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SKKE 81



SEMIPACK® 1

Rectifier Diode Modules

SKKE 81

Features

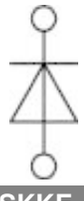
- Heat transfer through aluminium oxide ceramic isolated metal baseplate
- Hard soldered joints for high reliability
- UL recognized, file no. E 63 532

Typical Applications*

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

V_{RSM} V	V_{RRM} V	I_{FRMS} = 140 A (maximum value for continuous operation) I_{FAV} = 80 A (sin. 180; T_c = 87 °C)		
900	800	SKKE 81/08		
1300	1200	SKKE 81/12		
1700	1600	SKKE 81/16		

Symbol	Conditions	Values	Units
I_{FAV}	sin. 180; T_c = 85 (100) °C	82 (57)	A
I_D	P3/120; T_a = 45 °C; B2 / B6	63 / 70	A
	P3/180F; T_a = 35 °C; B2 / B6	135 / 175	A
I_{FSM}	T_{vj} = 25 °C; 10 ms	2000	A
	T_{vj} = 125 °C; 10 ms	1750	A
i^2t	T_{vj} = 25 °C; 8,3 ... 10 ms	20000	A^2s
	T_{vj} = 125 °C; 8,3 ... 10 ms	15000	A^2s
V_F	T_{vj} = 25 °C; I_F = 300 A	max. 1,55	V
$V_{(TO)}$	T_{vj} = 125 °C	max. 0,85	V
r_T	T_{vj} = 125 °C	max. 1,8	mΩ
I_{RD}	T_{vj} = 125 °C; V_{RD} = V_{RRM}	max. 4,5	mA
$R_{th(j-c)}$	per diode / per module	0,4 / 0,4	K/W
$R_{th(c-s)}$	per diode / per module	0,2 / 0,2	K/W
T_{vj}		- 40 ... + 125	°C
T_{stg}		- 40 ... + 125	°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	3 ± 15 %	Nm
a		5 * 9,81	m/s²
m	approx.	95	g
Case	SKKE	A 12	



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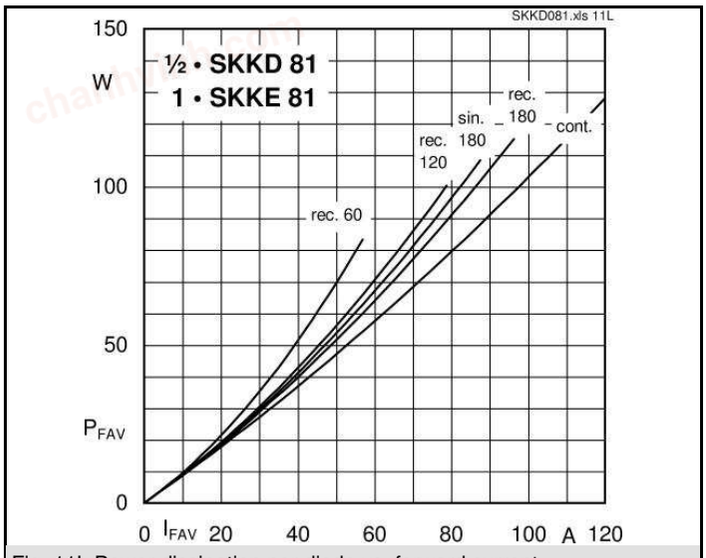


Fig. 11L Power dissipation per diode vs. forward current

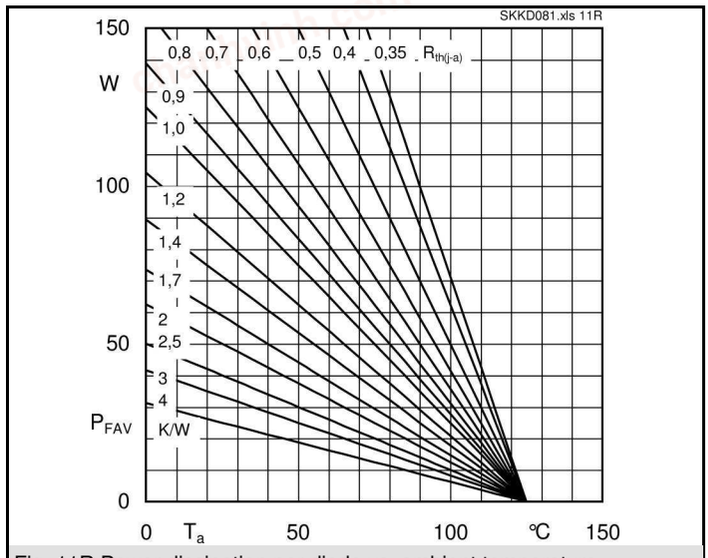


Fig. 11R Power dissipation per diode vs. ambient temperature

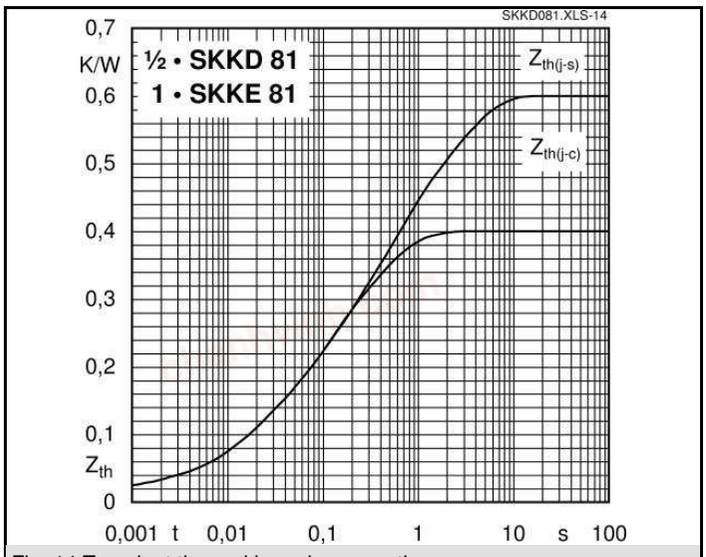


Fig. 14 Transient thermal impedance vs. time

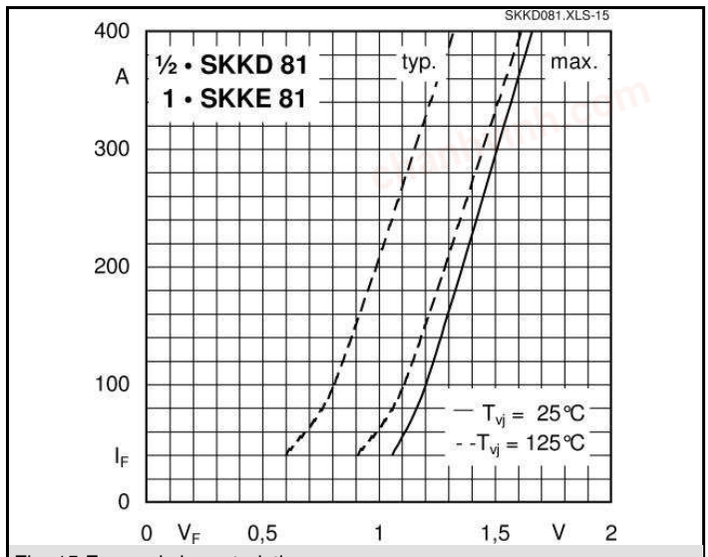


Fig. 15 Forward characteristics

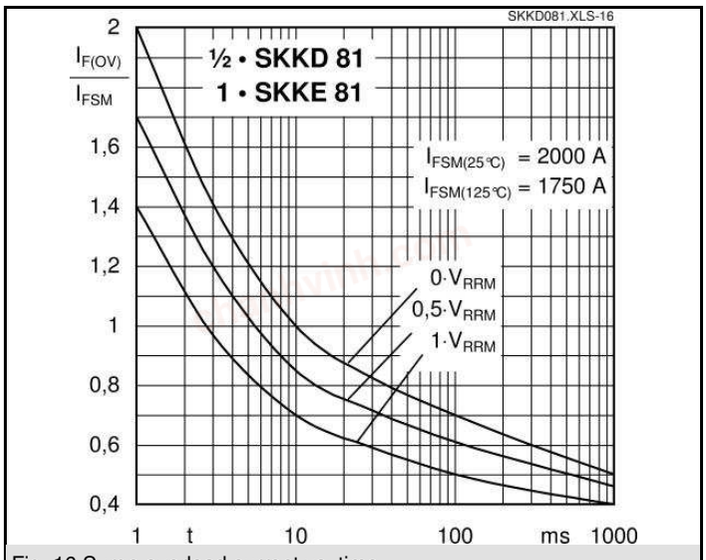
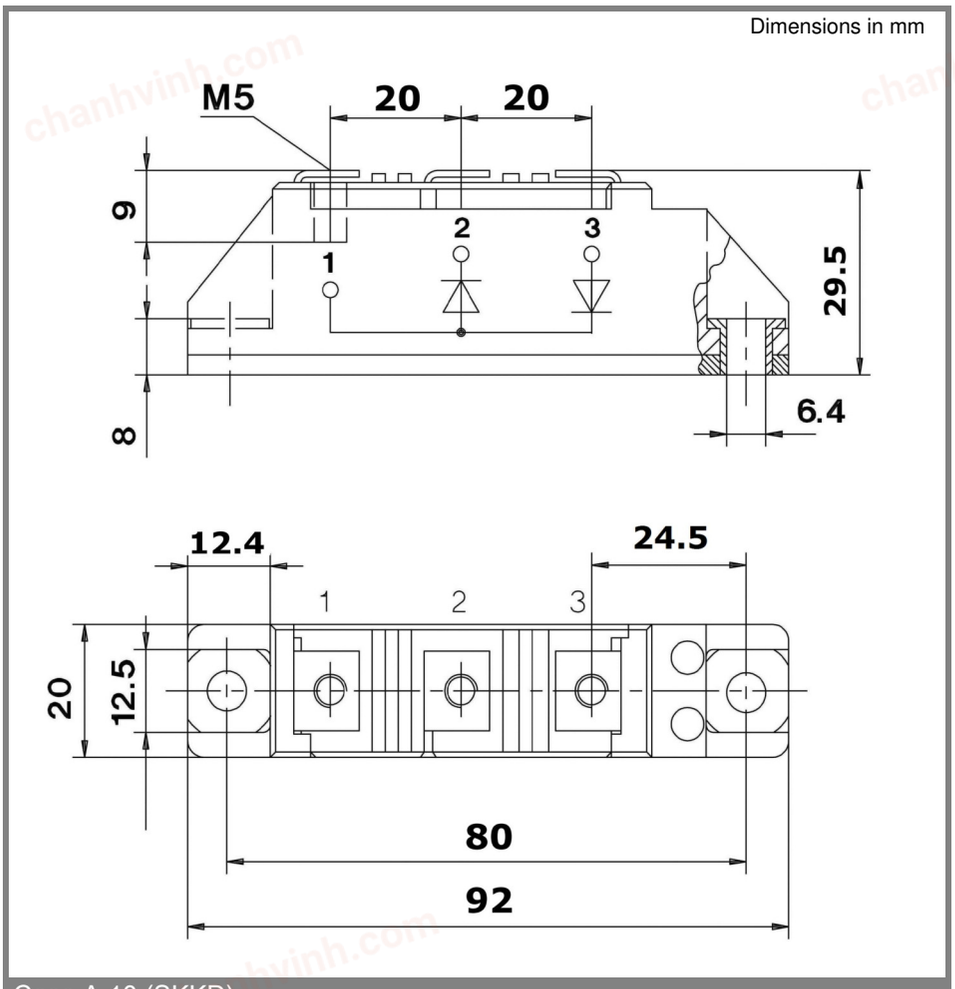


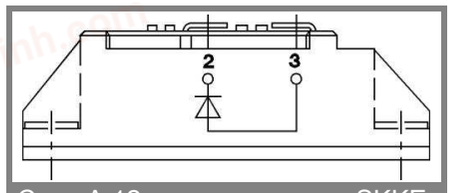
Fig. 16 Surge overload current vs. time

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Case A 10 (SKKD)



Case A 12 SKKE

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