

## SK 55 B 06 F

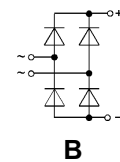
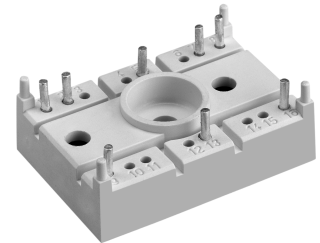
$V_{RRM}$ V	$I_D$ ( $T_h = 80^\circ\text{C}$ ) 54 A
600	<b>SK 55 B 06 F</b>

## SEMITOP® 2

### Bridge Rectifier

### SK 55 B 06 F

Symbol	Conditions <sup>1)</sup>	Values	Units
$I_D$	$T_h = 80^\circ\text{C}$	30 <sup>3)</sup>	A
$I_{FSM}$	$T_{vj} = 150^\circ\text{C}; 10\text{ ms}$	440	A
$i^2t$	$T_{vj} = 150^\circ\text{C}; 10\text{ ms}$	970	$\text{A}^2\text{s}$
$I_{RRM}$	$T_{vj} = 125^\circ\text{C}$	30	A
$t_{rr}$	$T_{vj} = 25^\circ\text{C}$	–	$\mu\text{s}$
$Q_{rr}$	$T_{vj} = 25^\circ\text{C}$	typ. 1	$\mu\text{C}$
	$T_{vj} = 125^\circ\text{C}$	typ. 3	$\mu\text{C}$
$I_R$	$T_j = 25^\circ\text{C}$	0,1	mA
	$T_j = 125^\circ\text{C}$	4	mA
$V_F$	$T_{vj} = 25^\circ\text{C}; (I_F = 50\text{ A})\text{ max.}$	1,7	V
$V_{T(T0)}$	$T_{vj} = 125^\circ\text{C}$	0,9	V
$r_T$	$T_{vj} = 125^\circ\text{C}$	16	$\text{m}\Omega$
$R_{thjh}$ <sup>2)</sup>	per diode	1,2	K/W
	per module	0,3	K/W
$T_{vj}$		– 40 ... + 150	$^\circ\text{C}$
$T_{stg}$		– 40 ... + 125	$^\circ\text{C}$
$T_{solder}$	terminals, 10 s	260	$^\circ\text{C}$
$V_{isol}$	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 6	



### Features

- Compact Design
- One screw mounting
- Heat transfer and isolation through direct copper bonded aluminium oxide ceramic (DCB)
- Fast and soft recovery CAL (controlled axial lifetime) diode
- UL recognized, file no. E 63 532

### Typical Applications

- General power switching applications
- UPS
- Switched mode power supplies

<sup>1)</sup>  $T_h = 25^\circ\text{C}$  unless otherwise specified

<sup>2)</sup> Thermal resistance junction to heatsink

<sup>3)</sup> Limited to 30 A due to number of pins

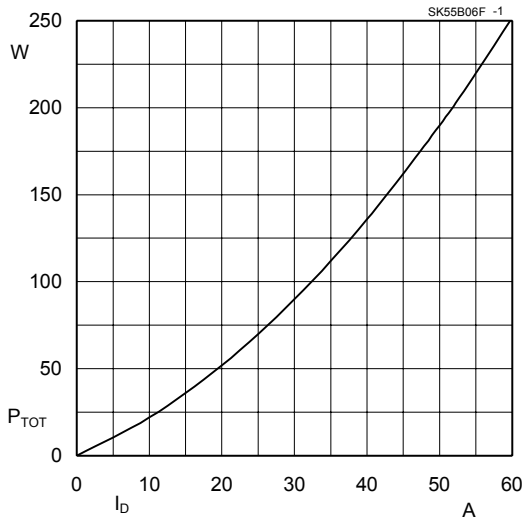


Fig. 1 Power dissipation vs. output current

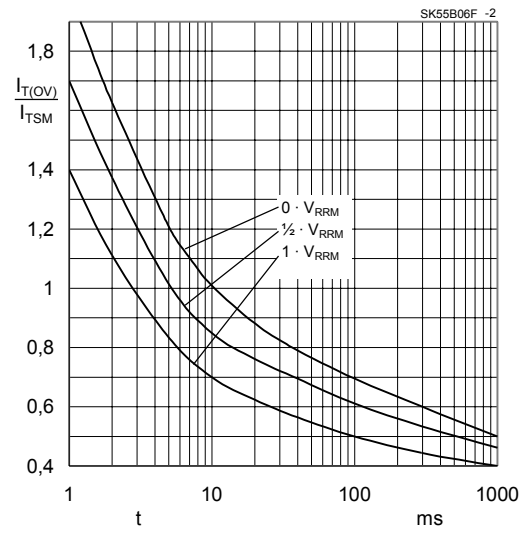


Fig. 2 Surge overload current vs. time

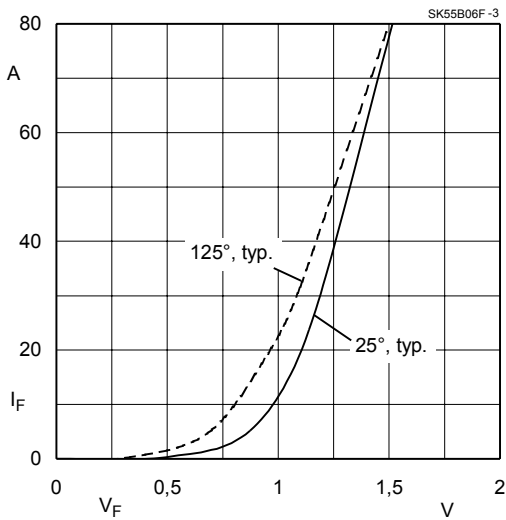


Fig. 3 Forward characteristic of single diode

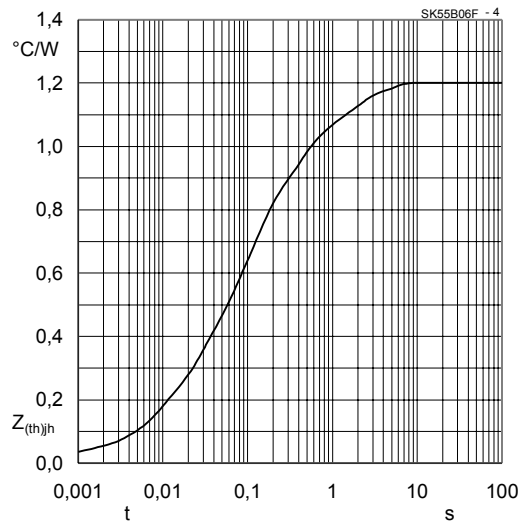


Fig. 4 Thermal transient impedance vs. time

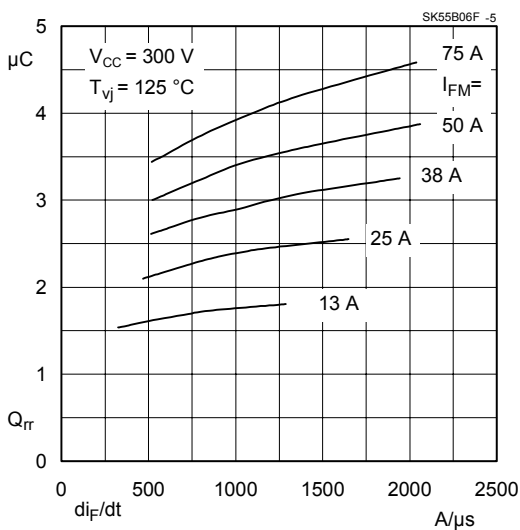
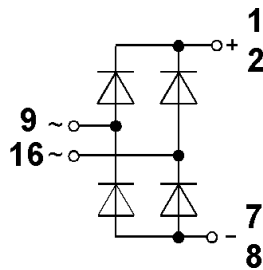
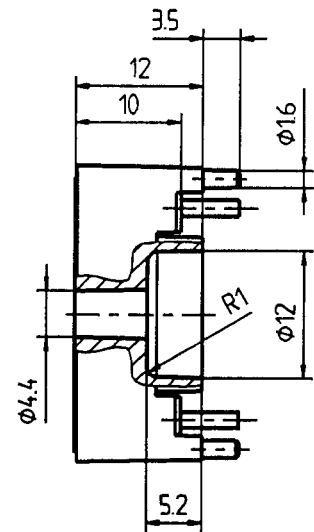
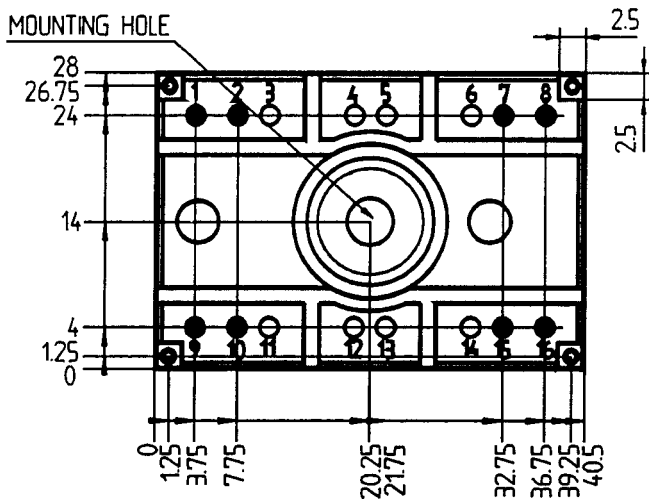
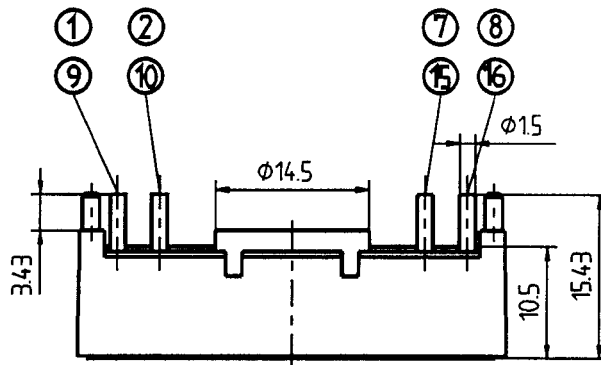


Fig. 5 Typ. reverse recovery charge  $Q_{rr} = f(di_F/dt)$

**SEMITOP® 2**  
**SK 55 B 06 F**

Case T 6



Dimensions in mm

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