

# SKMD 202E, SKND 202E



**SEMIPACK<sup>®</sup> 2**

## Ultrafast Epitaxial Diode Modules

**SKND 202E**

**SKMD 202E**

### Features

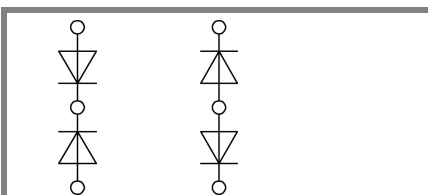
- Isolated metal baseplate
- Very short recovery times
- Low switching losses
- Up to 300 V peak inverse voltage
- SKMD common cathode  
SKND common anode
- UL recognized, file no. E 63 532

### Typical Applications\*

- Switched mode power converters
- Inverse diode for transistors in AC and DC motor controls
- Uninterruptible power supplies (UPS)

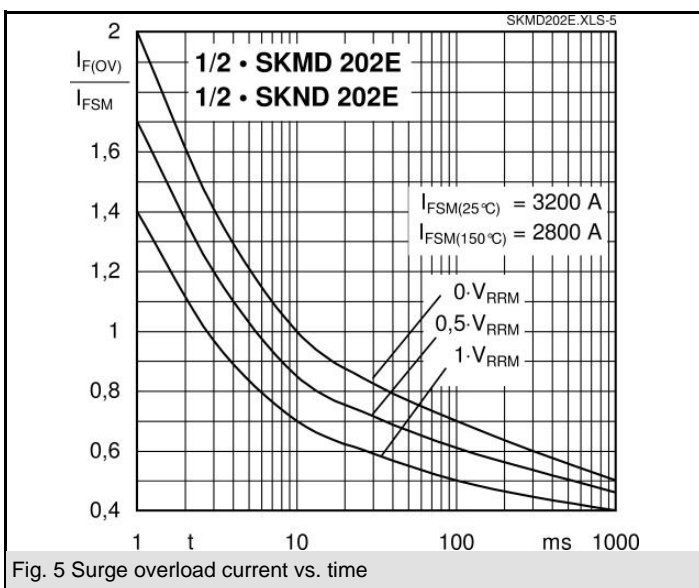
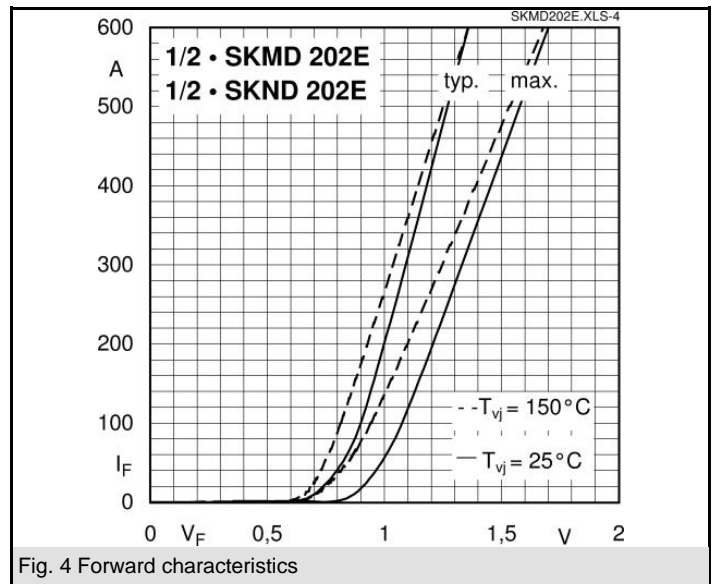
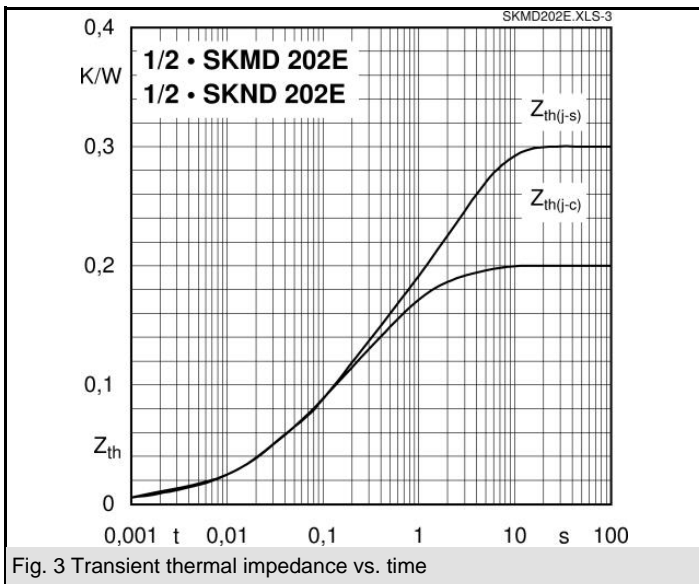
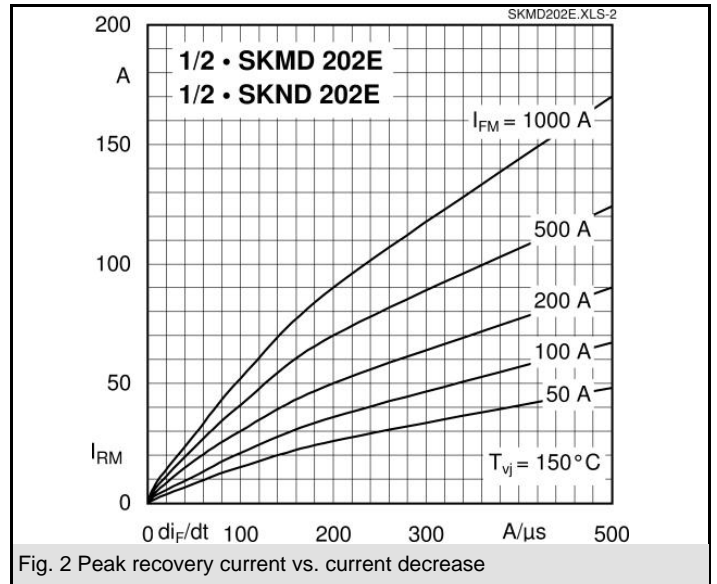
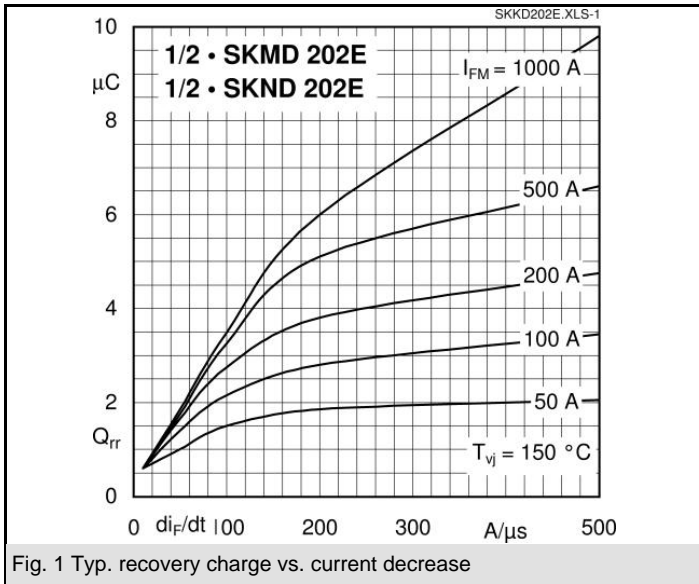
$V_{RSM}$ V	$V_{RRM}$ V	$I_{FRMS} = 325$ A (maximum value for continuous operation) $I_{FAV} = 202$ A (sin. 180, 50 Hz; $T_c = 87$ °C)	
200	200	SKMD 202E02	SKND 202E02
300	300	SKMD 202E03	SKND 202E03

Symbol	Conditions	Values	Units
$I_{FAV}$	sin. 180; $T_c = 85$ (100) °C	208 (156)	A
$I_{FSM}$	$T_{vj} = 25$ °C; 10 ms $T_{vj} = 150$ °C; 10 ms	3200 2800	A A
$i^2t$	$T_{vj} = 25$ °C; 8,3 ... 10 ms $T_{vj} = 150$ °C; 8,3 ... 10 ms	51000 39000	A <sup>2</sup> s A <sup>2</sup> s
$V_F$	$T_{vj} = 25$ °C; $I_F = 500$ A	max. 1,65	V
$V_{(TO)}$	$T_{vj} = 150$ °C	max. 0,8	V
$r_T$	$T_{vj} = 150$ °C	max. 1,5	mΩ
$I_{RD}$	$T_{vj} = 25$ °C; $V_{RD} = V_{RRM}$	max. 2	mA
$I_{RD}$	$T_{vj} = 130$ °C; $V_{RD} = V_{RRM}$	max. 100	mA
$Q_{rr}$	$T_{vj} = 150$ °C, $I_F = 50$ A,	2	μC
$I_{RM}$	$-di/dt = 100$ A/μs, $V_R = 100$ V	16	A
$t_{rr}$		-	ns
$E_{rr}$		-	mJ
$R_{th(j-c)}$	per diode / per module	0,2 / 0,1	K/W
$R_{th(c-s)}$	per diode / per module	0,1 / 0,05	K/W
$T_{vj}$		- 40 ... + 150	°C
$T_{stg}$		- 40 ... + 125	°C
$V_{isol}$	a. c. 50 Hz; r.m.s.; 1 s / 1 min.	3000 / 2500	V~
$M_s$	to heatsink	5 ± 15 %	Nm
$M_t$	to terminals	5 ± 15 %	Nm
$a$		5 * 9,81	m/s <sup>2</sup>
$m$	approx.	250	g
Case	SKMD SKND	A 51 A 52	

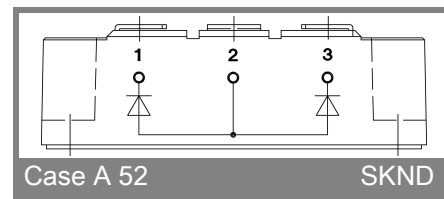
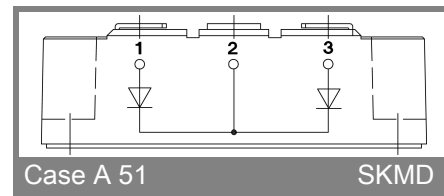
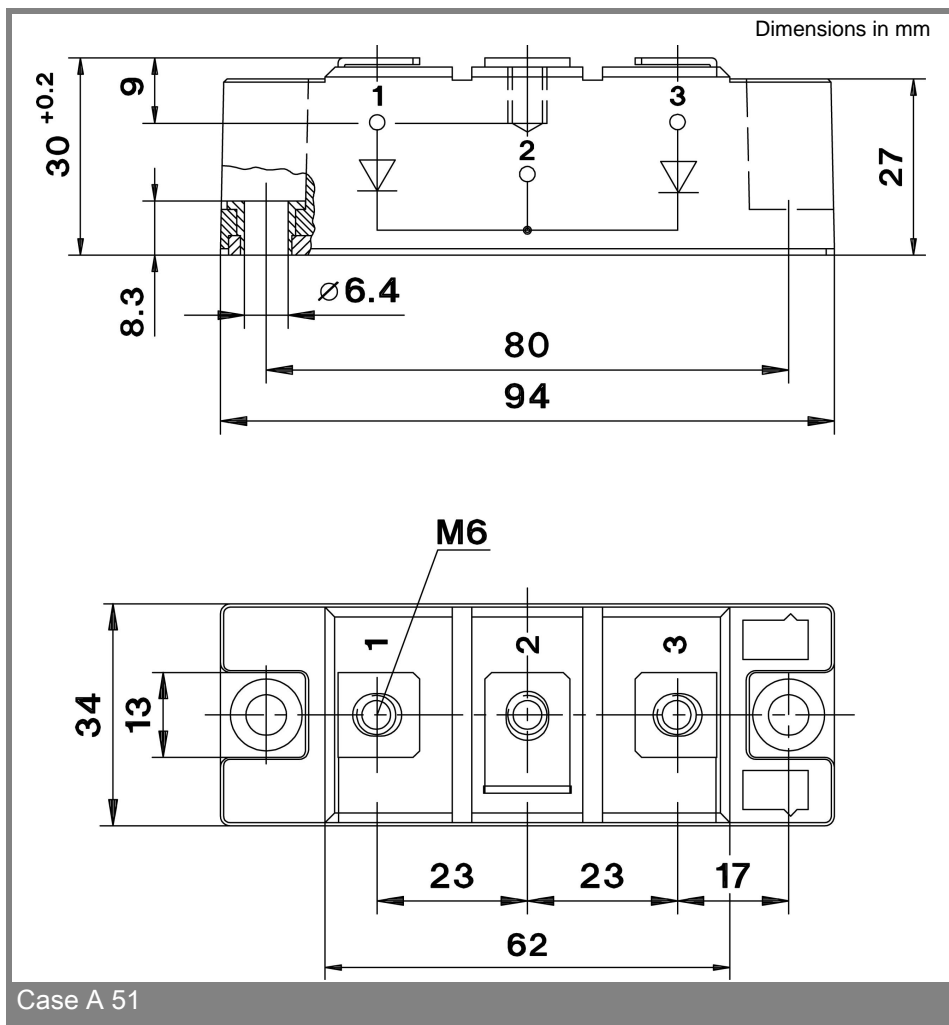


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\* The specifications of our components may not be considered as an assurance of component characteristics. Components have to be tested for the respective application. Adjustments may be necessary. The use of SEMIKRON products in life support appliances and systems is subject to prior specification and written approval by SEMIKRON. We therefore strongly recommend prior consultation of our personal.