

SKKD 205F, SKND 205F



SEMIPACK® 2

Fast Diode Modules

SKKD 205F

SKND 205F

Preliminary Data

Features

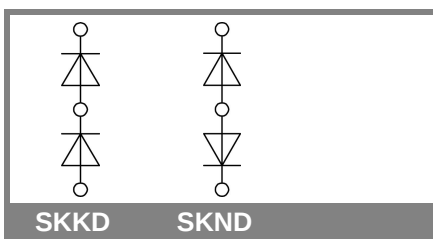
- Very soft recovery over the whole current range
- Very short recovery times
- Low switching losses
- Heat transfer through ceramic isolated metal baseplate
- Materials and distances according to UL

Typical Applications

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

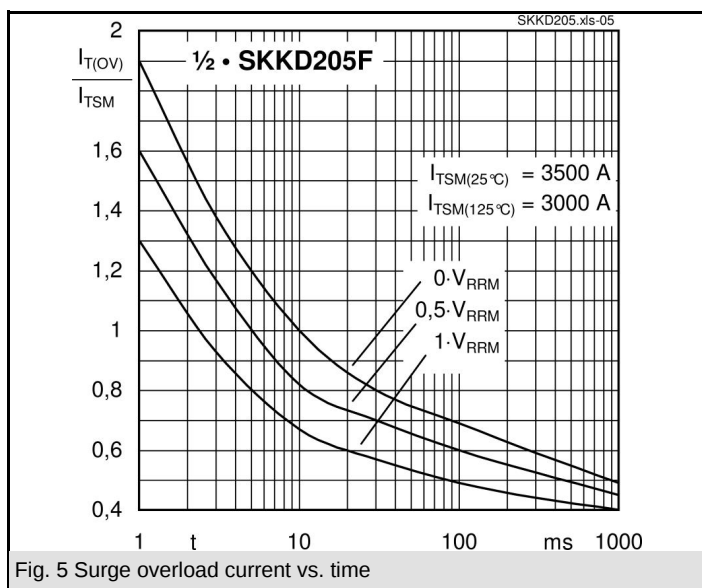
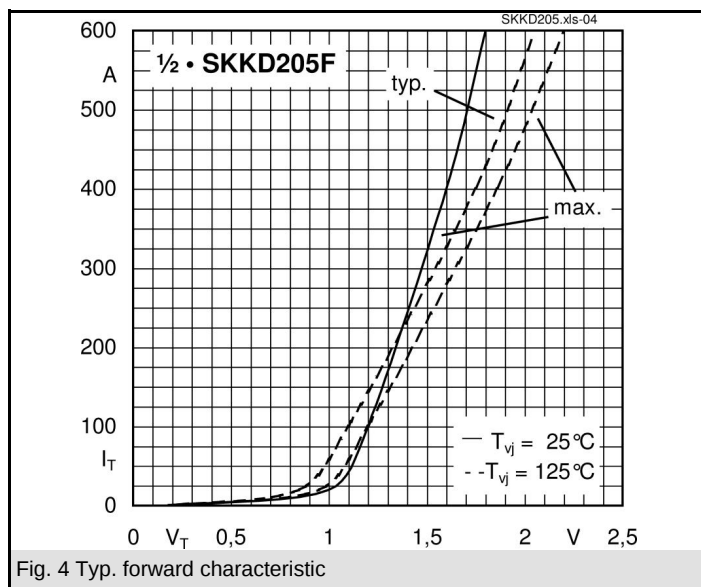
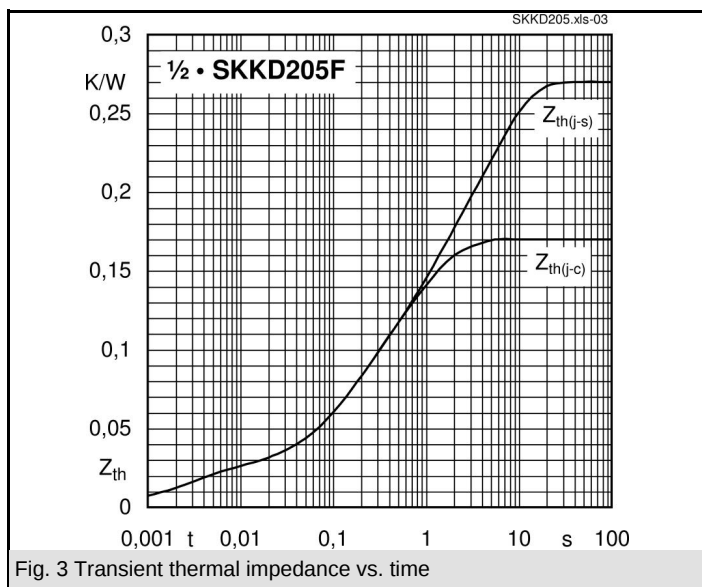
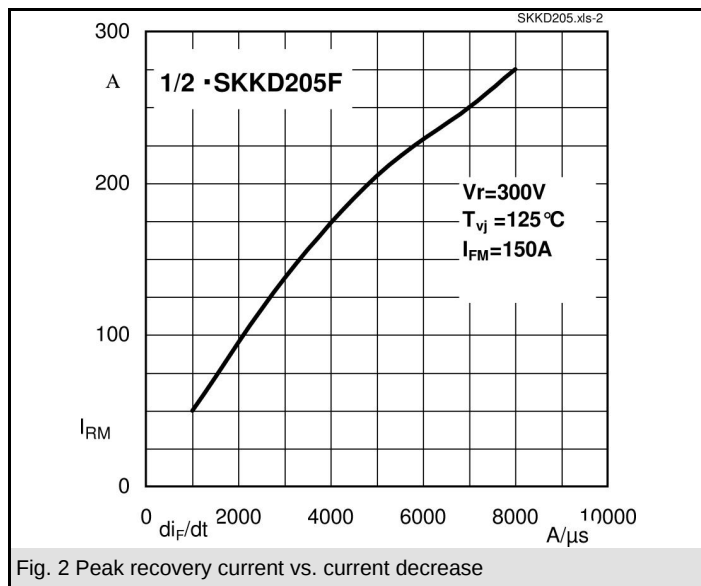
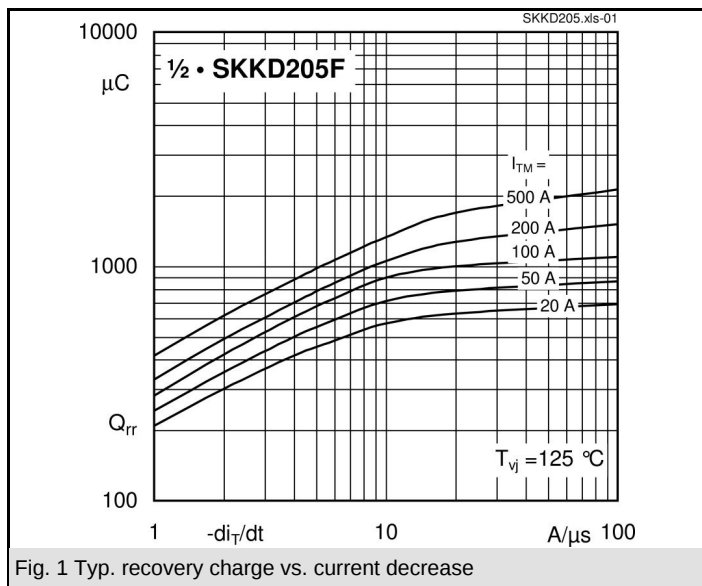
V_{RSM} V	V_{RRM} V	$I_{FRMS} = 455$ A (maximum value for continuous operation) $I_{FAV} = 205$ A (sin. 180; 50 Hz; $T_c = 87$ °C)	
600	600	SKKD 205F06	SKND 205F06

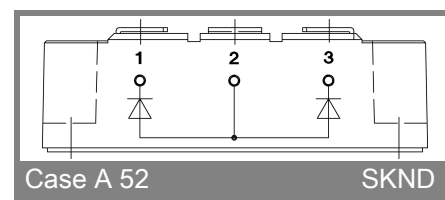
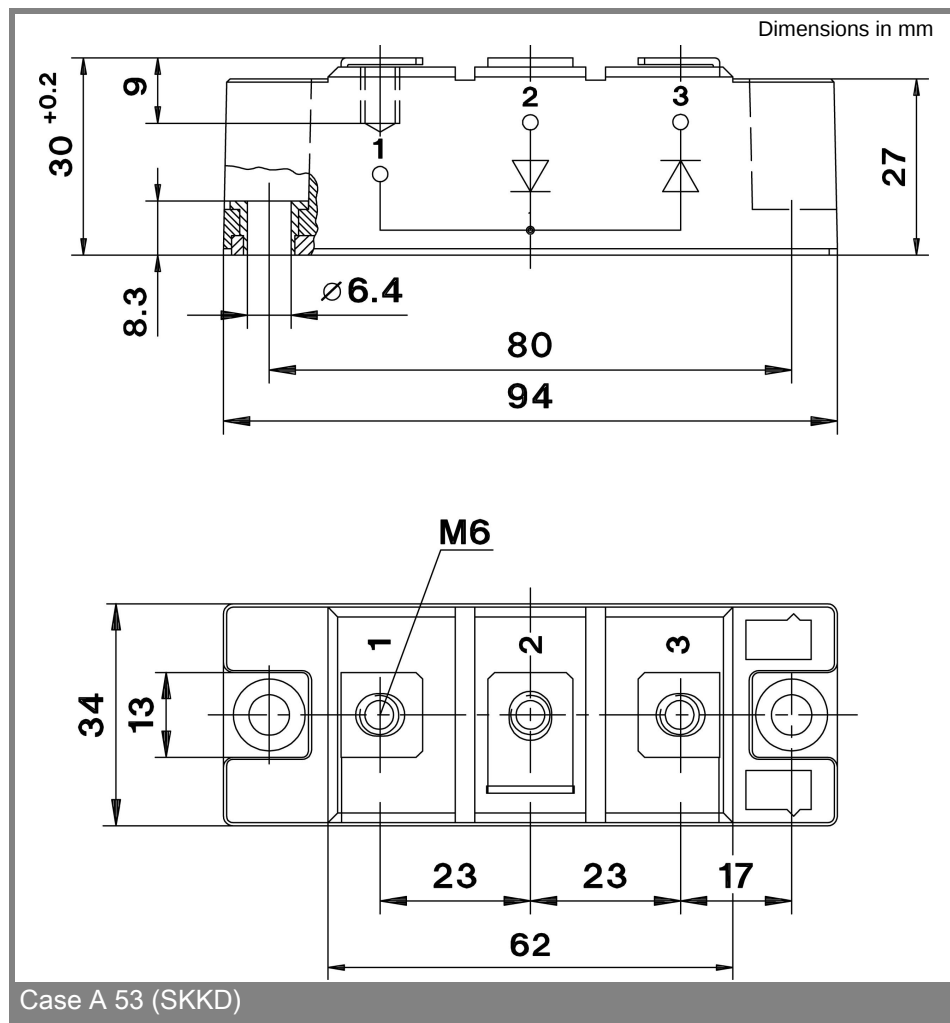
Symbol	Conditions	Values	Units
I_{FAV}	sin. 180; $T_c = 87$ °C	205	A
I_{FSM}	$T_{vj} = 25$ °C; 10 ms ms $T_{vj} = 150$ °C; 10 ms ms	3500 3000	A A
i^2t	$T_{vj} = 25$ °C; 8,3 ... 10 ms $T_{vj} = 150$ °C; 8,3 ... 10 ms	61250 45000	A ² s A ² s
V_F	$T_{vj} = 25$ °C; $I_F = 400$ A	max. 1,3	V
$V_{(TO)}$	$T_{vj} = 150$ °C	max. 0,9	V
r_T	$T_{vj} = 150$ °C	max. 2	mΩ
I_{RD}	$T_{vj} = 25$ °C; $V_{RD} = V_{RRM}$	max. 0,4	mA
I_{RD}	$T_{vj} = 150$ °C; $V_{RD} = V_{RRM}$	max. 30	mA
Q_{rr}	$T_{vj} = 150$ °C; $I_F = 300$ A, -di/dt = 800 A/μs, $V_R = 300$ V	25	μC
I_{RM}		120	A
t_{rr}		130	ns
E_{rr}		-	mJ
$R_{th(j-c)}$	per diode / per module	0,16 / 0,08	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. to heatsink	3600 / 3000	V~
M_s	for terminals	5 ± 15 %	
M_t		5 ± 15 %	
a		5 * 9,81	m/s ²
m	approx.	250	g
Case	SKND SKKD	A 52 A 53	



SKKD

SKND





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