SKKD 212 ... THYRISTOR BRIDGE,SCR,BRIDGE



SEMIPACK® 2

Rectifier Diode Modules

SKKD 212

Features

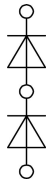
- Heat transfer through aluminium oxide ceramic isolated metal baseplate
- Hard soldered joints for high reliability

Typical Applications*

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

V_{RSM} V	V_{RRM} V	I_{FRMS} = 340 A (maximum value for continuous operation) I_{FAV} = 212 A (sin. 180; T_c = 85 °C)		
1300	1200	SKKD 212/12		
1700	1600	SKKD 212/16		
1900	1800	SKKD 212/18		

Symbol	Conditions	Values	Units
I_{FAV}	sin. 180; T_c = 85 (100) °C	212 (165)	A
I_{FSM}	T_{vj} = 25 °C; 10 ms	6600	A
	T_{vj} = 125 °C; 10 ms	5500	A
i²t	T_{vj} = 25 °C; 8,3 ... 10 ms	217800	A²s
	T_{vj} = 125 °C; 8,3 ... 10 ms	151250	A²s
V_F	T_{vj} = 25 °C; I_F = 500 A	max. 1,4	V
$V_{(TO)}$	T_{vj} = 135 °C	max. 0,75	V
r_T	T_{vj} = 135 °C	max. 1,05	mΩ
I_{RD}	T_{vj} = 135 °C; V_{RD} = V_{RRM}	max. 9	mA
$R_{th(j-c)}$	per diode / per module	0,18 / 0,09	K/W
$R_{th(c-s)}$	per diode / per module	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~
M_s	to heatsink	5 ± 15 %	Nm
M_t	to terminals	5 ± 15 %	Nm
a		5 * 9,81	m/s²
m	approx.	165	g
Case	SKKD	A 23	



SKKD

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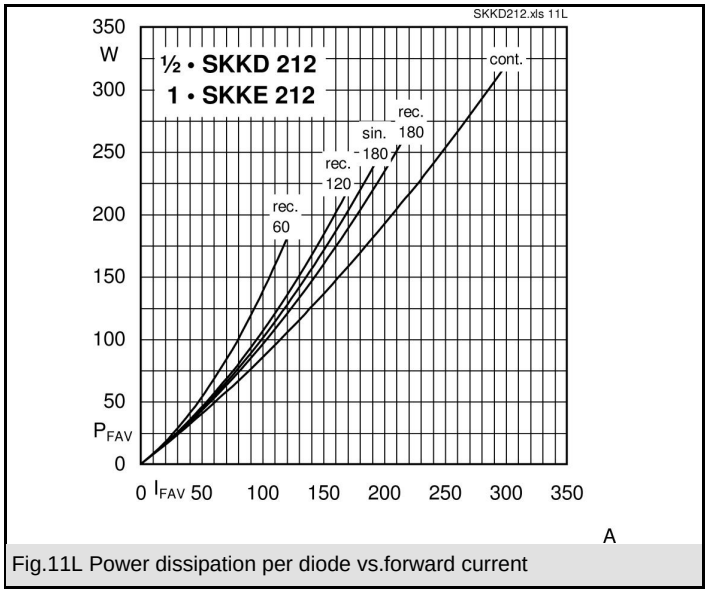


Fig.11L Power dissipation per diode vs.forward current

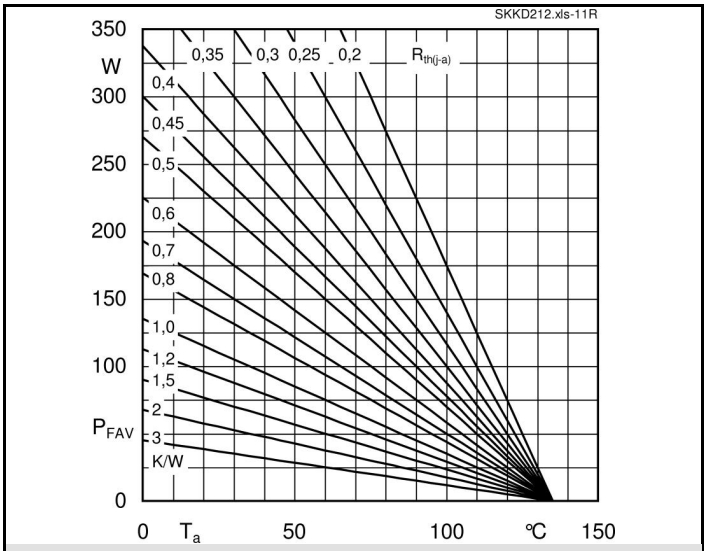


Fig.11R Power dissipation per diode vs.ambient

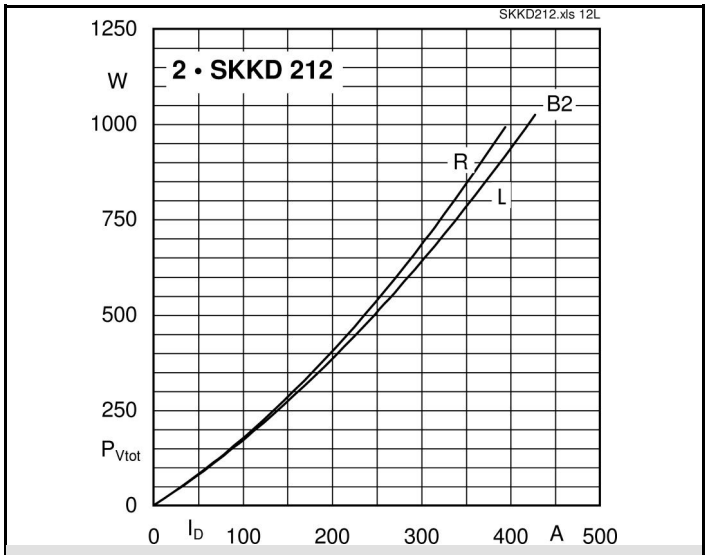


Fig.12L Power dissipation of two modules vs.direct

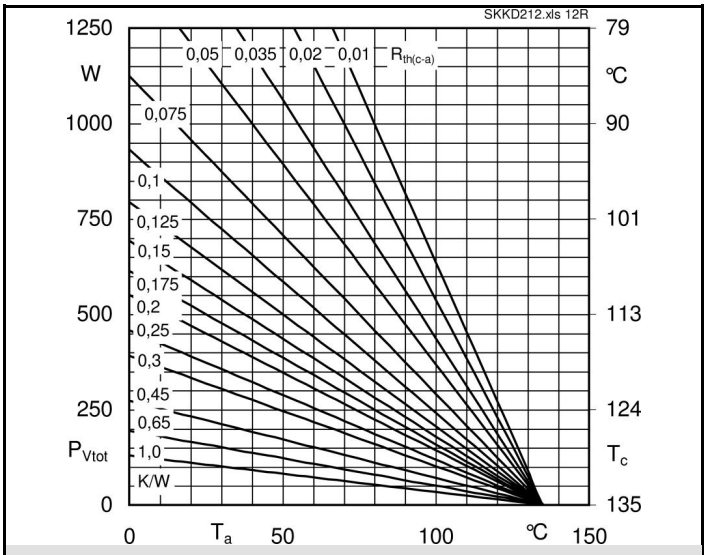


Fig.12R Power dissipation of two modules vs.case

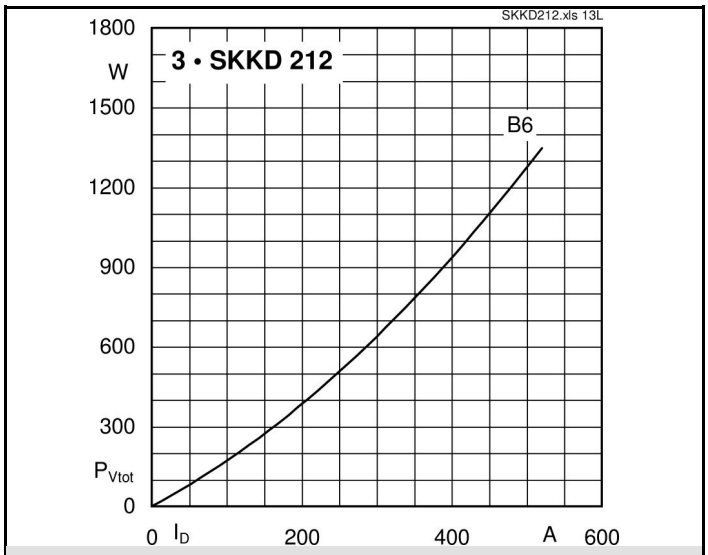


Fig.13L Power dissipation of three modules vs.direct

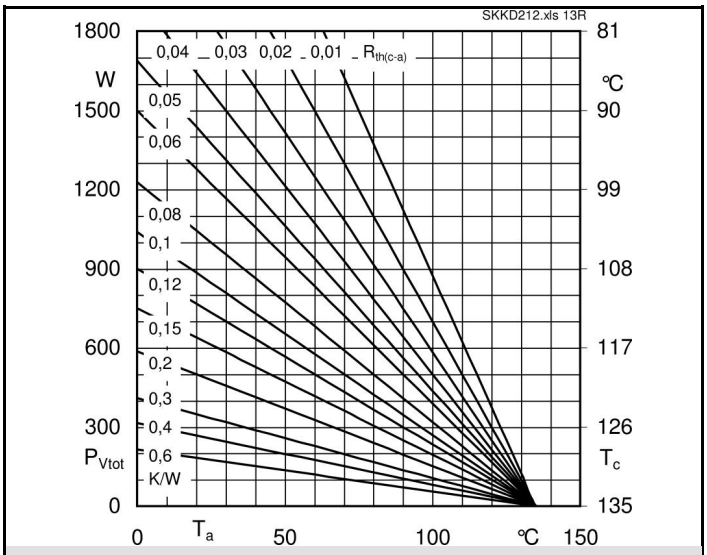


Fig.13R Power dissipation of three modules vs.case

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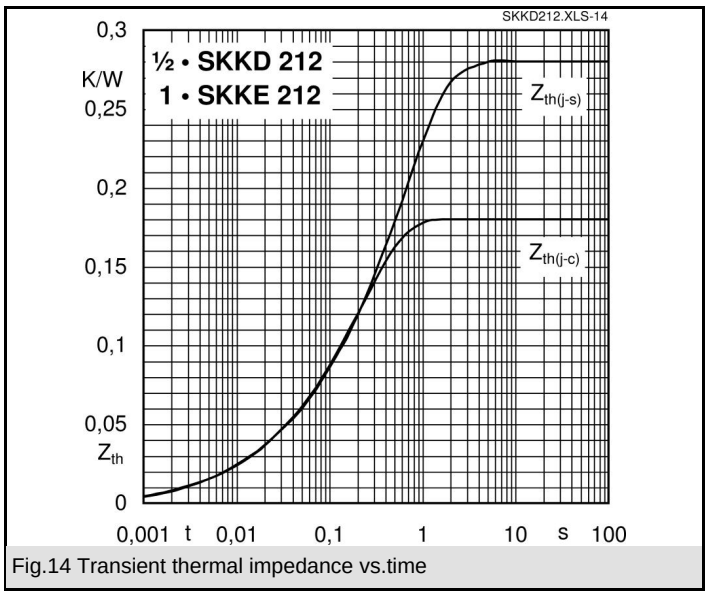


Fig.14 Transient thermal impedance vs.time

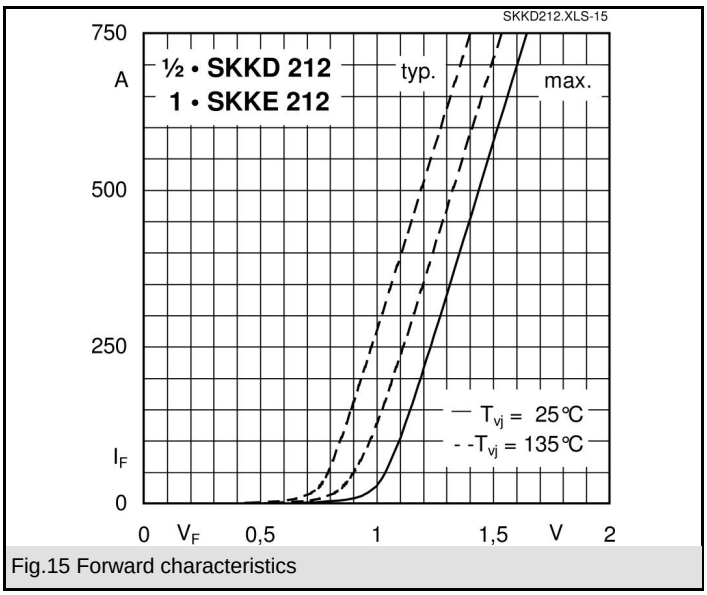


Fig.15 Forward characteristics

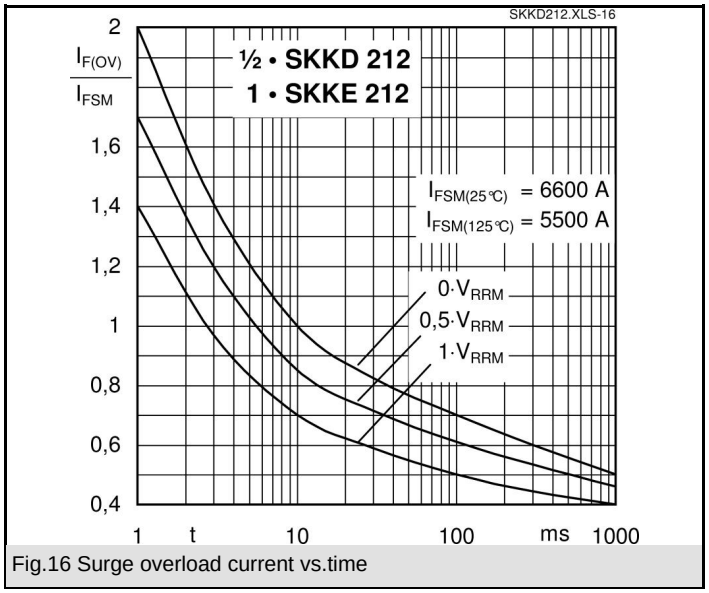
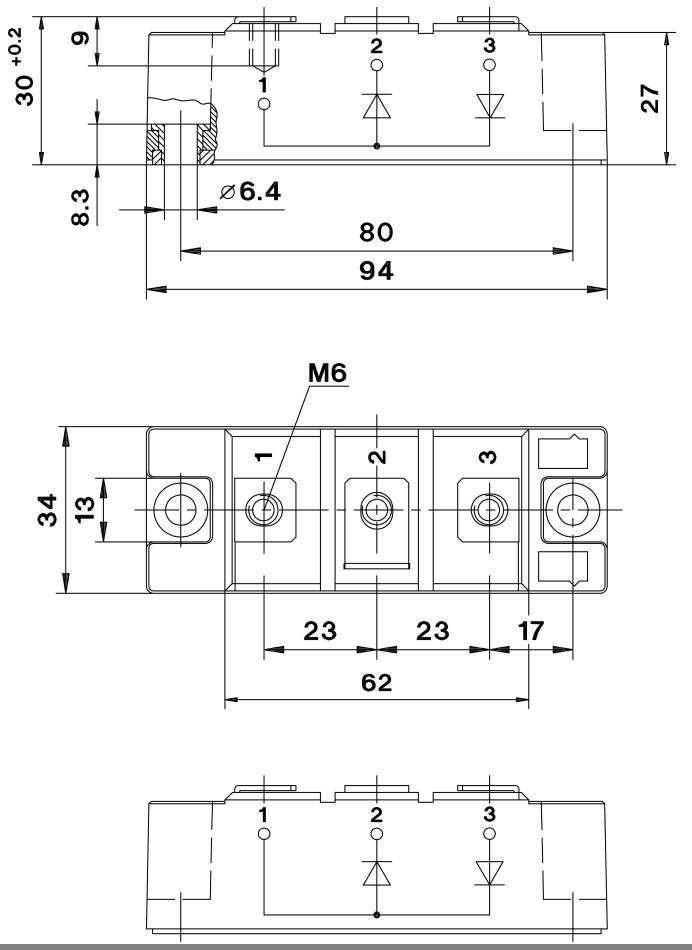


Fig.16 Surge overload current vs.time

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Dimensions in mm



Case A 23 (SKKD)

* The specifications of our components may not be considered as an assurance of component characteristics. Components have to be tested for the respective application. Adjustments may be necessary. The use of SEMIKRON products in life support appliances and systems is subject to prior specification and written approval by SEMIKRON. We therefore strongly recommend prior consultation of our personal.

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