

# SKMD 100



## SEMIPACK® 1

### Rectifier Diode Modules

#### SKMD 100

#### Features

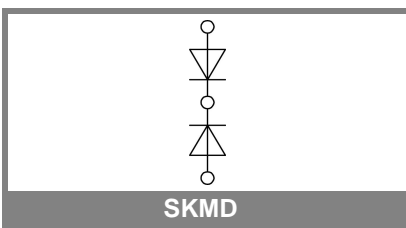
- Heat transfer through aluminium oxide ceramic isolated metal baseplate
- Hard soldered joints for high reliability
- UL recognized, file no. E 63532

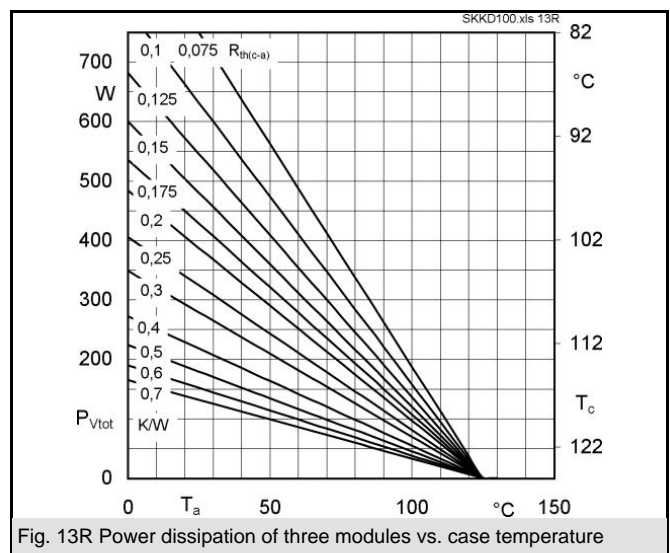
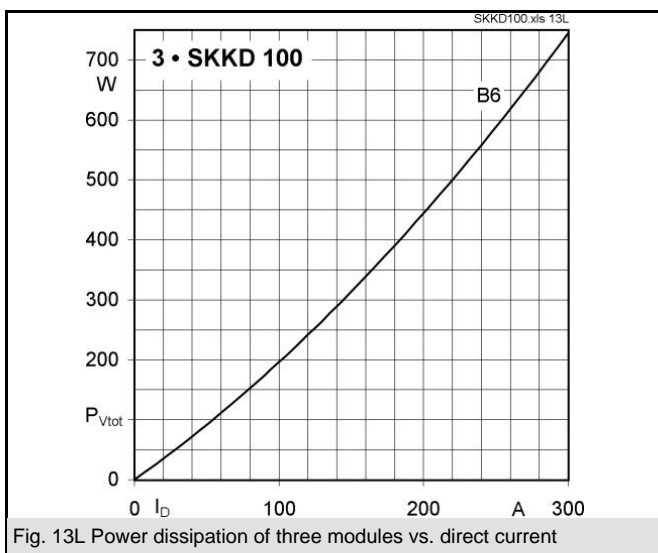
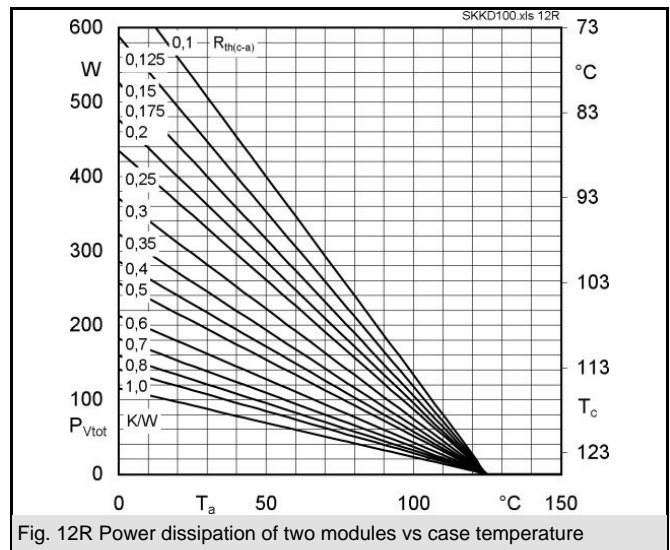
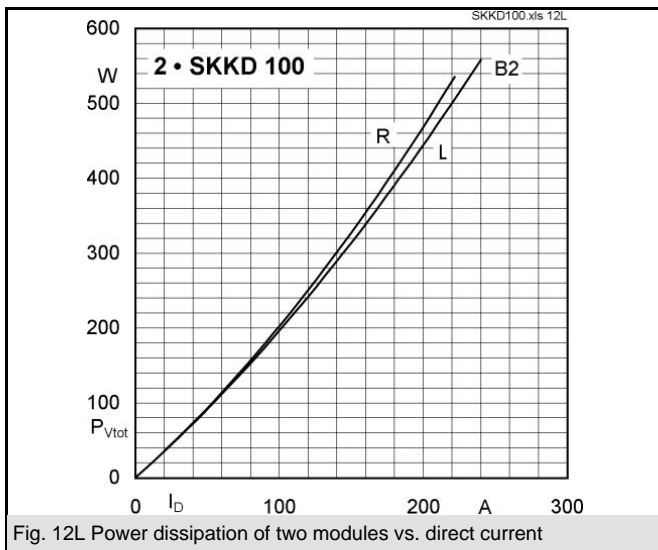
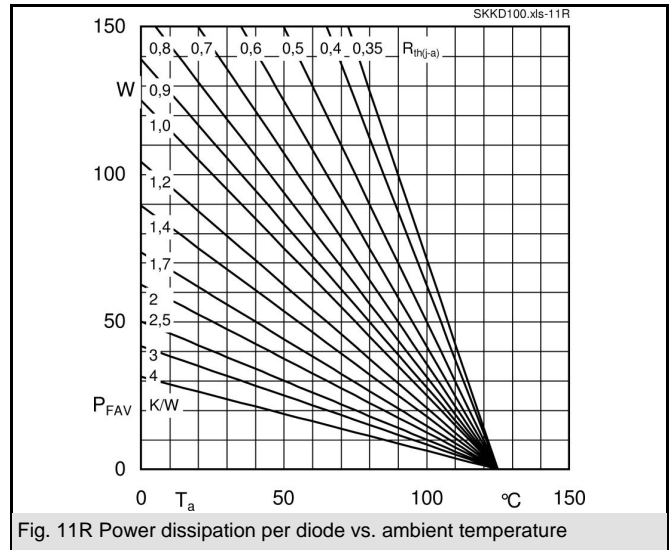
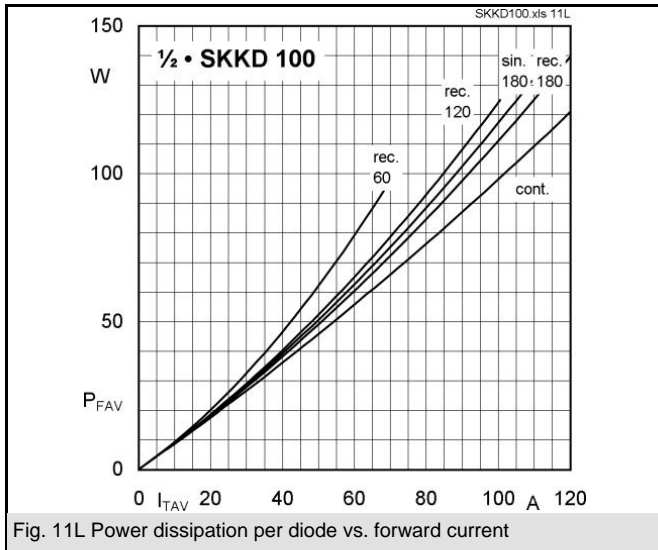
#### Typical Applications\*

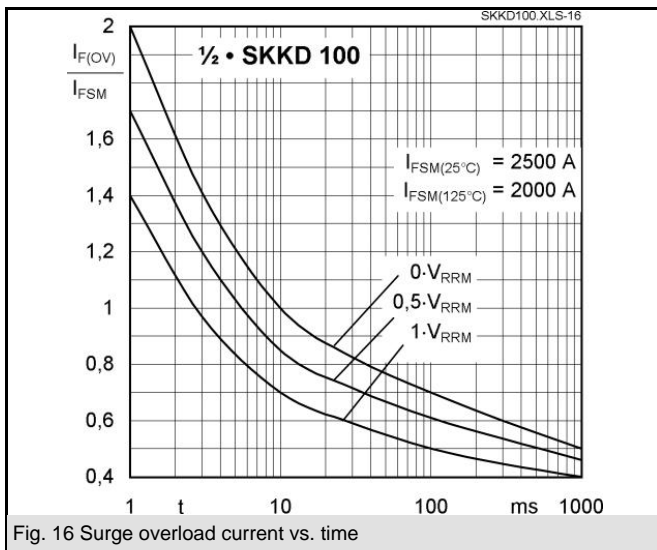
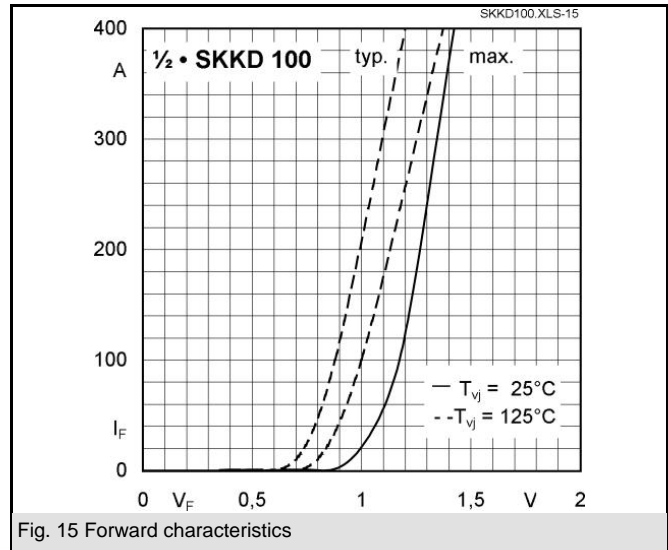
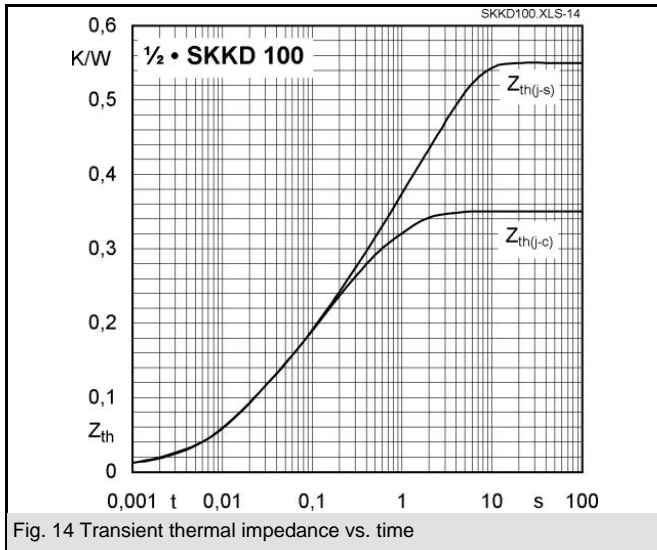
- Non-controllable rectifiers for AC/AC converters
- Line rectifiers for transistorized AC motor controllers
- Field supply for DC motors

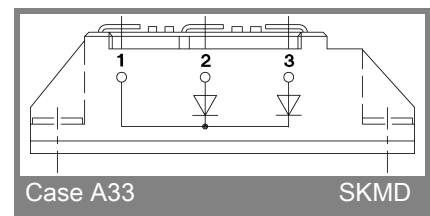
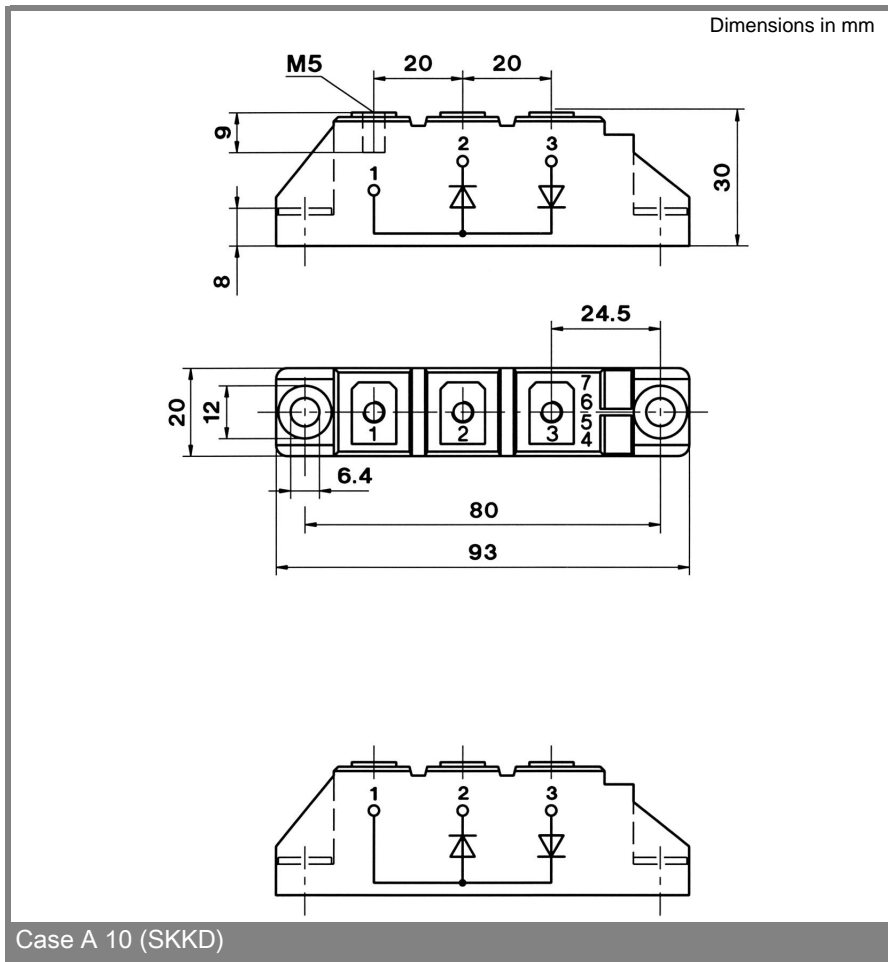
$V_{RSM}$ V	$V_{RRM}$ V	$I_{FRMS} = 175$ A (maximum value for continuous operation) $I_{FAV} = 100$ A (sin. 180; $T_c = 85$ °C)		
500	400	SKMD 100/04		
900	800	SKMD 100/08		
1500	1400	SKMD 100/14		
1700	1600	SKMD 100/16		

Symbol	Conditions	Values	Units
$I_{FAV}$	sin. 180; $T_c = 85$ (100) °C	100 (67)	A
$I_D$	P3/180; $T_a = 45$ °C; B2 / B6	73 / 91	A
	P3/180F; $T_a = 35$ °C; B2 / B6	150 / 190	A
$I_{FSM}$	$T_{vj} = 25$ °C; 10 ms	2500	A
	$T_{vj} = 125$ °C; 10 ms	2000	A
$i^2t$	$T_{vj} = 25$ °C; 8,3 ... 10 ms	31250	A <sup>2</sup> s
	$T_{vj} = 125$ °C; 8,3 ... 10 ms	20000	A <sup>2</sup> s
$V_F$	$T_{vj} = 25$ °C; $I_F = 300$ A	max. 1,35	V
$V_{(TO)}$	$T_{vj} = 125$ °C	max. 0,85	V
$r_T$	$T_{vj} = 125$ °C	max. 1,3	mΩ
$I_{RD}$	$T_{vj} = 125$ °C; $V_{RD} = V_{RRM}$	max. 5	mA
$R_{th(j-c)}$	per diode / per module	0,35 / 0,175	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.	3600 / 3000	V~
$M_s$	to heatsink	5 ± 15 %	Nm
$M_t$	to terminals	3 ± 15 %	Nm
$a$		5 * 9,81	m/s <sup>2</sup>
$m$	approx.	95	g
Case	SKMD	A 33	









\* 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.