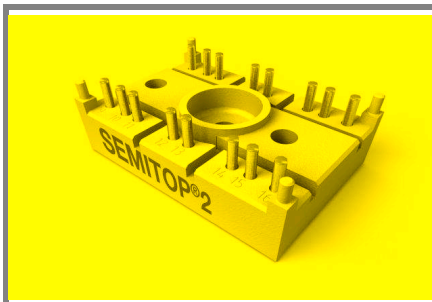


# SK 95 D



**SEMITOP® 2**

## Bridge Rectifier

### SK 95 D

Preliminary Data

### Features

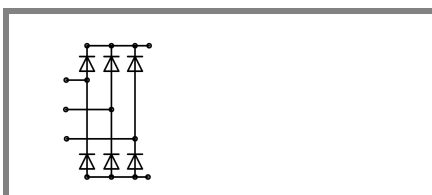
- Compact design
- One screw mounting
- Heat transfer and insulation through direct copper bonded aluminium oxide ceramic (DCB)
- Up to 1600V reverse voltage
- High surge currents
- Glass passivated diodes chips
- UL recognized, file no. E 63 532

### Typical Applications

- Input rectifier for power supplies
- Rectifier

$V_{RSM}$ V	$V_{RRM}, V_{DRM}$ V	$I_D = 95 \text{ A}$ (full conduction) ( $T_s = 80 \text{ °C}$ )
800	800	SK 95 D 08
1200	1200	SK 95 D 12
1600	1600	SK 95 D 16

Symbol	Conditions	Values	Units
$I_D$	$T_s = 80 \text{ °C}$	95	A
$I_{FSM}$	$T_{vj} = 25 \text{ °C}; 10 \text{ ms}$ $T_{vj} = 150 \text{ °C}; 10 \text{ ms}$	700 560	A A
$i^2t$	$T_{vj} = 25 \text{ °C}; 8,3...10 \text{ ms}$ $T_{vj} = 150 \text{ °C}; 8,3...10 \text{ ms}$	2450 1370	A <sup>2</sup> s A <sup>2</sup> s
$V_F$	$T_{vj} = 25 \text{ °C}; I_F = 35 \text{ A}$	max. 1,2	V
$V_{(TO)}$	$T_{vj} = 150 \text{ °C}$	max. 0,8	V
$r_T$	$T_{vj} = 150 \text{ °C}$	max. 11	mΩ
$I_{RD}$	$T_{vj} = 150 \text{ °C}; V_{DD} = V_{DRM}; V_{RD} = V_{RRM}$	max. 4	mA mA
$R_{th(f-s)}$	per diode per module	1,2 0,2	K/W K/W
$T_{solder}$	terminals, 10s	260	°C
$T_{vj}$		-40...+150	°C
$T_{stg}$		-40...+125	°C
$V_{isol}$	a. c. 50 Hz; r.m.s.; 1 s / 1 min.	3000 ( 2500 )	V
$M_s$	mounting torque to heatsink	2	Nm
$M_t$			
m	approx. weight	19	g
Case	SEMITOP® 2	T 7	



D

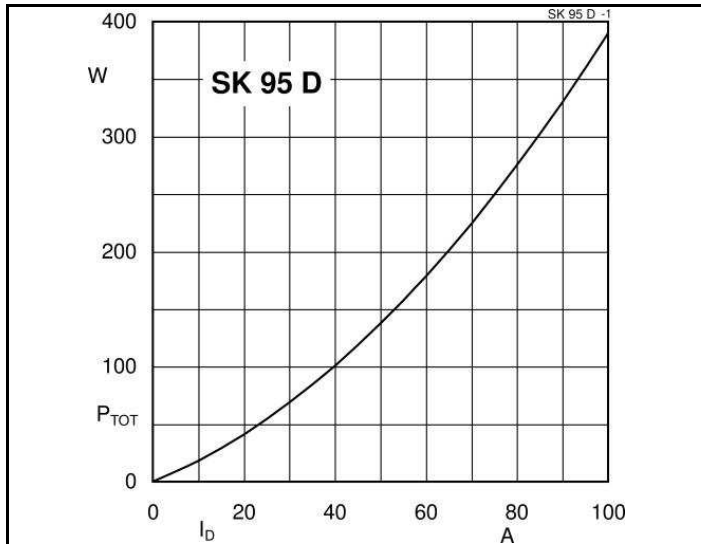


Fig. 1 Power dissipation vs. Output current

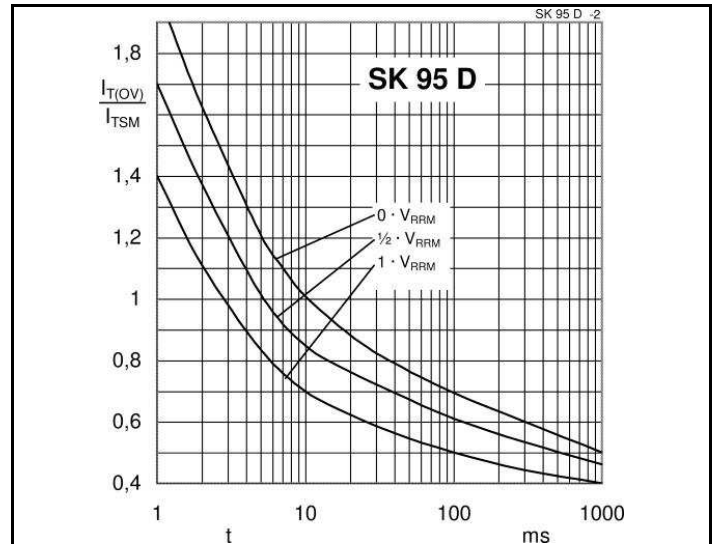


Fig. 2 Surge overload current vs. time

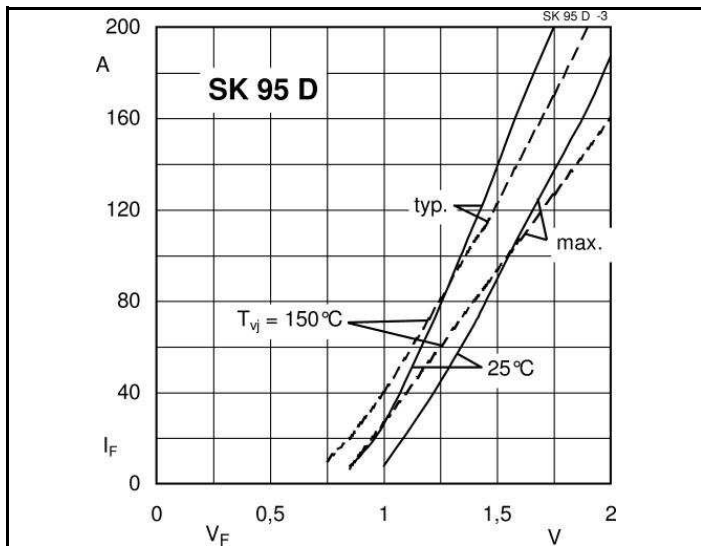


Fig. 3 Forward characteristics of single diode

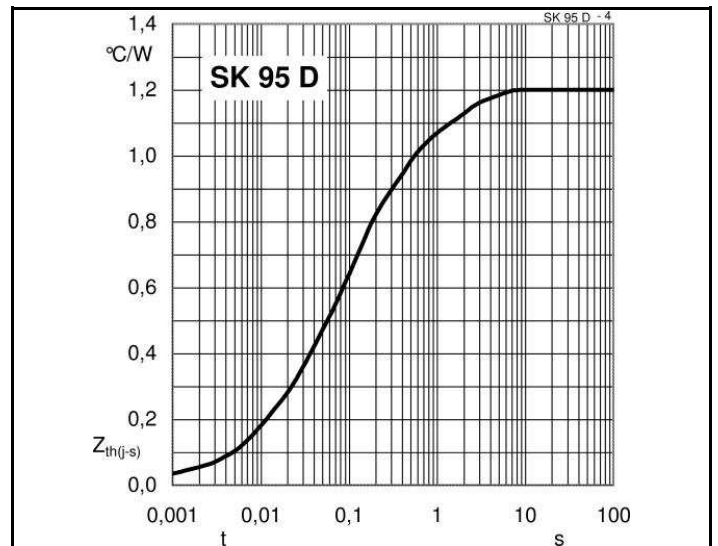
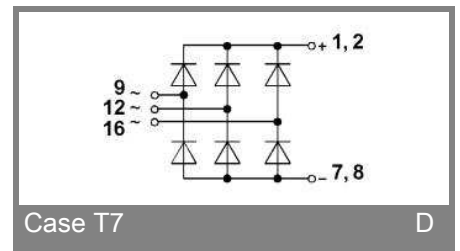
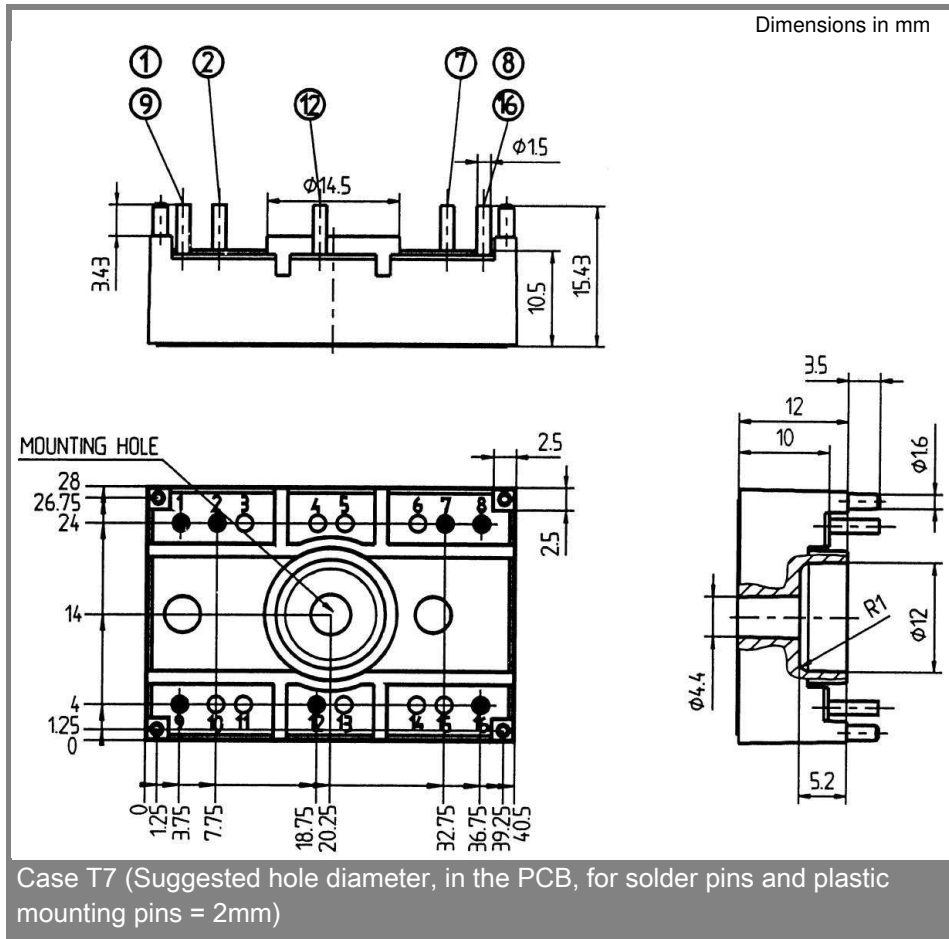


Fig. 4 Thermal transient impedance vs. time



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