

SKKD 81 H4



SEMIPACK® 1

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)		
2100	2000	SKKD 81/20 H4		
2300	2200	SKKD 81/22 H4		

Rectifier Diode Modules

SKKD 81 H4

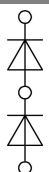
Features

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

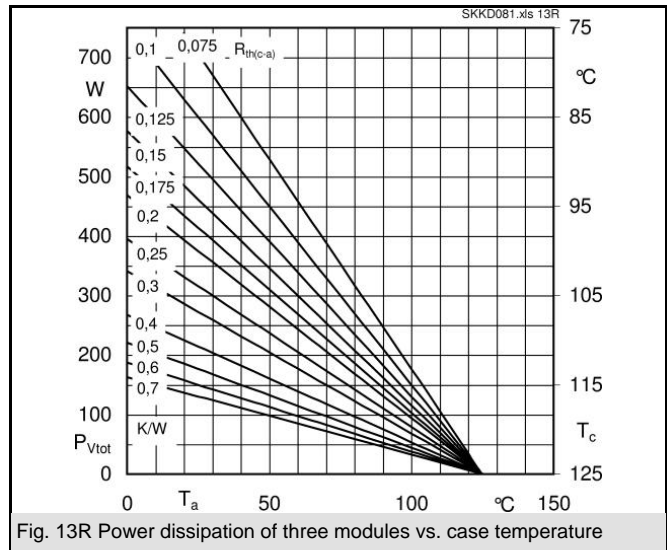
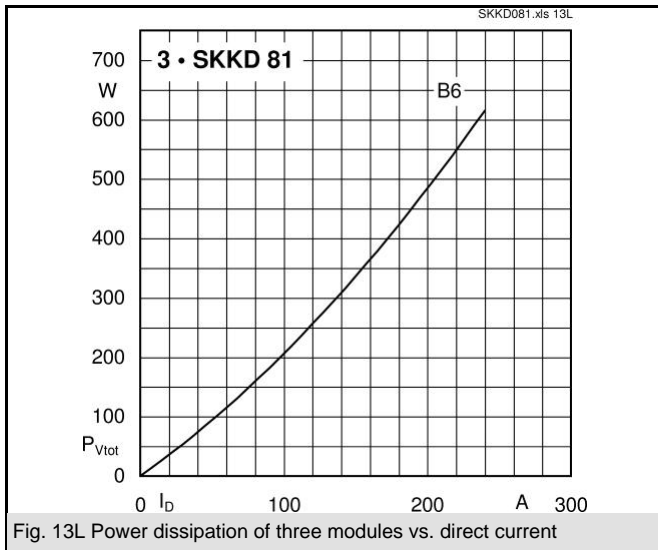
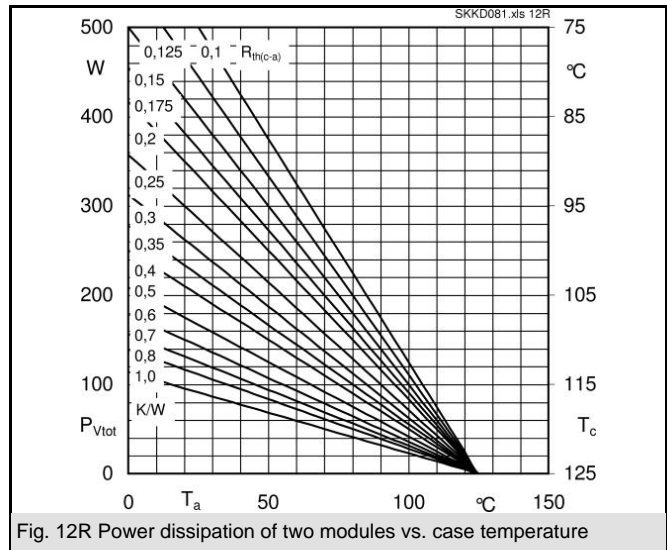
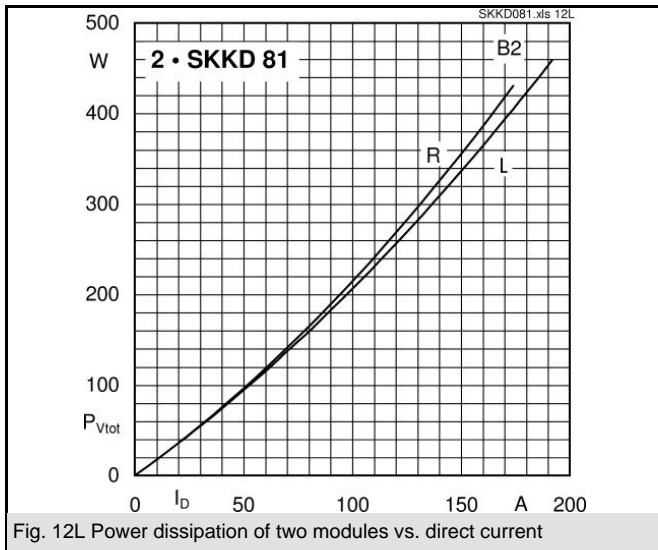
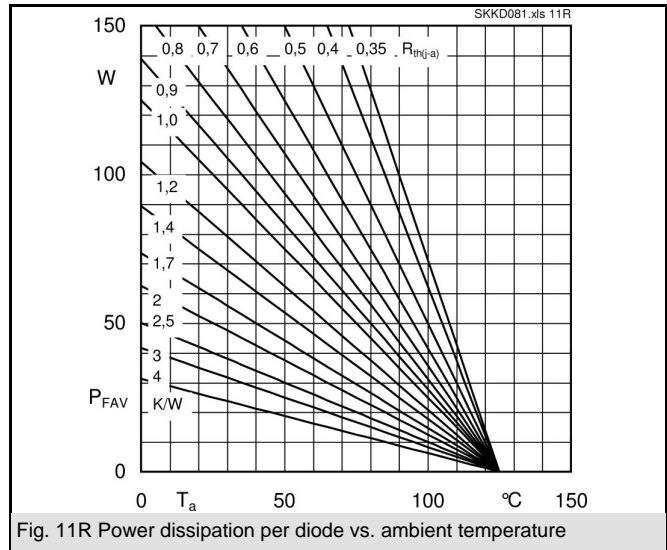
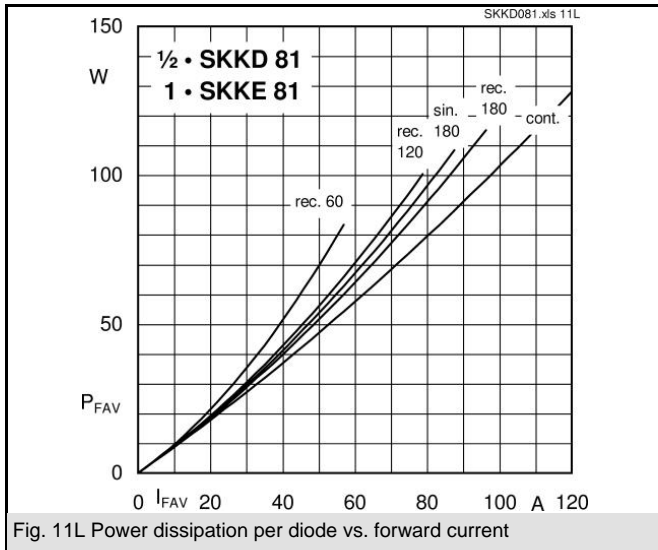
Typical Applications*

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

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 ² s
	$T_{vj} = 125$ °C; 8,3 ... 10 ms	15000	A ² s
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 / 0,2	K/W
$R_{th(c-s)}$	per diode / per module	0,2 / 0,1	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.	4800 / 4000	V~
M_s	to heatsink	5 ± 15 %	Nm
M_t	to terminals	3 ± 15 %	Nm
a		5 * 9,81	m/s ²
m	approx.	95	g
Case	SKKD	A 10	



SKKD



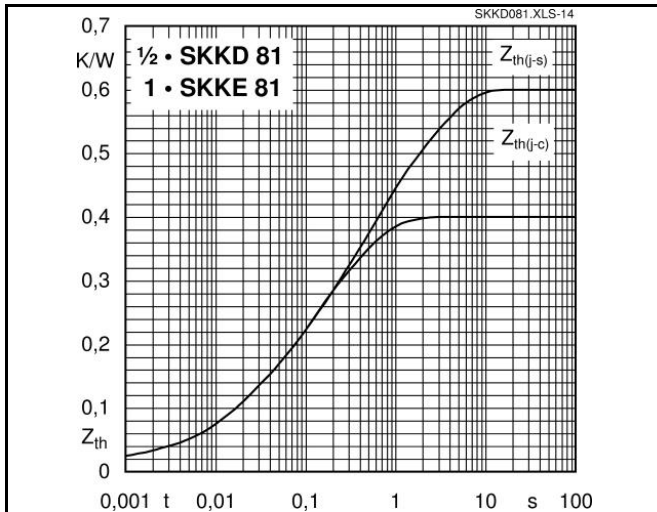


Fig. 14 Transient thermal impedance vs. time

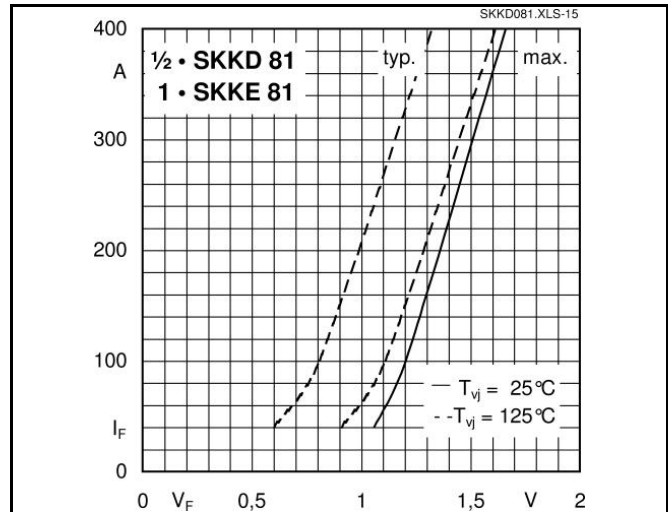


Fig. 15 Forward characteristics

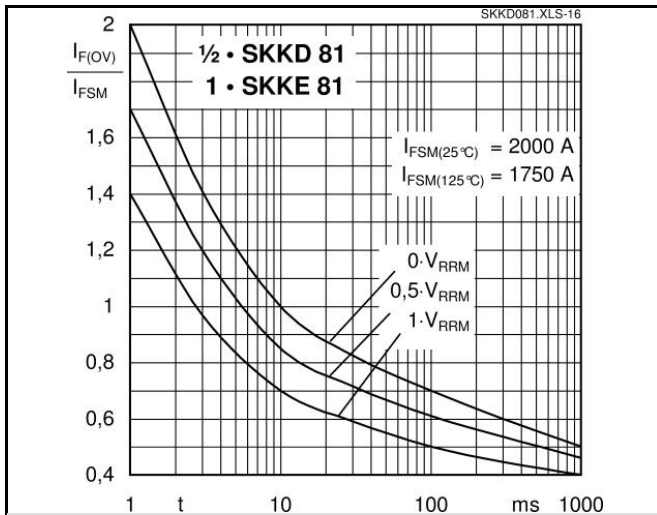
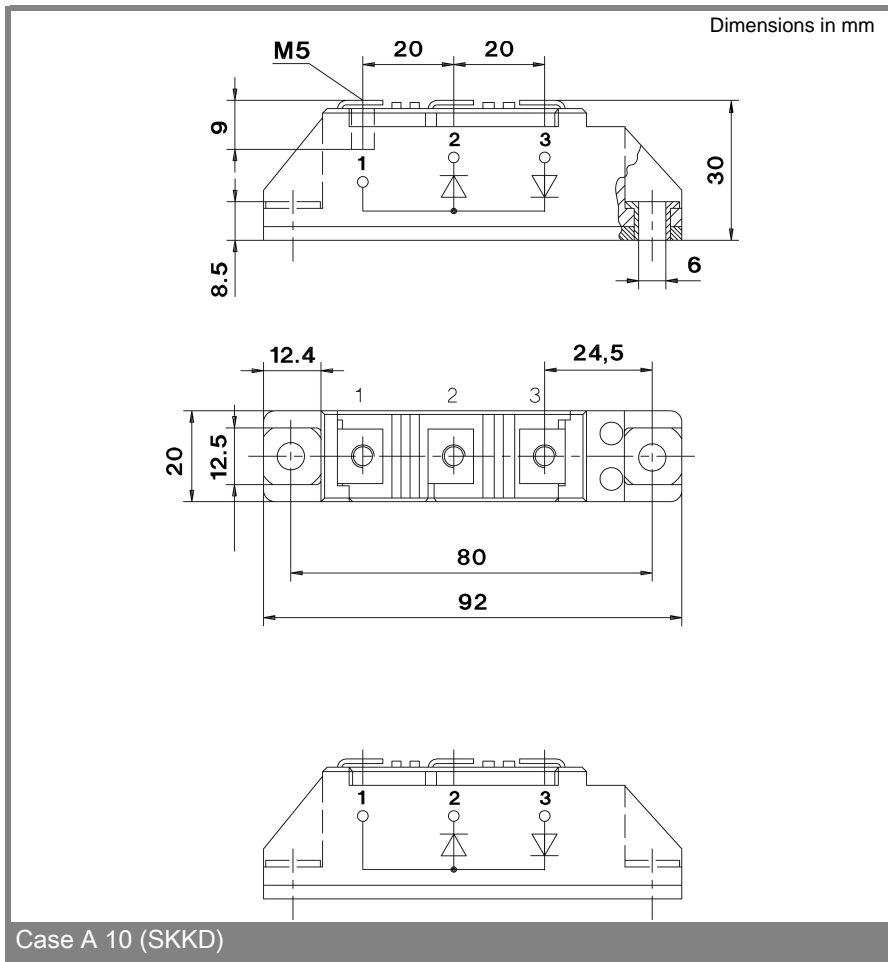


Fig. 16 Surge overload current vs. time



* 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.