

# 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

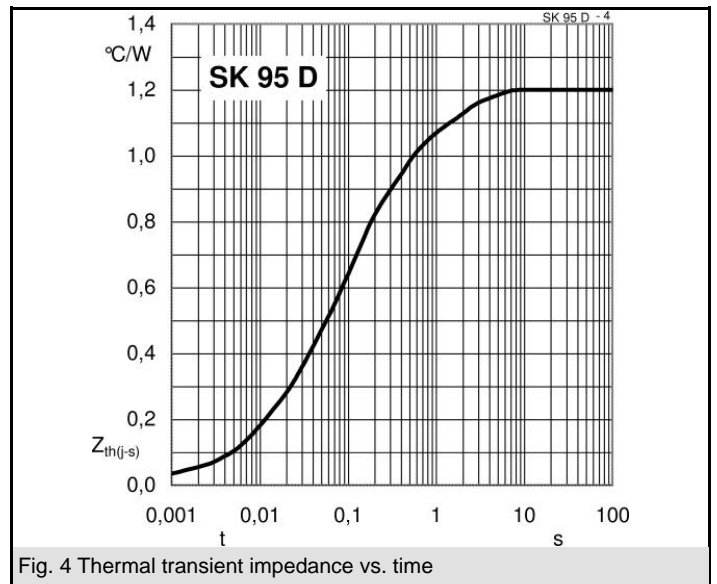
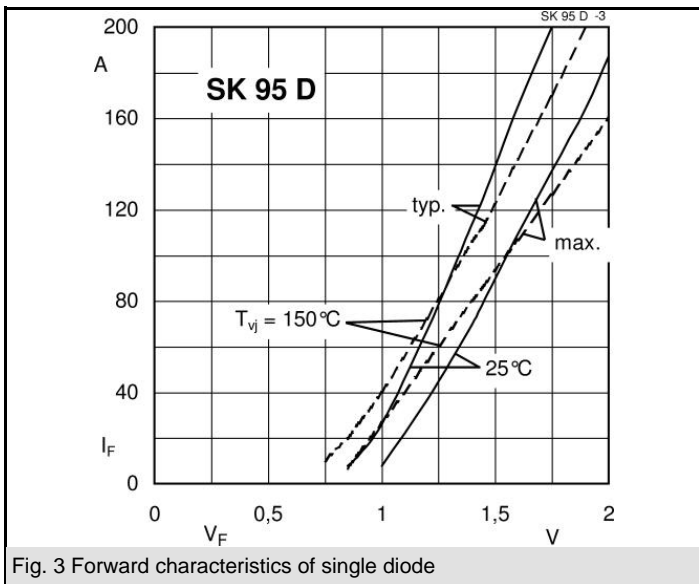
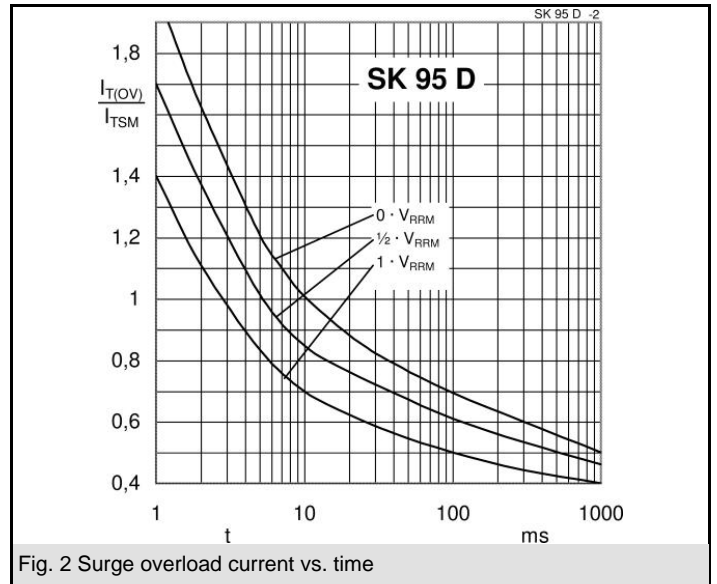
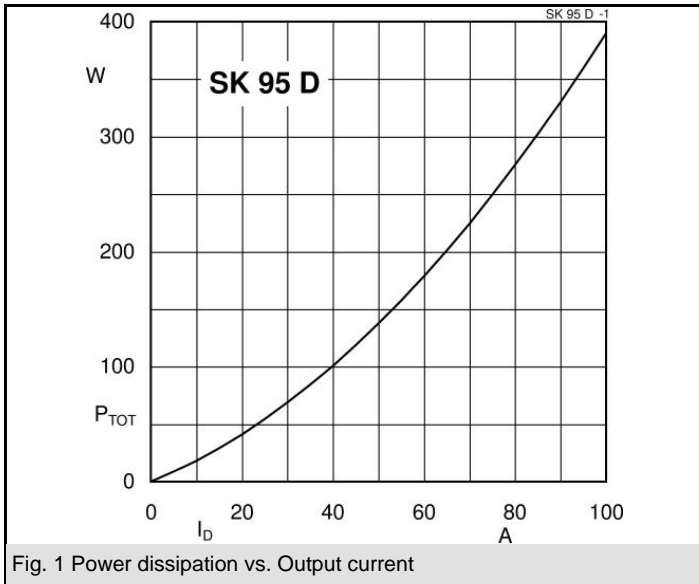
- Input rectifier for power supplies
- Rectifier

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

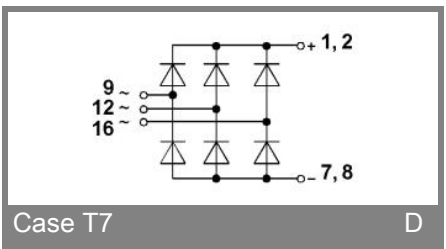
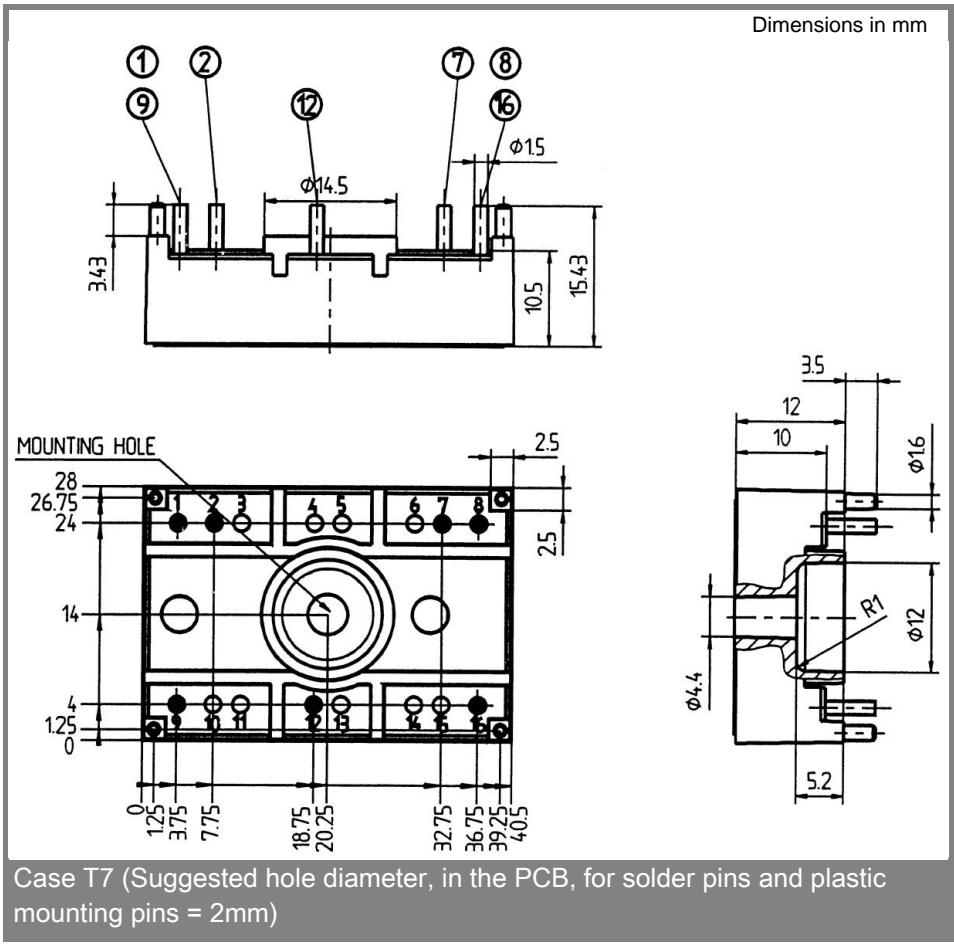
| Symbol        | Conditions  | Values        | Units                                |
|---------------|---|---------------|--------------------------------------|
| $I_D$         | $T_s = 80$ °C   | 95            | A                                    |
| $I_{FSM}$     | $T_{vj} = 25$ °C; 10 ms<br>$T_{vj} = 150$ °C; 10 ms             | 700<br>560    | A<br>A                               |
| $i^2t$        | $T_{vj} = 25$ °C; 8,3...10 ms<br>$T_{vj} = 150$ °C; 8,3...10 ms | 2450<br>1370  | A <sup>2</sup> s<br>A <sup>2</sup> s |
| $V_F$         | $T_{vj} = 25$ °C; $I_F = 35$ A                                  | max. 1,2      | V                                    |
| $V_{(TO)}$    | $T_{vj} = 150$ °C   | max. 0,8      | V                                    |
| $r_T$         | $T_{vj} = 150$ °C   | max. 11       | mΩ                                   |
| $I_{RD}$      | $T_{vj} = 150$ °C; $V_{DD} = V_{DRM}$ ; $V_{RD} = V_{RRM}$      | max. 4        | mA<br>mA                             |
| $R_{th(f-s)}$ | per diode<br>per module   | 1,2<br>0,2    | K/W<br>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



Dimensions in mm



Case T7

D

Case T7 (Suggested hole diameter, in the PCB, for solder pins and plastic mounting pins = 2mm)

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