

# SKKD 40F, SKMD 40F



**SEMIPACK<sup>®</sup> 1**

## Fast Diode Modules

**SKKD 40F**

**SKMD 40F**

### Features

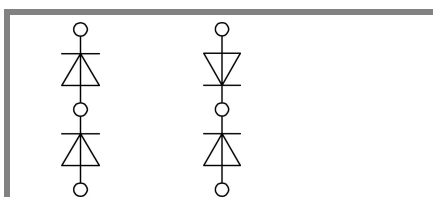
- Heat transfer through ceramic isolated metal baseplate
- Hard soldered joints for high reliability
- SKKD half bridge connection; SKMD centre tap connection, common cathode
- UL recognized, file no. E 63 532

### Typical Applications

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

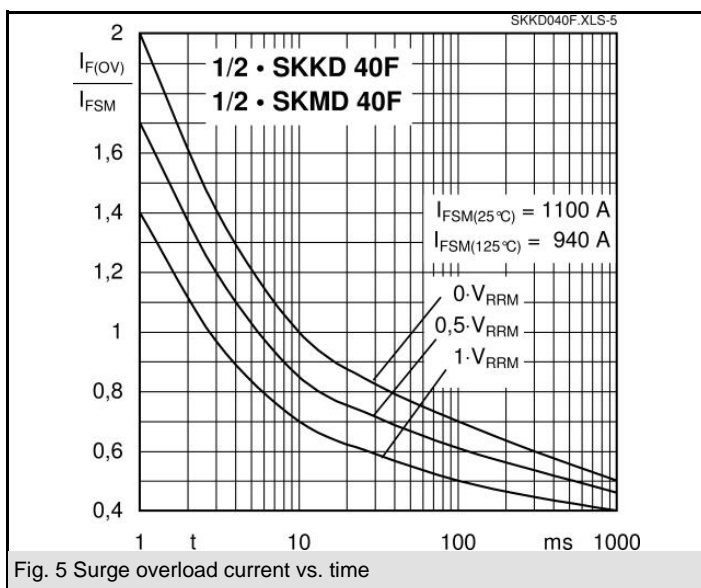
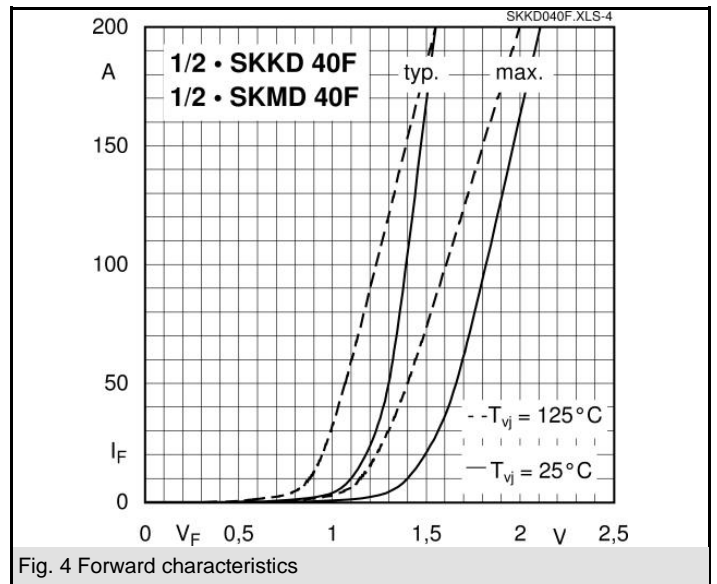
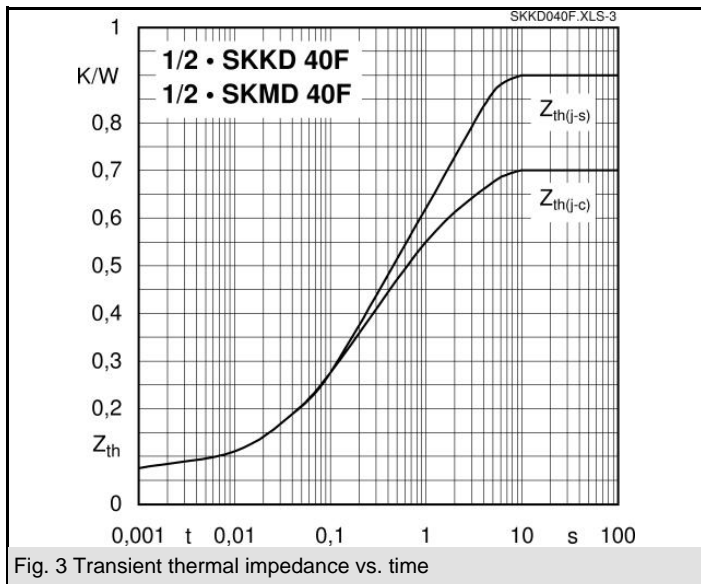
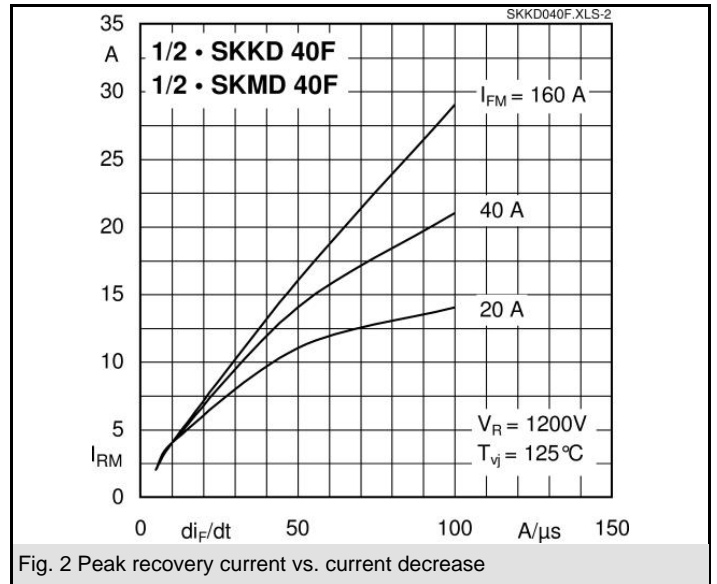
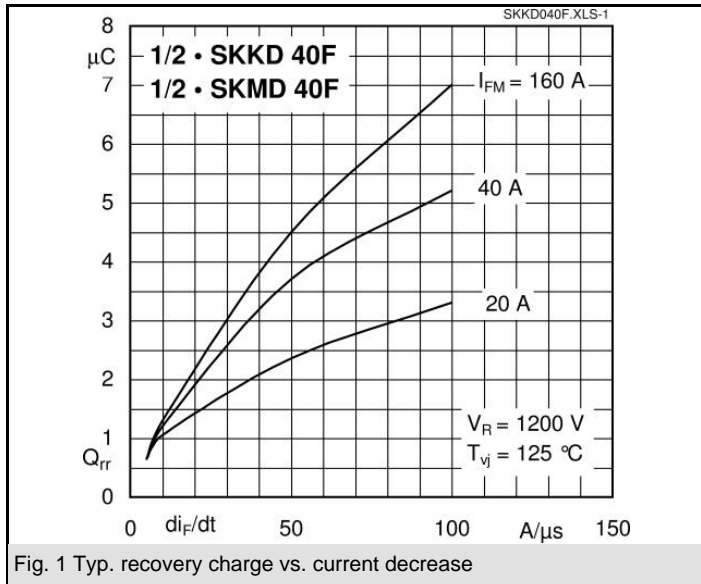
$V_{RSM}$ V	$V_{RRM}$ V	$I_{FRMS} = 110$ A (maximum value for continuous operation) $I_{FAV} = 40$ A (sin. 180°; 50Hz; $T_c = 80$ °C)	
400	400	SKKD 40F04	SKMD 40F04
600	600	SKKD 40F06	SKMD 40F06
800	800	SKKD 40F08	SKMD 40F08
1000	1000	SKKD 40F10	SKMD 40F10

Symbol	Conditions	Values	Units
$I_{FAV}$	sin. 180; $T_c = 85$ (100) °C	37 (25)	A
$I_{FSM}$	$T_{vj} = 25$ °C; 10 ms	1100	A
	$T_{vj} = 125$ °C; 10 ms	940	A
$i^2t$	$T_{vj} = 25$ °C; 8,3 ... 10 ms	6000	A <sup>2</sup> s
	$T_{vj} = 125$ °C; 8,3 ... 10 ms	4400	A <sup>2</sup> s
$V_F$	$T_{vj} = 25$ °C; $I_F = 150$ A	max. 2	V
$V_{(TO)}$	$T_{vj} = 125$ °C	max. 1,2	V
$r_T$	$T_{vj} = 125$ °C	max. 4	mΩ
$I_{RD}$	$T_{vj} = 25$ °C; $V_{RD} = V_{RRM}$	max. 0,5	mA
$I_{RD}$	$T_{vj} = 125$ °C; $V_{RD} = V_{RRM}$	max. 50	mA
$Q_{rr}$	$T_{vj} = 125$ °C; $I_F = 100$ A,	3	μC
$I_{RM}$	$-di/dt = 30$ A/μs, $V_R = 30$ V	10	A
$t_{rr}$		600	ns
$E_{rr}$		0,05	mJ
$R_{th(j-c)}$	per diode / per module	0,7 / 0,35	K/W
$R_{th(c-s)}$	per diode / per module	0,2 / 0,1	K/W
$T_{vj}$		- 40 ... + 125	°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	
	SKMD	A 11	

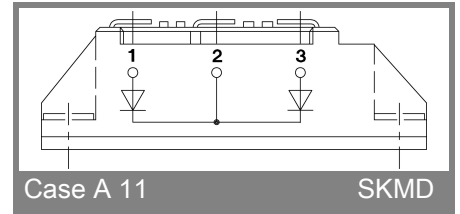


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