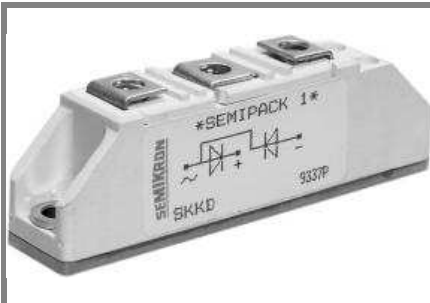


# SKKD 105F



**SEMIPACK® 1**

## Fast Diode Modules

### SKKD 105F

#### Features

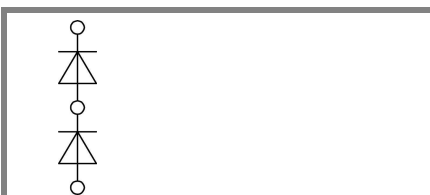
- Heat transfer through ceramic isolated metal baseplate
- Hard soldered joints for high reliability
- SKKD half bridge connection; centre tap connections: SKMD common cathode, SKND common anode
- UL recognized, file no. E 63 532

#### Typical Applications\*

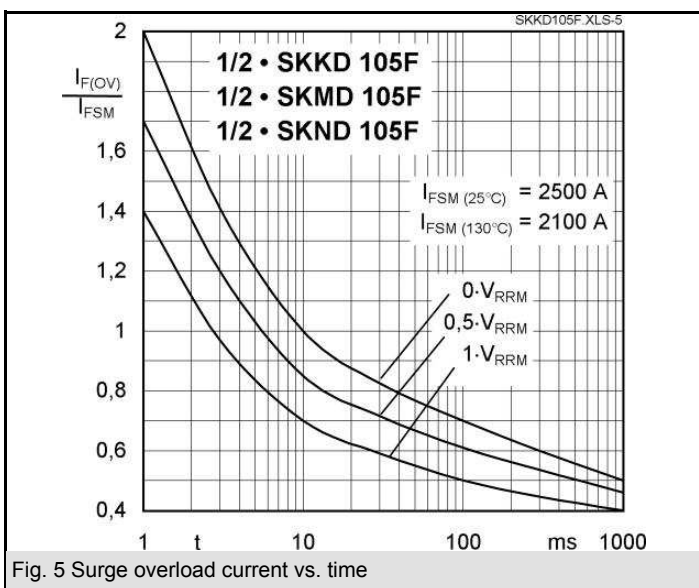
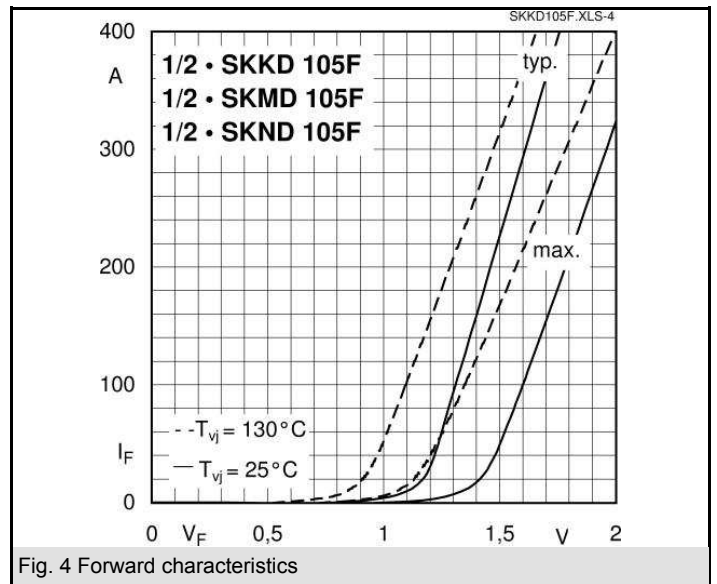
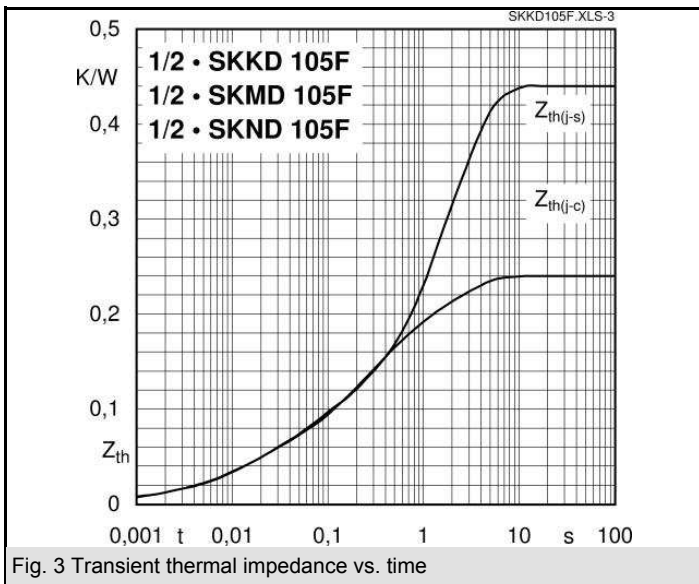
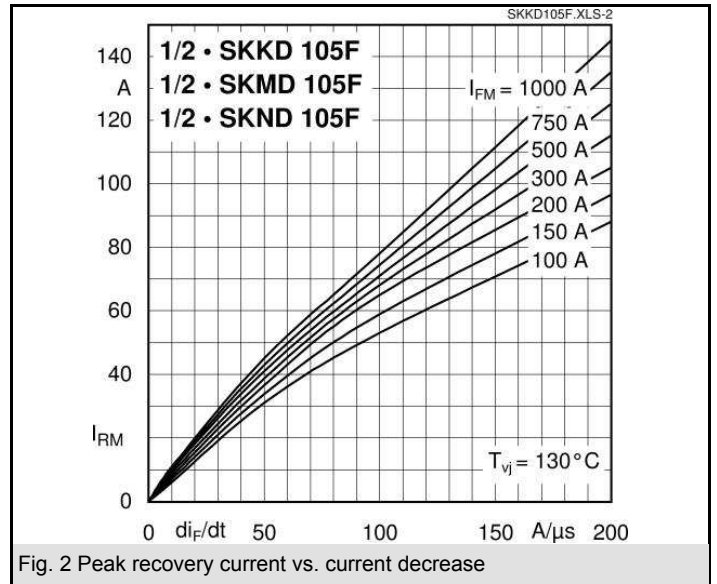
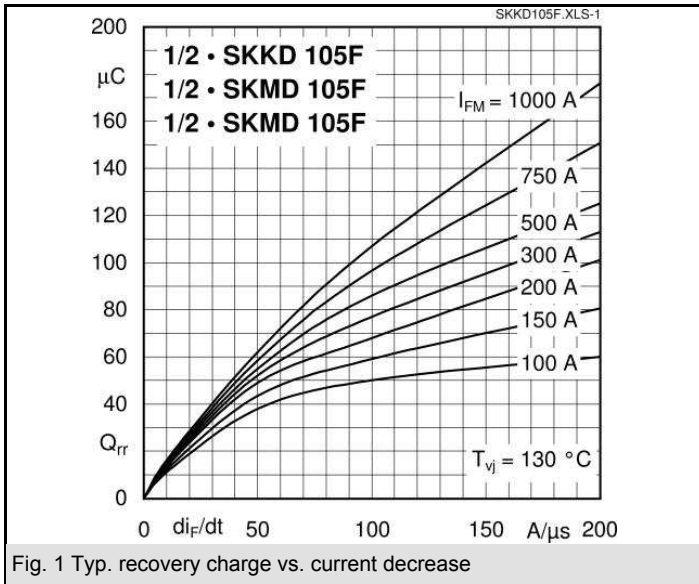
- Self-commutated inverters
- DC choppers
- AC motor speed control
- Inductive heating
- Uninterruptible power supplies
- Electronic welders
- General power switching applications

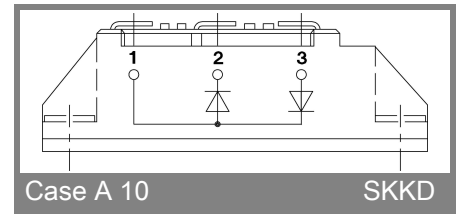
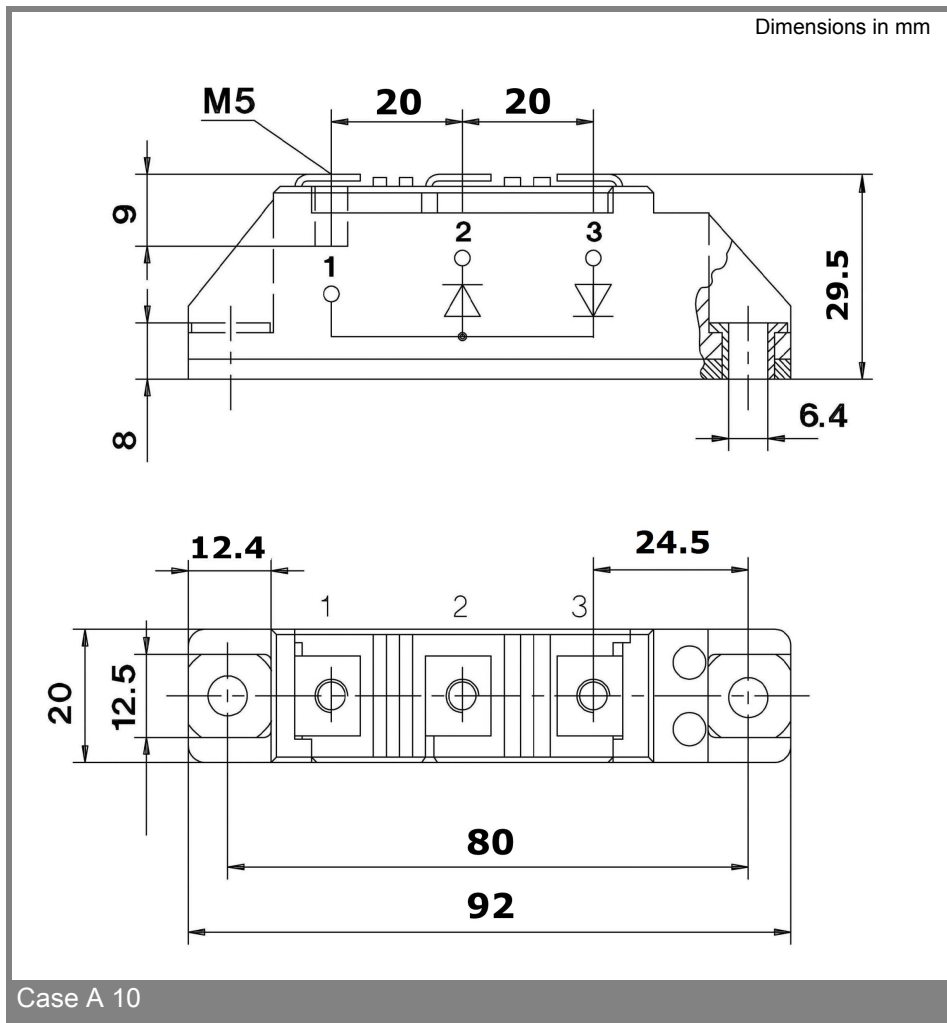
$V_{RSM}$ V	$V_{RRM}$ V	$I_{FRMS} = 200$ A (maximum value for continuous operation) $I_{FAV} = 105$ A (sin. 180; $T_c = 83$ °C)	
1200	1200	SKKD 105F12	
1600	1600	SKKD 105F16	

Symbol	Conditions	Values	Units
$I_{FAV}$	sin. 180; $T_c = 85$ (100) °C	102 (65)	A
$I_{FSM}$	$T_{vj} = 25$ °C; 10 ms $T_{vj} = 130$ °C; 10 ms	2500 2100	A A
$i^2t$	$T_{vj} = 25$ °C; 8,3 ... 10 ms $T_{vj} = 130$ °C; 8,3 ... 10 ms	31250 22000	A <sup>2</sup> s A <sup>2</sup> s
$V_F$	$T_{vj} = 25$ °C; $I_F = 300$ A	max. 2,05	V
$V_{(TO)}$	$T_{vj} = 130$ °C	max. 1,2	V
$r_T$	$T_{vj} = 130$ °C	max. 2,5	mΩ
$I_{RD}$	$T_{vj} = 25$ °C; $V_{RD} = V_{RRM}$	max. 1	mA
$I_{RD}$	$T_{vj} = 130$ °C; $V_{RD} = V_{RRM}$	max. 30	mA
$Q_{rr}$	$T_{vj} = 130$ °C, $I_F = 100$ A, $-di/dt = 50$ A/μs, $V_R = 30$ V	50	μC
$I_{RM}$		53	A
$t_{rr}$		1890	ns
$E_{rr}$		0,8	mJ
$R_{th(j-c)}$	per diode / per module	0,24 / 0,12	K/W
$R_{th(c-s)}$	per diode / per module	0,2 / 0,1	K/W
$T_{vj}$		- 40 ... + 130	°C
$T_{stg}$		- 40 ... + 125	°C
$V_{isol}$	a. c. 50 Hz; r.m.s; 1 s / 1 min.	3600 / 3000	V~
$M_s$	to heatsink	5 ± 15 %	Nm
$M_t$	to terminals	3 ± 15 %	Nm
$a$		5 * 9,81	m/s <sup>2</sup>
$m$	approx.	120	g
Case	SKKD	A 10	



**SKKD**





## \*IMPORTANT INFORMATION AND WARNINGS

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