SKMD 202E, SKND 202E

SEMIPACK® 2

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

Ultrafast Epitaxial Diode Modules

SKND 202E

SKMD 202E

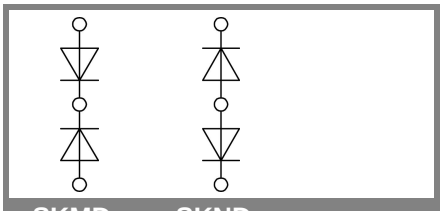
Features

- Isolated metal baseplate
- Very short recovery times
- Low switching losses
- Up to 400 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)

Symbol	Conditions	Values	Units
I_{FAV}	sin. 180; T_c = 85 (100) °C	208 (156)	A
I_{FSM}	T_{vj} = 25 °C; 10 ms	3200	A
	T_{vj} = 150 °C; 10 ms	2800	A
i²t	T_{vj} = 25 °C; 8,3 ... 10 ms	51000	A²s
	T_{vj} = 150 °C; 8,3 ... 10 ms	39000	A²s
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/s²
m	approx.	250	g
Case	SKMD	A 51	
	SKND	A 52	



SKMD **SKND**

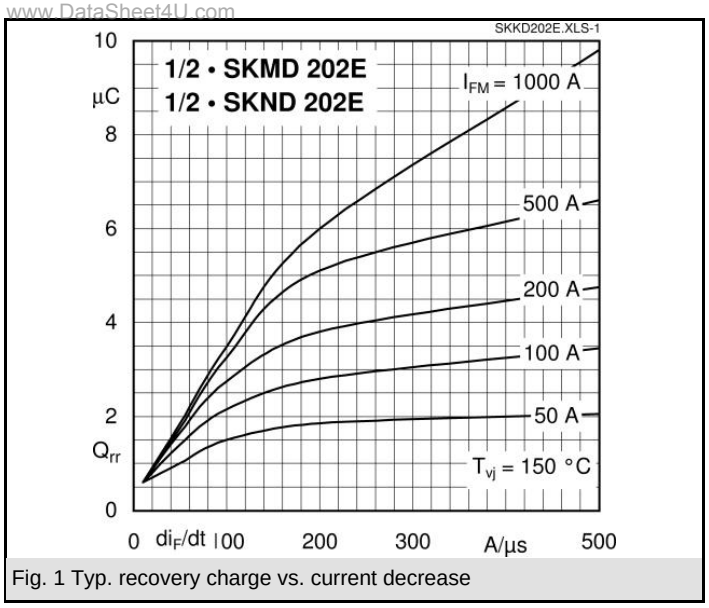


Fig. 1 Typ. recovery charge vs. current decrease

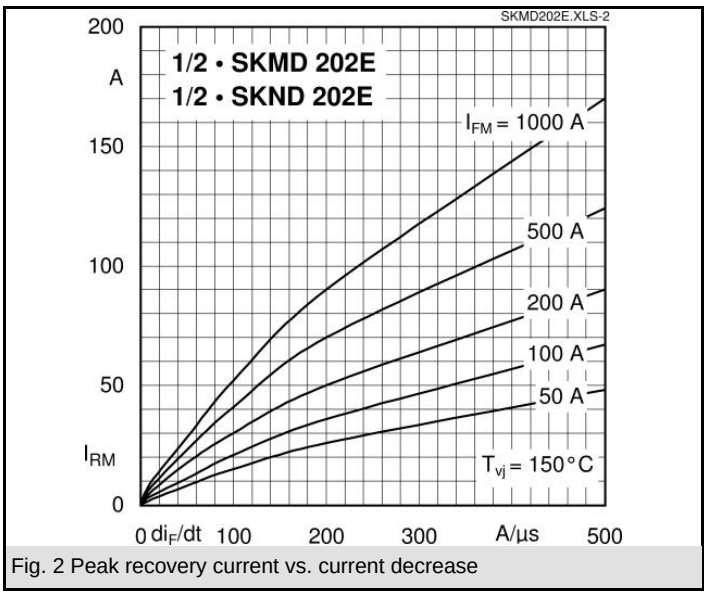


Fig. 2 Peak recovery current vs. current decrease

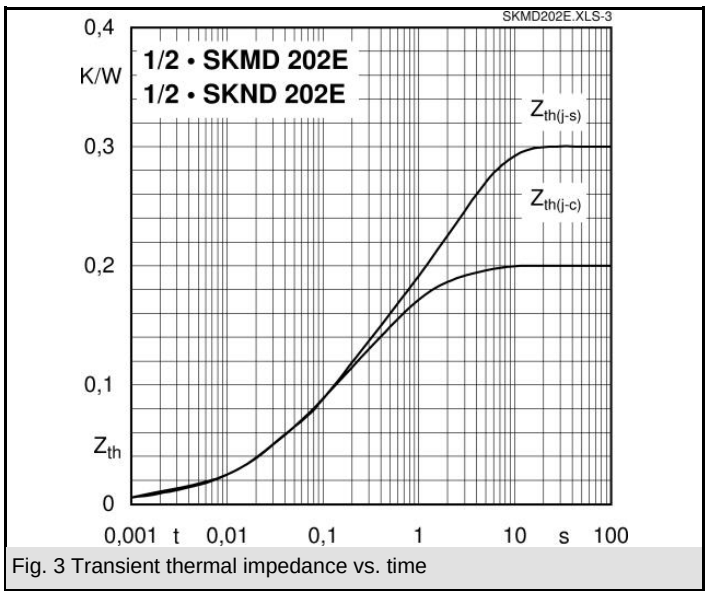


Fig. 3 Transient thermal impedance vs. time

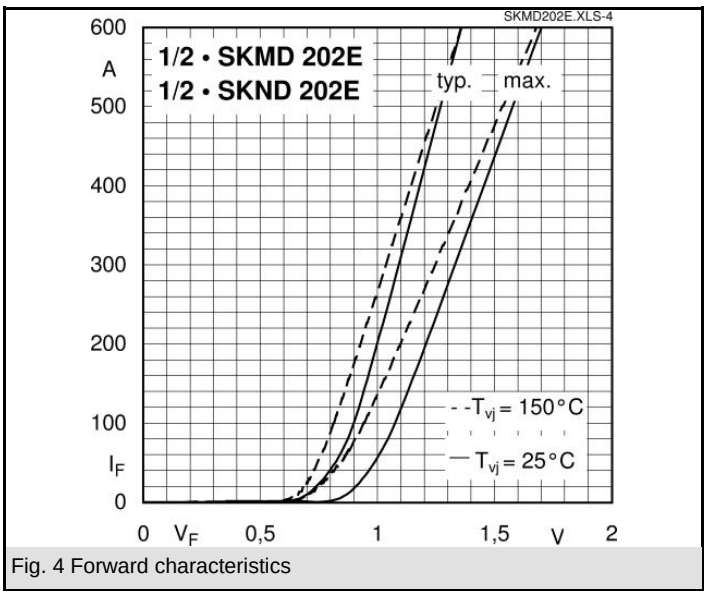


Fig. 4 Forward characteristics

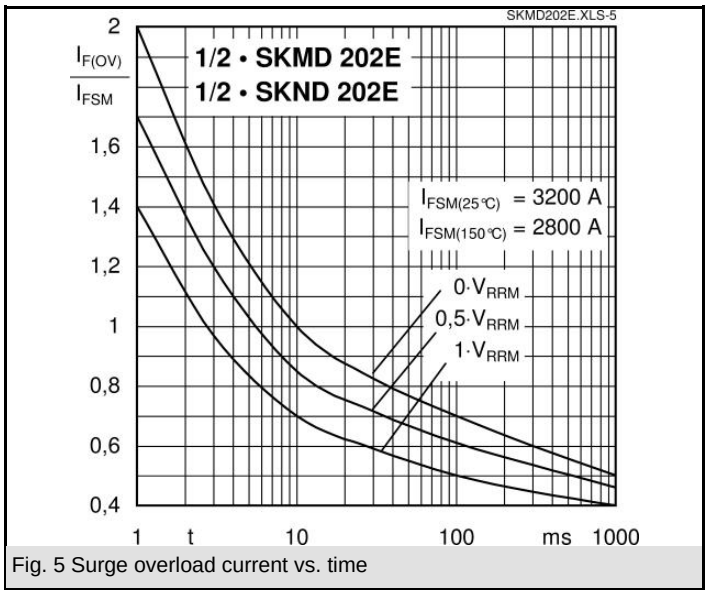
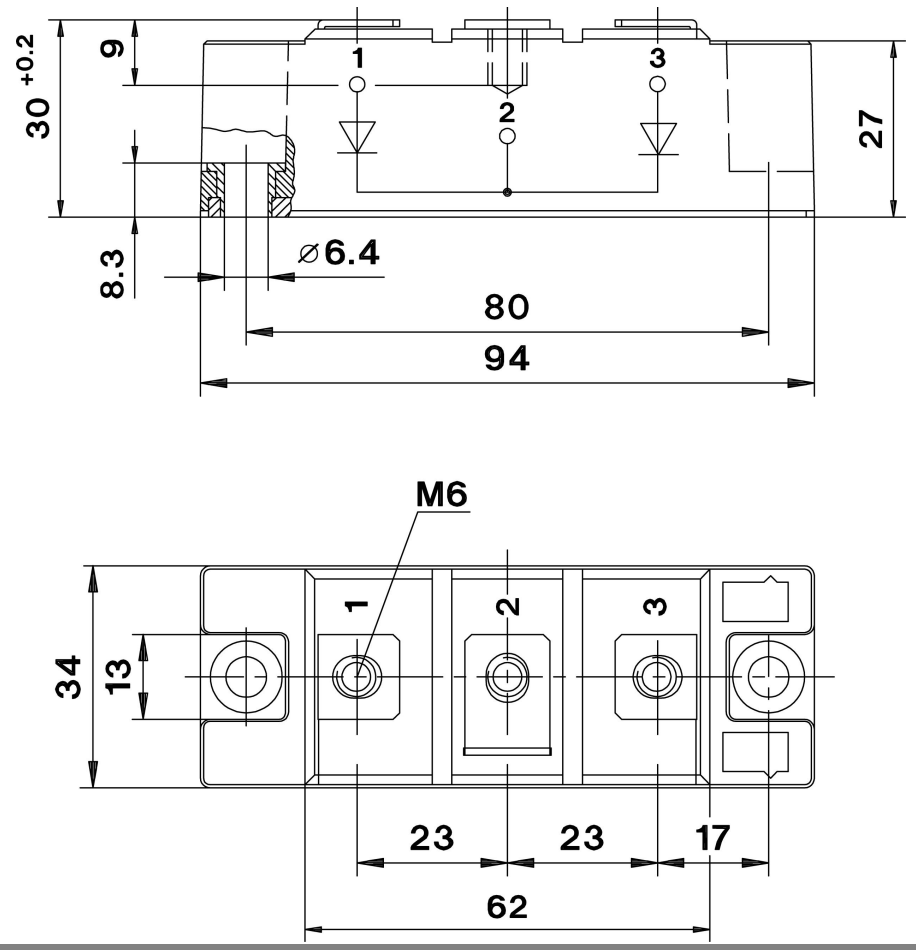
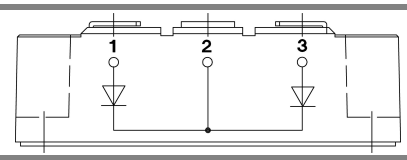


Fig. 5 Surge overload current vs. time

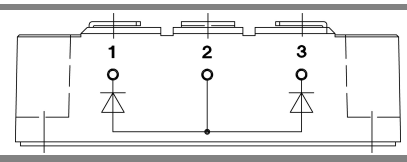
Dimensions in mm



Case A 51



Case A 51 SKMD



Case A 52 SKND

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