## **SKKD 205F, SKND 205F**



# SEMIPACK<sup>®</sup> 2

## **Fast Diode Modules**

SKKD 205F SKND 205F

**Preliminary Data** 

#### **Features**

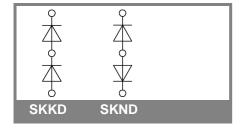
- Very soft recovery over the whole current range
- Very short recovery times
- Low switching losses
- Heat transfer through ceramic isolated metal baseplate
- Materials and distances according to UL

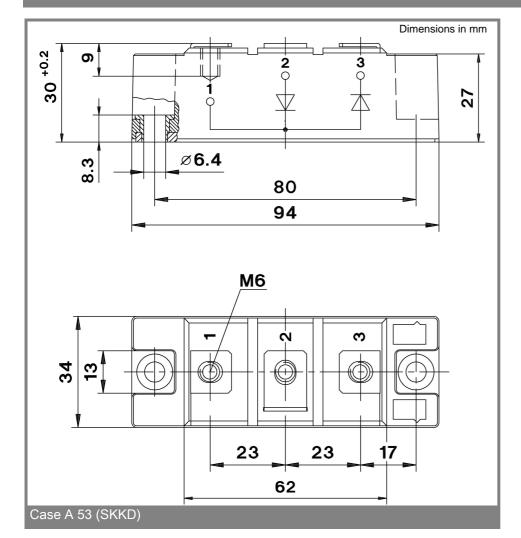
### **Typical Applications**

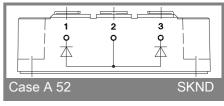
- Self-commutated inverters
- DC choppers
- AC motor speed control
- Inductive heating
- Uninterruptible power supplies
- · Electronic welders
- General power switching applications

V <sub>RSM</sub>	$V_{RRM}$	I <sub>FRMS</sub> = 455 A (maximum value for continuous operation)		
V	V	$I_{FAV}$ = 205 A (sin. 180; 50 Hz; $T_c$ = 87 °C)		
600	600	SKKD 205F06	SKND 205F06	

Symbol	Conditions	Values	Units
I <sub>FAV</sub>	sin. 180; T <sub>c</sub> = 87 °C	205	Α
I <sub>FSM</sub>	T <sub>vi</sub> = 25 °C; 10 ms ms	3500	Α
	T <sub>vi</sub> = 150 °C; 10 ms ms	3000	Α
i²t	T <sub>vj</sub> = 25 °C; 8,3 10 ms	61250	A²s
	T <sub>vj</sub> = 150 °C; 8,3 10 ms	45000	A²s
$V_{F}$	$T_{v_i} = 25  ^{\circ}\text{C}; I_F = 400  \text{A}$	max. 1,3	V
$V_{(TO)}$	T <sub>vj</sub> = 150 °C	max. 0,9	V
r <sub>T</sub>	T <sub>vj</sub> = 150 °C	max. 2	mΩ
I <sub>RD</sub>	$T_{vj}$ = 25 °C; $V_{RD}$ = $V_{RRM}$	max. 0,4	mA
$I_{RD}$	T <sub>vj</sub> = 150 °C; V <sub>RD</sub> =V <sub>RRM</sub>	max. 30	mA
Q <sub>rr</sub>	$T_{v_i} = 150 ^{\circ}\text{C}, I_F = 300 \text{A},$	25	μC
I <sub>RM</sub>	$-di/dt = 800 \text{ A/}\mu\text{s}, V_R = 300 \text{ V}$	120	Α
t <sub>rr</sub>		130	ns
E <sub>rr</sub>		-	mJ
R <sub>th(j-c)</sub>	per diode / per module	0,16 / 0,08	K/W
R <sub>th(c-s)</sub>	per diode / per module	0,1 / 0,05	K/W
$T_{v_{j}}$		- 40 <b>+</b> 150	°C
T <sub>stg</sub>		- 40 <b>+</b> 125	°C
V <sub>isol</sub>	a.c. 50 Hz; r.m.s.; 1 s / 1 min.	3600 / 3000	V~
$M_s$	to heatsink	5 ± 15 %	
M <sub>t</sub>	for terminals	5 ± 15 %	
а		5 * 9,81	m/s²
m	approx.	250	g
Case	SKND	A 52	
	SKKD	A 53	







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