



**SEMIPACK<sup>®</sup> 4**

## Rectifier Diode Modules

### SKKE 600

#### Preliminary Data

#### 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

1) The screws must be lubricated

$V_{RSM}$ 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 600/20 H4	
2200	2200	SKKE 600/22 H4	

Symbol	Conditions	Values	Units
$I_{FAV}$	sin. 180; $T_c = 100$ (85) °C	600 (725)	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	A <sup>2</sup> s
	$T_{vj} = 150$ °C; 8,3 ... 10 ms	1805000	A <sup>2</sup> s
$V_F$	$T_{vj} = 25$ °C; $I_F = 3000$ A	max. 1,5	V
$V_{(TO)}$	$T_{vj} = 150$ °C;	0,75	V
$r_T$	$T_{vj} = 150$ °C;	0,25	mΩ
$I_{RD}$	$T_{vj} = 150$ °C; $V_{RD} = V_{RRM}$	max. 20	mA
$R_{th(j-c)}$	cont.; per diode = per module	0,07	K/W
	sin. 180; per diode = per module	0,075	K/W
$R_{th(c-h)}$	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 % <sup>1)</sup>	Nm
$a$		5 * 9,81	m/s <sup>2</sup>
$m$	approx.	940	g
Case		A 42	



**SKKE**

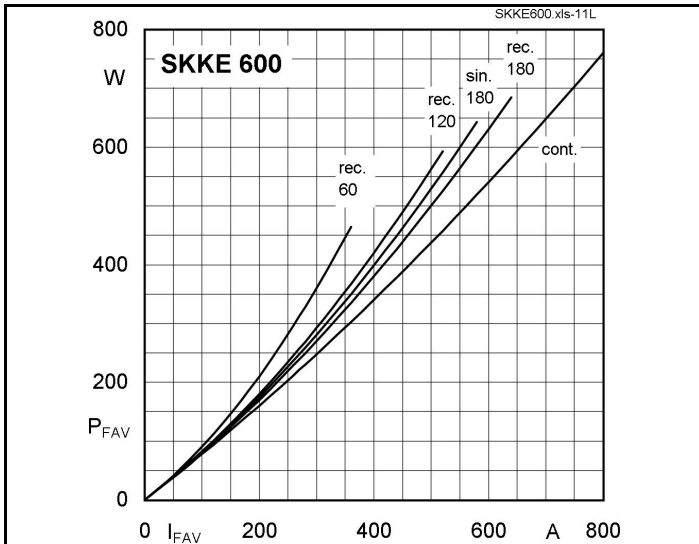


Fig. 11L Power dissipation per diode vs. forward current

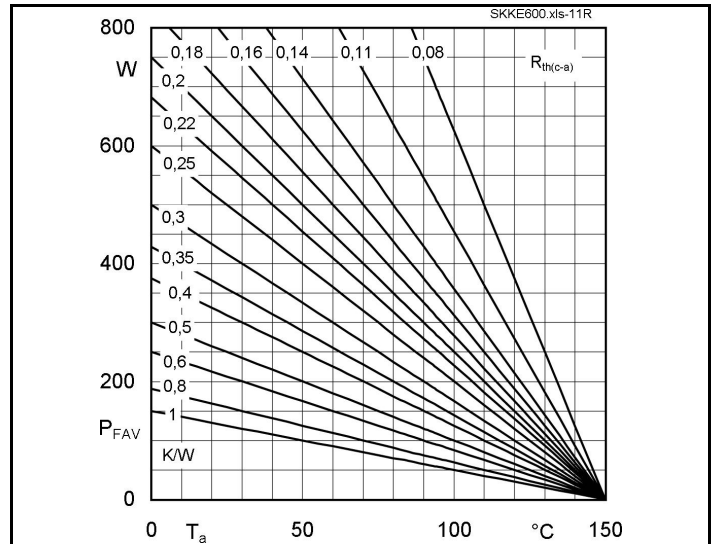


Fig. 11R Power dissipation per diode vs. ambient temperature

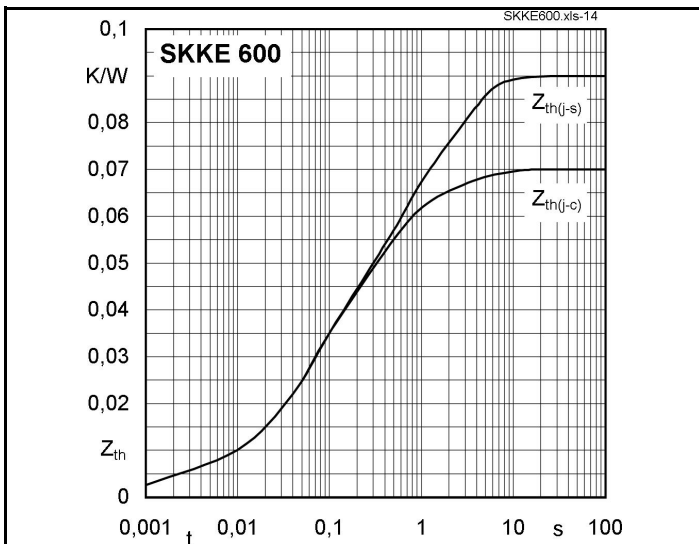


Fig. 14 Transient thermal impedance vs. time

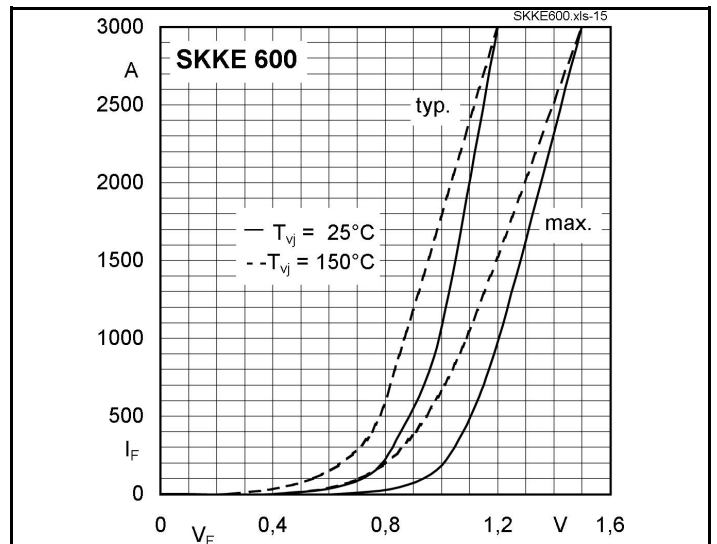


Fig. 15 Forward characteristics

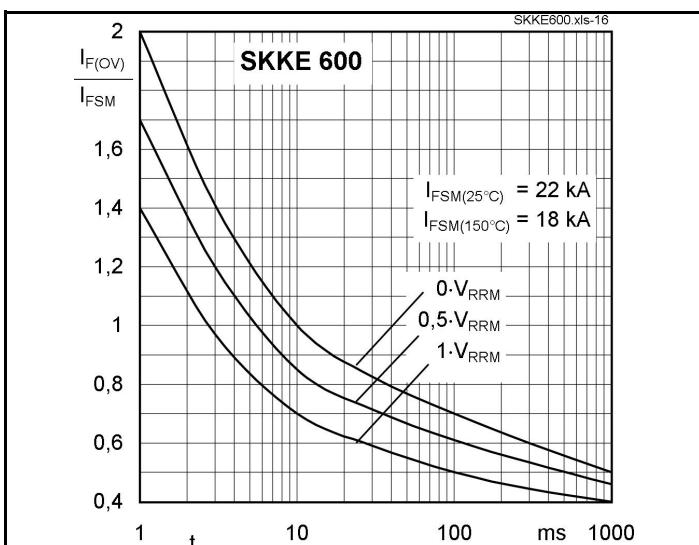
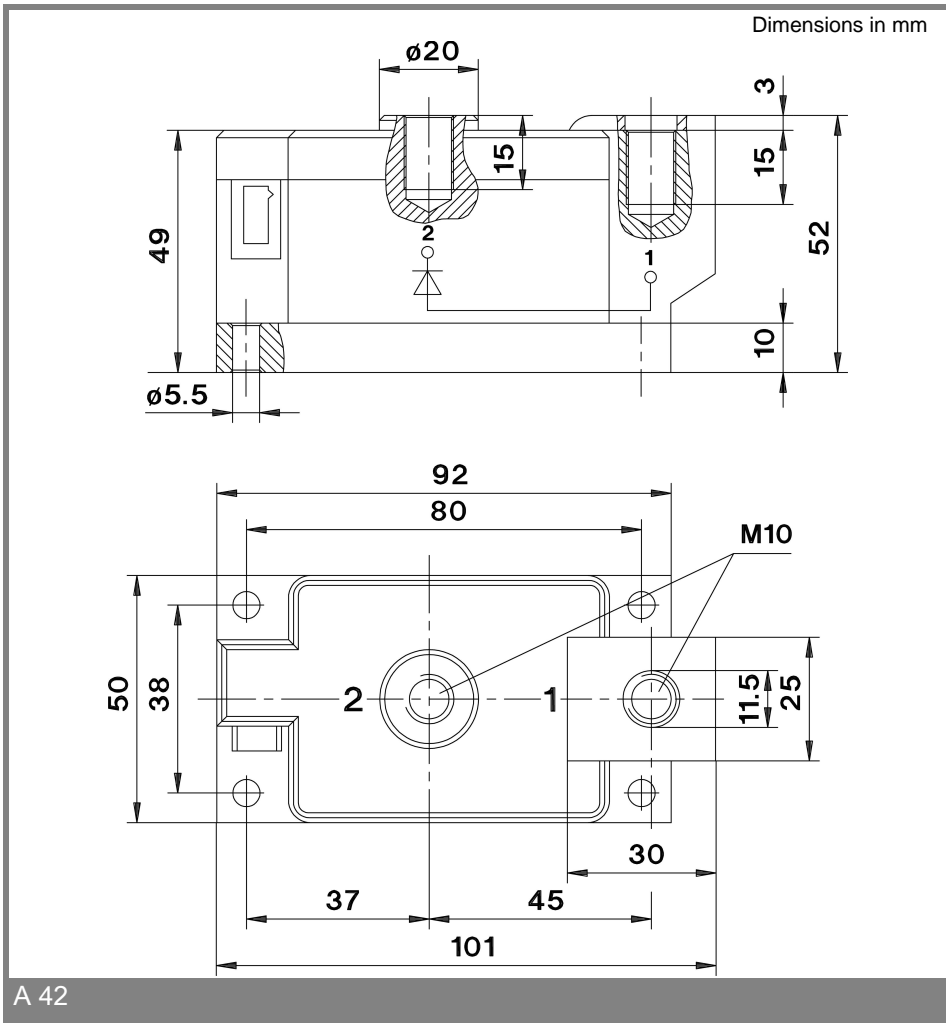


Fig. 16 Surge overload current vs. time



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