



SEMIPACK® 4

Rectifier Diode Modules

SKKE 600

Features

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

Typical Applications*

- Rectifiers

V_{RSM} V	V_{RRM} V	$I_{FRMS} = 930$ A (maximum value for continuous operation) $I_{FAV} = 600$ A (sin. 180; $T_c = 100$ °C)		
1200	1200	SKKE 600/12		
1600	1600	SKKE 600/16		
2000	2000	SKKE 600/20H4		
2200	2200	SKKE 600/22H4		

Symbol	Conditions	Values	Units
I_{FAV}	sin. 180; $T_c = 100$ °C	600	A
I_{FSM}	$T_{vj} = 25$ °C; 10 ms	22000	A
	$T_{vj} = 150$ °C; 10 ms	18000	A
i^2t	$T_{vj} = 25$ °C; 8,3 ... 10 ms	2420000	A²s
	$T_{vj} = 150$ °C; 8,3 ... 10 ms	1805000	A²s
V_F	$T_{vj} = 25$ °C; $I_F = 3000$ A	max. 1,5	V
$V_{(TO)}$	$T_{vj} = 150$ °C	max. 0,75	V
r_T	$T_{vj} = 150$ °C	max. 0,25	mΩ
I_{RD}	$T_{vj} = 150$ °C; $V_{RD} = V_{RRM}$	max. 15	mA
$R_{th(j-c)}$	cont.; per diode = per module	0,07	K/W
	sin. 180; per diode = per module	0,075	K/W
$R_{th(c-s)}$	per diode = per module	0,02	K/W
T_{vj}		- 40 ... + 150	°C
T_{stg}		- 40 ... + 130	°C
V_{isol}	a. c. 50 Hz; r.m.s.; 1 s / 1 min.	3600 / 3000	V~
V_{isol}	a. c. 50 Hz; r.m.s.; 1 s / 1 min. for SKKE...H4	4800 / 4000	V~
M_s	to heatsink	5 ± 15%	Nm
M_t	to terminals	17 ± 15 %	Nm
a		5 * 9,81	m/s²
m	approx.	940	g
Case		A 42	



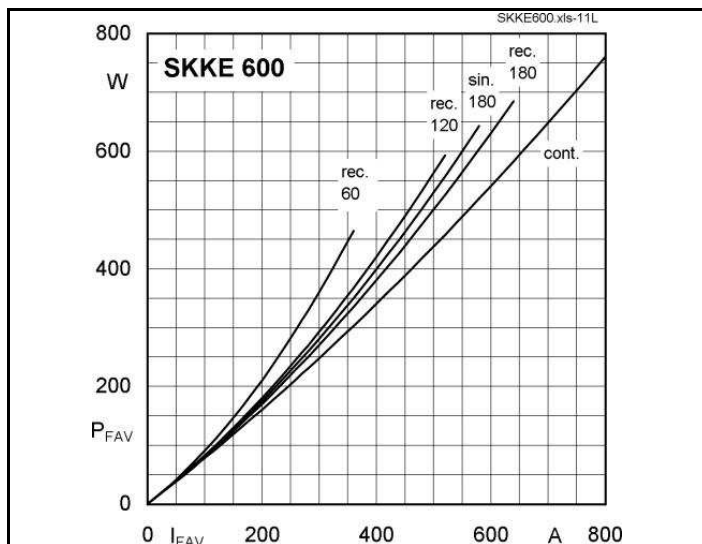


Fig. 11L Power dissipation per diode vs. forward current

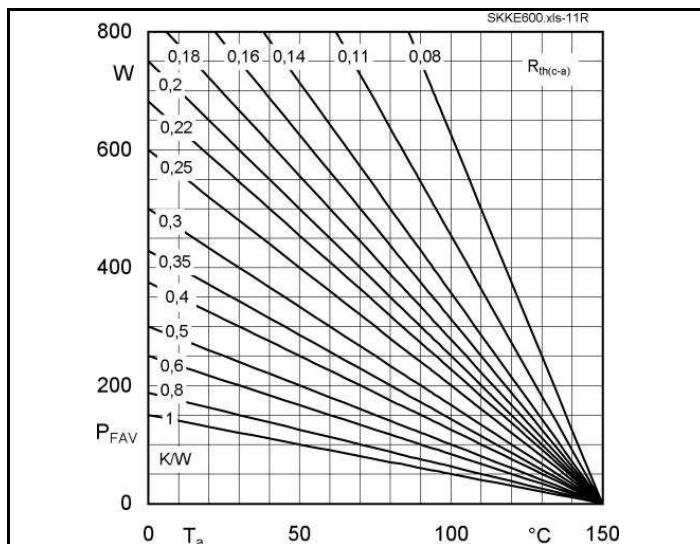


Fig. 11R Power dissipation per diode vs. ambient temperature

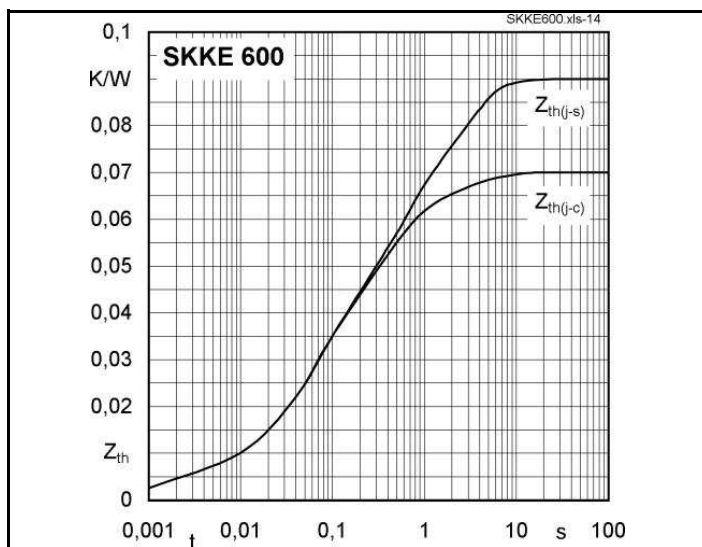


Fig. 14 Transient thermal impedance vs. time

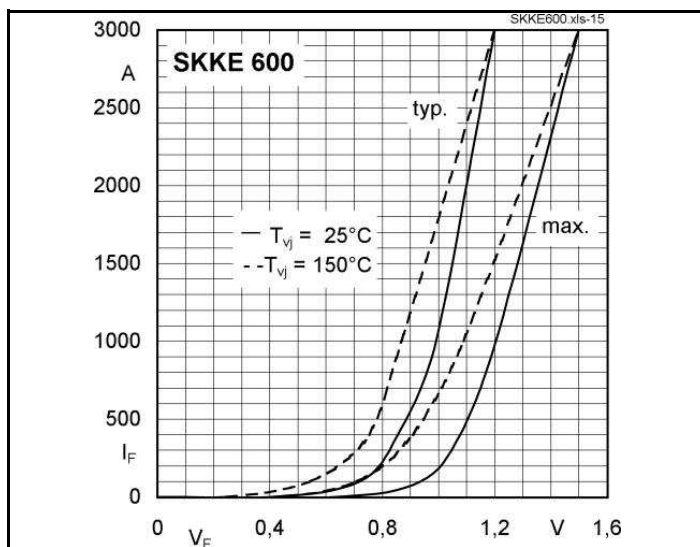


Fig. 15 Forward characteristics

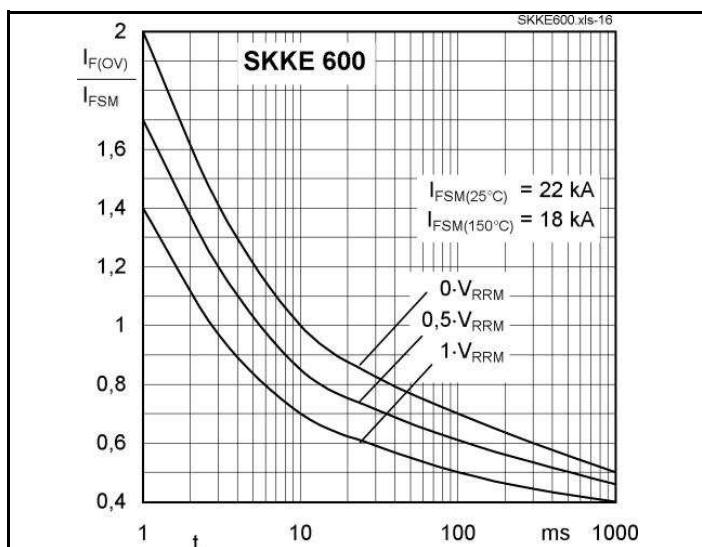


Fig. 16 Surge overload current vs. time



3