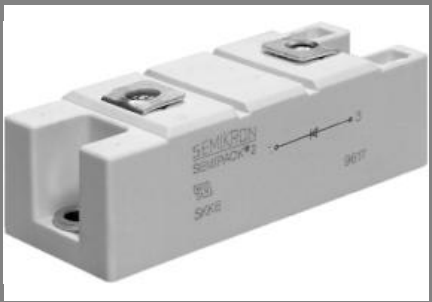


SKKE 310F



SEMIPACK® 2

Fast Diode Module

SKKE 310F

Preliminary Data

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

Typical Applications

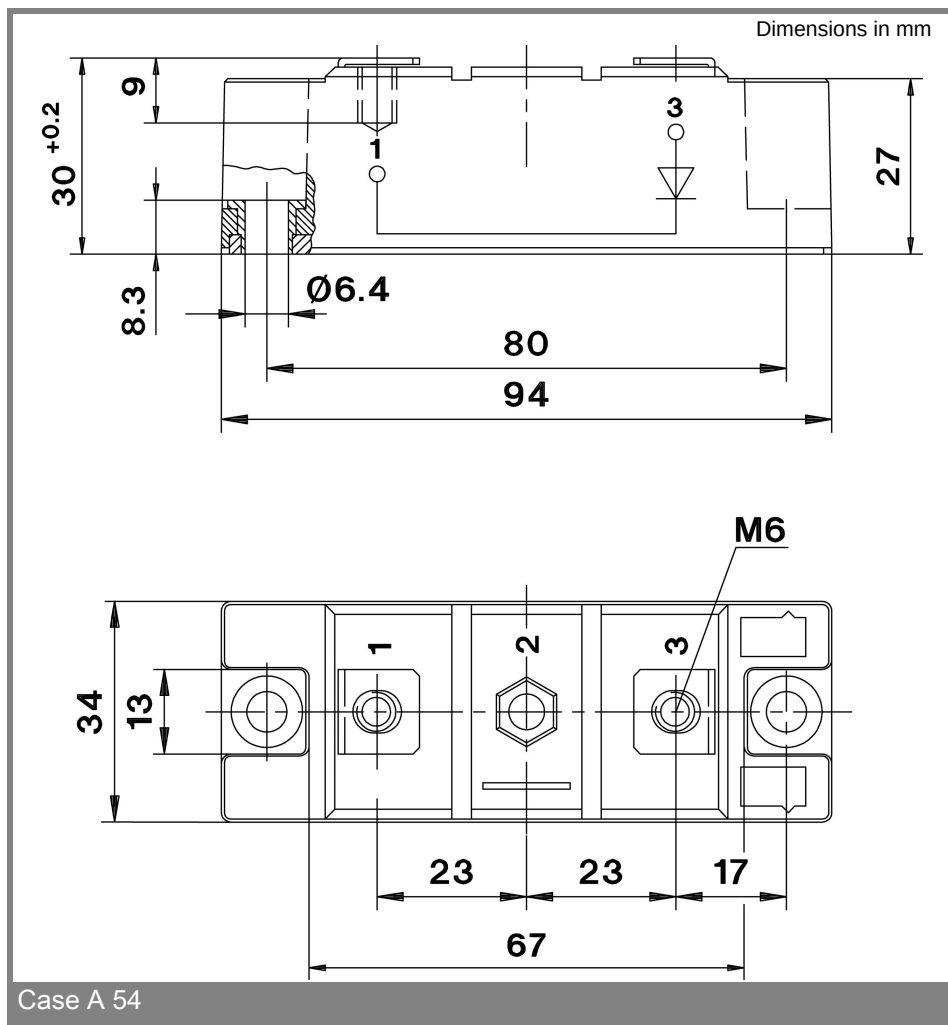
- Self-commutated inverters
- DC choppers
- AC motor speed control
- Inductive heating
- Uninterruptible power supplies
- Electronic welders
- General power switching applications

V_{RSM} V	V_{RRM} V	$I_{FRMS} = 455\text{ A}$ (maximum value for continuous operation) $I_{FAV} = 310\text{ A}$ (sin. 180; 50Hz; $T_c = 84\text{ °C}$)		
1200	1200	SKKE 310F12		

Symbol	Conditions	Values	Units
I_{FAV}	sin. 180; $T_c = 85\text{ (100) °C}$	308 (260)	A
I_{FSM} i^2t	$T_{vj} = 25\text{ °C}; 10\text{ ms}$	6500	A
	$T_{vj} = 150\text{ °C}; 10\text{ ms}$	5500	A
	$T_{vj} = 25\text{ °C}; 8,3 \dots 10\text{ ms}$	211000	A²s
	$T_{vj} = 150\text{ °C}; 8,3 \dots 10\text{ ms}$	151000	A²s
V_F	$T_{vj} = 25\text{ °C}; I_F = 400\text{ A}$	max. 2,1	V
$V_{(TO)}$	$T_{vj} = 150\text{ °C}$	max. 1,2	V
r_T	$T_{vj} = 150\text{ °C}$	max. 1,9	mΩ
I_{RD}	$T_{vj} = 25\text{ °C}; V_{RD} = V_{RRM}$	max. 2	mA
I_{RD}	$T_{vj} = 150\text{ °C}; V_{RD} = V_{RRM}$	max. 60	mA
Q_{rr}	$T_{vj} = 125\text{ °C}; I_F = 400\text{ A},$ $-di/dt = 4000\text{ A/}\mu\text{s}, V_R = 600\text{ V}$	58	μC
I_{RM}		400	A
t_{rr}		370	ns
E_{rr}		22	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/s²
m	approx.	250	g
Case		A 54	



SKKE



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