SKKD 150F, SKMD 150F, SKND 150F



SEMIPACK[®] 2

Fast Diode Modules

SKKD 150F SKMD 150F SKND 150F

Features

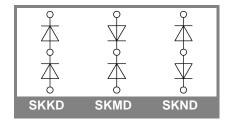
- CAL (controlled axial lifetime) technology, patent No. DE 43 10 44
- Heat transfer through ceramic isolated metal baseplate
- Very short recovery times
- Soft recovery
- · Low switching losses
- SKKD half bridge connection
- centre tap connections: SKMD common cathode SKND common anode
- UL recognized, file no. E 63 532

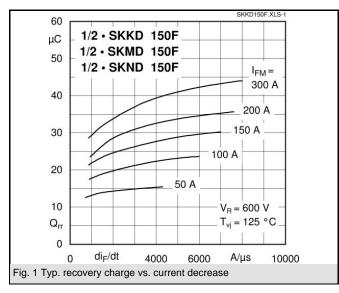
Typical Applications*

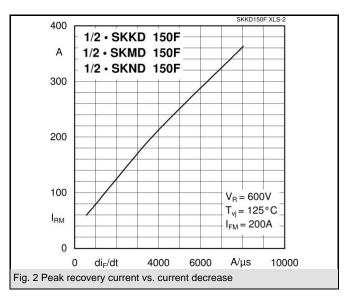
- · Self-commutated inverters
- DC choppers
- AC motor speed control
- inductive heating
- Uninterruptible power supplies
- Electronic welders
- General power switching applications

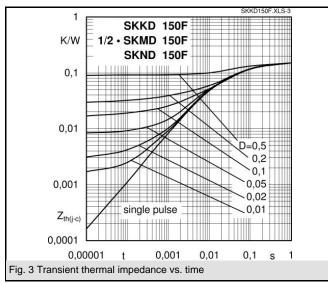
V _{RSM}	V_{RRM}	I _{FRMS} = 220 A (maximum value for continuous operation)		
V	V	I_{FAV} = 150 A (sin. 180; 50 Hz; T_c = 54 °C)		
1200	1200	SKKD 150F12	SKMD 150F12	SKND 150F12

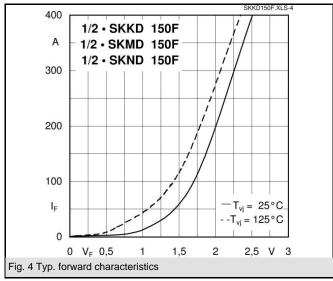
Symbol	Conditions	Values	Units
I _{FAV}	sin. 180; T _c = 85 (100) °C	117 (99)	А
I _{FSM}	T _{vi} = 25 °C; 10 ms	2000	Α
	T _{vi} = 150 °C; 10 ms	1800	Α
i²t	T _{vj} = 25 °C; 8,3 10 ms	20000	A²s
	T _{vj} = 150 °C; 8,3 10 ms	16200	A²s
V_{F}	T _{vj} = 25 °C; I _F = 150 A	max. 2,2	V
$V_{(TO)}$	T _{vi} = 150 °C	max. 1,2	V
r _T	T _{vi} = 150 °C	max. 5,5	mΩ
I_{RD}	$T_{vj} = 25 ^{\circ}C; V_{RD} = V_{RRM}$	max. 1	mA
I _{RD}	T_{vj} = 150 °C; V_{RD} = V_{RRM}	max. 40	mA
Q _{rr}	T _{vi} = 125 °C, I _F = 150 A,	21	μC
I_{RM}	-di/dt = 1000 A/μs, V _R = 600 V	80	Α
t _{rr}		710	ns
E _{rr}		4,5	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.	4800 / 4000	V~
M_s	to heatsink	5 ± 15%	Nm
M _t	to terminals	5 ± 15 %	Nm
а		5 * 9,81	m/s²
m	approx.	160	g
Case	SKKD	A 53	İ
	SKMD	A 51	
	SKND	A 52	

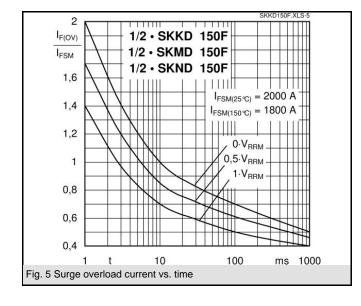


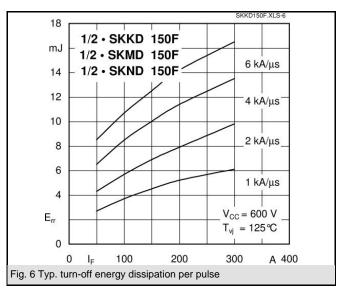




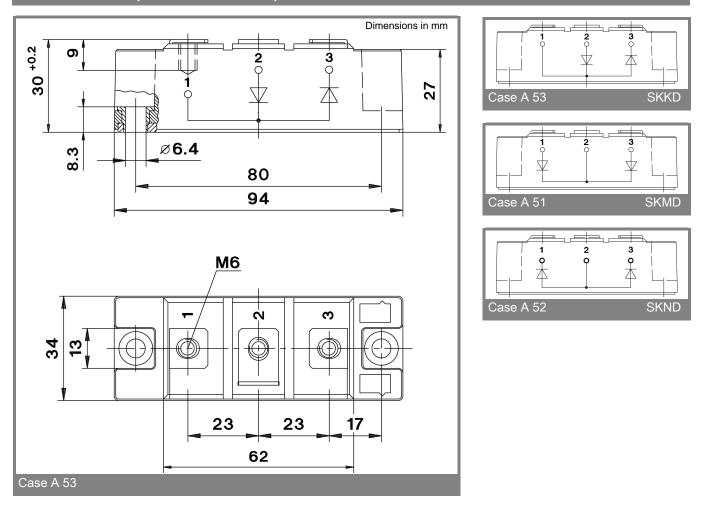








SKKD 150F, SKMD 150F, SKND 150F



^{*} The specifications of our components may not be considered as an assurance of component characteristics. Components have to be tested for the respective application. Adjustments may be necessary. The use of SEMIKRON products in life support appliances and systems is subject to prior specification and written approval by SEMIKRON. We therefore strongly recommend prior consultation of our personal.

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