



SEMIPACK® 6

Rectifier Diode Modules

SKKE 1201/22

Features

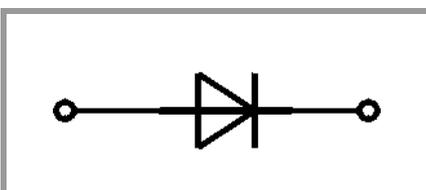
- Precise metal pressure contacts for high reliability
- UL recognized, file no. E 63 532

Typical Applications*

- Rectifiers

Absolute Maximum Ratings				
Symbol	Conditions		Values	Unit
Rectifier Diode				
I_{FAV}	sin. 180°	$T_c = 85\text{ °C}$	1360	A
		$T_c = 100\text{ °C}$	1100	A
I_{FRMS}	continuous operation		1700	A
I_{FSM}	10 ms	$T_j = 25\text{ °C}$	41000	A
		$T_j = 150\text{ °C}$	35000	A
i^2t	10 ms	$T_j = 25\text{ °C}$	8405000	A ² s
		$T_j = 150\text{ °C}$	6125000	A ² s
V_{RSM}			2300	V
V_{RRM}			2200	V
T_j			-40 ... 150	°C
Module				
T_{stg}			-40 ... 150	°C
V_{isol}	a.c.; 50 Hz; r.m.s.	1 min	3000	V
		1 s	3600	V

Characteristics						
Symbol	Conditions		min.	typ.	max.	Unit
Diode						
V_F	$T_j = 150\text{ °C}, I_F = 3000\text{ A}$				1.11	V
$V_{(TO)}$	$T_j = 150\text{ °C}$				0.75	V
r_T	$T_j = 150\text{ °C}$				0.073	mΩ
I_{RD}	$T_j = 150\text{ °C}, V_{RD} = V_{RRM}$				150	mA
$R_{th(j-c)}$	cont.	per chip			0.0466	K/W
		per module			0.0466	K/W
$R_{th(j-c)}$	sin. 180°	per chip			0.048	K/W
		per module			0.048	K/W
Module						
$R_{th(c-s)}$	chip				0.015	K/W
	module				0.015	K/W
M_s	to heatsink M6		5.1		6.9	Nm
M_t	to terminal M12		16.2		19.8	Nm
a					5 * 9,81	m/s ²
w					1950	g



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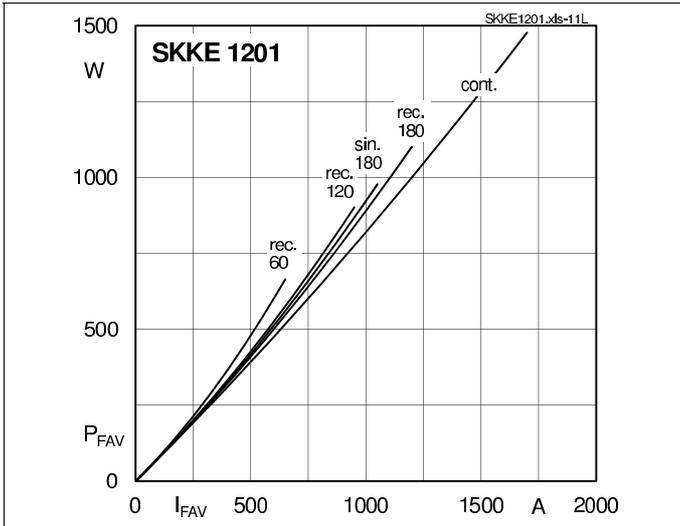


Fig. 11L: Power dissipation per diode vs. forward current

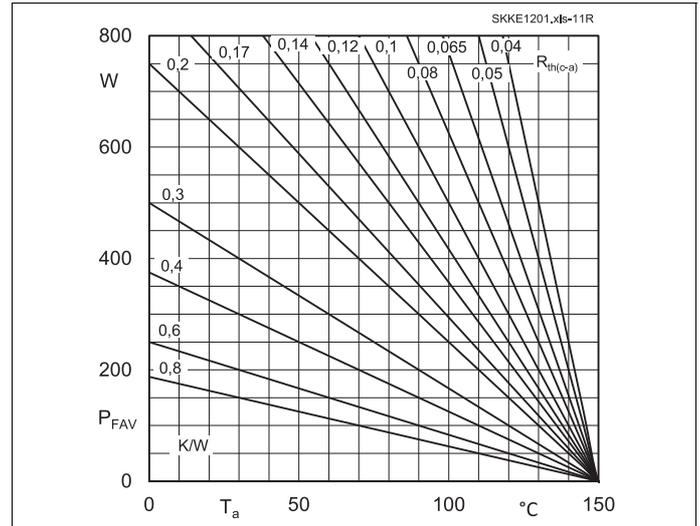


Fig. 11R: Power dissipation per diode vs. ambient temperature

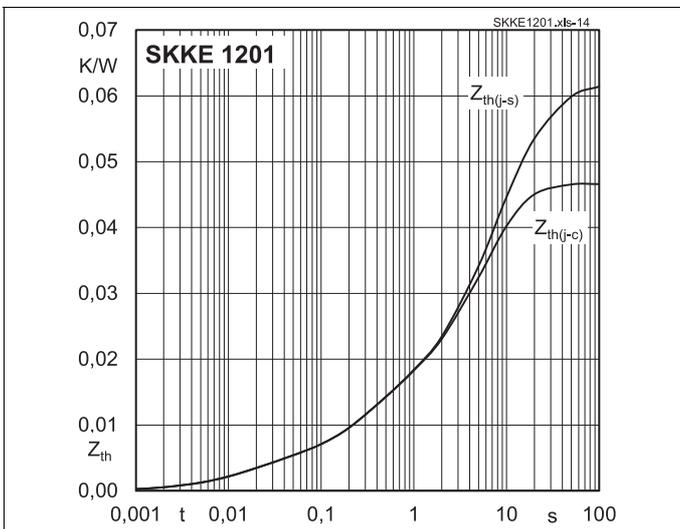


Fig. 14: Transient thermal impedance vs. time

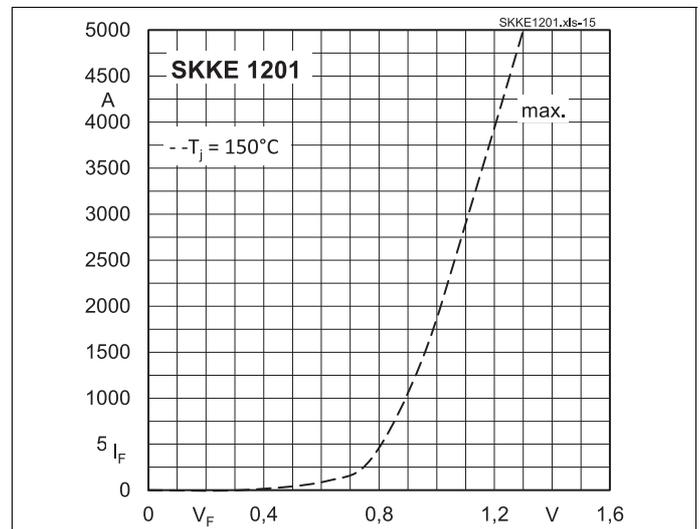


Fig. 15: Forward characteristics

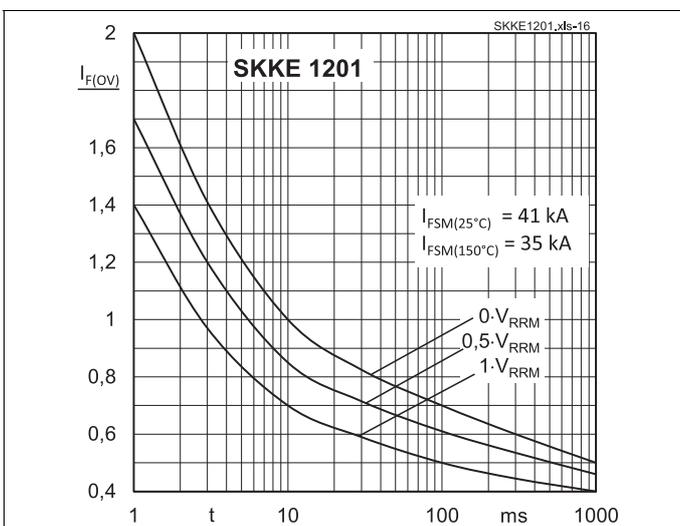
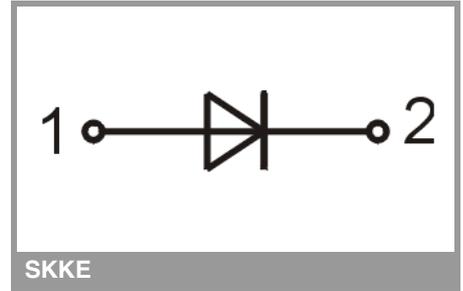
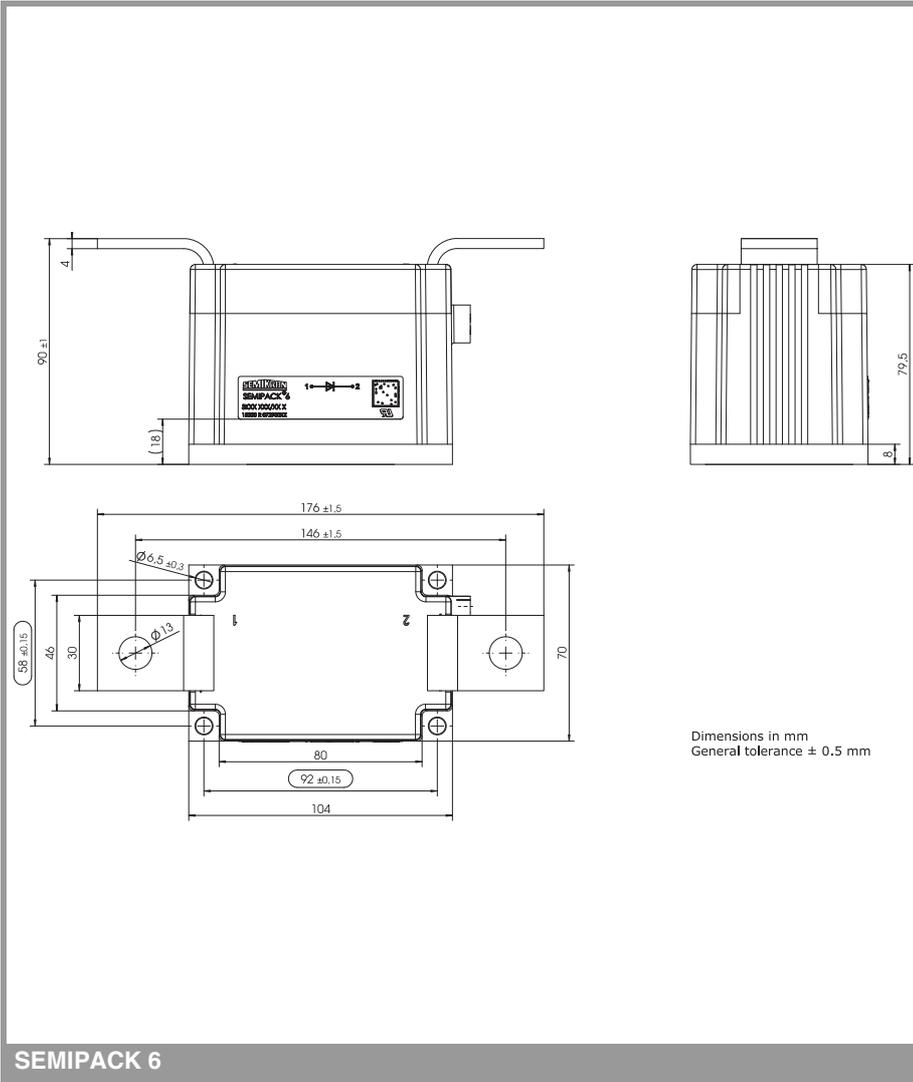


Fig. 16: Surge overload current vs. time



This is an electrostatic discharge sensitive device (ESDS), international standard IEC 60747-1, chapter IX.

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