



## SEMIPACK® 3

### Rectifier Diode Modules

#### SKKD 260

#### Features

- Heat transfer through aluminium nitride ceramic isolated metal baseplate
- Precious metal pressure contacts
- UL recognized, file no. E 63 532

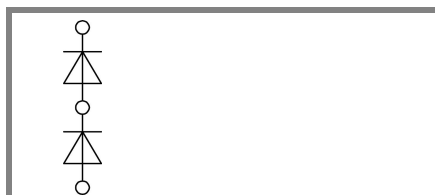
#### Typical Applications

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

1) The screws must be lubricated

$V_{RSM}$ V	$V_{RRM}$ V	$I_{FRMS} = 410$ A (maximum value for continuous operation) $I_{FAV} = 260$ A (sin. 180; $T_c = 85$ °C)	
900	800	SKKD 260/08	
1300	1200	SKKD 260/12	
1500	1400	SKKD 260/14	
1700	1600	SKKD 260/16	
2100	2000	SKKD 260/20H4	
2300	2200	SKKD 260/22H4	

Symbol	Conditions	Values	Units
$I_{FAV}$	sin. 180; $T_c = 85$ (100) °C	260 (185)	A
$I_D$	P3/180F; $T_a = 35$ °C; B2 / B6	280 / 320	A
	P3/180F; $T_a = 35$ °C; B2 / B6	490 / 655	A
$I_{FSM}$	$T_{vj} = 25$ °C; 10 ms	11000	A
	$T_{vj} = 130$ °C; 10 ms	10000	A
$i^2t$	$T_{vj} = 25$ °C; 8,3 ... 10 ms	605000	A <sup>2</sup> s
	$T_{vj} = 130$ °C; 8,3 ... 10 ms	500000	A <sup>2</sup> s
$V_F$	$T_{vj} = 25$ °C; $I_F = 750$ A	max. 1,25	V
$V_{(TO)}$	$T_{vj} = 130$ °C	max. 0,9	V
$r_T$	$T_{vj} = 130$ °C	max. 0,37	mΩ
$I_{RD}$	$T_{vj} = 130$ °C; $V_{RD} = V_{RRM}$	max. 15	mA
$R_{th(j-c)}$	cont.; per diode / per module	0,14 / 0,07	K/W
	sin. 180; per diode / per module	0,15 / 0,075	K/W
$R_{th(c-s)}$	per diode / per module	0,04 / 0,02	K/W
$T_{vj}$		- 40 ... + 130	°C
$T_{stg}$		- 40 ... + 130	°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	9 ± 15 % <sup>1)</sup>	Nm
$a$		5 * 9,81	m/s <sup>2</sup>
$m$	approx.	600	g
Case		A 78b	



SKKD

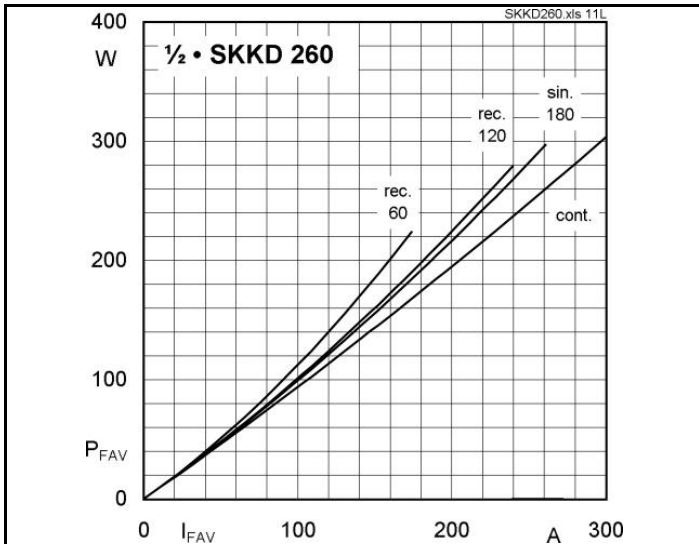


Fig. 11L Power dissipation per diode vs. forward current

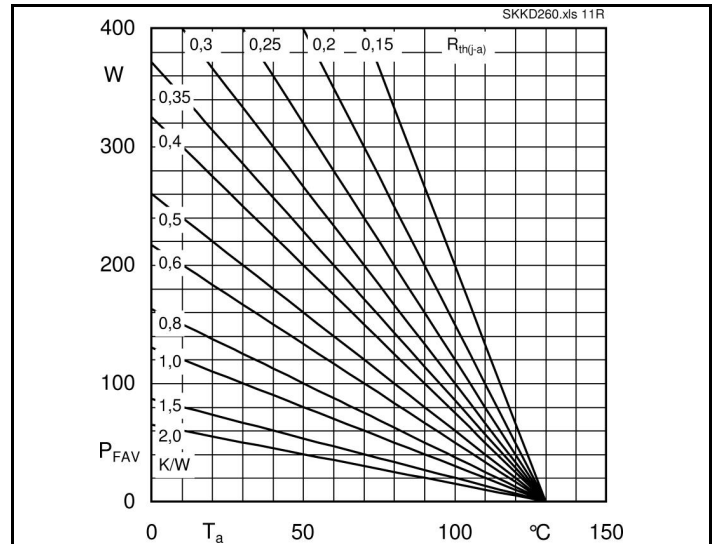


Fig. 11R Power dissipation per diode vs. ambient temperature

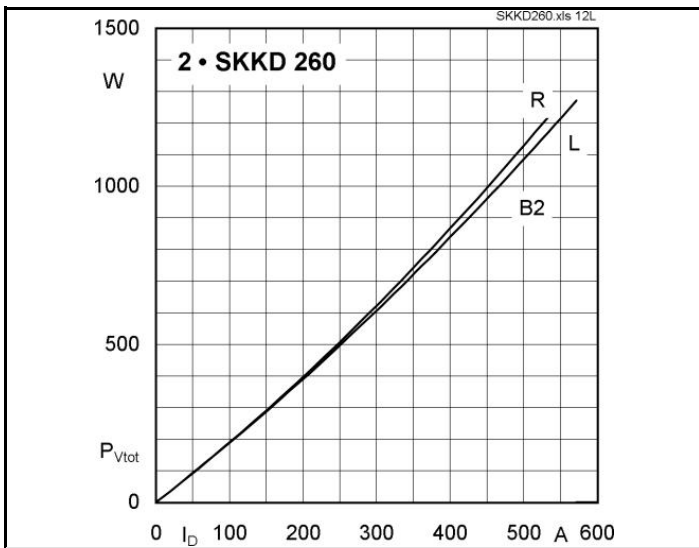


Fig. 12L Power dissipation of two modules vs. direct current

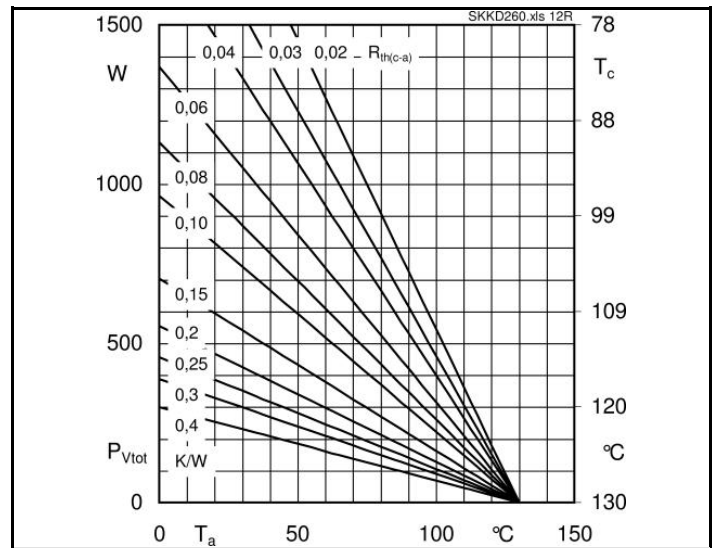


Fig. 12R Power dissipation of two modules vs. case temperature

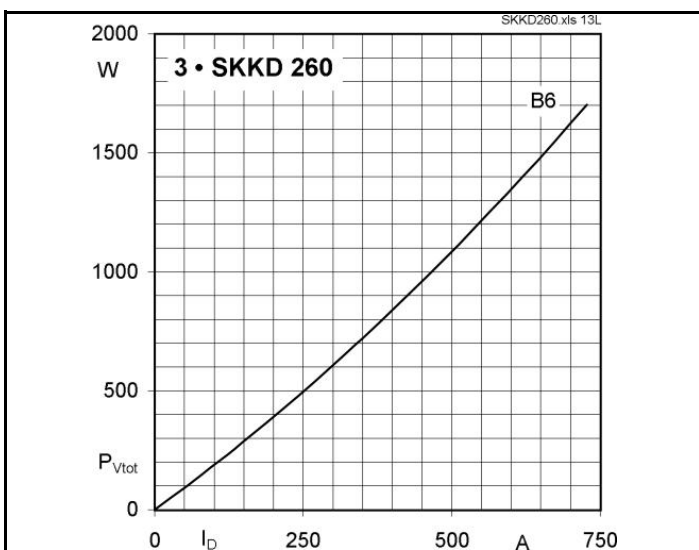


Fig. 13L Power dissipation of three modules vs. direct current

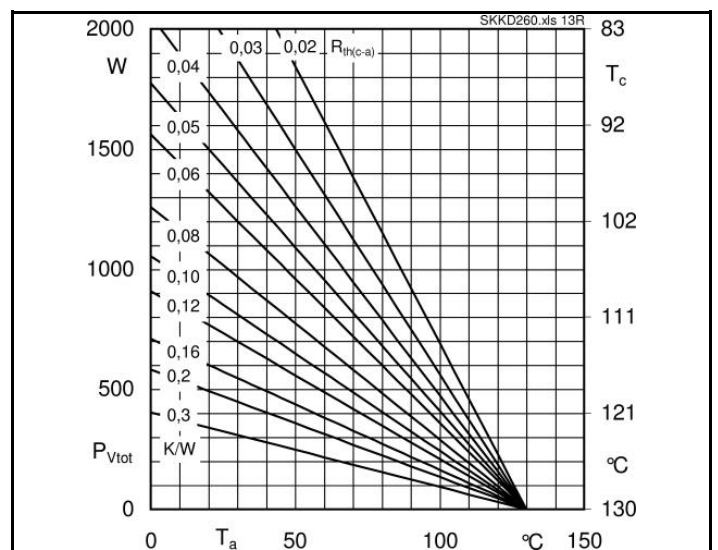


Fig. 13R Power dissipation of three modules vs. case temperature

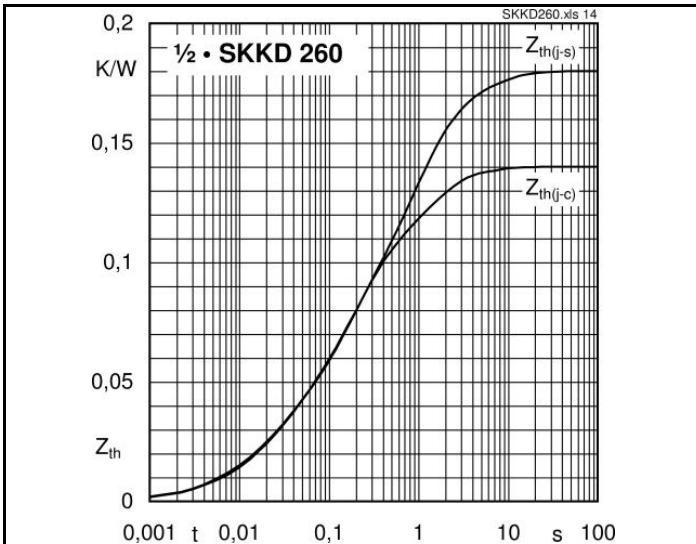


Fig. 14 Transient thermal impedance vs. time

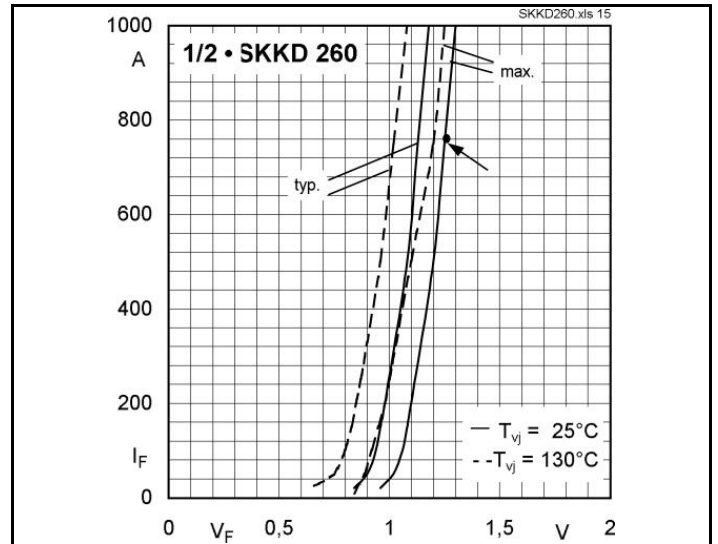


Fig. 15 Forward characteristics

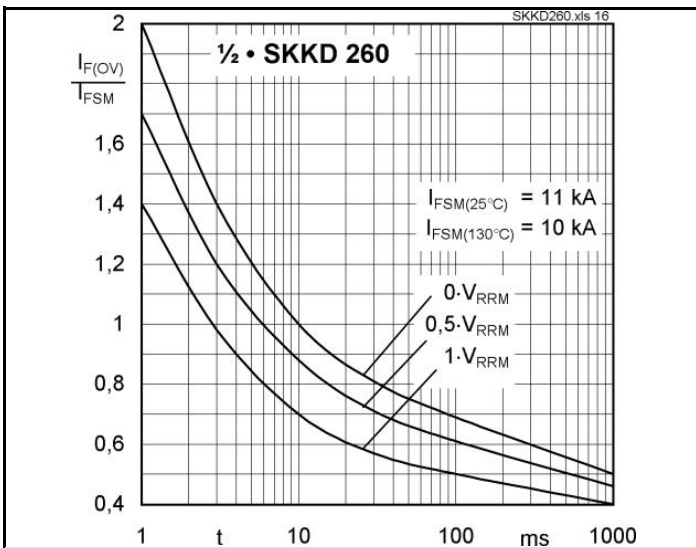


Fig. 16 Surge overload current vs. time

