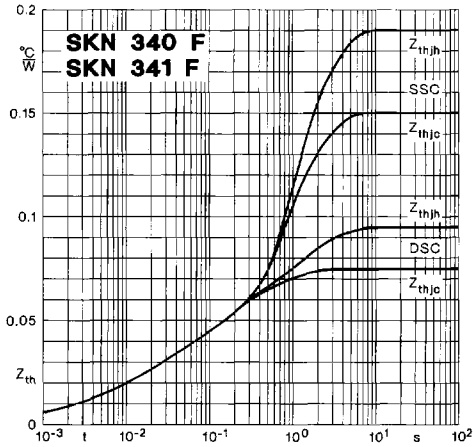


Fig. 7 Transient thermal impedance

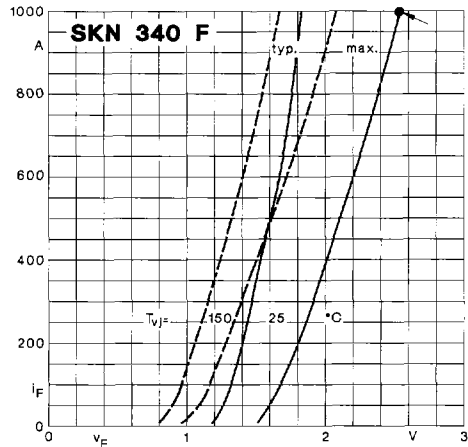


Fig. 8 a Forward characteristics

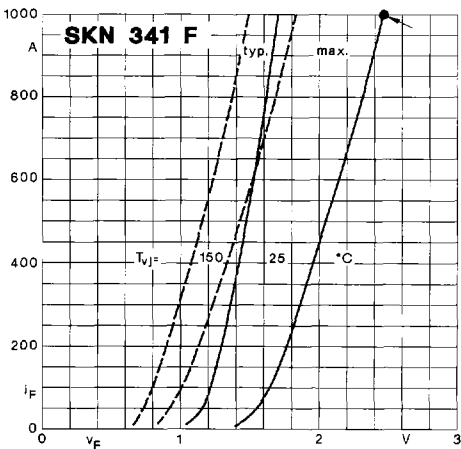


Fig. 8 b Forward characteristics

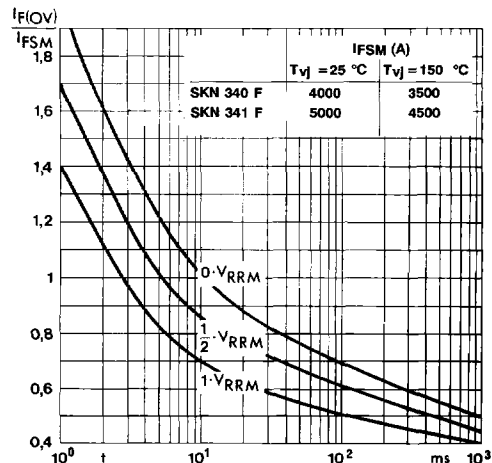
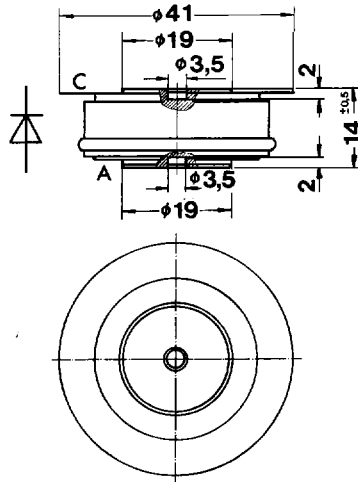


Fig. 9 Rated surge overload current

SKN 340 F
SKN 341 F

Case E 18

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



Dimensions in mm