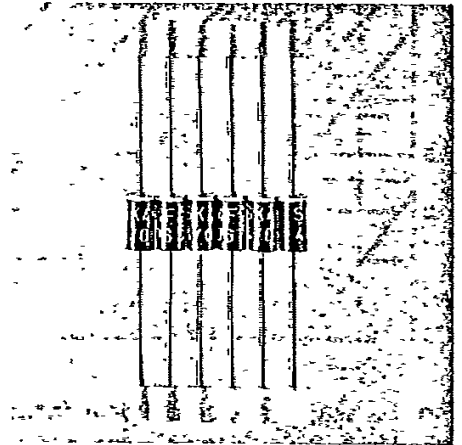


Fast Recovery Rectifier Diodes

SK 4 F 4
SK 4 G 4



Features

- Small recovered charge
- Soft recovery. SK 4 G 4 with specified fall time
- Axial leads; taped for automatic insertion

Typical Applications

- Switched mode power supplies
- TV sets
- Inverters
- Ultrasonic generators

V _{RSM} V _{RRM}	I _{FRMS} (maximum values for continuous operation) 6 A	
	I _{FAV} (sin. 180; T _{ref} = 27 °C) 3,8 A	
V	t _{rr} = 0,45 μs	
200	SK 4 F 4/02	SK 4 G 4/02
400	SK 4 F 4/04	SK 4 G 4/04
600	SK 4 F 4/06	SK 4 G 4/06
800	SK 4 F 4/08	SK 4 G 4/08¹⁾
1000	SK 4 F 4/10	SK 4 G 4/10¹⁾

Symbol	Conditions	SK 4 F 4 SK 4 G 4	Units
I _{FAV}	sin. 180; T _{ref} = 27 °C; f = 1000 Hz T _{amb} = 45 °C; f = 1000 Hz	3,8 1,2 ²⁾	A A
I _{FSM}	T _{vj} = 25 °C T _{vj} = 130 °C	85 70	A A
i ² t	T _{vj} = 25 °C T _{vj} = 130 °C	36 24,5	A ² s A ² s
Q _{rr}	T _{vj} = 130 °C; I _{FM} = 1 A; - $\frac{dI_F}{dt}$ = 10 $\frac{A}{\mu s}$	typ. 0,33	μC
I _R	T _{vj} = 25 °C; V _R = V _{RRM} T _{vj} = 130 °C; V _R = V _{RRM}	max. 20 (02) max. 4 (04...10) max. 1	μA μA mA
t _{rr}	T _{vj} = 25 °C; I _F = 50 mA; I _R = 50 mA; i _{rr} = 10 mA I _F = 0,5 A; I _R = 1 A; i _{rr} = 0,25 A T _{vj} = 130 °C; I _F = 50 mA; I _R = 50 mA; i _{rr} = 10 mA	max. 0,45 max. 0,20	μs μs
t _t	T _{vj} = 25 °C	typ. 0,9 SK 4 G 4: min. 0,16	μs μs
V _F	T _{vj} = 25 °C; I _F = 10 A	max. 1,5	V
V _(TO)	T _{vj} = 130 °C	1,0	V
r _T	T _{vj} = 130 °C	50	mΩ
R _{thja}		60 ²⁾	°C/W
R _{thjr}		18	°C/W
T _{vj}		-25... + 130	°C
T _{stg}		-25... + 150	°C
a w	approx.	5·9,81 1	m/s ² g
Case		E 29	

¹⁾ In limited production

²⁾ On a p. c. b. of 50 x 50 x 1,5 mm³

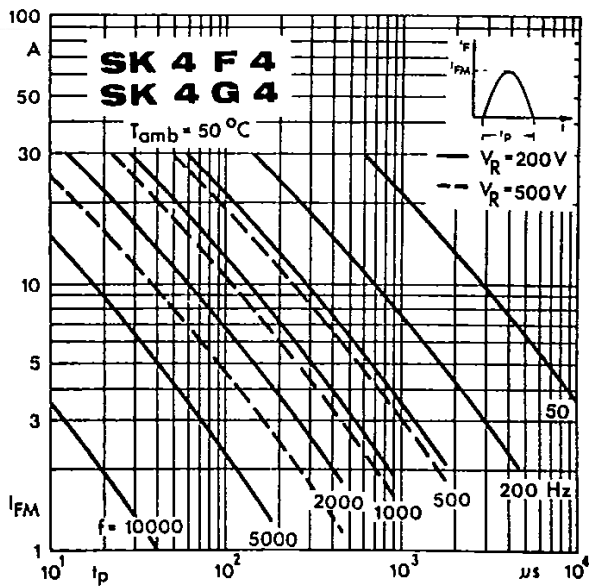


Fig. 1 a Rated sinusoidal peak forward current

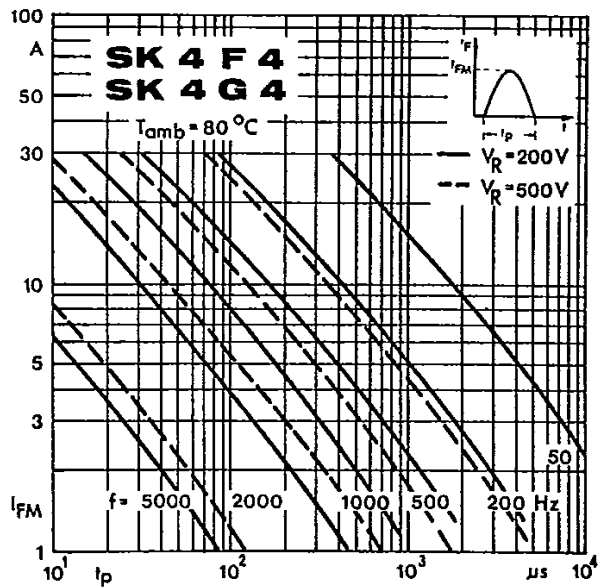


Fig. 1 b Rated sinusoidal peak forward current

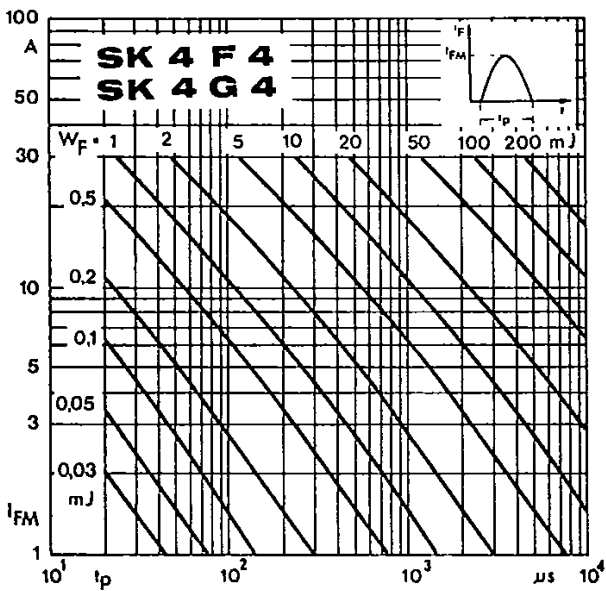


Fig. 2 Forward energy dissipation, sinusoidal

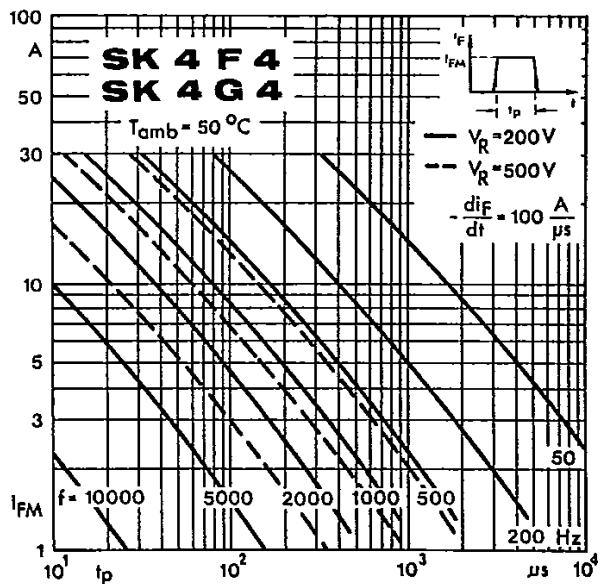


Fig. 3 a Rated rectangular peak forward current

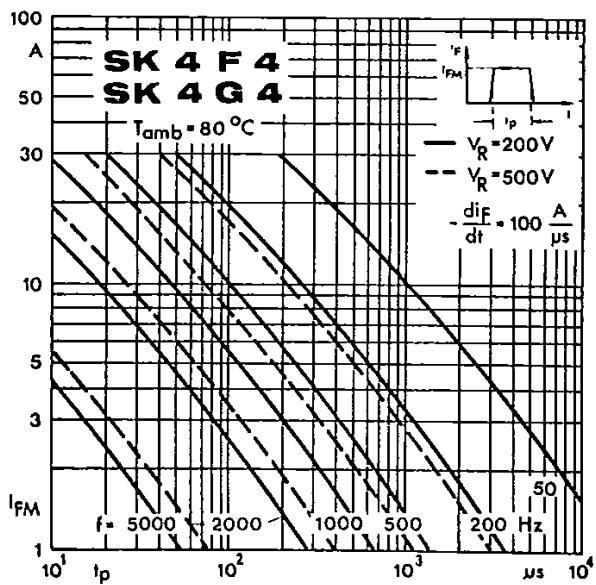


Fig. 3 b Rated rectangular peak forward current

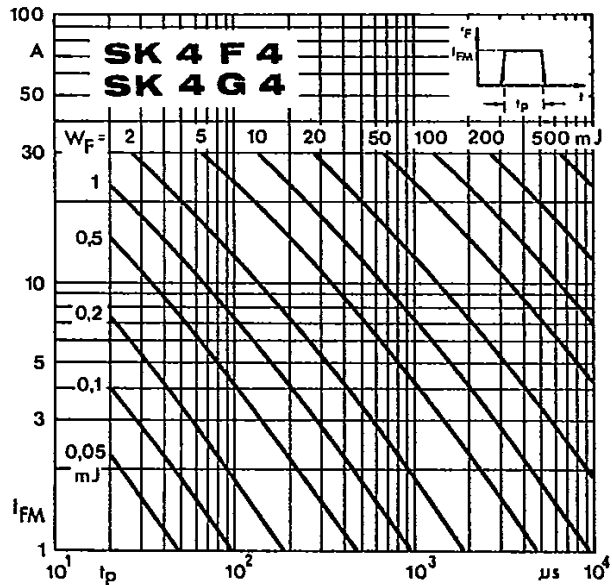


Fig. 4 Forward energy dissipation, rectangular

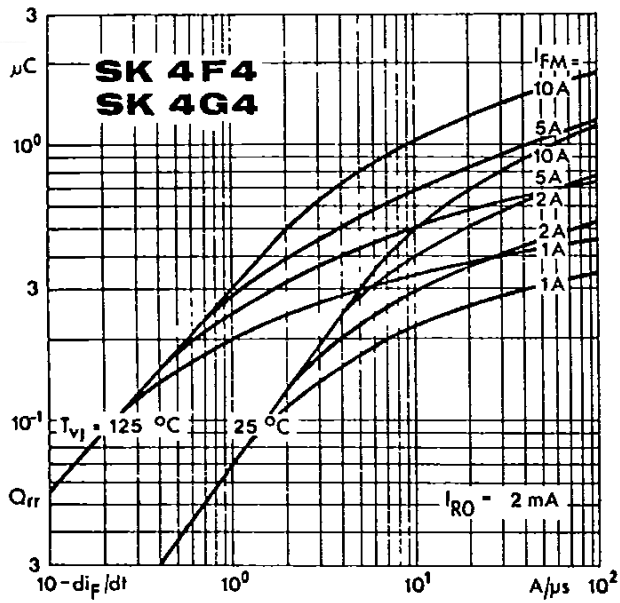


Fig. 5 Recovered charge

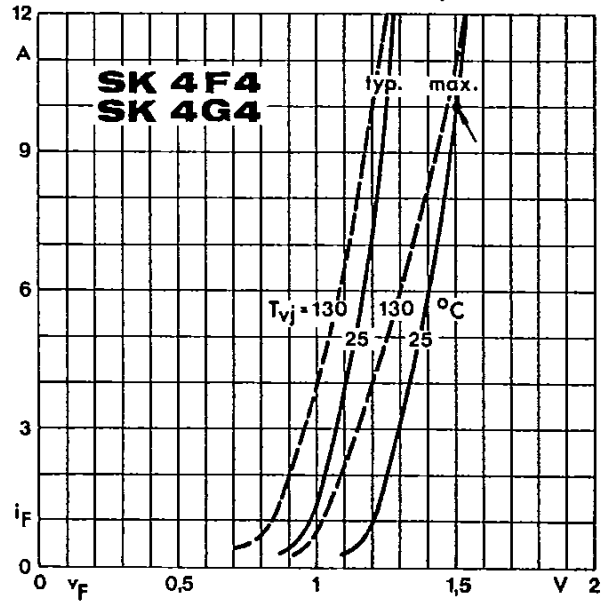


Fig 8 Forward characteristics

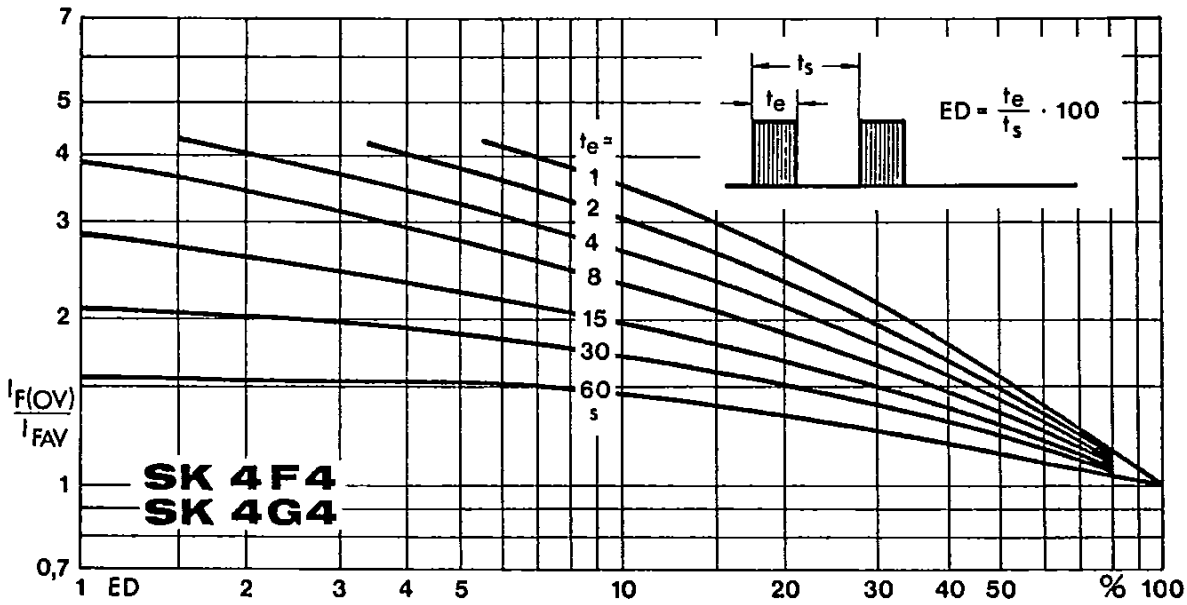


Fig. 10 Intermittent duty overload current

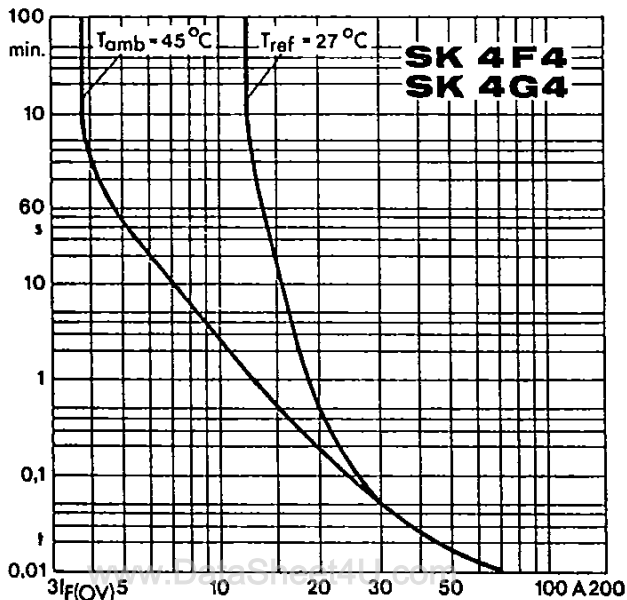


Fig. 11 Rated surge overload current