### SK 35 D 12 F



# Bridge Rectifier

#### SK 35 D 12 F

Preliminary Data

#### **Features**

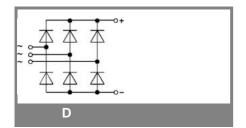
- Compact design
- · One screw mounting
- Heat transfer and insulation through direct copper bonded aluminium oxide ceramic (DCB
- Fast and soft recovery CAL (Controlled Axial Lifetime) diode
- UL recognized, file no. E 63 532

### **Typical Applications**

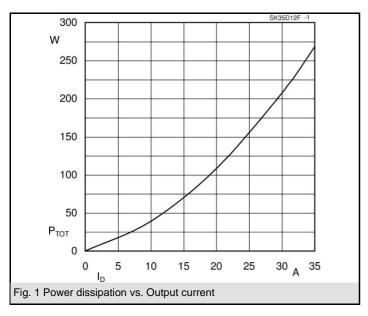
- General power switching applications
- UPS
- SMPS

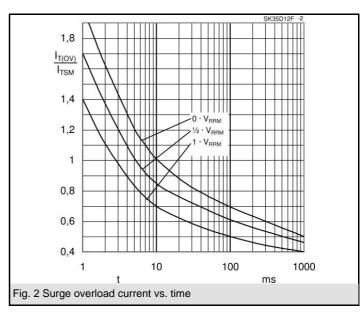
$V_{RSM}$	$V_{RRM}, V_{DRM}$	I <sub>D</sub> = 33 A (full conduction)
V	V	(T <sub>s</sub> = 80 °C)
	1200	Sk 35 D 12 F

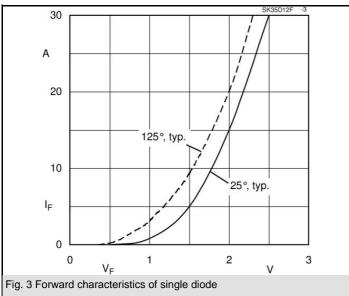
Symbol	Conditions	Values	Units
I <sub>D</sub>	T <sub>s</sub> = 80 °C	33	А
I <sub>RRM</sub>	T <sub>vj</sub> = 125°C (See Fig. 6)	typ. 16	Α
$Q_{rr}$	T <sub>vj</sub> = 25 (125)°C (See Fig. 6)	typ. 1,5 (2,7)	μC
$I_R$	T <sub>vj</sub> = 25 (150)°C; V <sub>R</sub> =V <sub>RRM</sub>	0,1 (2)	mA
I <sub>FSM</sub>	T <sub>vj</sub> = 150 °C; 10 ms	180	Α
	T <sub>vj</sub> = °C; ms		Α
i²t	T <sub>vj</sub> = 150 °C; 10 ms	162	A²s
	T <sub>vj</sub> = °C; ms		A²s
V <sub>F</sub>	T <sub>vi</sub> = 25 °C; I <sub>F</sub> = 15 A	max. 2,5	V
$V_{(TO)}$	T <sub>vi</sub> = 125 °C	max. 1,2	V
r <sub>T</sub>	T <sub>vi</sub> = 125 °C	max. 75	mΩ
$I_{RD}$	$T_{vj} = {^{\circ}C}; V_{DD} = V_{DRM}; V_{RD} = V_{RRM}$		mA
			mA
R <sub>th(j-s)</sub>	per diode	1,7	K/W
(ii) 3)	per module	0,283	K/W
T <sub>solder</sub>	terminals, 10s	260	°C
T <sub>vj</sub>	· ·	-40+150	°C
T <sub>stg</sub>		-40+125	°C
V <sub>isol</sub>	a. c. 50 Hz; r.m.s.; 1 s / 1 min.	3000 ( 2500 )	V
M <sub>s</sub>	mounting torque to heatsink	2	Nm
Mt			
m	approx. weight	21	g
Case	SEMITOP® 2	T 7	

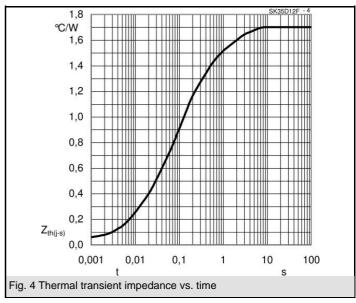


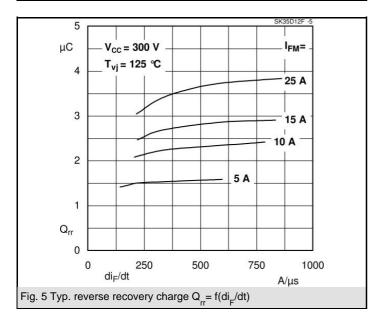
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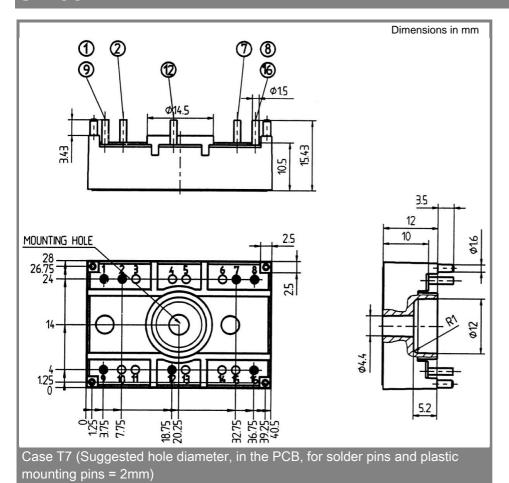


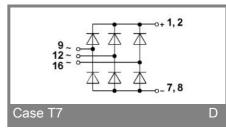


I<sub>F</sub>= 15A V<sub>R</sub>= 600V -di/dt = 400A/μs Fig. 6

Measurement conditions for switching parameters:

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