

SK 70 D, SK 95 D

V_{RSM} V_{RRM} V	I_D ($T_h = 80^\circ\text{C}$)	
	70 A	95 A
800	SK 70 D 08	SK 95 D 08
1200	SK 70 D 12	SK 95 D 12
1600	SK 70 D 16	SK 95 D 16

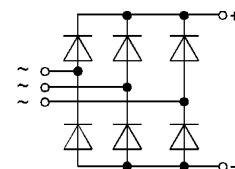
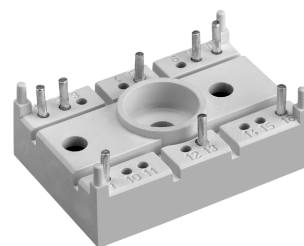
SEMITOP® 2

Bridge Rectifier

SK 70 D SK 95 D

Symbol	Conditions	SK 70 D	SK 95 D	Units
I_D	$T_h = 80^\circ\text{C}$	35 ²⁾	35 ²⁾	A
I_{FSM}	$T_{vj} = 25^\circ\text{C}; 10\text{ ms}$	370	700	A
	$T_{vj} = 150^\circ\text{C}; 10\text{ ms}$	270	560	A
i^2t	$T_{vj} = 25^\circ\text{C}; 8,3...10\text{ ms}$	685	2450	A ² s
	$T_{vj} = 150^\circ\text{C}; 8,3...10\text{ ms}$	365	1370	A ² s
V_F	$T_{vj} = 25^\circ\text{C}; (I_T = \dots\text{ A}); \text{max.}$	1,25(25)	1,2(35)	V
$V_{(T0)}$	$T_{vj} = 150^\circ\text{C}$	0,8	0,8	V
r_T	$T_{vj} = 150^\circ\text{C}$	13	11	mΩ
I_{RD}	$T_{vj} = 25^\circ\text{C}; V_{RD} = V_{RRM}$	0,2	0,2	mA
	$T_{vj} = 150^\circ\text{C}; V_{RD} = V_{RRM}$	4	4	mA
R_{thjh} ¹⁾	per diode per module	1,7 0,28	1,2 0,2	K/W K/W
T_{vj}		- 40 ... + 150		°C
T_{stg}		- 40 ... + 125		°C
T_{solder}	terminals, 10 s	260		°C
V_{isol}	a.c. 50 Hz; r.m.s. 1 s/1 min	3000 / 2500		V
M_1	mounting torque	2,0		Nm
w		19		g
Case		T 7		

Preliminary Data



Features

- Compact Design
- One screw mounting
- Heat transfer and isolation through direct copper bonded aluminium oxide ceramic (DCB)
- Up to 1600V reverse voltage
- High surge currents
- Glass passivated diode chips
- UL recognized, file no. E 63 532

Typical Applications

- Input rectifier for power supplies
- Rectifier

¹⁾ Thermal resistance junction to heatsink

²⁾ Current limited by number of pins

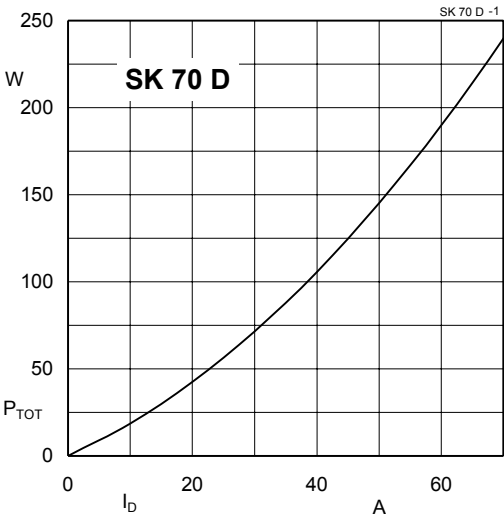


Fig. 1 Power dissipation vs. output current

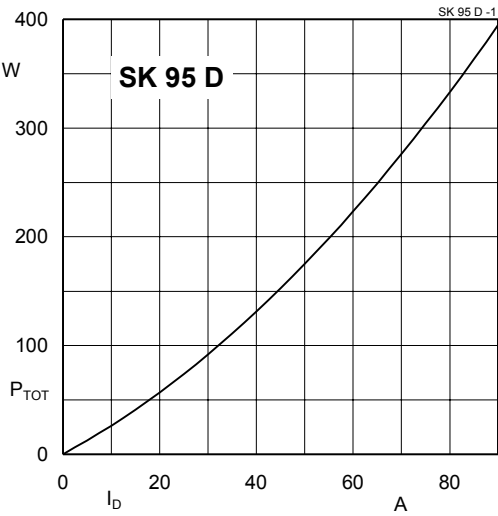


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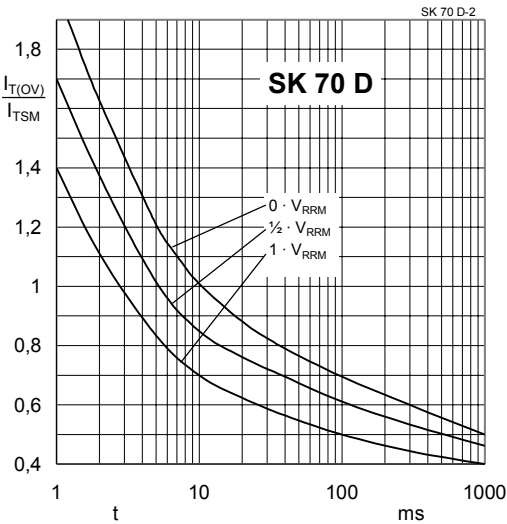


Fig. 2 Surge overload current vs. time

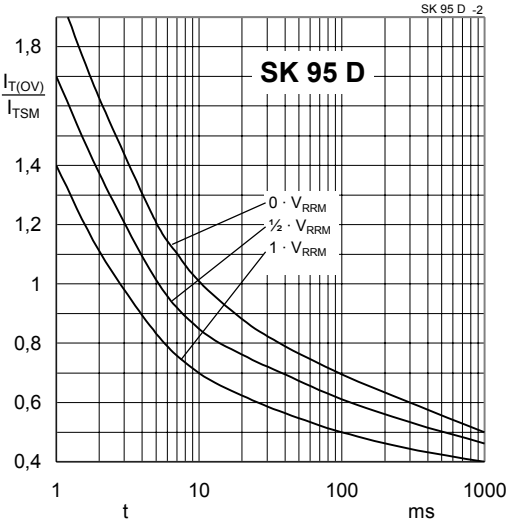


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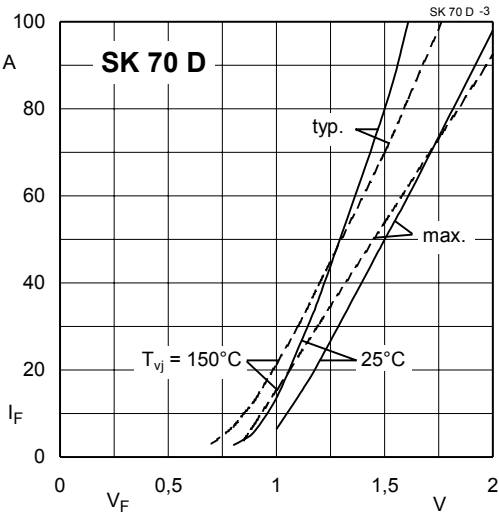


Fig. 3 Forward characteristic of single diode

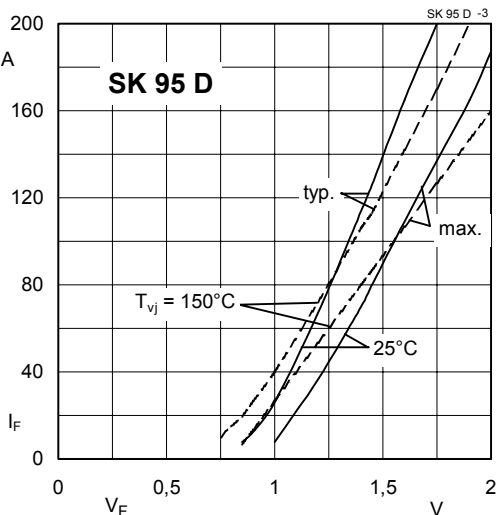


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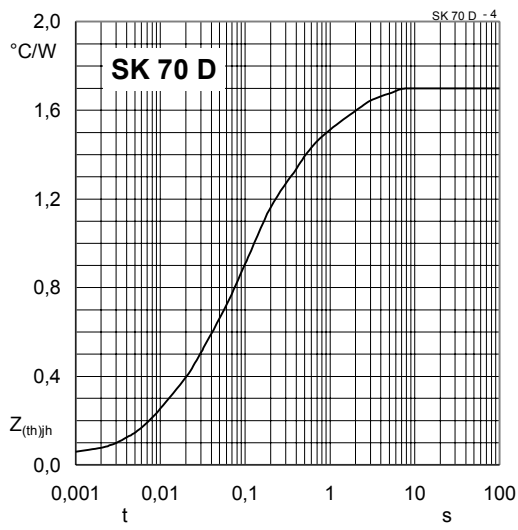


Fig. 4 Thermal transient impedance vs. time

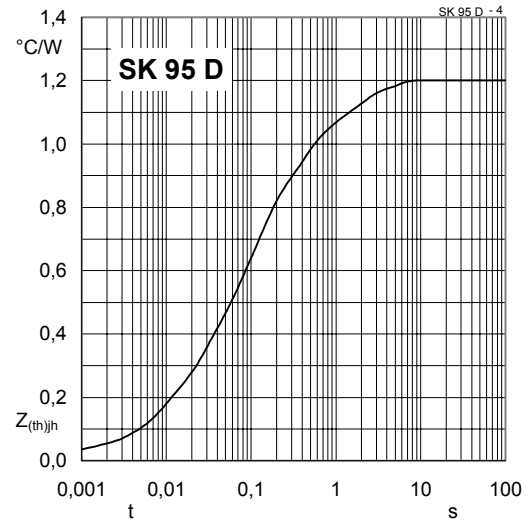
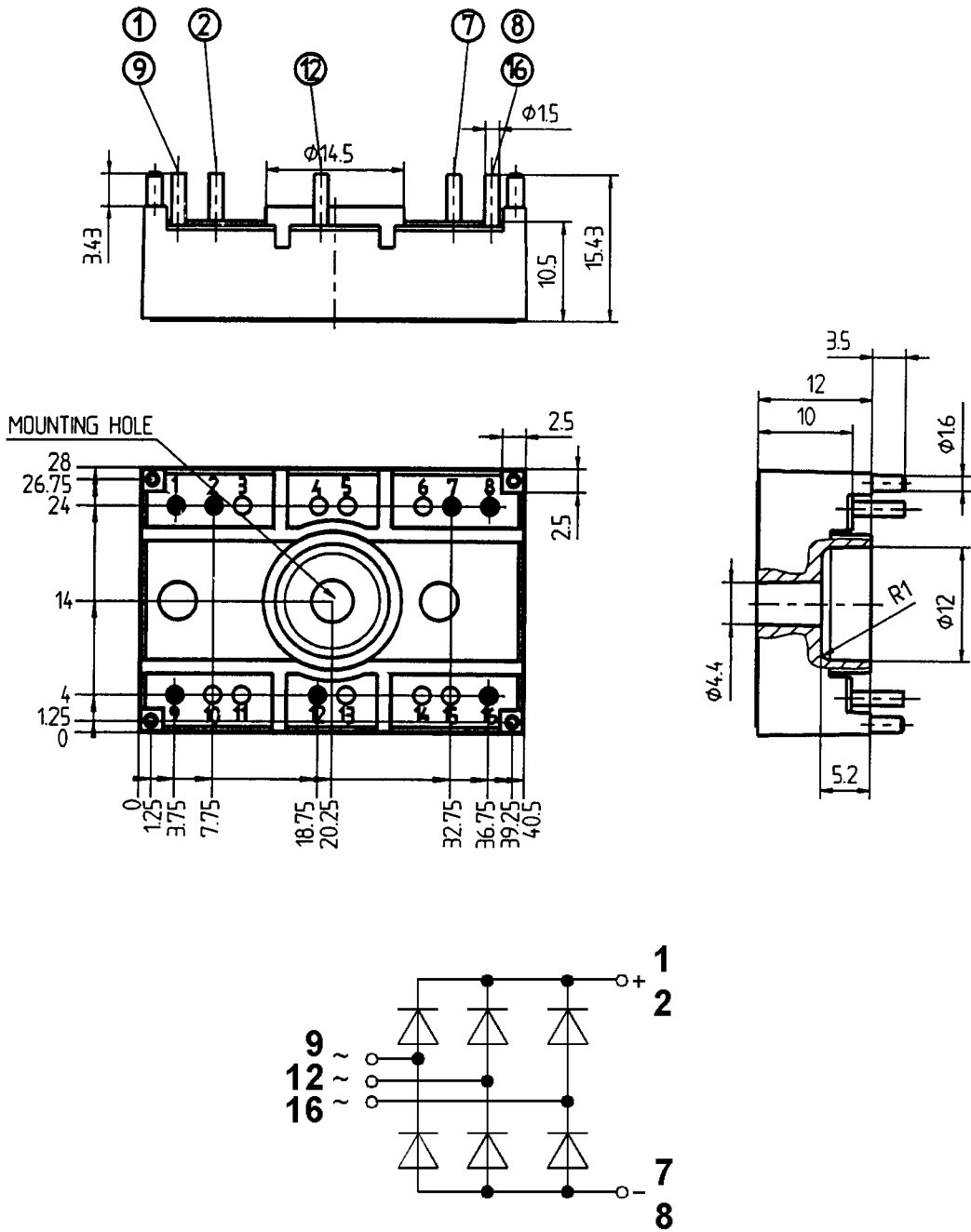


Fig. 4 Thermal transient impedance vs. time

SEMITOP® 2
SK 70 D
SK 95 D

Case T 7



Dimensions in mm

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