

SEMIPACK® 4 Diode Modules

SKKE 400

V_{RSM} V_{RRM} V	I_{FAV} (sin. 180; $T_{case} = 100\text{ °C}$) 430 A
1200 1600 2000 2400	SKKE 400/12 SKKE 400/16 SKKE 400/20 SKKE 400/24 ¹⁾



Symbol	Conditions	SKKE 400	Units
I_{FAV}	sin. 180; $T_{case} = 85\text{ °C}$ 100 °C	525 430	A A
I_{FSM}	$T_{vj} = 25\text{ °C}$ $T_{vj} = 150\text{ °C}$	12 000 10 500	A A
i^2t	$T_{vj} = 25\text{ °C}$ $T_{vj} = 150\text{ °C}$	720 000 550 000	A^2s A^2s
Q_{rr}	} $T_{vj} = 150\text{ °C}$; $I_{FM} = 500\text{ A}$ } $- di_F/dt = 10\text{ A}/\mu s$; $V_R = 100\text{ V}$	2000	μC
I_{RM}		100	A
I_{RD}	$T_{vj} = 25\text{ °C}$; $V_{RD} = V_{RRM}$ $T_{vj} = 130\text{ °C}$; $V_{RD} = V_{RRM}$	4 40	mA mA
V_F	$T_{vj} = 25\text{ °C}$; $I_{FM} = 3000\text{ A}$; max.	1,90	V
V_{TO}	$T_{vj} = 150\text{ °C}$	0,85	V
r_T	$T_{vj} = 150\text{ °C}$	0,35	$m\Omega$
R_{thjc}	cont. } sin. 180 } per diode = per module	0,090	$^{\circ}C/W$
R_{thch}		0,095	$^{\circ}C/W$
T_{vj}		0,02	$^{\circ}C/W$
T_{stg}		- 40 ... + 150	$^{\circ}C$
V_{isol}	a. c. 50 Hz; r.m.s.; 1 s/1 min ¹⁾	3600 / 3000	V~
M_1	to heatsink } to terminals } SI (US) units	5 (44 lb. in.) $\pm 15\%$ ²⁾	Nm
M_2		17 (150 lb. in.) $\pm 15\%$ ³⁾	Nm
a		5 · 9,81	m/s^2
w	approx.	950	g
Case	→ page B 1 – 94	A 42	

Features

- Heat transfer through aluminium nitride ceramic isolated metal baseplate
- Precious metal pressure contacts for high reliability
- UL recognized, file no. E 63 532

Typical Applications

- Rectifiers

¹⁾ SKKE 400/24: V_{isol} 1 s/1 min. = 4500/3750 V~

²⁾ See the assembly instructions

³⁾ The screws must be lubricated

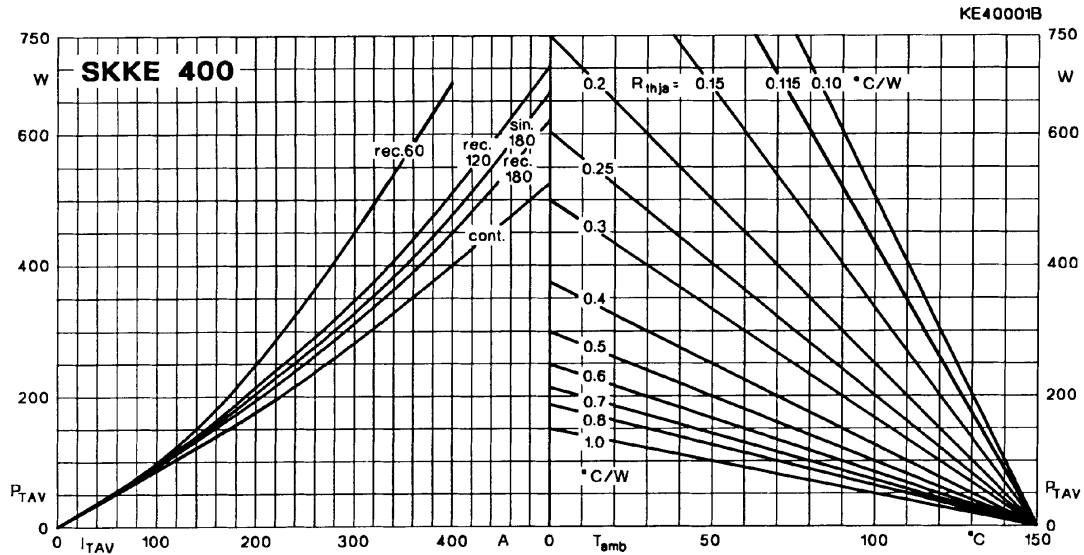


Fig. 11 Power dissipation per diode vs forward current and ambient temperature

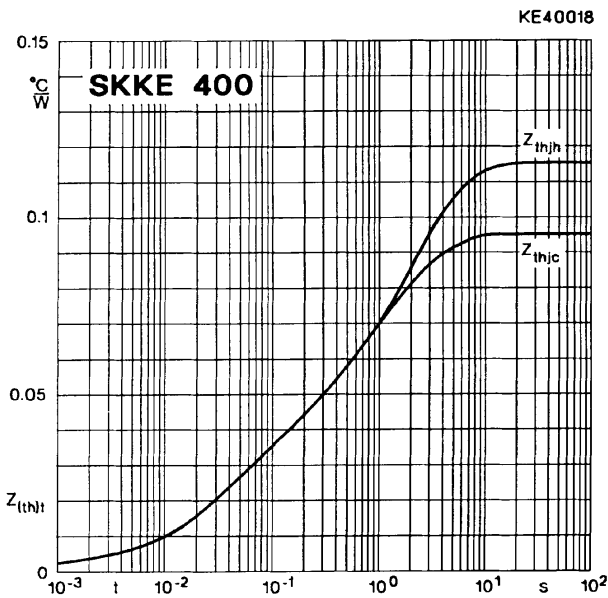


Fig. 14 Transient thermal impedance vs. time

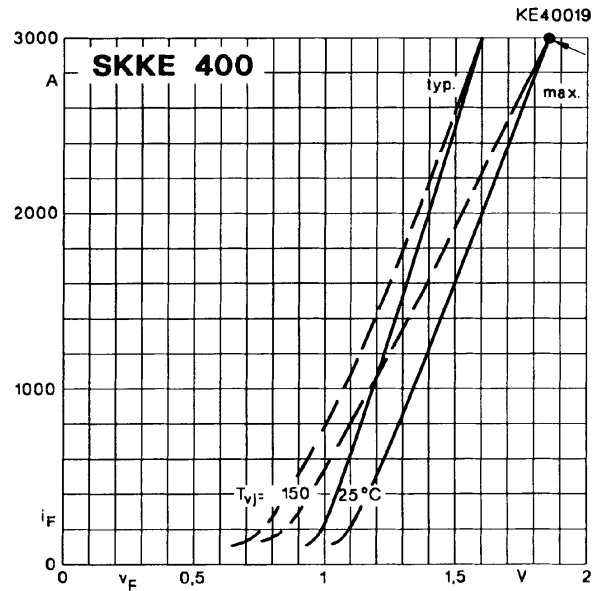


Fig. 15 Forward characteristics

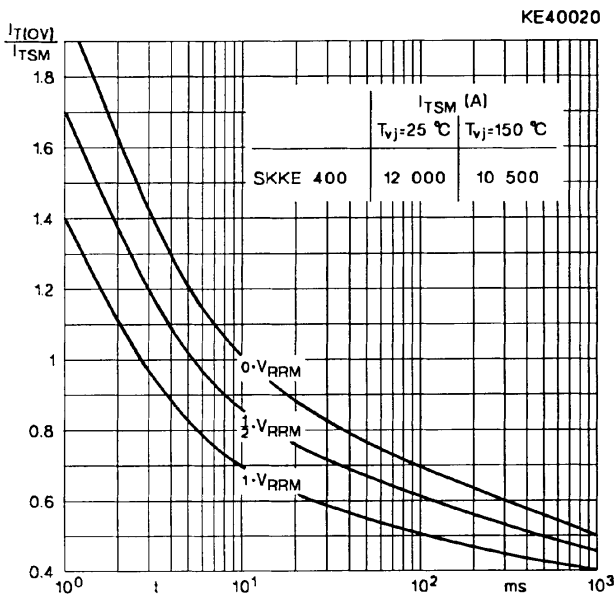
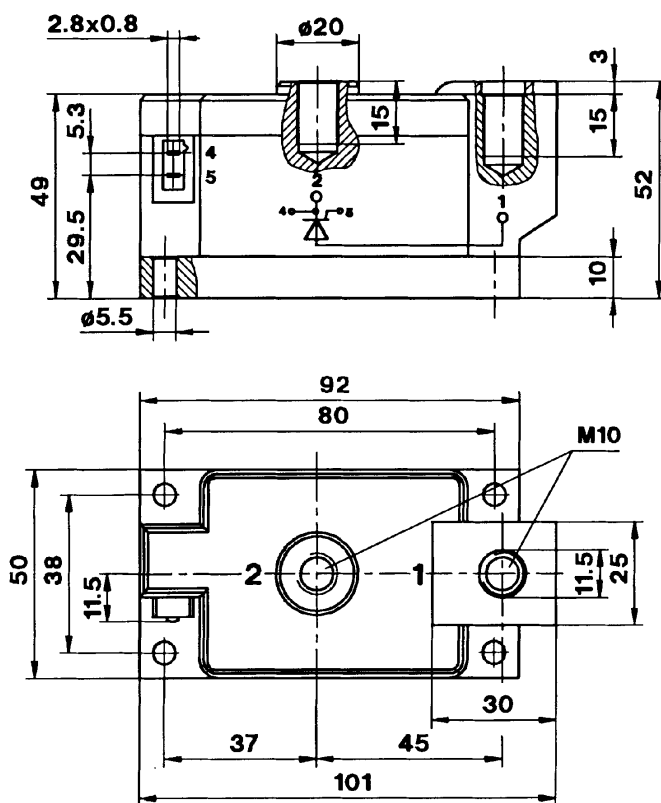


Fig. 20 Surge overload current vs. time

SKET 330
SKET 400

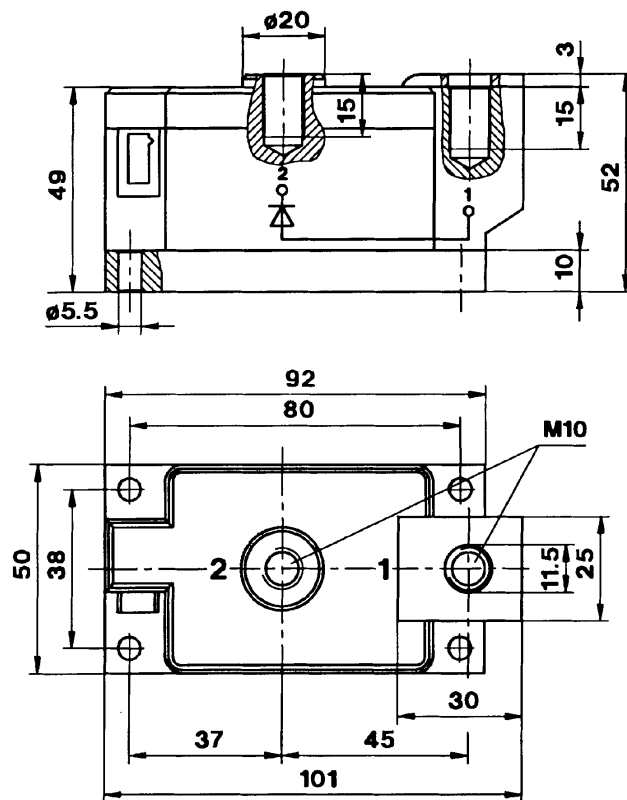
Case A 36
SEMIPACK® 4



Dimensions in mm

SKKE 400

Case A 42
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Dimensions in mm