SKKD 162, SKKE 162

SEMIPACK® 2

Rectifier Diode Modules

SKKD 162

SKKE 162

Features

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

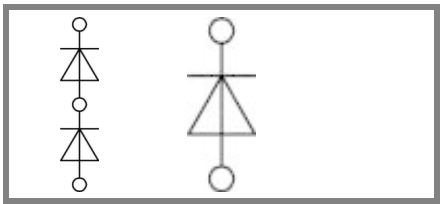
Typical Applications*

- Non-controllable rectifiers for AC/AC converters
- Line rectifiers for transistorized AC motor controllers
- Field supply for DC motors

1) SKKD types only

V_{RSM} V	V_{RRM} V	I_{FRMS} = 310 A (maximum value for continuous operation) I_{FAV} = 160 A (sin. 180; T_c = 95 °C)		
900	800	SKKD 162/08	SKKE 162/08	
1300	1200	SKKD 162/12	SKKE 162/12	
1500	1400	SKKD 162/14	SKKE 162/14	
1700	1600	SKKD 162/16	SKKE 162/16	
1900	1800	SKKD 162/18	SKKE 162/18	
2100	2000	SKKD 162/20H4		
2300	2200	SKKD 162/22H4	SKKE 162/22H4	

Symbol	Conditions	Values	Units
I_{FAV}	sin. 180; T_c = 85 (100) °C	195 (150)	A
I_D	P3/180; T_a = 45 °C; B2 / B6	90 / 115	A
	P3/180F; T_a = 35 °C; B2 / B6	210 / 260	A
I_{FSM}	T_{vj} = 25 °C; 10 ms	6000	A
	T_{vj} = 125 °C; 10 ms	5000	A
i^2t	T_{vj} = 25 °C; 8,3 ... 10 ms	180000	A^2s
	T_{vj} = 125 °C; 8,3 ... 10 ms	125000	A^2s
V_F	T_{vj} = 25 °C; I_F = 500 A	max. 1,5	V
$V_{(TO)}$	T_{vj} = 135 °C	max. 0,85	V
r_T	T_{vj} = 135 °C	max. 1,2	mΩ
I_{RD}	T_{vj} = 135 °C; V_{RD} = V_{RRM}	max. 9	mA
$R_{th(j-c)}$	per diode / per module 1)	0,18 / 0,09	K/W
$R_{th(c-s)}$	per diode / per module 1)	0,1 / 0,05	K/W
T_{vj}		- 40 ... + 135	°C
T_{stg}		- 40 ... + 135	°C
V_{isol}	a. c. 50 Hz; r.m.s.; 1 s / 1 min.	3600 / 3000	V~
V_{isol}	a. c. 50 Hz; r.m.s.; 1 s / 1 min. for SKK ...H4	4800 / 4000	V~
M_s	to heatsink	5 ± 15 %	Nm
M_t	to terminals	5 ± 15 %	Nm
a		5 * 9,81	m/s^2
m	approx.	165	g
Case	SKKD	A 23	
	SKKE	A 24	
	SKKE H4	A 54	



SKKD SKKE

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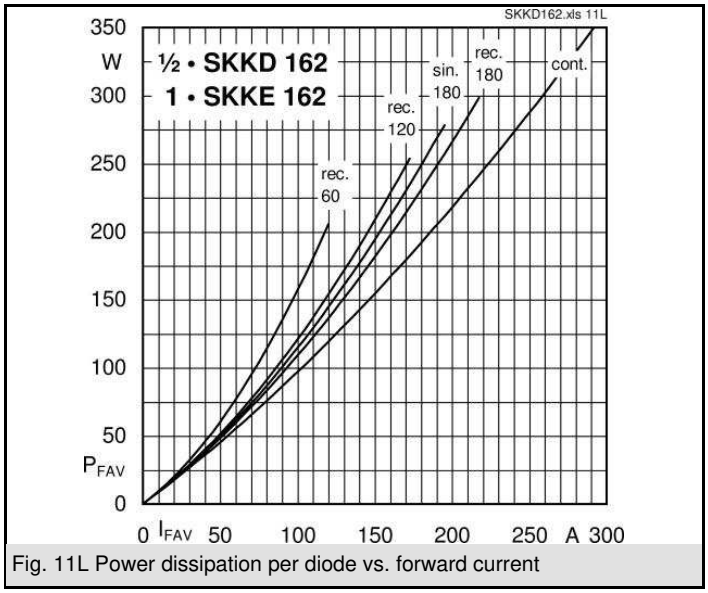

Fig. 11L Power dissipation per diode vs. forward current

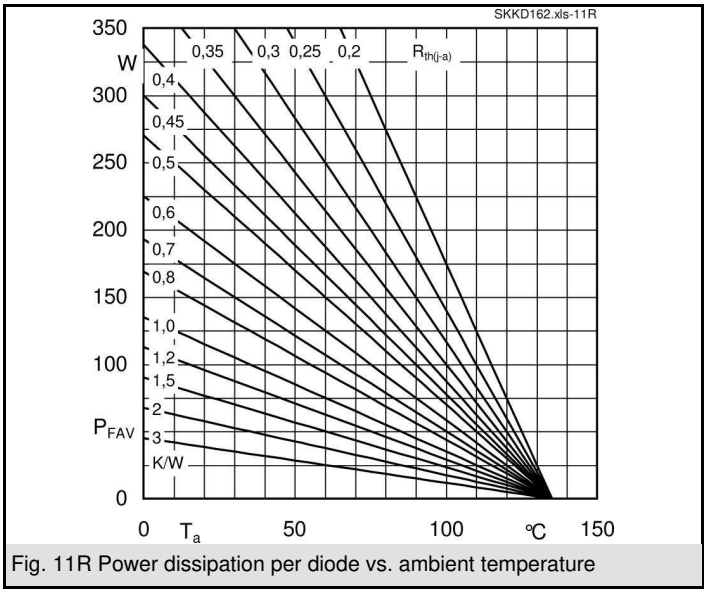

Fig. 11R Power dissipation per diode vs. ambient temperature

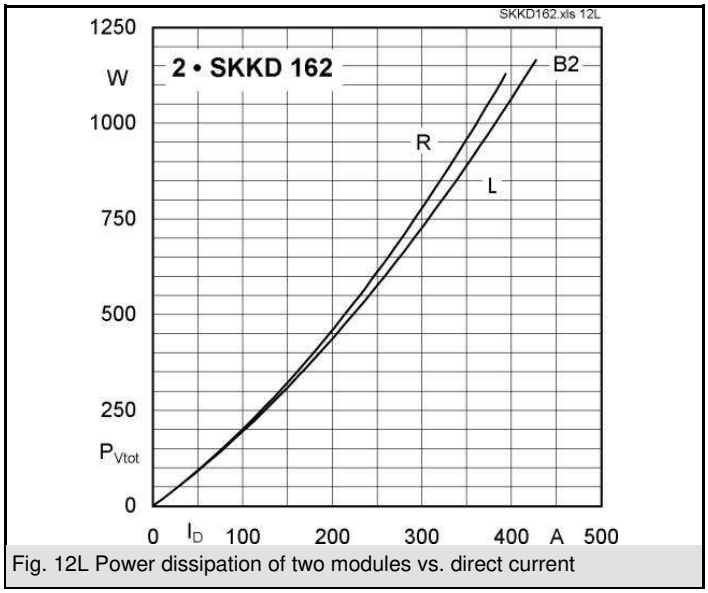

Fig. 12L Power dissipation of two modules vs. direct current

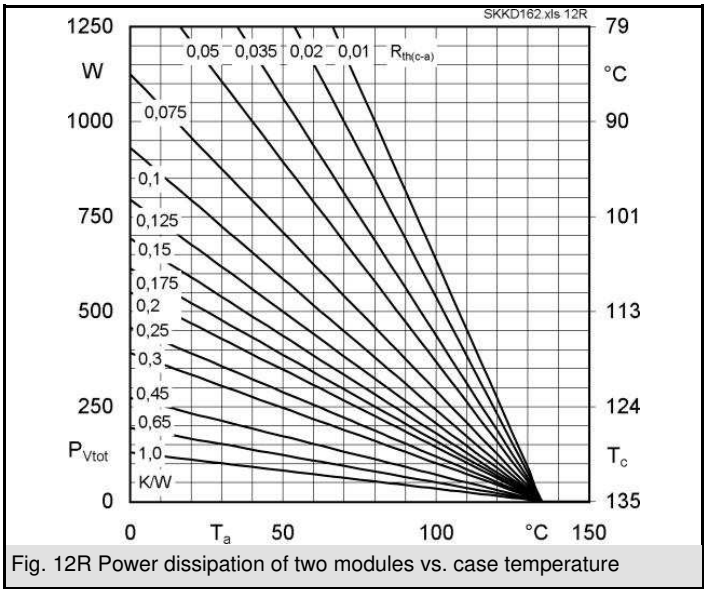

Fig. 12R Power dissipation of two modules vs. case temperature

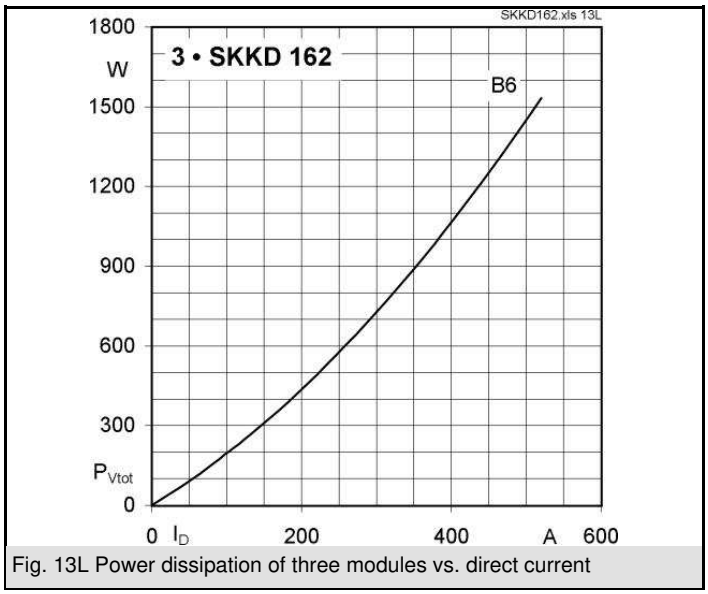

Fig. 13L Power dissipation of three modules vs. direct current

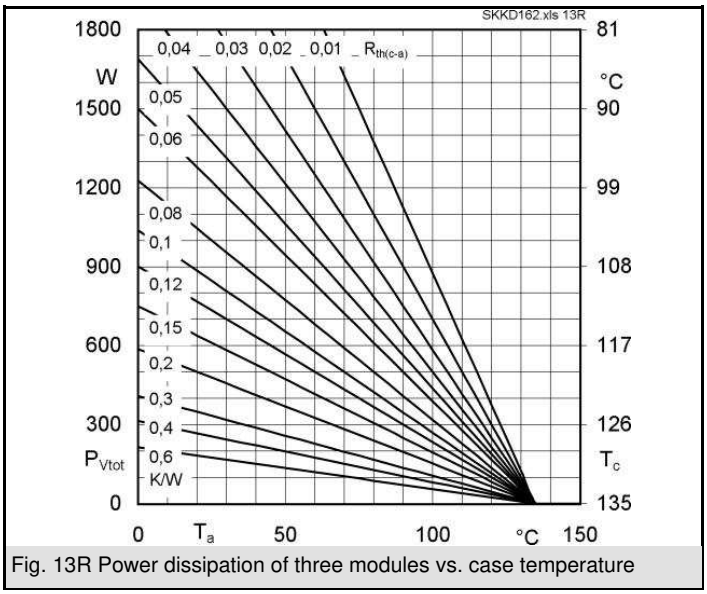

Fig. 13R Power dissipation of three modules vs. case temperature

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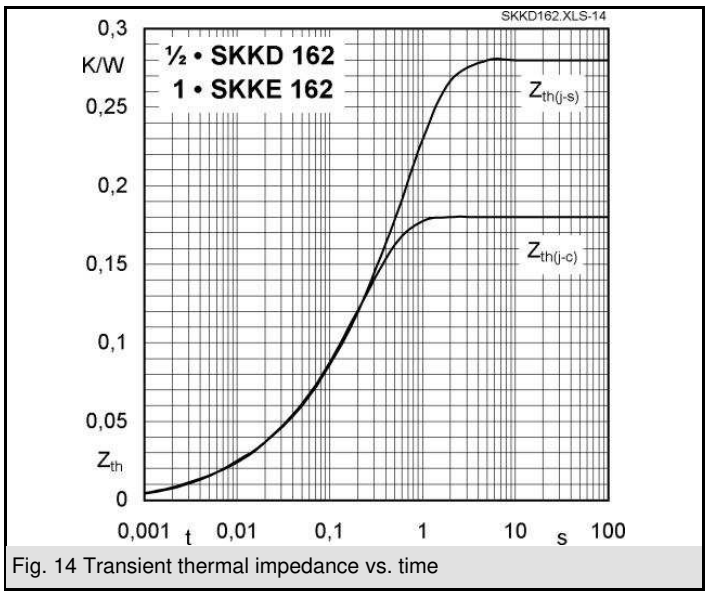

Fig. 14 Transient thermal impedance vs. time

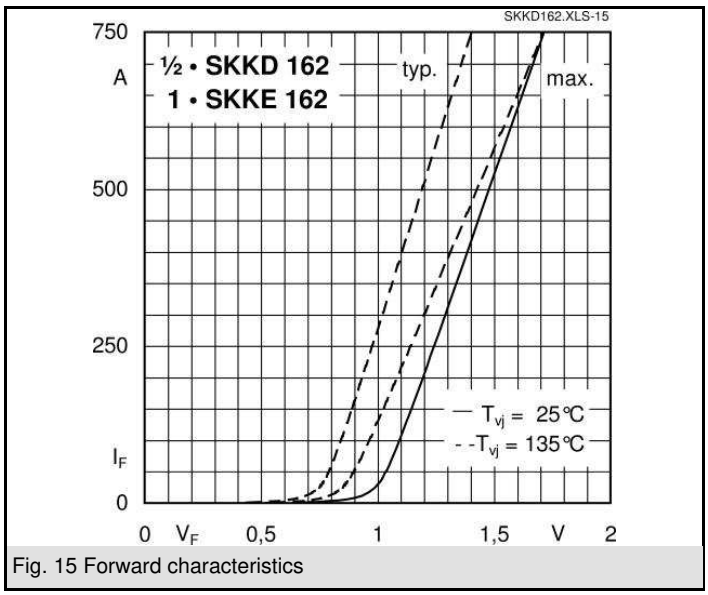

Fig. 15 Forward characteristics

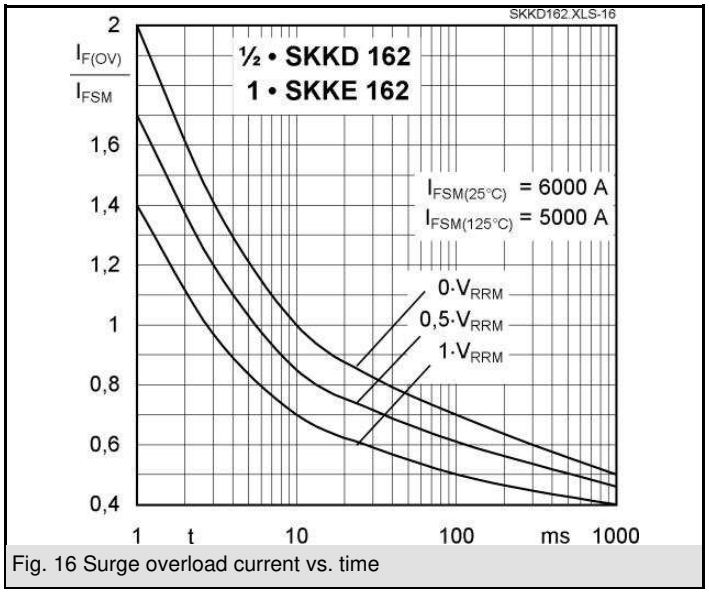

Fig. 16 Surge overload current vs. time

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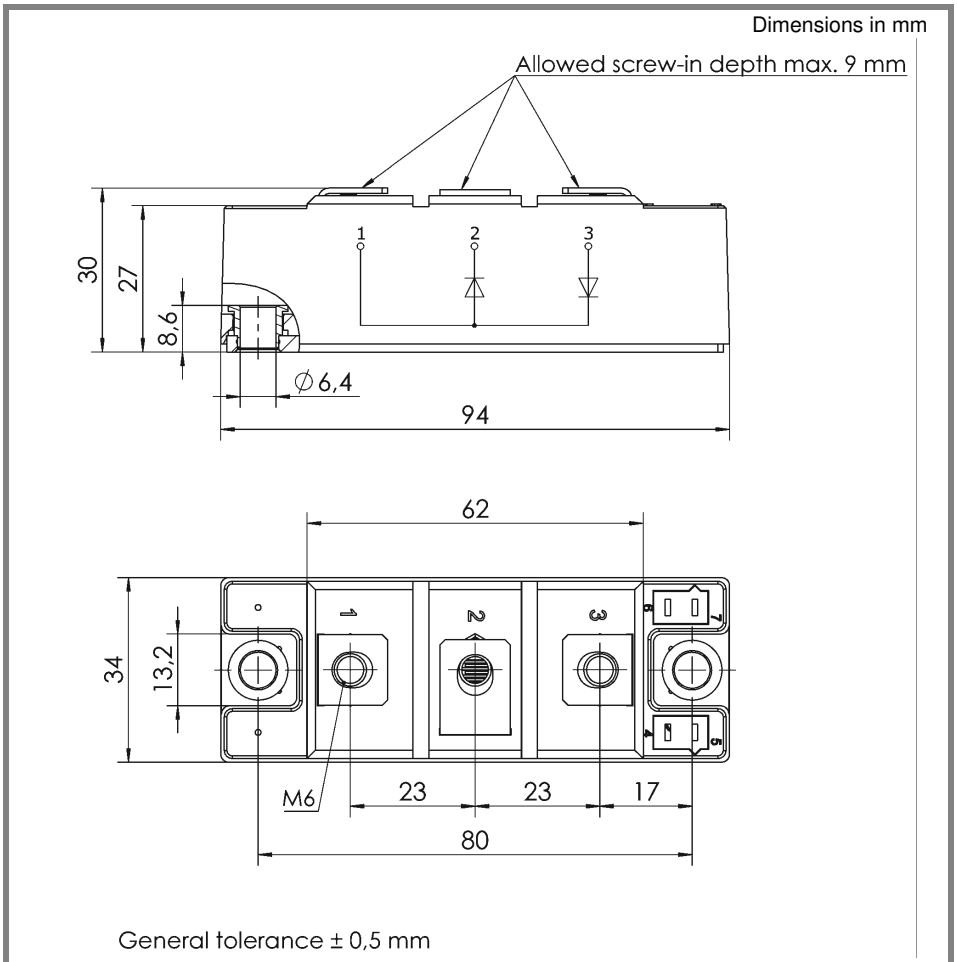
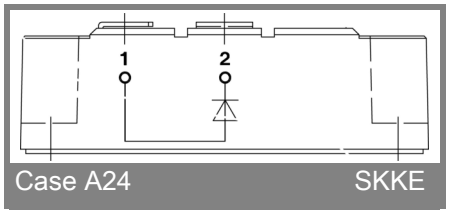
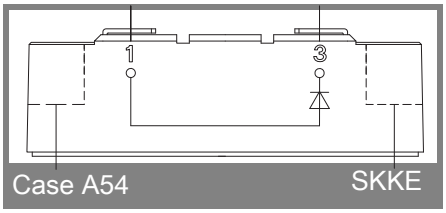


Case A 23 (SKKD)



Case A24 SKKE



Case A54 SKKE

This is an electrostatic discharge sensitive device (ESDS) due to international standard IEC 61340.

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