

**SEMITOP® 2**

## Bridge Rectifier

### SK 95 D

#### Preliminary Data

#### Features

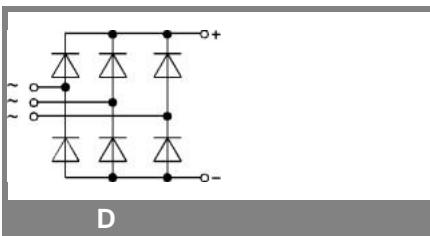
- Compact design
- One screw mounting
- Heat transfer and insulation through direct copper bonded aluminium oxide ceramic (DCB)
- Up to 1600V reverse voltage
- High surge currents
- Glass passivated diodes chips
- UL recognized, file no. E 63 532

#### Typical Applications

- Input rectifier for power supplies
- Rectifier

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

Symbol	Conditions	Values	Units
$I_D$	$T_s = 80^\circ\text{C}$	95	A
$I_{FSM}$	$T_{vj} = 25^\circ\text{C}; 10 \text{ ms}$ $T_{vj} = 150^\circ\text{C}; 10 \text{ ms}$	700 560	A A
$i^2t$	$T_{vj} = 25^\circ\text{C}; 8,3\ldots10 \text{ ms}$ $T_{vj} = 150^\circ\text{C}; 8,3\ldots10 \text{ ms}$	2450 1370	$\text{A}^2\text{s}$ $\text{A}^2\text{s}$
$V_F$	$T_{vj} = 25^\circ\text{C}; I_F = 35 \text{ A}$	max. 1,2	V
$V_{(TO)}$	$T_{vj} = 150^\circ\text{C}$	max. 0,8	V
$r_T$	$T_{vj} = 150^\circ\text{C}$	max. 11	$\text{m}\Omega$
$I_{RD}$	$T_{vj} = 150^\circ\text{C}; V_{DD} = V_{DRM}; V_{RD} = V_{RRM}$	max. 4	mA
$R_{th(j-s)}$	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	



# SK 95 D

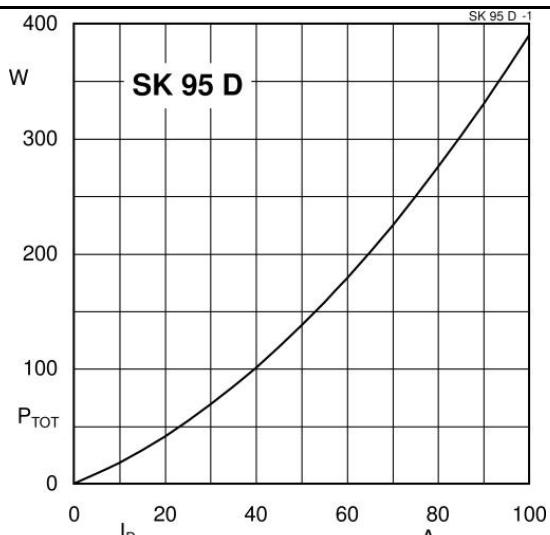


Fig. 1 Power dissipation vs. Output current

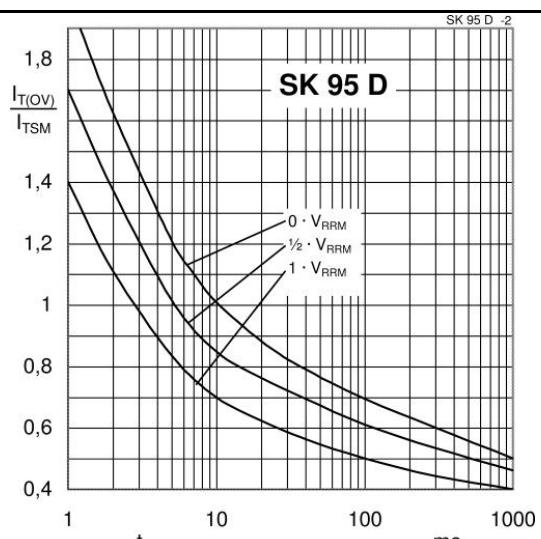


Fig. 2 Surge overload current vs. time

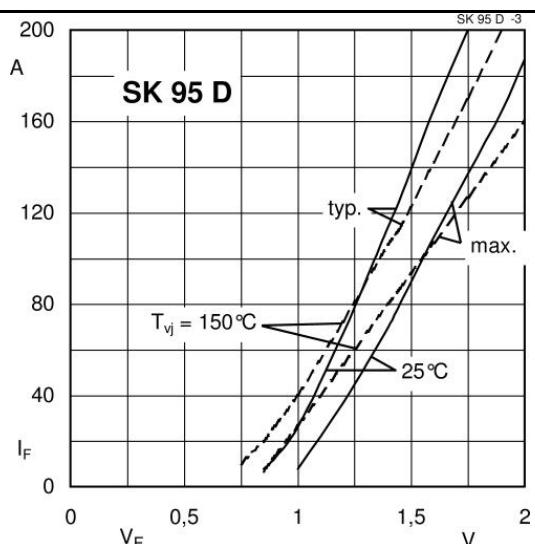


Fig. 3 Forward characteristics of single diode

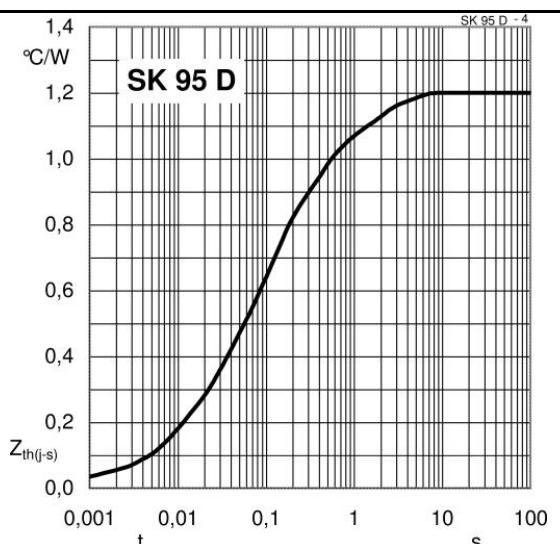


Fig. 4 Thermal transient impedance vs. time

