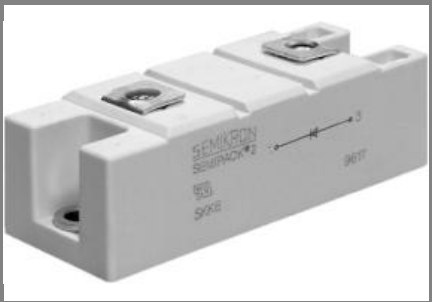




SEMIPACK[®] 2

Fast Diode Modules

SKKE 290F

Preliminary Data

Features

- CAL (controlled axial lifetime) chip technology, patent No. DE 43 10 44
- 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

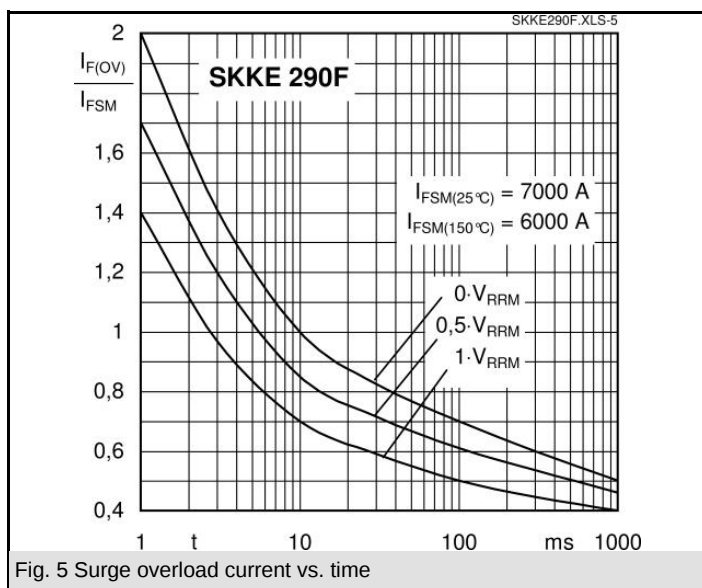
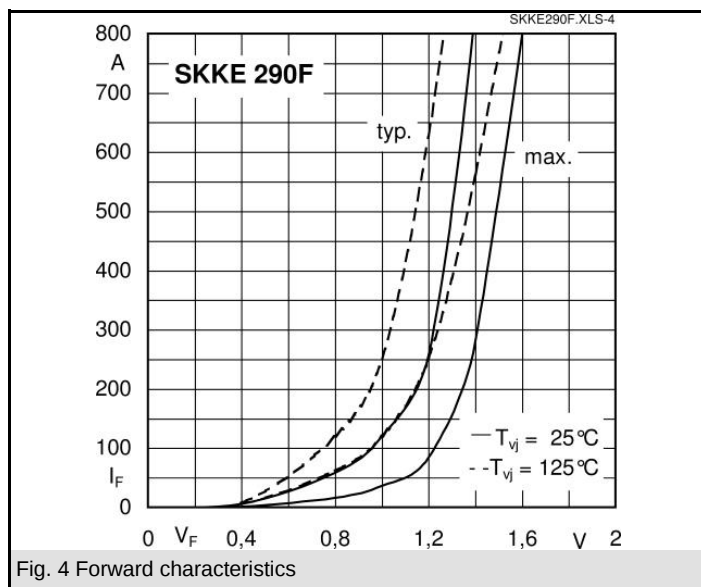
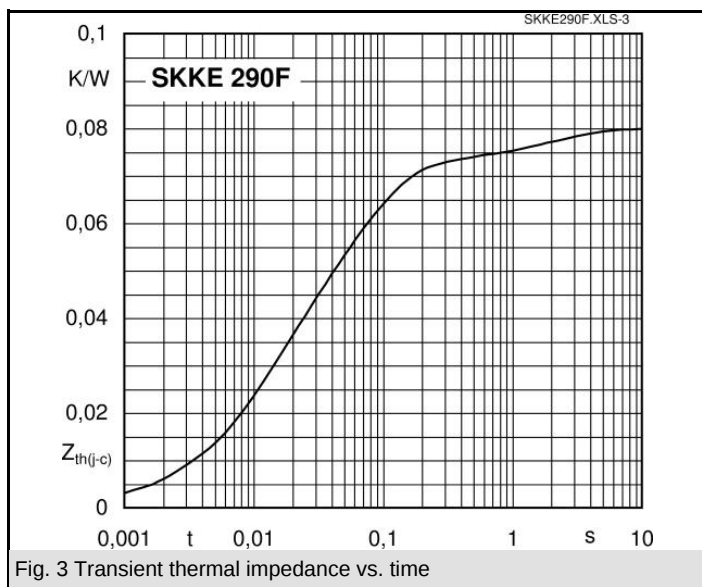
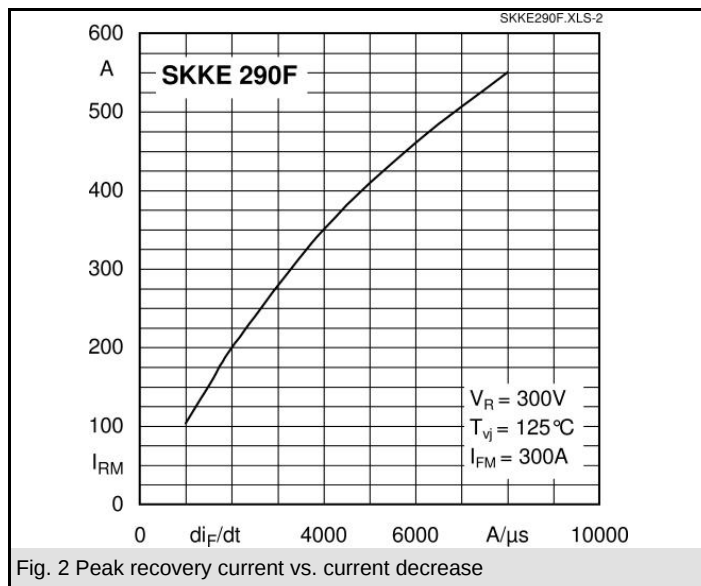
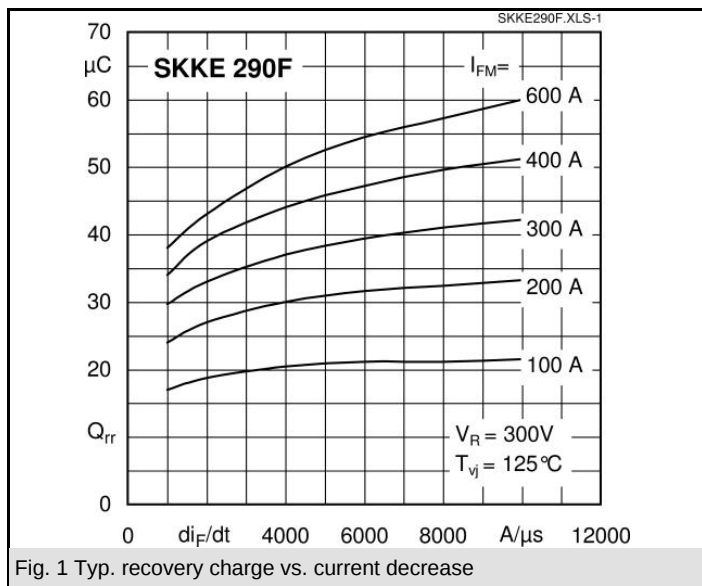
- Self-commutated inverters
- DC choppers
- AC motor speed control
- Inductive heating
- Uninterruptible power supplies
- Electronic welders
- General power switching applications

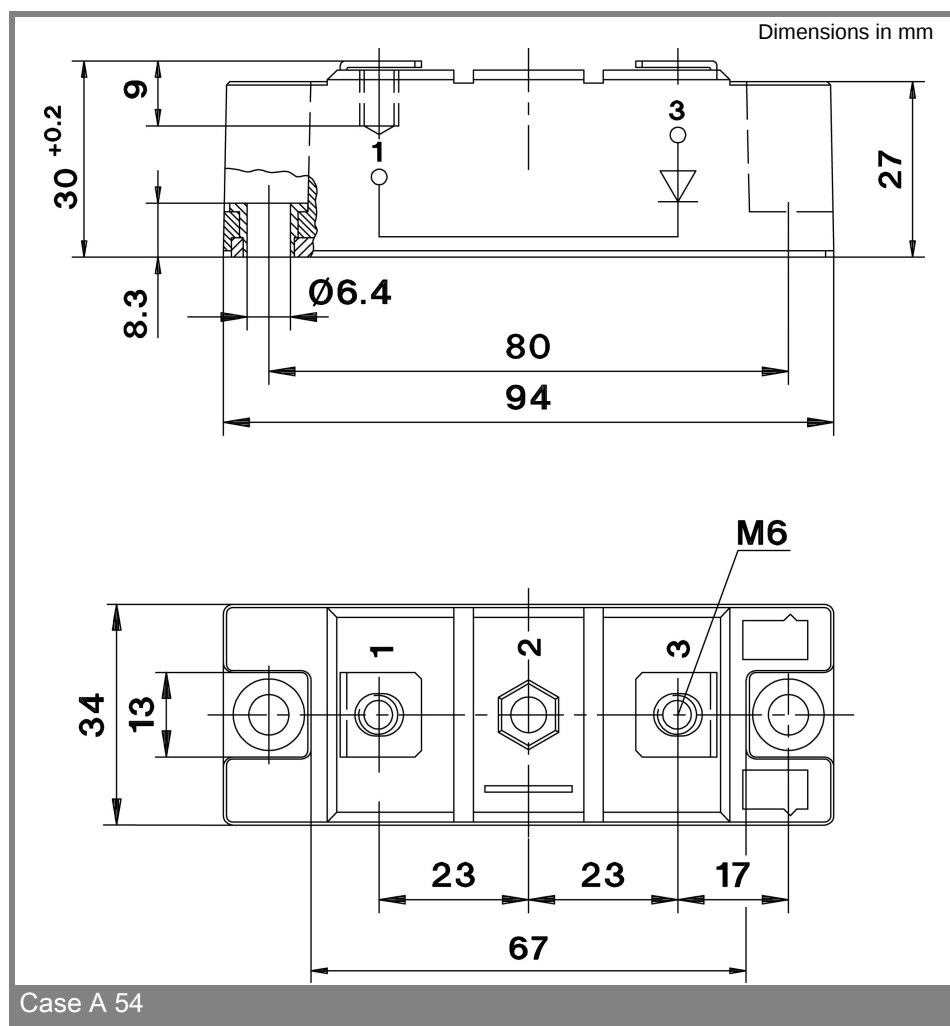
V_{RSM} V	V_{RRM} V	$I_{FRMS} = 455\text{ A}$ (maximum value for continuous operation) $I_{FAV} = 290\text{ A}$ (sin. 180; 50 Hz; $T_c = 109\text{ °C}$)		
600	600	SKKE 290F06		

Symbol	Conditions	Values	Units
I_{FAV}	sin. 180; $T_c = 85\text{ (100) °C}$	390 (330)	A
I_{FSM}	$T_{vj} = 25\text{ °C}; 10\text{ ms}$ $T_{vj} = 150\text{ °C}; 10\text{ ms}$	7000 6000	A A
i^2t	$T_{vj} = 25\text{ °C}; 8,3 \dots 10\text{ ms}$ $T_{vj} = 150\text{ °C}; 8,3 \dots 10\text{ ms}$	245000 180000	A ² s A ² s
V_F	$T_{vj} = 25\text{ °C}; I_F = 400\text{ A}$	max. 1,45	V
$V_{(TO)}$	$T_{vj} = 150\text{ °C}$	max. 0,9	V
r_T	$T_{vj} = 150\text{ °C}$	max. 1,2	mΩ
I_{RD}	$T_{vj} = 25\text{ °C}; V_{RD} = V_{RRM}$	max. 0,4	mA
I_{RD}	$T_{vj} = 150\text{ °C}; V_{RD} = V_{RRM}$	max. 60	mA
Q_{rr}	$T_{vj} = 125\text{ °C}; I_F = 300\text{ A},$ $-di/dt = 1600\text{ A/μs}, V_R = 300\text{ V}$	33,5	μC
I_{RM}		160	A
t_{rr}		580	ns
E_{rr}		3,6	mJ
$R_{th(j-c)}$		0,08	K/W
$R_{th(c-s)}$		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.	3600 / 3000	V~
M_s	to heatsink	5 ± 15 %	Nm
M_t	to terminals	5 ± 15 %	Nm
a		5 * 9,81	m/s ²
m	approx.	160	g
Case		A 54	



SKKE





This technical information specifies semiconductor devices but promises no characteristics. No warranty or guarantee expressed or implied is made regarding delivery, performance or suitability.