

V _{RSM}	V _{RSM}	I _{FRMS} (maximum value for continuous operation)		
		175 A	310 A	310 A
I _{FAV} (sin. 180; T _{case} = . . .)				
V	V	100 A (85 °C)	160 A (95 °C)	160 A (95 °C)
500	400	SKKD 100/04	–	–
900	800	SKKD 100/08	SKKD 162/08	SKKE 162/08
1300	1200	SKKD 100/12	SKKD 162/12	SKKE 162/12
1500	1400	SKKD 100/14	SKKD 162/14	SKKE 162/14
1700	1600	SKKD 100/16	SKKD 162/16	SKKE 162/16
1900	1800	SKKD 100/18	SKKD 162/18	SKKE 162/18
2100	2000	–	SKKD 162/20	SKKE 162/20
2300	2200	–	SKKD 162/22	SKKE 162/22

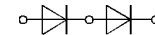
Rectifier Diode Modules

SEMIPACK® 1
SKKD 100 SKMD 100¹⁾

SEMIPACK® 2
SKKD 162 SKND 162¹⁾
SKKE 162



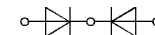
Symbol	Conditions	SKKD 100	SKKD 162 SKKE 162	Units	
I _{FAV} I _D ¹⁾	sin. 180; T _{case} = 85 °C B2/B6 T _{amb} = 45 °C; P 3/180 T _{amb} = 35 °C; P 3/180 F P 16/200 F	100 73 / 91 150 / 190 –	195 90 / 115 210 / 260 320 / 425	A A A A	
I _{FSM} i ² t	T _{vj} = 25 °C; 10 ms T _{vj} = 125 °C; 10 ms T _{vj} = 25 °C; 8,3 ... 10 ms T _{vj} = 125 °C; 8,3 ... 10 ms	2 500 2 000 31 250 20 000	6 000 5 000 180 000 125 000	A A A ² s A ² s	
I _{RD}	T _{vj} max.; V _{RD} = V _{RSM}	5	9	mA	
V _F	T _{vj} = 25 °C; (I _F = . . .); max.	1,35 (300 A)	1,5 (500 A)	V	
V _(TO)	T _{vj} max	0,85	0,85	V	
r _T	T _{vj} max	1,3	1,2	mΩ	
R _{thjc} R _{thch} T _{vj} T _{stg}	} per diode / per module ²⁾	0,35 / 0,175 0,2 / 0,1 – 40 ... + 125 – 40 ... + 125	0,18 / 0,09 0,10 / 0,05 – 40 ... + 135 – 40 ... + 135	°C/W °C/W °C °C	
V _{isol} M ₁ M ₂		} SI (US) units	3600 / 3000 5 (44 lb. in.) ± 15 %		V~ Nm
a w			3 (26 lb. in.) ± 15 % ³⁾ 5 · 9,81 95	5 (44 lb. in.) ± 15 % ³⁾ 5 · 9,81 250	Nm m/s ² g
Case			→ page B 1 – 95; 96 (B 1 – 38: SKMD 100: A 33)	SKKD 100: A 10	SKKD 162: A 23 SKKE 162: A 24 SKND 162: A 57



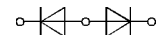
SKKD



SKKE



SKMD



SKND

Features

- Heat transfer through aluminium oxide ceramic isolated metal baseplate
- Hard soldered joints for high reliability
- **SKKD** half bridge connection
center-tap connections:
- **SKMD** common cathode
- **SKND** common anode
- UL recognized, file no. E 63 532

Typical Applications

- Non-controllable rectifiers for AC/AC converters
- Line rectifiers for transistorized AC motor controllers
- Field supply for DC motors
- SKKE: Free-wheeling diodes

¹⁾ SKMD 100, SKND 162 available on request

²⁾ SKKD types only

³⁾ See the assembly instructions

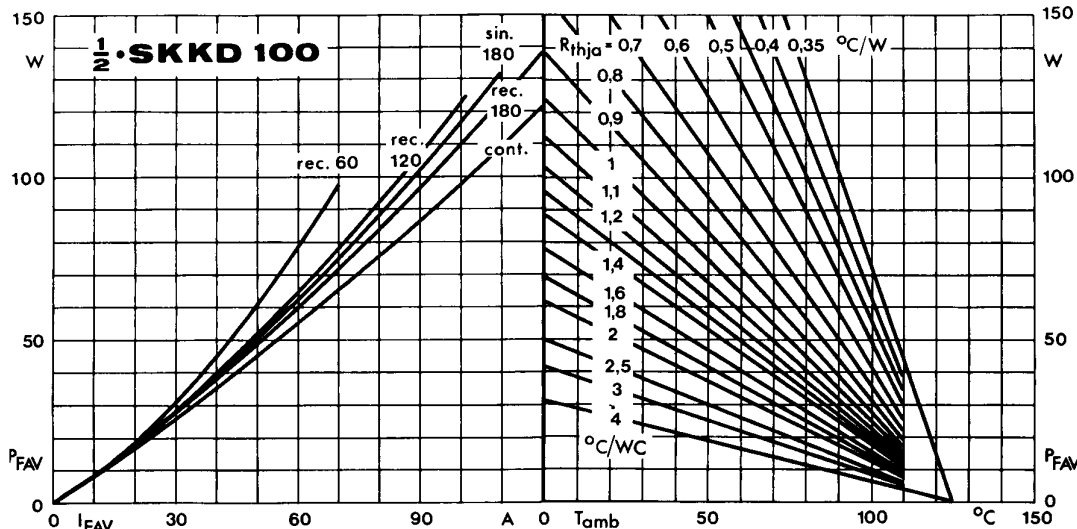


Fig. 11 a Power dissipation per diode vs. forward current and ambient temperature

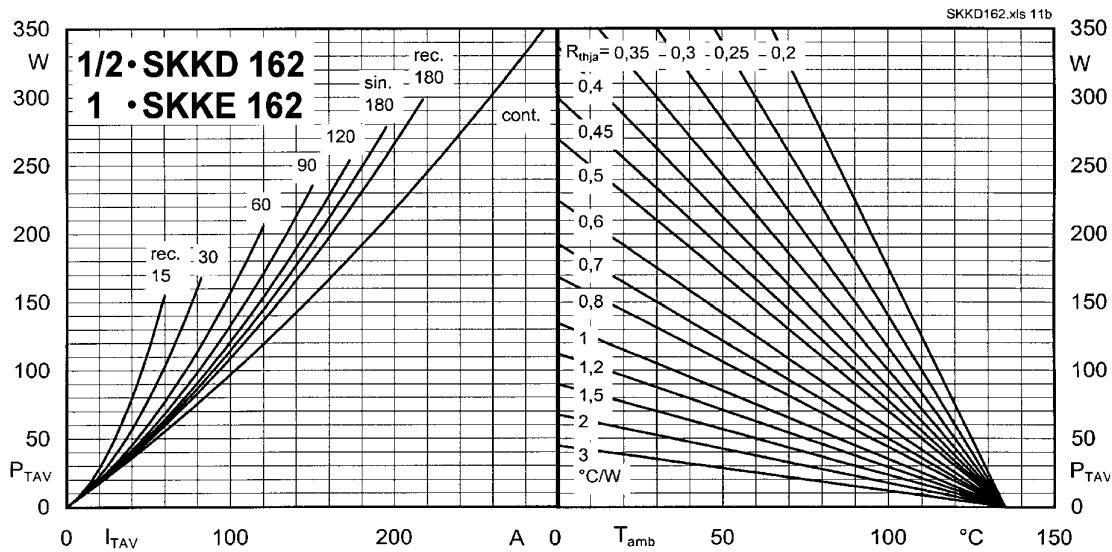


Fig. 11 b Power dissipation per diode vs. forward current and ambient temperature

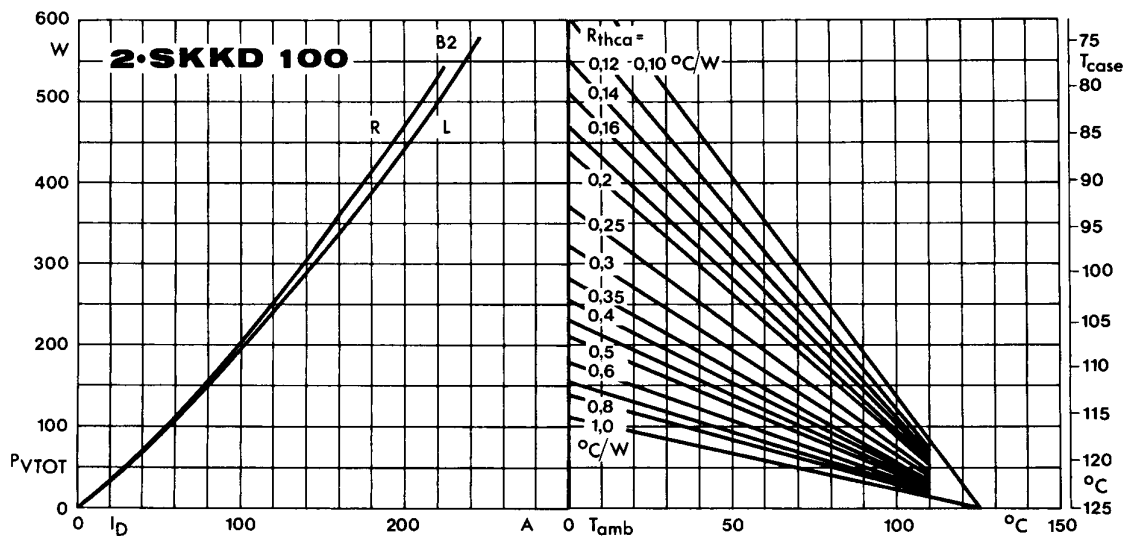


Fig. 12 a Power dissipation of two modules vs. direct current and case temperature

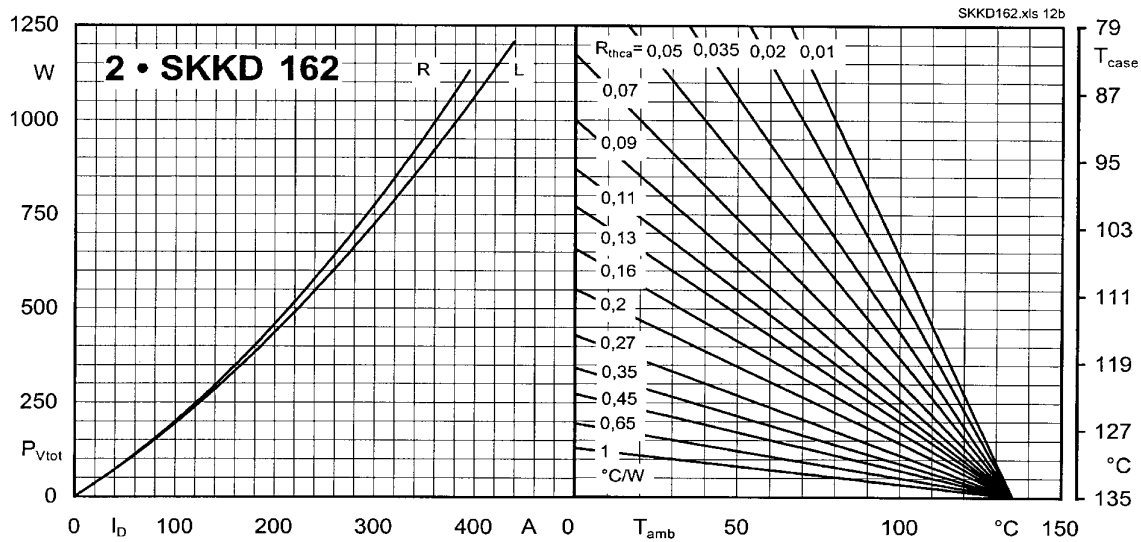


Fig. 12 b Power dissipation of two modules vs. direct current and case temperature

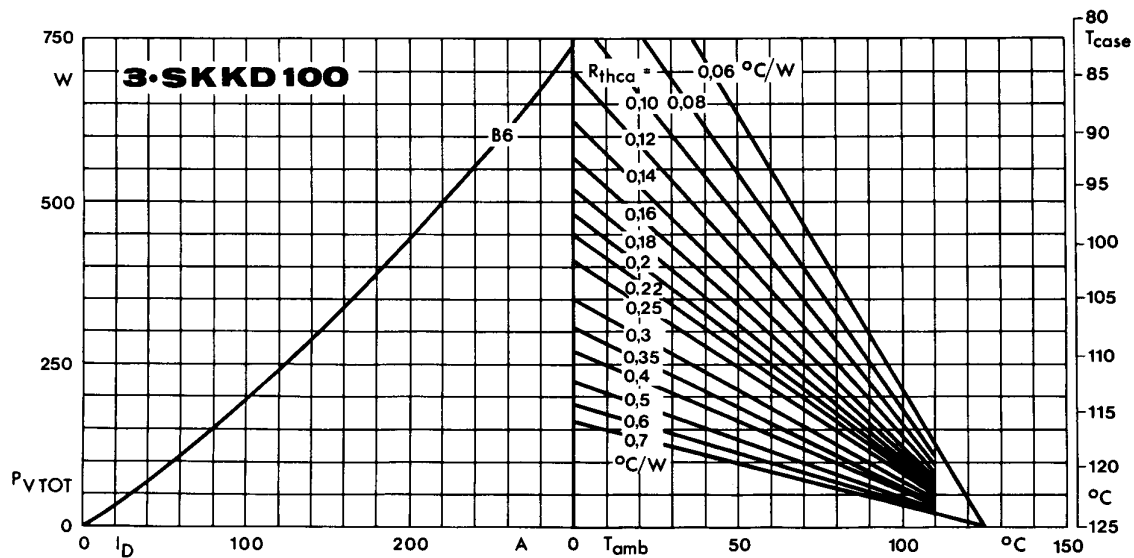


Fig. 13 a Power dissipation of three modules vs. direct current and case temperature

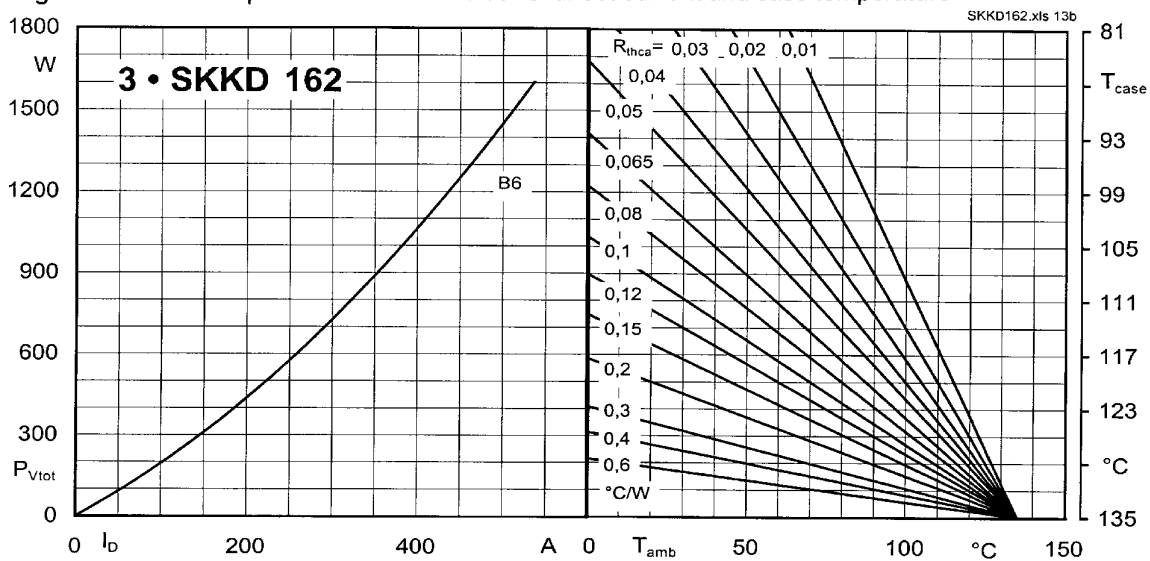


Fig. 13 b Power dissipation of three modules vs. direct current and case temperature

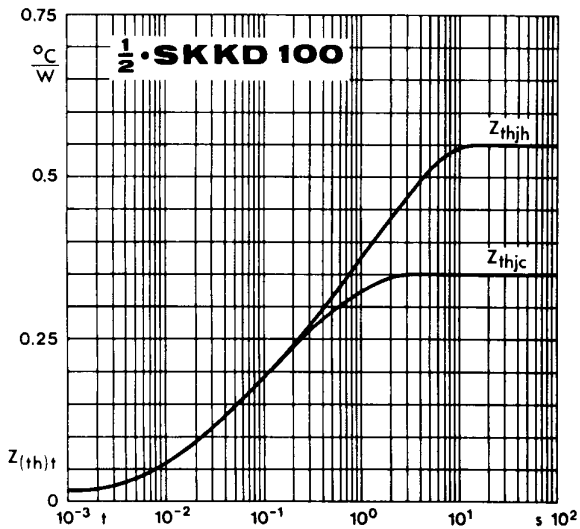


Fig. 14 a Transient thermal impedance vs. time

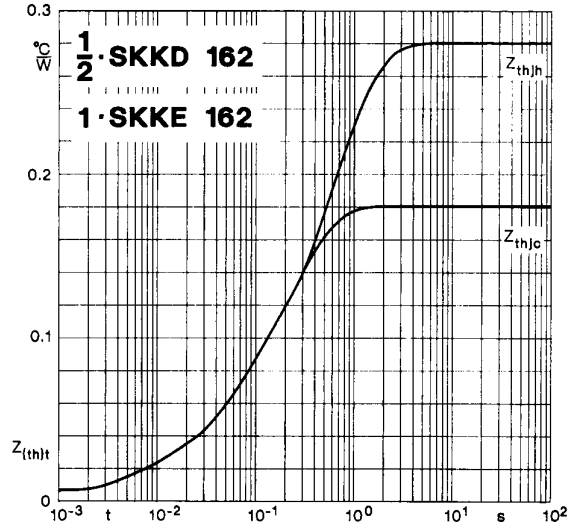


Fig. 14 b Transient thermal impedance vs. time

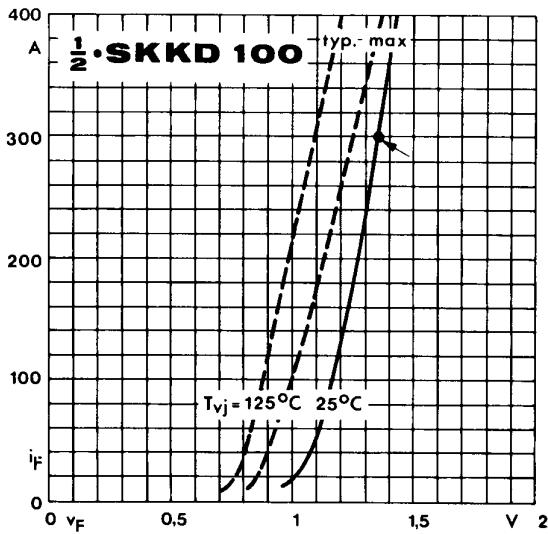


Fig. 15 a Forward characteristics

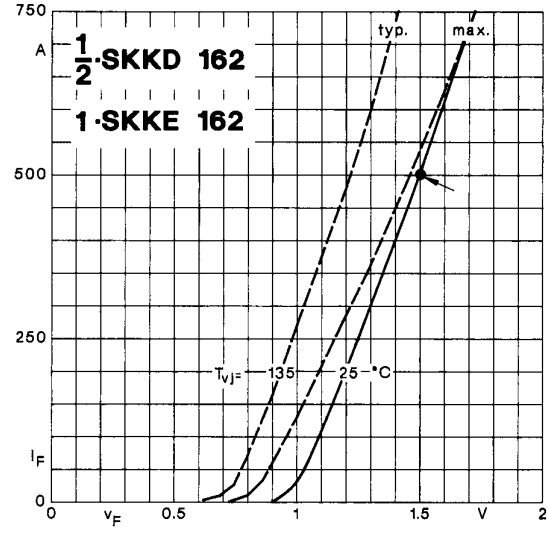


Fig. 15 b Forward characteristics

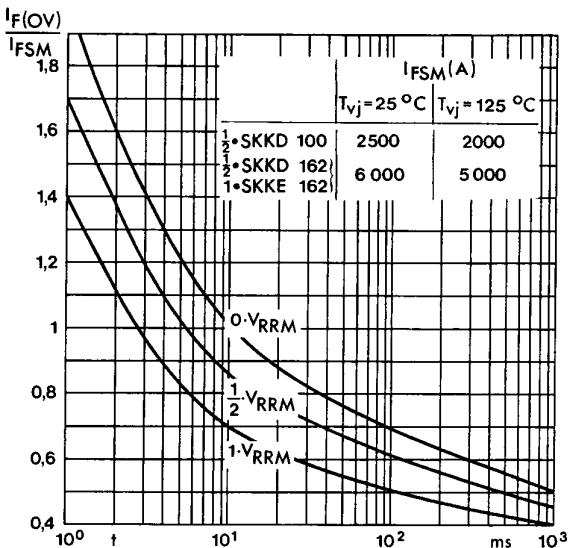


Fig. 16 Surge overload current vs. time

SKKT 19 ... 105

Case A 5

IEC 192-2: A 77 A

JEDEC: TO-240 AA

SEMIPACK® 1

UL recognized, file no. E 63 532



Dimensions in mm

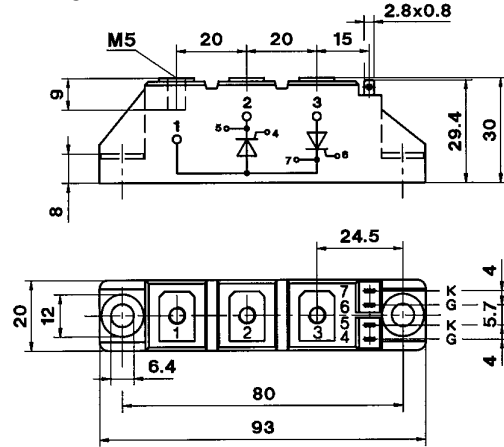
SKKT 20/ ... 106/

Case A 46

IEC 192-2: A 77 A

JEDEC: TO-240 AA

SEMIPACK® 1



Dimensions in mm

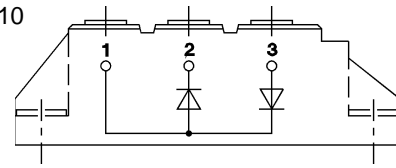
SKKH 26 ... 105

Case A 6



SKKD 26 ... 100

Case A 10



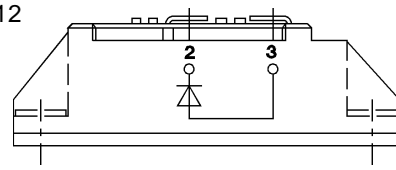
SKNH 56 ... 91

Case A 7



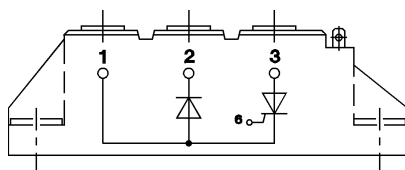
SKKE 81

Case A 12



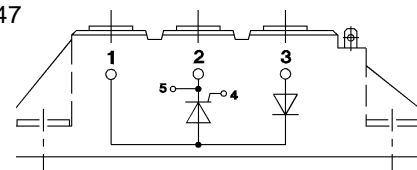
SKKL 56 ... 105

Case A 9



SKKH 27 ... 106

Case A 47



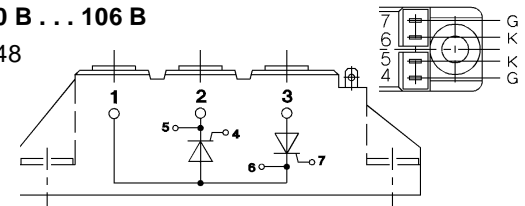
SKND 46 ... 81

Case A 19



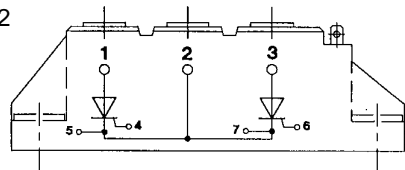
SKKT 20 B ... 106 B

Case A 48



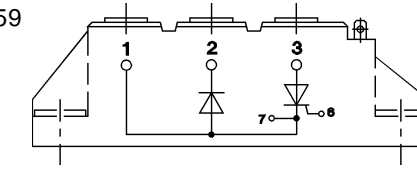
SKMT 92

Case A 72



SKKL 42 ... 106

Case A 59

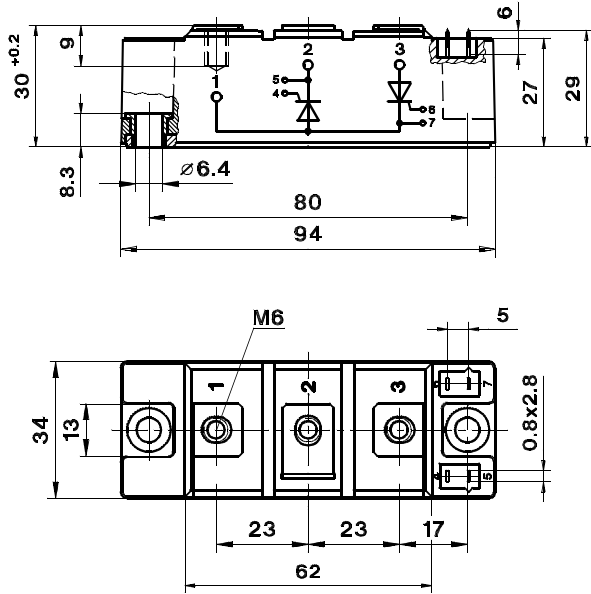


SKKT 122, 132, 162

Case A 21

SEMIPACK[®] 2

UL recognized, file no. E 63 532

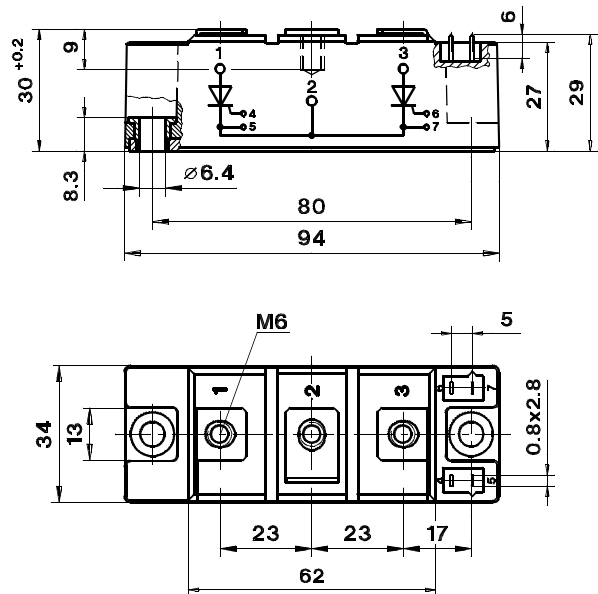


SKMT 132

Case A 50

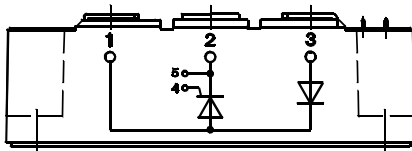
SEMIPACK[®] 2

UL recognized, file no. E 63 532



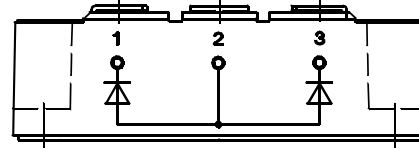
SKKH 122, 132, 162

Case A 22



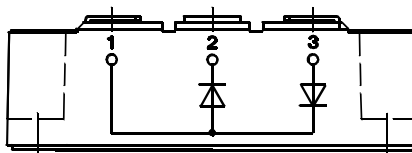
SKND 165

Case A 52



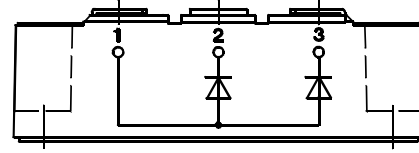
SKKD 162

Case A 23



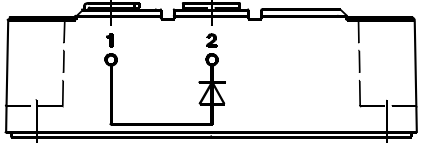
SKND 162

Case A 57



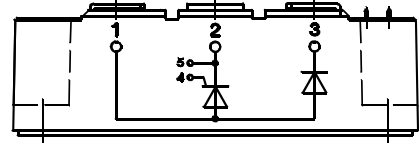
SKKE 162

Case A 24



SKNH 132

Case A 61



Dimensions in mm

Dimensions in mm

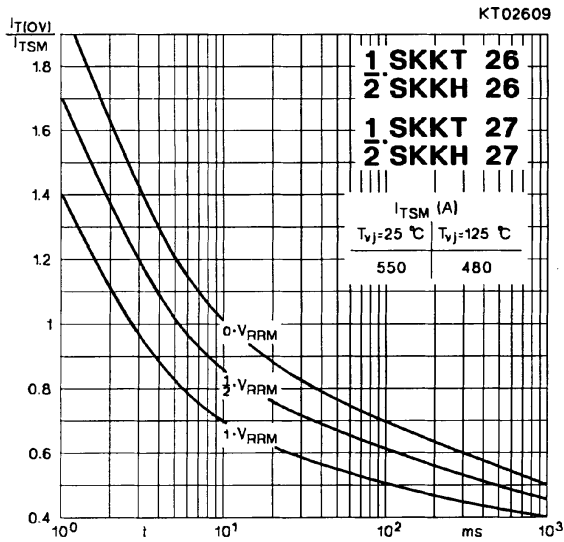


Fig. 9 Surge overload current vs. time

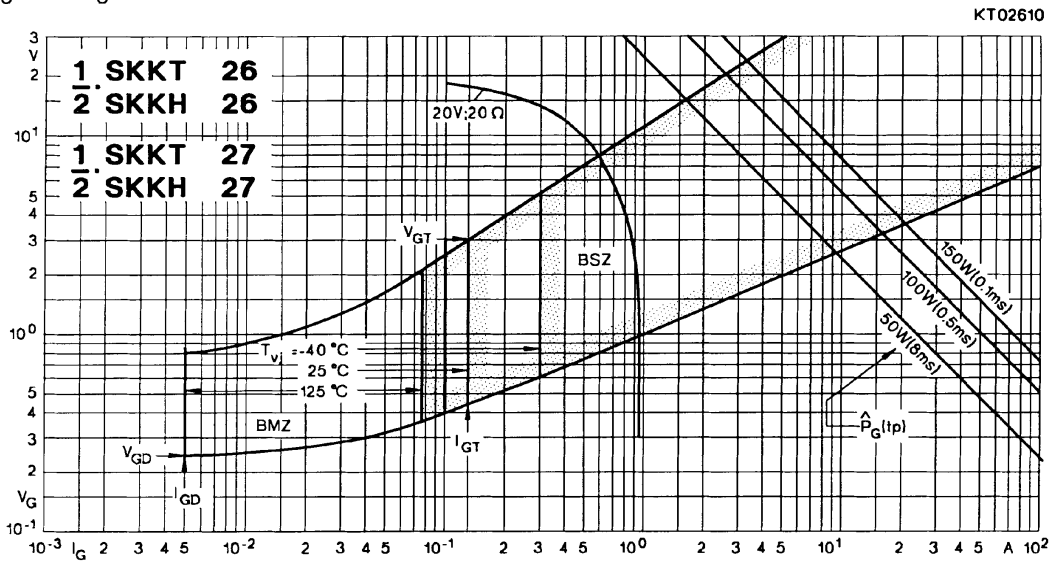


Fig. 10 Gate trigger characteristics

