SKKD 212 ... THYRISTOR BRIDGE,SCR BRIDGE

SEMIPACK® 2

Rectifier Diode Modules

SKKD 212

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
i^2t	T_{vj} = 25 °C; 8,3 ... 10 ms	217800	A^2s
	T_{vj} = 125 °C; 8,3 ... 10 ms	151250	A^2s
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/s^2
m	approx.	165	g
Case	SKKD	A 23	

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

SKKD

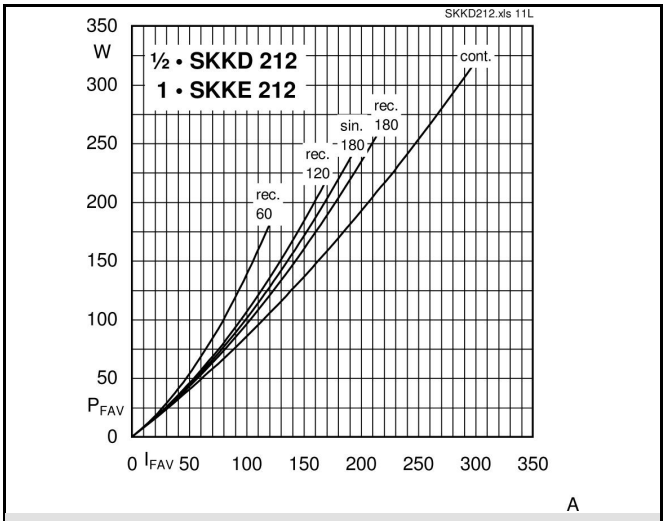


Fig.11L Power dissipation per diode vs.forward current

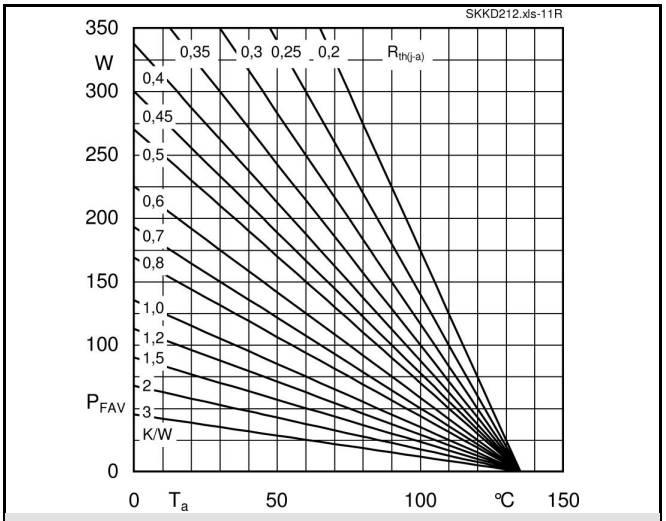


Fig.11R Power dissipation per diode vs.ambient

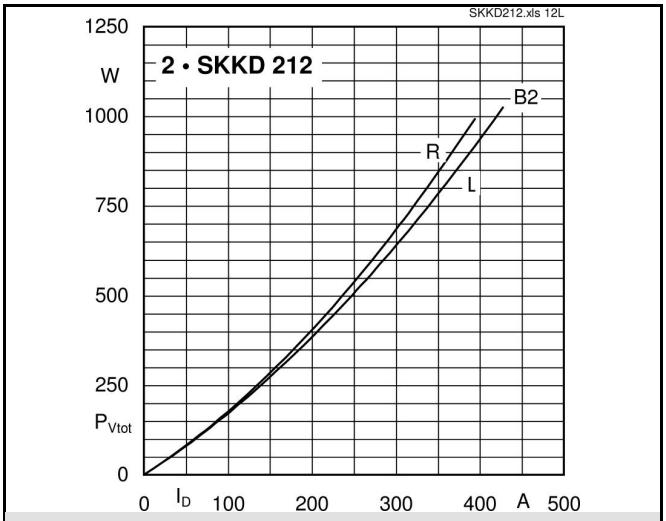


Fig.12L Power dissipation of two modules vs.direct

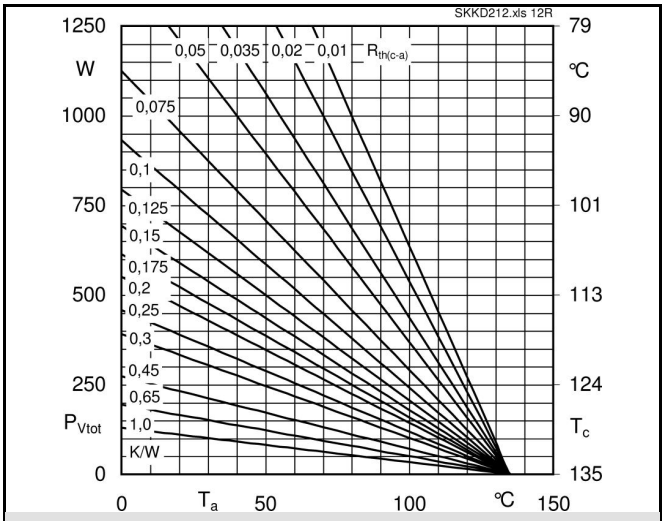


Fig.12R Power dissipation of two modules vs.case

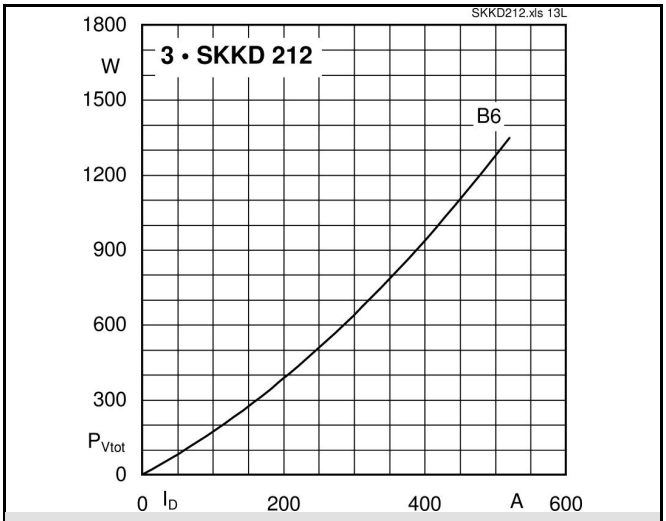


Fig.13L Power dissipation of three modules vs.direct

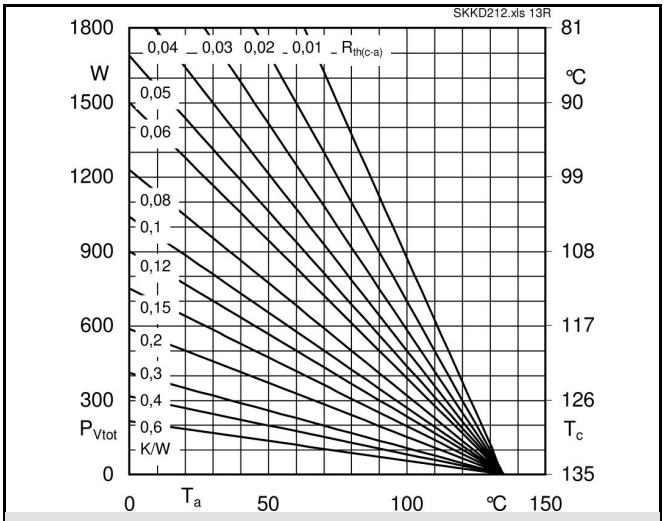


Fig.13R Power dissipation of three modules vs.case

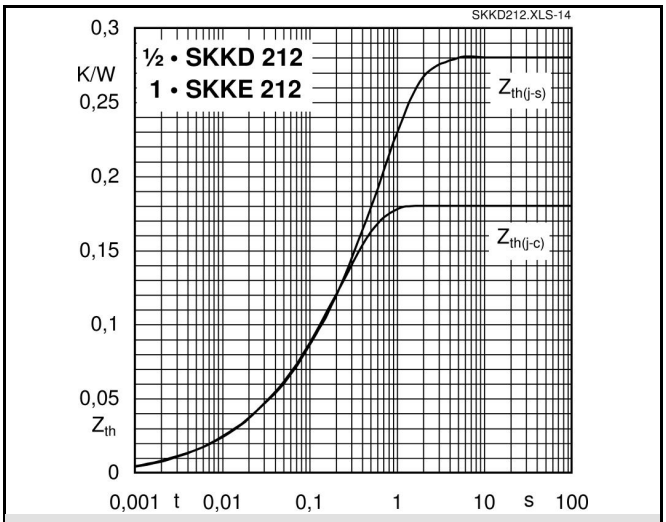


Fig.14 Transient thermal impedance vs.time

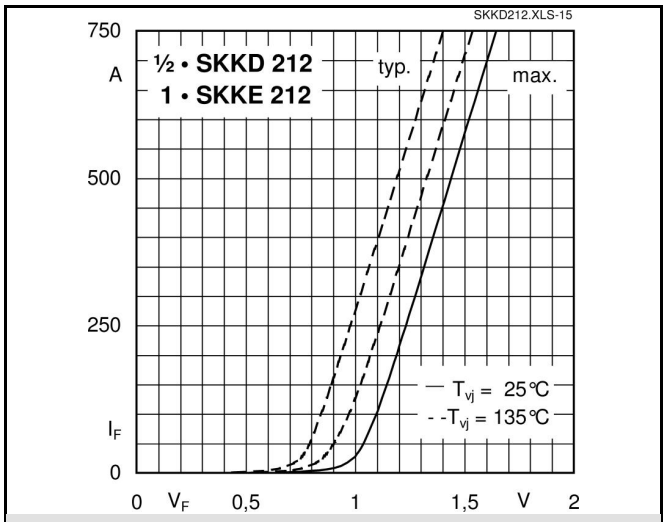


Fig.15 Forward characteristics

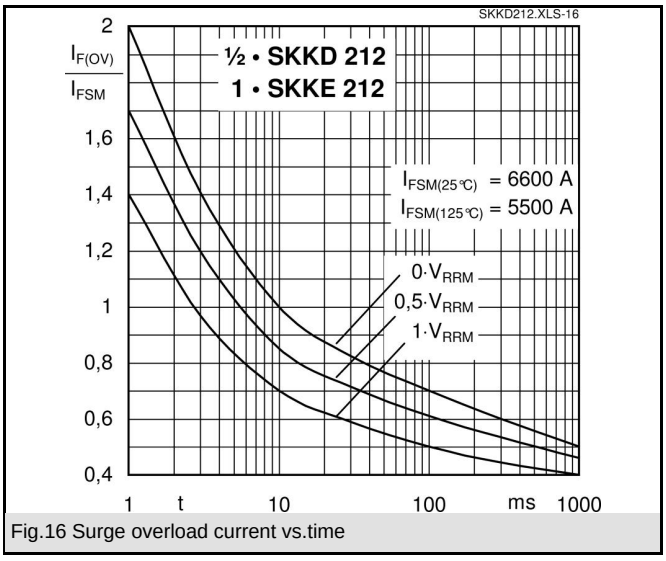
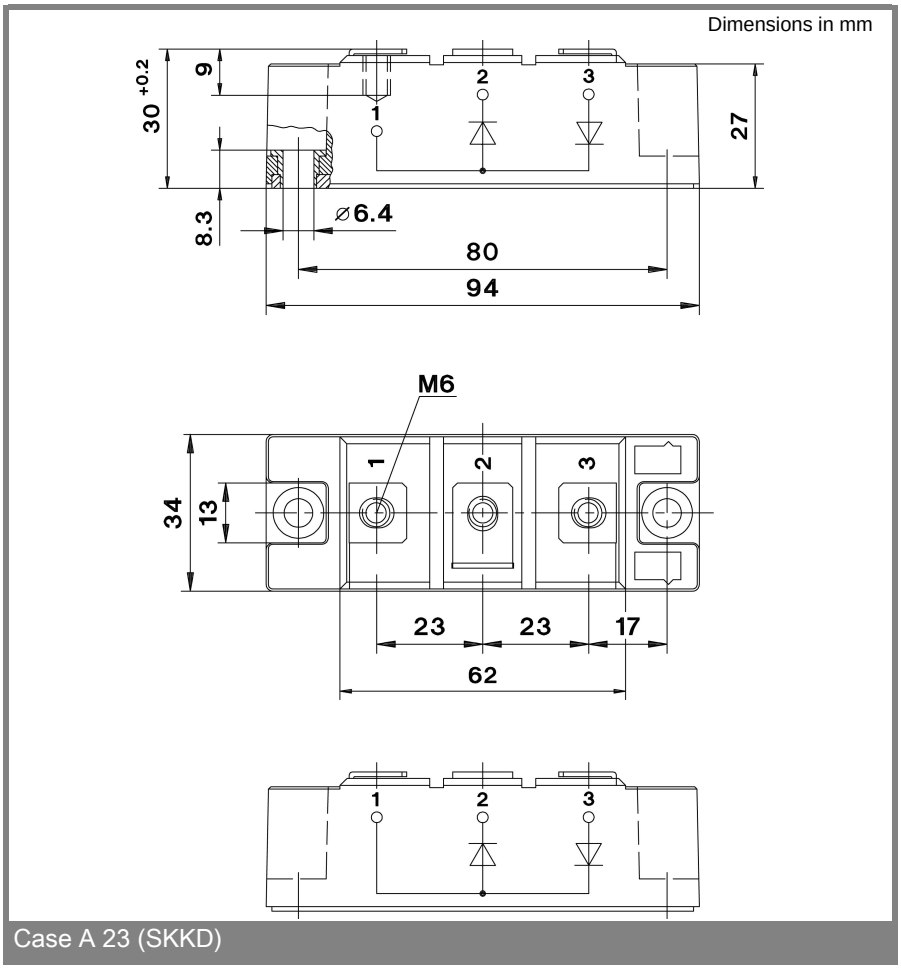


Fig.16 Surge overload current vs.time



Case A 23 (SKKD)

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