

T-25-23

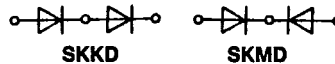
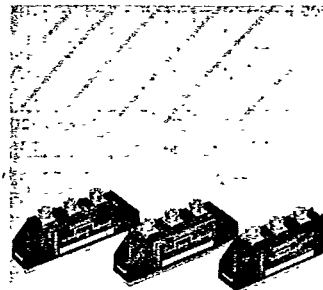
V _{RRM} V _{RRM} V	I _{FRMS} (maximum values for continuous operation)			
	110 A	110 A	110 A	110 A
	I _{FAV} (sin. 180; T _{case} = ... °C; 50 Hz)			
	40 A (80 °C)	40 A (83 °C)	40 A (83 °C)	40 A (80 °C)
400	SKKD 40 F 04	—	—	SKMD 40 F 04
600	SKKD 40 F 06	—	—	SKMD 40 F 06
800	SKKD 40 F 08	SKKD 40 M 08	SKFH 30 / 08 ..	SKMD 40 F 08
1000	SKKD 40 F 10	—	SKFH 30 / 10 ..	SKMD 40 F 10
1200	—	SKKD 40 M 12	SKFH 30 / 12 ..	—
1400	—	SKKD 40 M 14	—	—
1500	—	SKKD 40 M 15	—	—

Symbol	Conditions	SKKD 40 F SKMD 40 F	SKKD 40 M SKFH 30 ¹⁾
I _{FAV}	sin. 180; T _{case} = 85 °C	36 A	38 A
I _{FSM}	T _{vj} = 25 °C T _{vj} = 125 °C	1100 A 940 A	800 A 700 A
i ² t	T _{vj} = 25 °C T _{vj} = 125 °C	6000 A ² s 4400 A ² s	3200 A ² s 2450 A ² s
t _{rr}	T _{vj} = 25 °C; I _F = 1 A; -di _F /dt = 15 A/μs; V _R = 30 V	200 ns	1 μs
Q _{rr}	T _{vj} = 125 °C; I _F = 100 A; -di _F /dt = 30 A/μs; V _R = 30 V	3 μC	20 μC
I _{RM}		10 A	20 A
I _R	T _{vj} = 25 °C; V _R = V _{RRM} T _{vj} = 125 °C; V _R = V _{RRM}	0,5 mA 50 mA	0,5 mA 15 mA
V _F	T _{vj} = 25 °C; I _F = 150 A	2,0 V	1,85 V
V _(TO)	T _{vj} = 125 °C	1,2 V	1,0 V
r _T	T _{vj} = 125 °C	4 mΩ	5 mΩ
R _{thjo} R _{thch} T _{vj} T _{stg}	per diode/per module	0,7 °C/W/0,35 °C/W 0,2 °C/W/0,1 °C/W	-40 ... + 125 °C -40 ... + 125 °C
V _{isol}		3000 V ~ / 2500 V ~	
M ₁ M ₂ w		5 Nm/44 lb. in ± 15 % 3 Nm/26 lb. in. ± 15 % 120 g	
Case		→ page B 2-12	SKKD A 10 SKMD A 11 SKFH A 8

SEMIPACK® 1

Fast Thyristor/ Diode Modules

SKKD 40 F SKMD 40 F
SKKD 40 M SKFH 30

Diode data¹⁾

SKKD

SKMD



SKFH

Features

- Heat transfer through ceramic isolated metal baseplate
- Hard soldered joints for high reliability
- UL recognized, file no. E 63 532

Typical Applications

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

¹⁾ For the data of the thyristor see page B 2-33

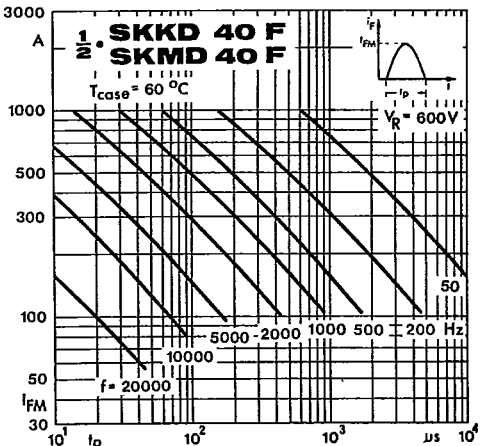


Fig. 12 a Rated sinusoidal peak forward current

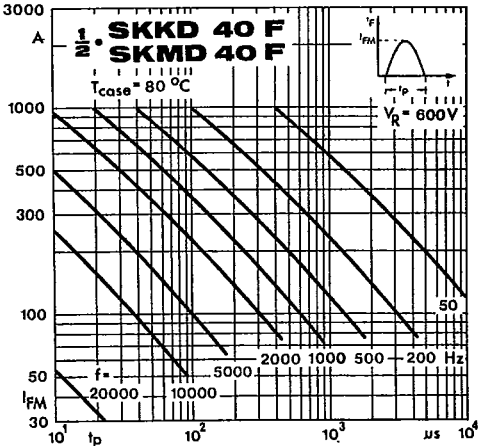


Fig. 12 b Rated sinusoidal peak forward current

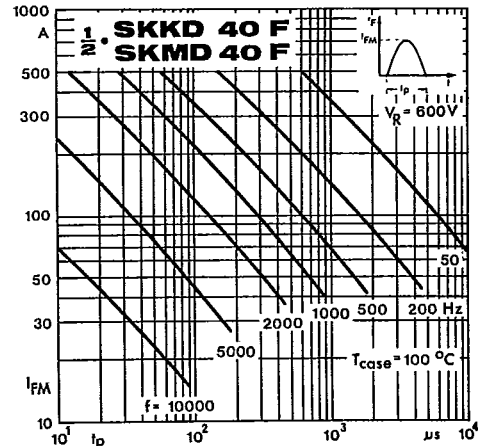


Fig. 12 c Rated sinusoidal peak forward current

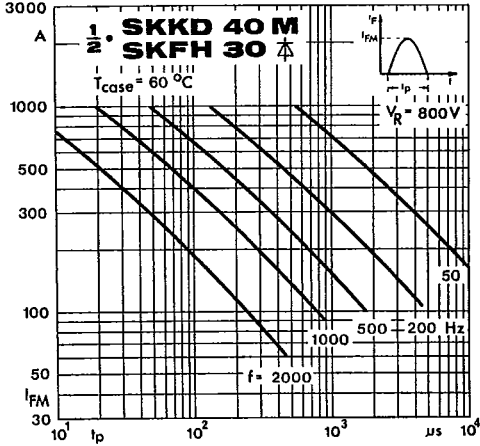


Fig. 12 d Rated sinusoidal peak forward current

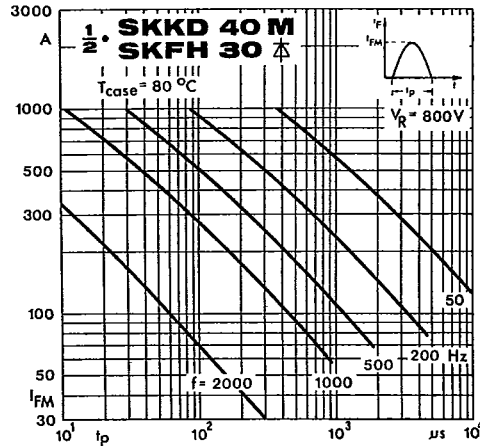


Fig. 12 e Rated sinusoidal peak forward current

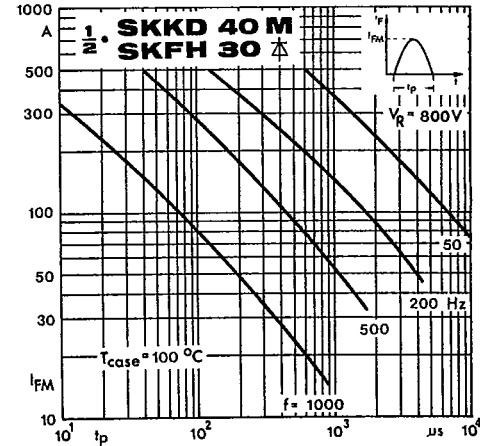


Fig. 12 f Rated sinusoidal peak forward current

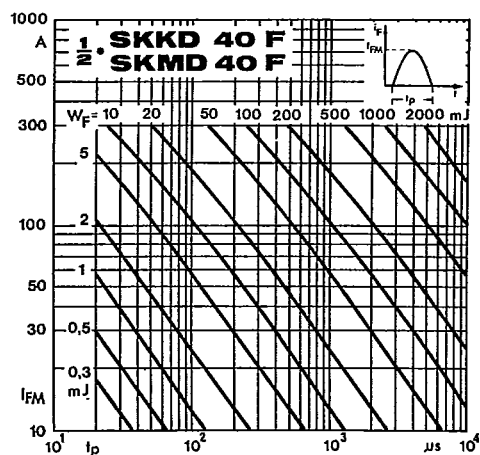


Fig. 13 a Forward energy dissipation, sinusoidal

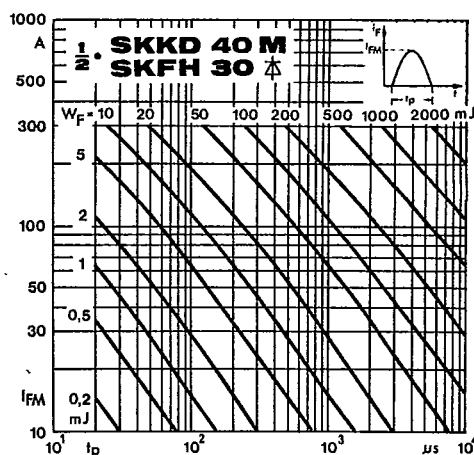


Fig. 13 b Forward energy dissipation, sinusoidal

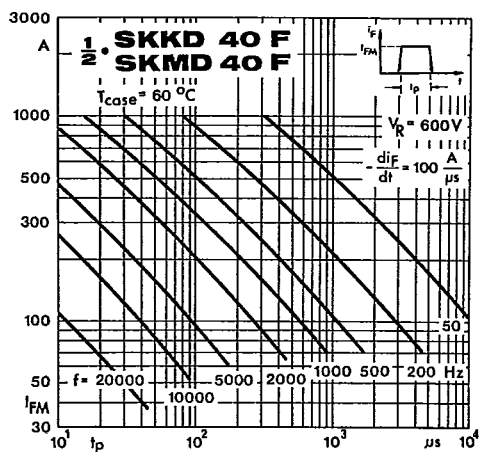


Fig. 14 a Rated rectangular peak forward current

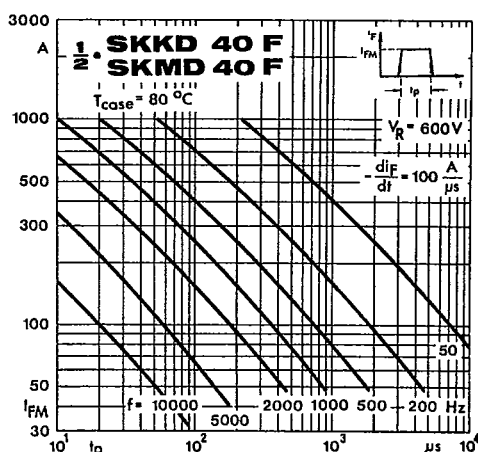


Fig. 14 b Rated rectangular peak forward current

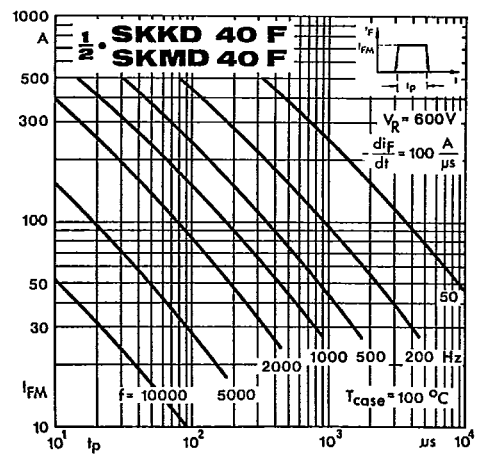


Fig. 14 c Rated rectangular peak forward current

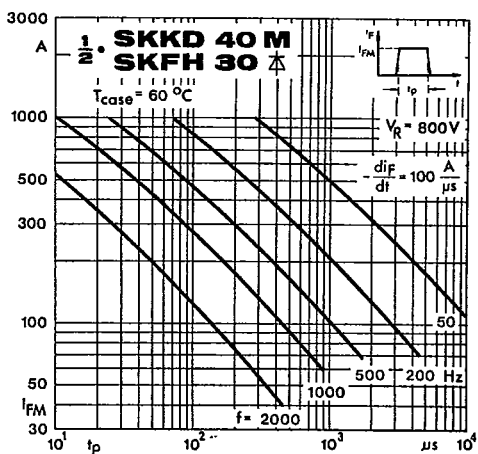


Fig. 14 d Rated rectangular peak forward current

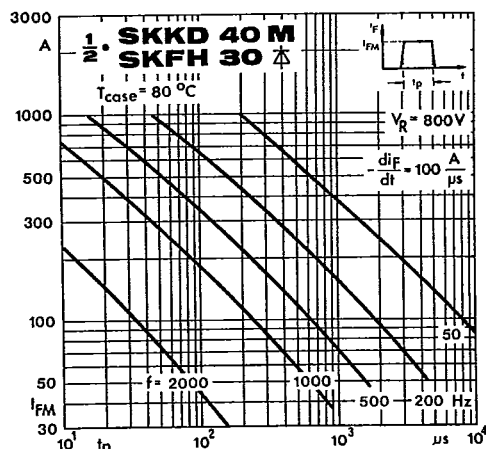


Fig. 14 e Rated rectangular peak forward current

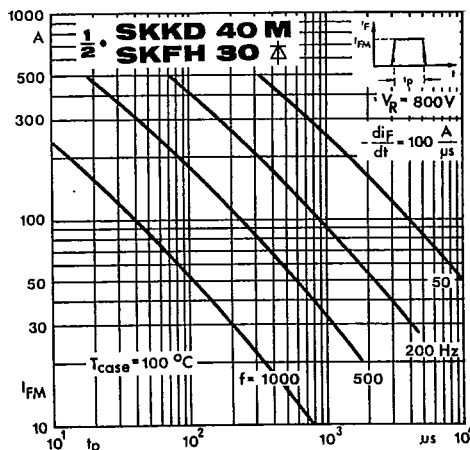


Fig. 14 f Rated rectangular peak forward current

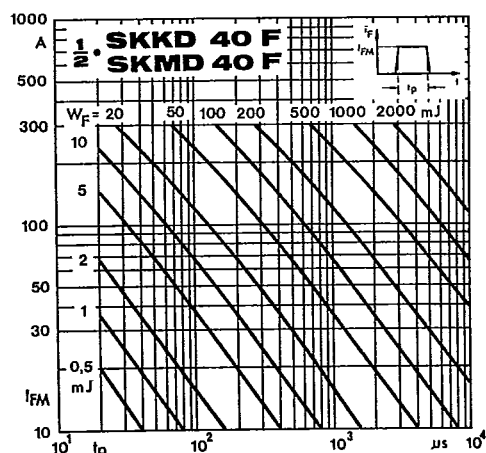


Fig. 15 a Forward energy dissipation, rectangular

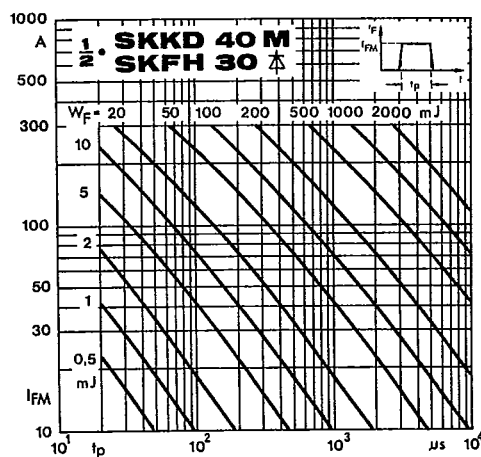


Fig. 15 b Forward energy dissipation, rectangular

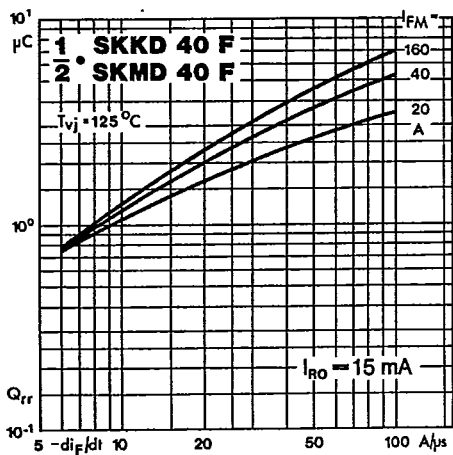


Fig. 16 a Recovered charge vs. current decrease

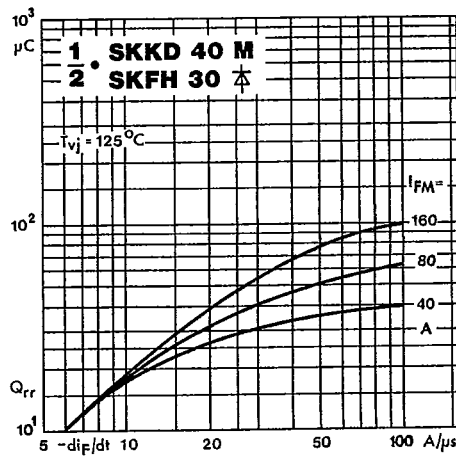


Fig. 16 b Recovered charge vs. current decrease

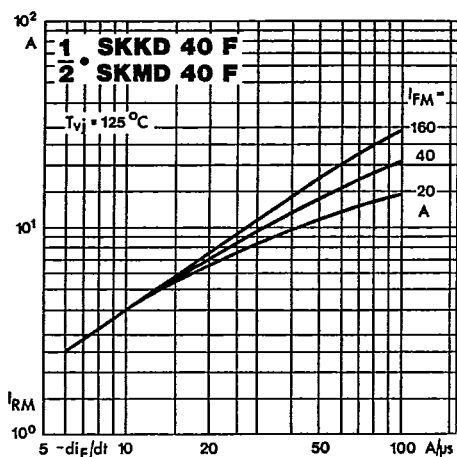


Fig. 17 a Peak recovery current vs. current decrease

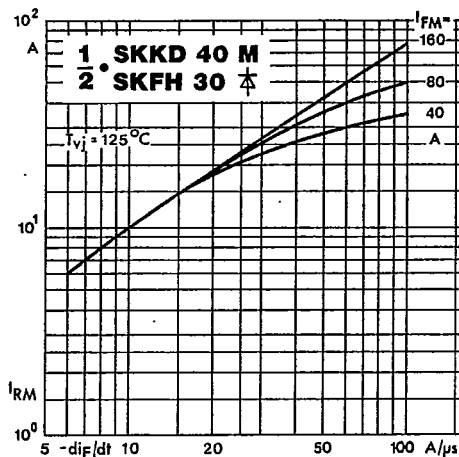


Fig. 17 b Peak recovery current vs. current decrease

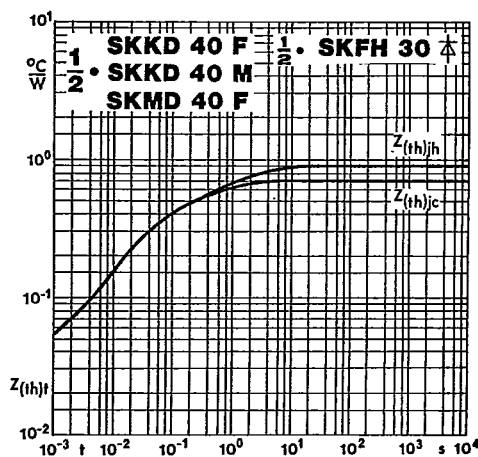


Fig. 18 Transient thermal impedance vs. time

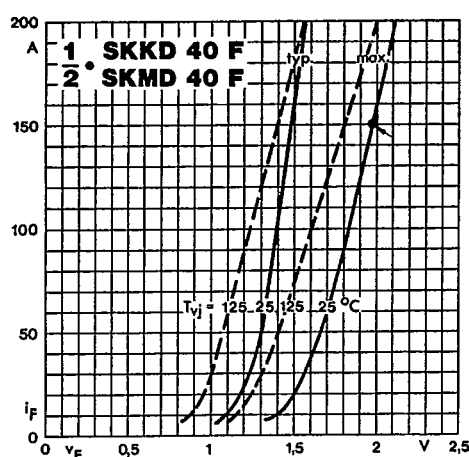


Fig. 19 a Forward characteristics

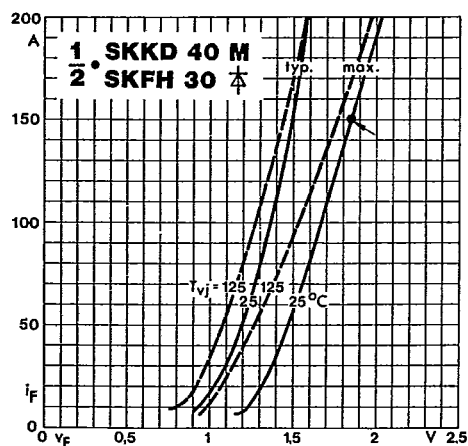


Fig. 19 b Forward characteristics

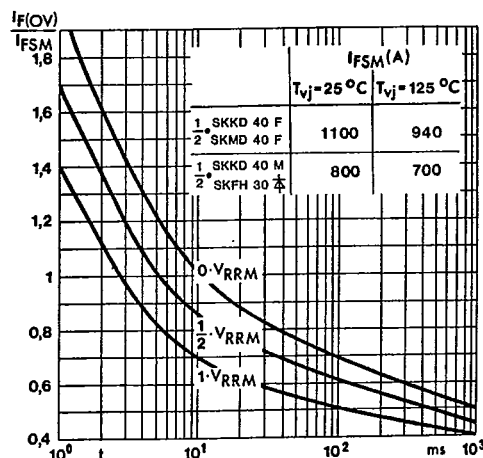


Fig. 20 Surge overload current vs. time

SKFT 30, 40, 60

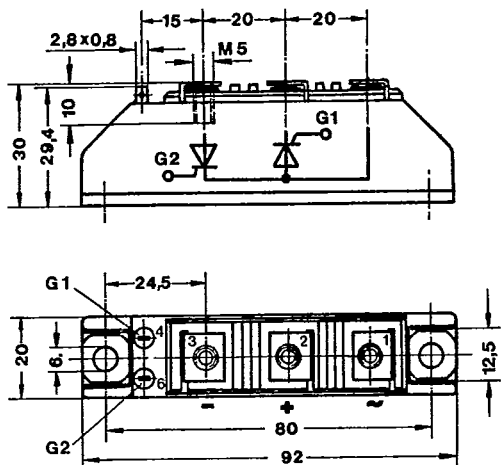
Case A 5

SEMIPACK® 1

IEC 192-2: A 77 A

JEDEC: TO-240 AA

UL recognized, file no. E 63 532



Dimensions in mm

SKFH 30, 40, 60

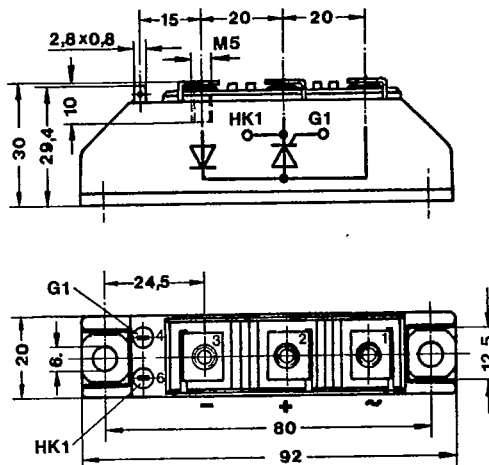
Case A 8

SEMIPACK® 1

IEC 192-2: A 77 A

JEDEC: TO-240 AA

UL recognized, file no. E 63 53

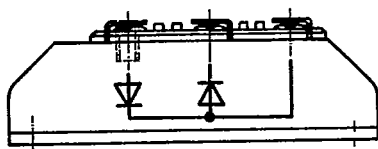


Dimensions in mm

SKKD 40 F, 40 M, 42 F, 105 F, 115 F

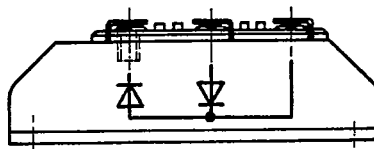
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SKKD 50 E

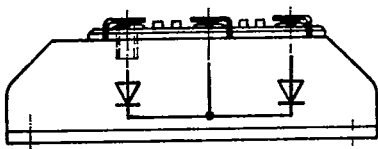
Case A 20



SKMD 40 F

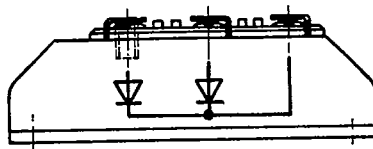
Case A 11

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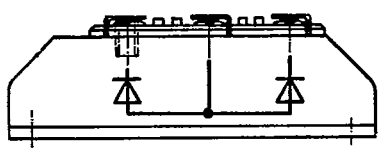
SKMD 42 F, 105 F

Case A 33



SKND 50 E

Case A 19



SKND 42 F, 105 F

Case A 37

