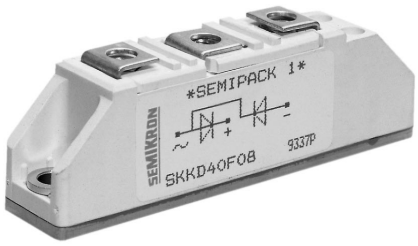
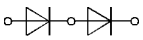
V_{RSM} V_{RRM}	I_{FRMS} (maximum values for continuous operation) 200 A			200 A
V	I_{FAV} (sin. 180; T_{case} = 85 °C; 50 Hz) 102 A			113 A
800	**SKKD 105F08**	**SKMD 105F08**	**SKND 105F08**	–
1000	**SKKD 105F10**	**SKMD 105F10**	**SKND 105F10**	–
1200	**SKKD 105F12**	**SKMD 105F12**	**SKND 105F12**	**SKKD 115F12**
1400	–	–	–	**SKKD 115F14**

Symbol	Conditions	SKKD 105F SKMD 105F SKND 105F	SKKD 115F	Units
I_{FAV}	sin. 180; T_{case} = 83 °C	105	115	A
I_{FSM}	T_{vj} = 25 °C; 10 ms	2 500	2 500	A
	T_{vj} = 130 °C; 10 ms	2 100	2 100	A
i^2t	T_{vj} = 25 °C; 8,3 ... 10 ms	31 250	31 250	A^2s
	T_{vj} = 130 °C; 8,3 ... 10 ms	22 000	22 000	A^2s
t_{rr}	T_{vj} = 25 °C; I_F = 1 A; – di_F/dt = 15 A/µs; V_R = 30 V	500	800	ns
Q_{rr}	T_{vj} = 130 °C; I_F = 100 A; – di_F/dt = 50 A/µs; V_R = 30 V	50	90	µC
I_{RM}		53	90	A
I_R	T_{vj} = 25 °C; V_R = V_{RRM}	1	1	mA
	T_{vj} = 130 °C; V_R = V_{RRM}	30	30	mA
V_F	T_{vj} = 25 °C ; I_F = 300 A	2,05	1,8	V
$V_{(TO)}$	T_{vj} = 130 °C	1,2	1,1	V
r_T	T_{vj} = 130 °C	2,5	2	mΩ
R_{thjc}	per diode/per module	0,24/0,12		°C/W
R_{thch}	per diode/per module	0,2/0,1		°C/W
T_{vj}		– 40 ... +130		°C
T_{stg}		– 40 ... +125		°C
V_{isol}	a. c. 50 Hz; r.m.s; 1 s/1 min.	3600/3000		V~
M_1	to heatsink SI (US) units	5 (44 lb. in.) ± 15 %		Nm
M_2	to terminals SI (US) units	3 (26 lb. in.) ± 15 %		Nm
w	approx.	120		g
Case	→ page B 2 – 28 SKKD	A 10		
	SKMD	A 33		
	SKND	A 37		

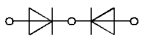
SEMIPACK® 1
Fast Diode Modules

SKKD 105F SKMD 105F
SKKD 115F SKND 105F

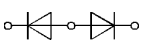




SKKD



SKMD



SKND

Features

- Heat transfer through ceramic isolated metal baseplate
- Hard soldered joints for high reliability
- **SKKD** half bridge connection
  centre tap connections:
  SKMD common cathode
  SKND common anode
- UL recognized, file no. E63 532

Typical Applications

- Self-commutated inverters
- DC choppers
- AC motor speed control
- Inductive heating
- Uninterruptible power supplies
- Electronic welders
- General power switching applications

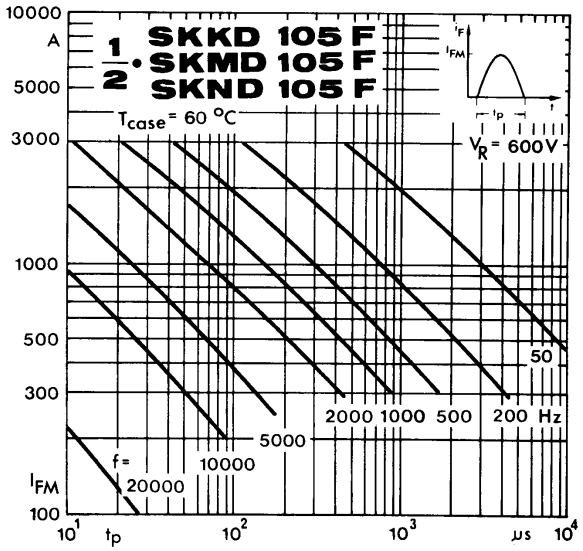


Fig. 12 a Rated sinusoidal peak forward current

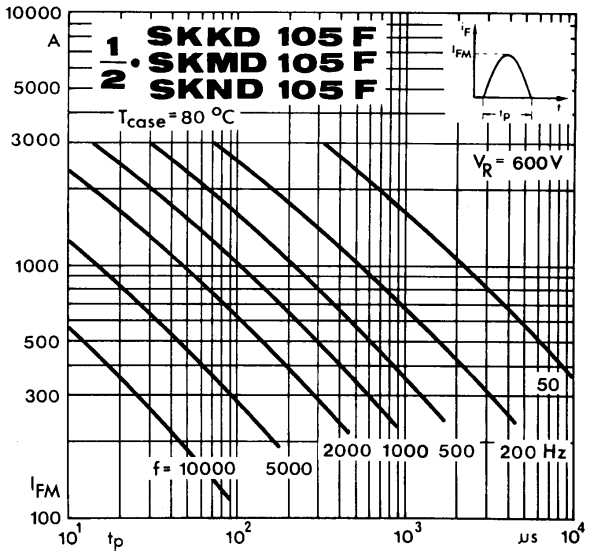


Fig. 12 b Rated sinusoidal peak forward current

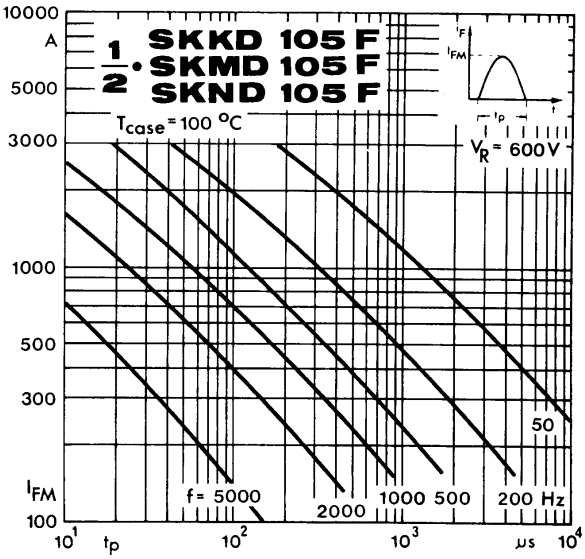


Fig. 12 c Rated sinusoidal peak forward current

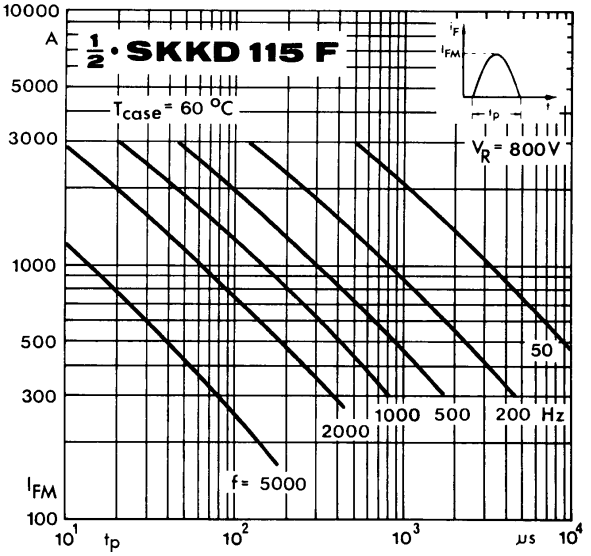


Fig. 12 d Rated sinusoidal peak forward current

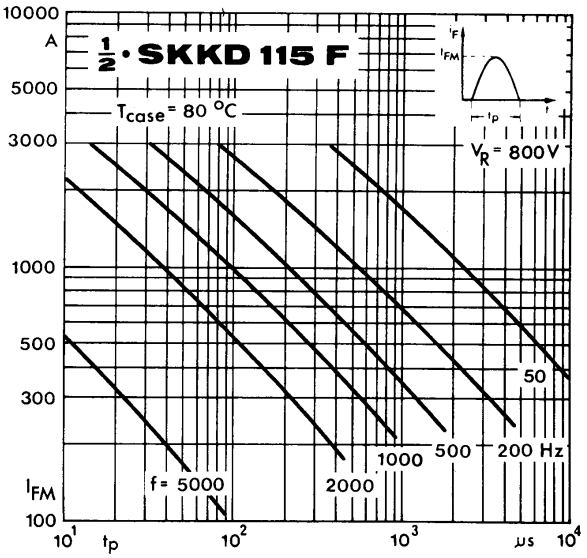


Fig. 12 e Rated sinusoidal peak forward current

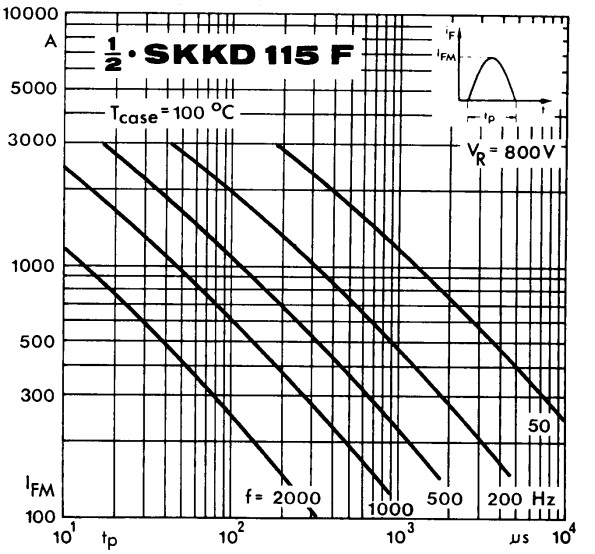


Fig. 12 f Rated sinusoidal peak forward current

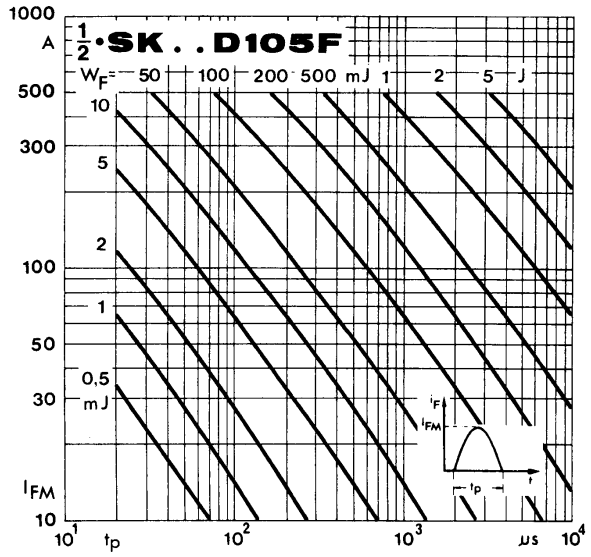


Fig. 13 a Forward energy dissipation, sinusoidal

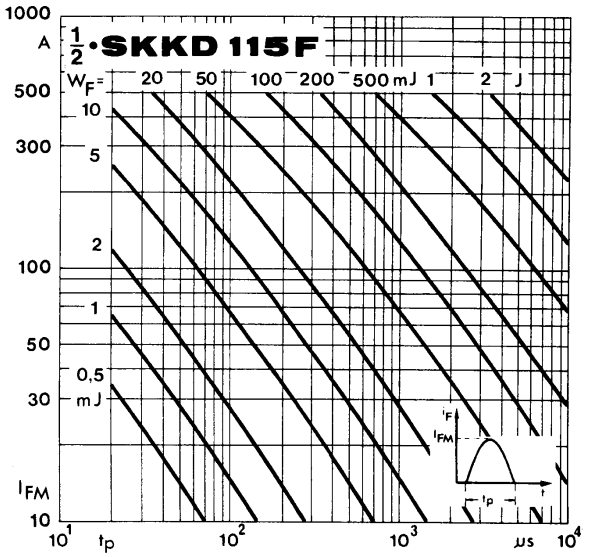


Fig. 13 b Forward energy dissipation, sinusoidal

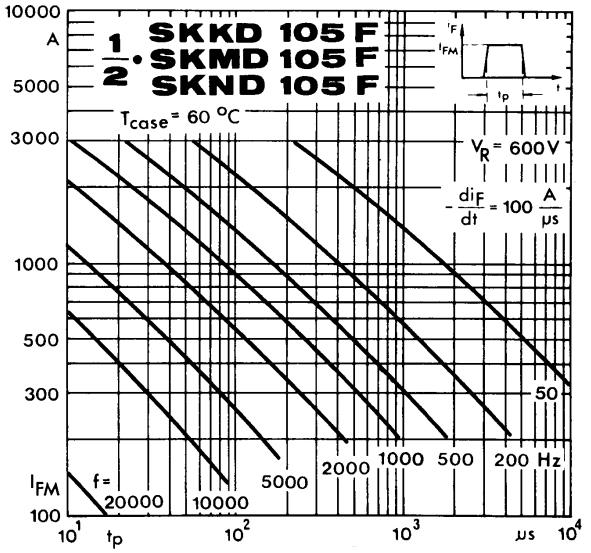


Fig. 14 a Rated rectangular peak forward current

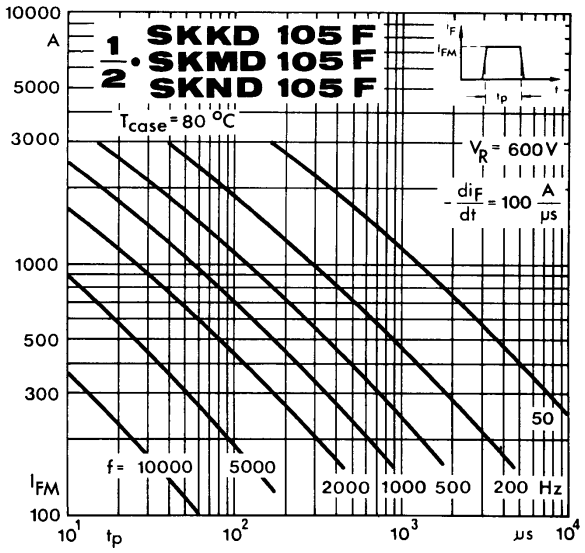


Fig. 14 b Rated rectangular peak forward current

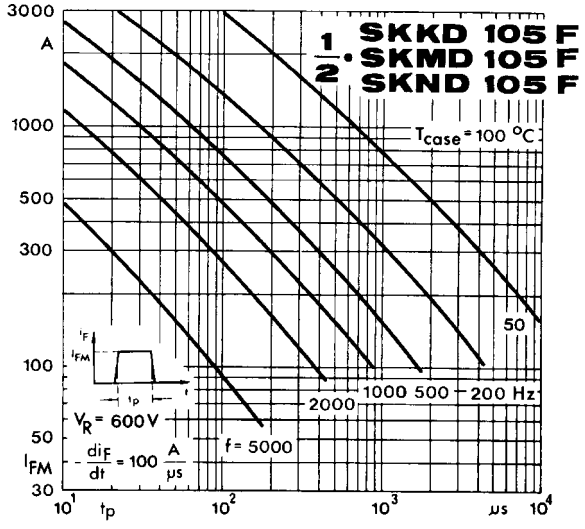


Fig. 14 c Rated rectangular peak forward current

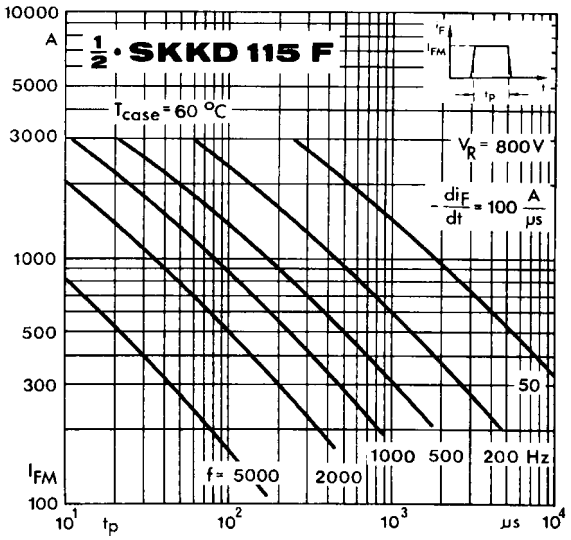


Fig. 14 d Rated rectangular peak forward current

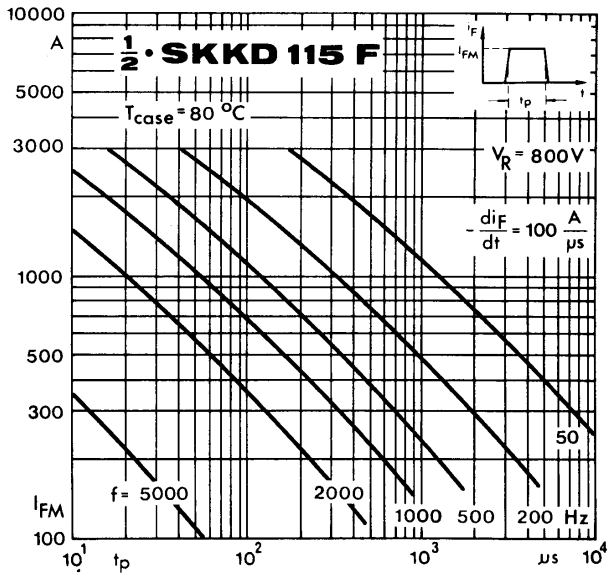


Fig. 14 e Rated rectangular peak forward current

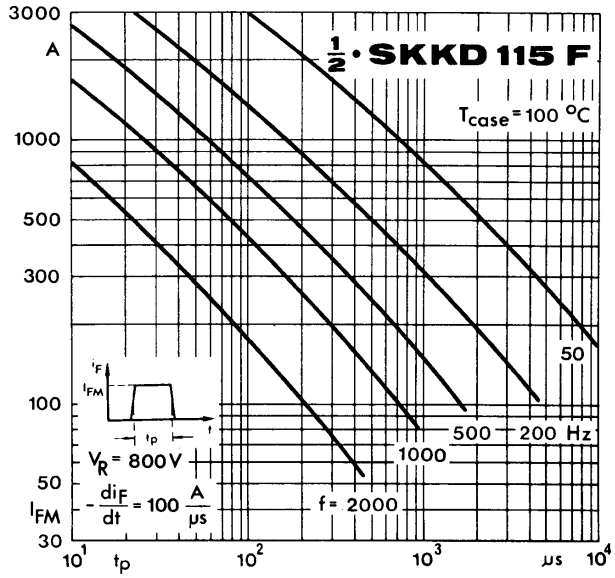


Fig. 14 f Rated rectangular peak forward current

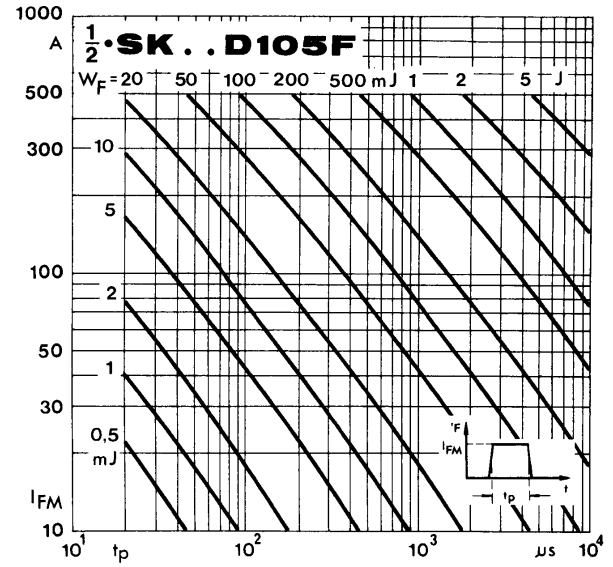


Fig. 15 a Forward energy dissipation, rectangular

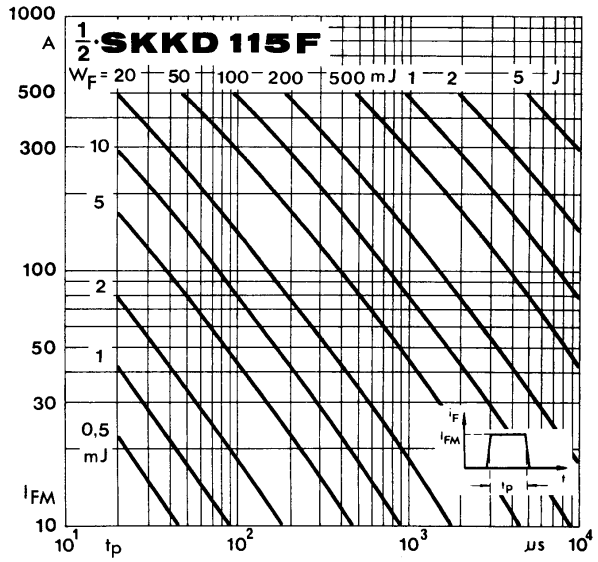


Fig. 15 b Forward energy dissipation, rectangular

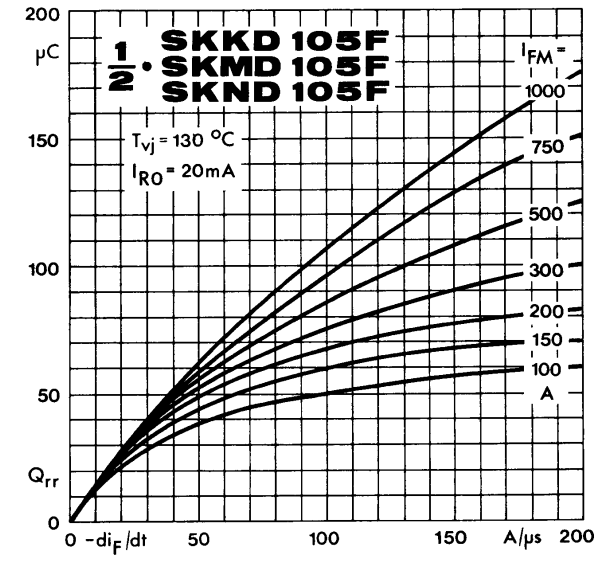


Fig. 16 a Recovered charge vs. current decrease

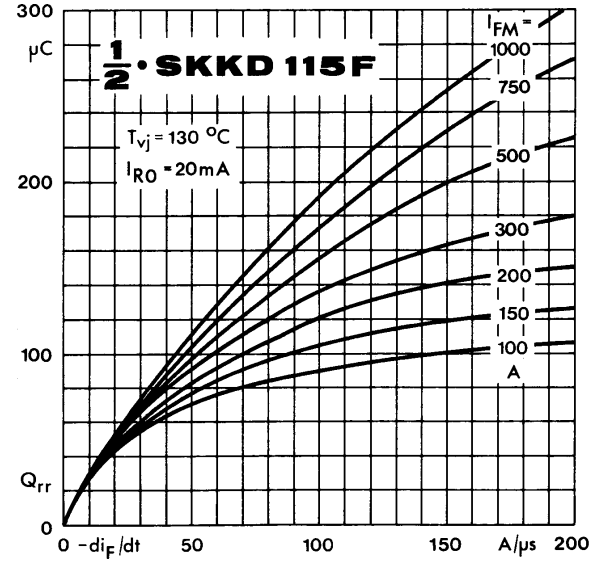


Fig. 16 b Recovered charge vs. current decrease

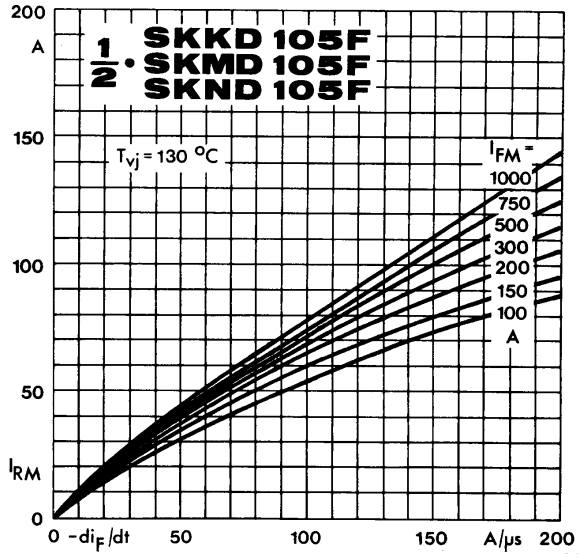


Fig. 17 a Peak recovery current vs. current decrease

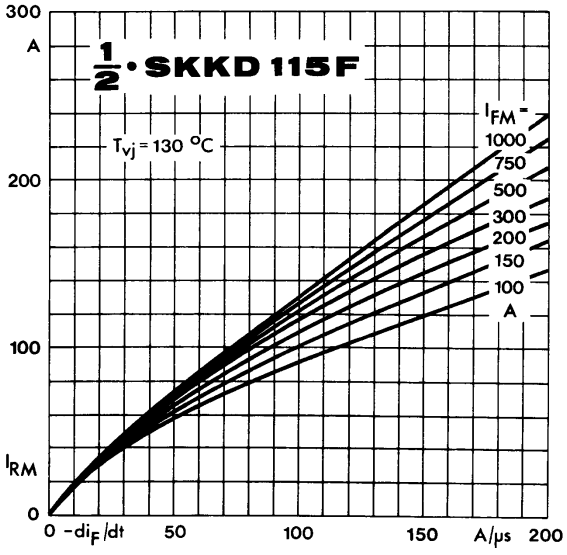


Fig. 17 b Peak recovery current vs. current decrease

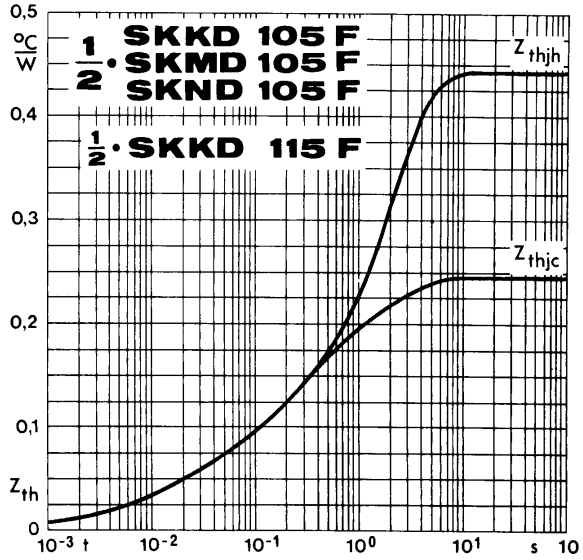


Fig. 18 Transient thermal impedance vs. time

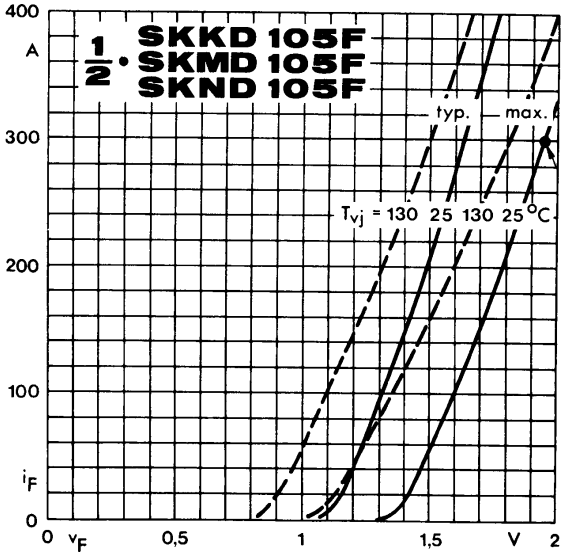


Fig. 19 a Forward characteristics

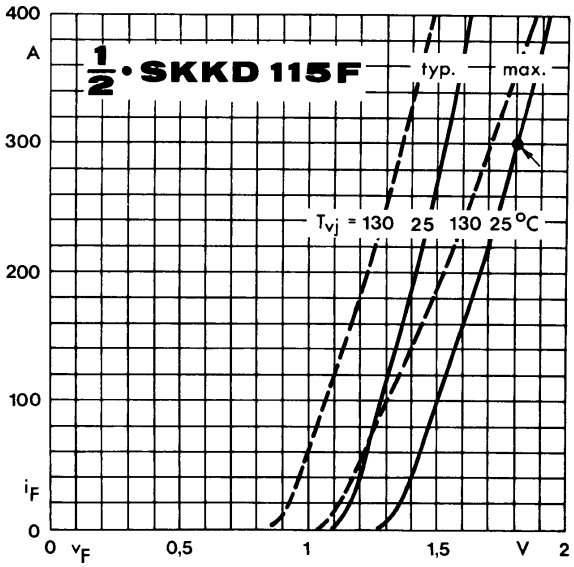


Fig. 19 b Forward characteristics

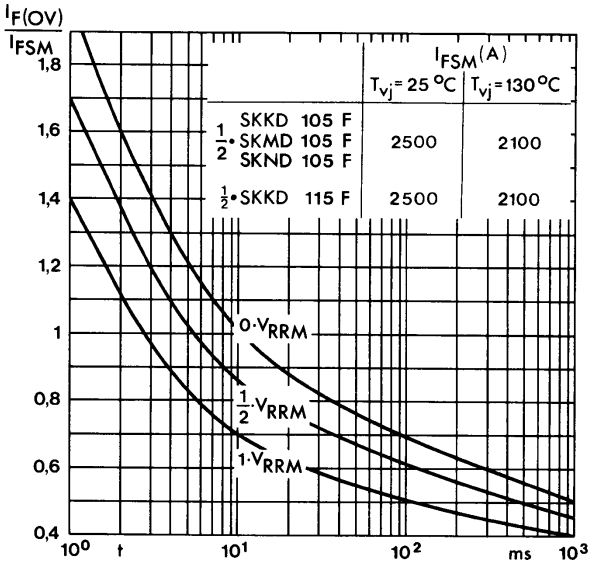


Fig. 20 Surge overload current vs. time

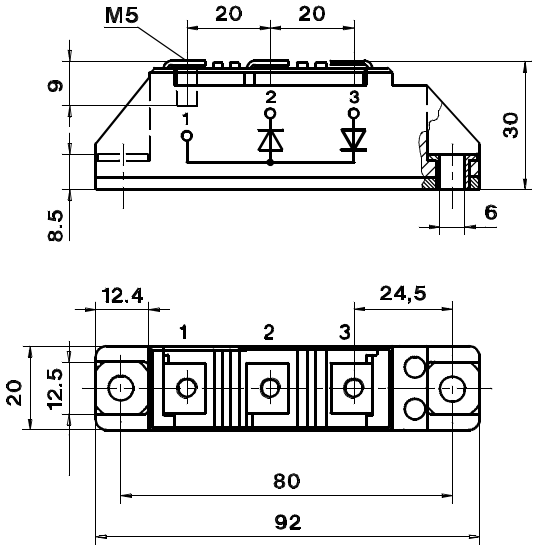
SKKD 105 F, 115 F

Case A 10

IEC 192-2: A 77 A
JEDEC: TO-240 AA

SEMIPACK® 1

UL recognized, file no. E 63 532



SKKD 60 F, 75 F

Case A 23

SEMIPACK® 2

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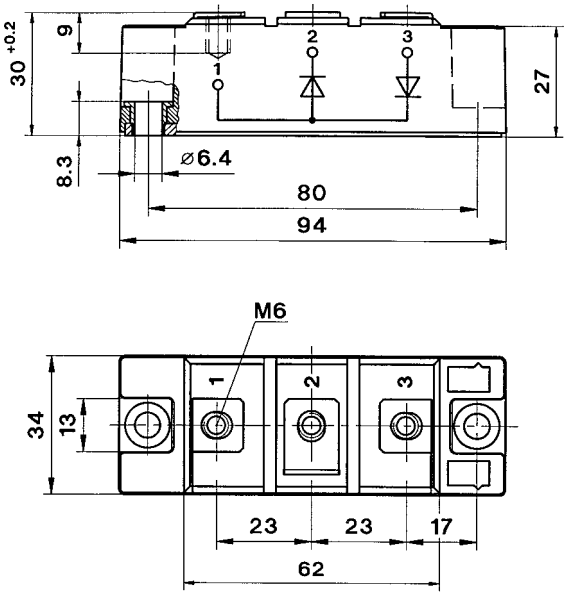
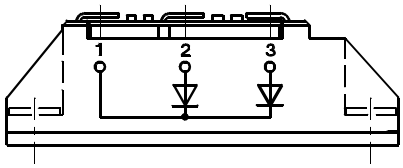
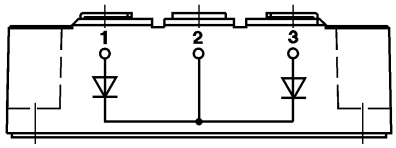


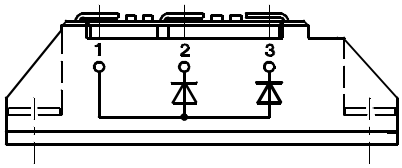
SKMD 105 F
Case A 33



SKMD 150 F, 202 E
Case A 51

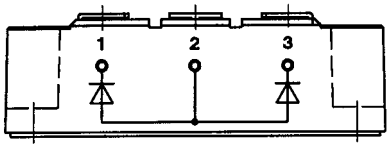


SKND 105 F
Case A 37

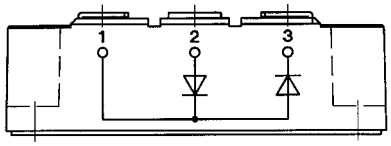


Dimensions in mm

SKND 150 F, 202 E
Case A 52



SKKD 150 F, 170 F
Case A 53



Dimensions in mm

