

## SK 70 D, SK 95 D

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

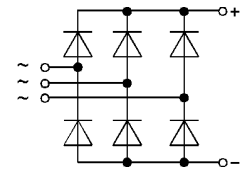
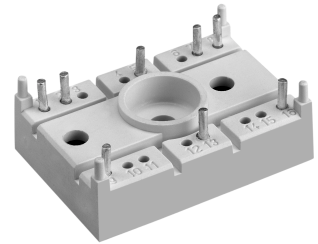
## SEMITOP® 2

### 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 <sup>2)</sup>	35 <sup>2)</sup>	A
$I_{FSM}$ $i^2t$	$T_{vj} = 25^\circ\text{C}; 10\text{ ms}$	370	700	A
	$T_{vj} = 150^\circ\text{C}; 10\text{ ms}$	270	560	A
	$T_{vj} = 25^\circ\text{C}; 8,3...10\text{ ms}$	685	2450	A <sup>2</sup> s
	$T_{vj} = 150^\circ\text{C}; 8,3...10\text{ ms}$	365	1370	A <sup>2</sup> s
$V_F$ $V_{(T0)}$	$T_{vj} = 25^\circ\text{C}; (I_T = \dots\text{ A}); \text{max.}$	1,25(25)	1,2(35)	V
	$T_{vj} = 150^\circ\text{C}$	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	1,7	1,2	K/W
	per module	0,28	0,2	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

<sup>1)</sup> Thermal resistance junction to heatsink

<sup>2)</sup> Current limited by number of pins

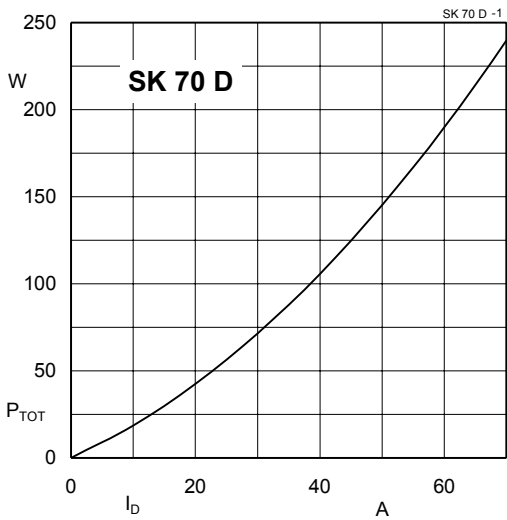


Fig. 1 Power dissipation vs. output current

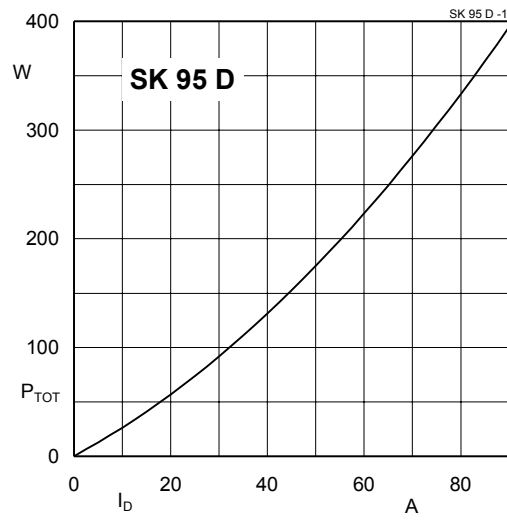


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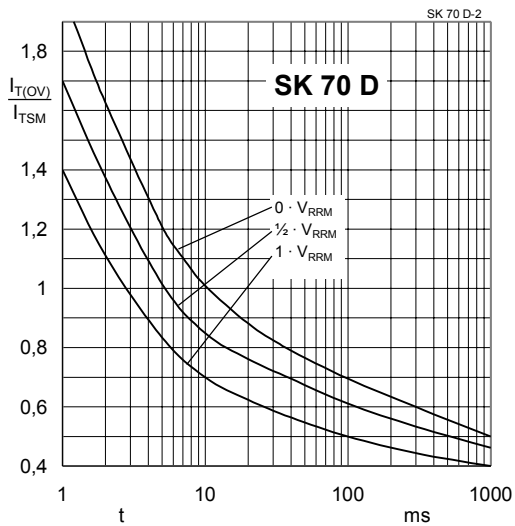


Fig. 2 Surge overload current vs. time

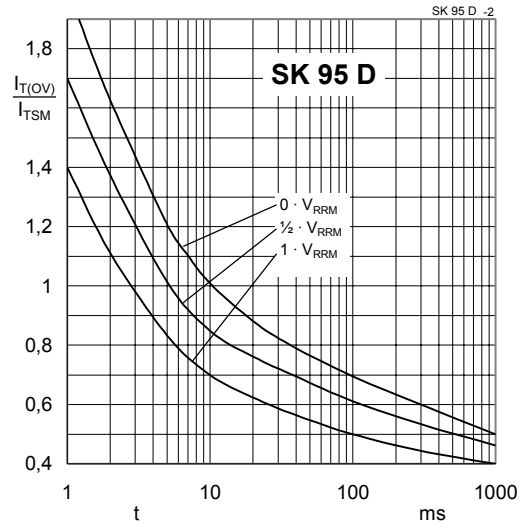


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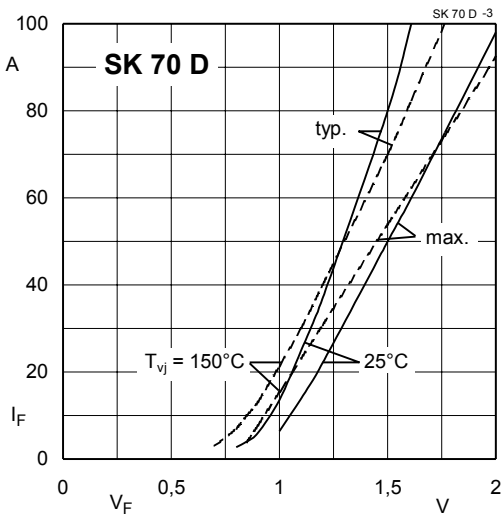


Fig. 3 Forward characteristic of single diode

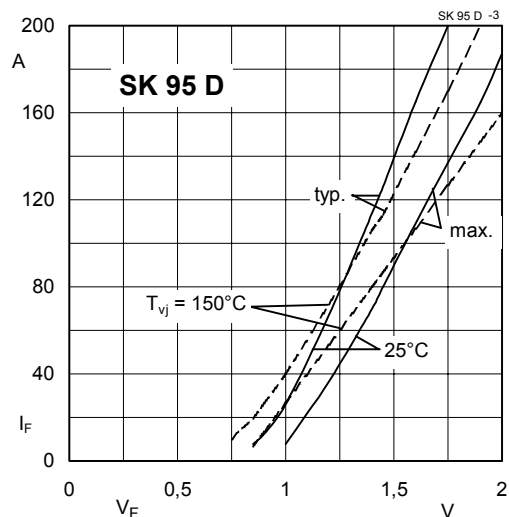


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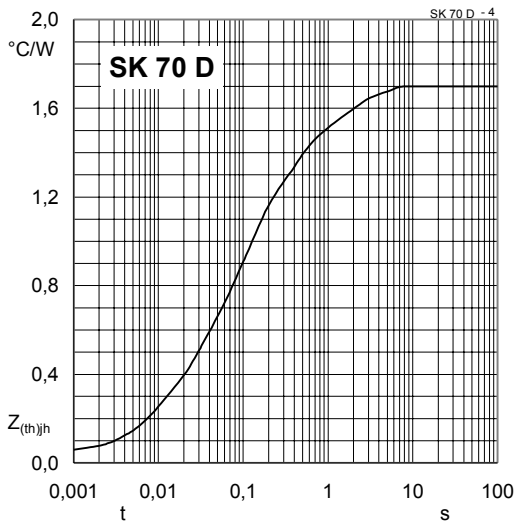


Fig. 4 Thermal transient impedance vs. time

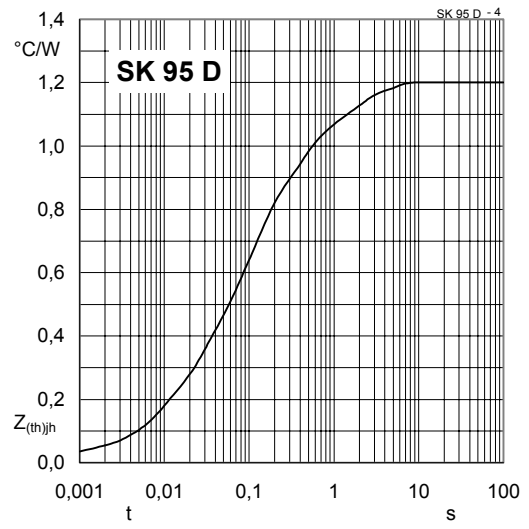


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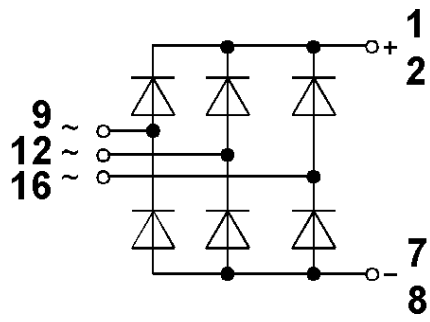
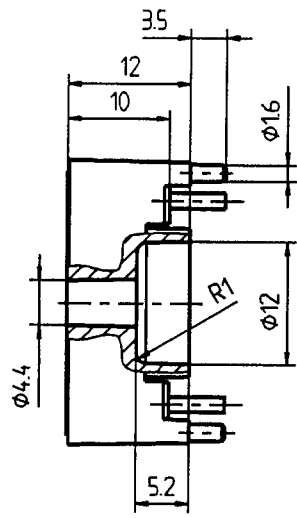
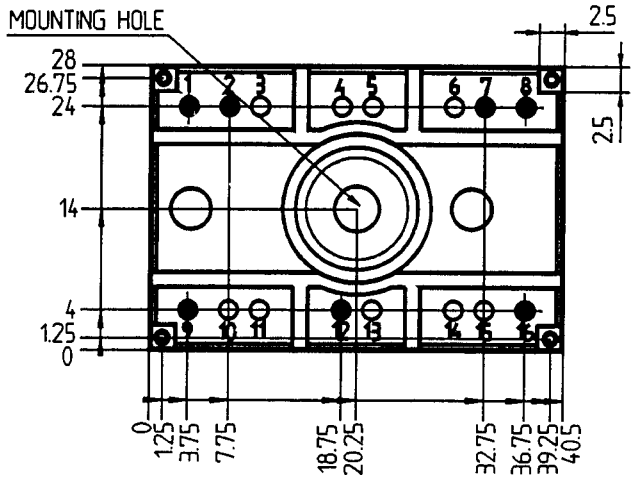
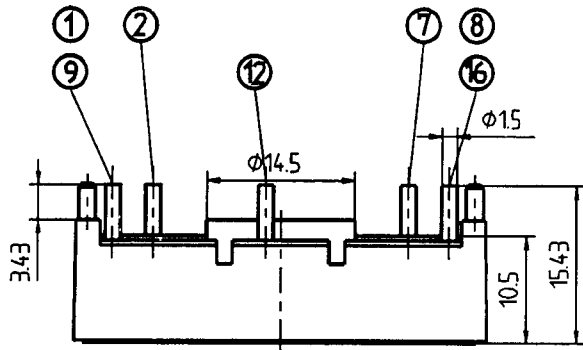
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**SEMITOP<sup>®</sup> 2**

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Case T 7



Dimensions in mm