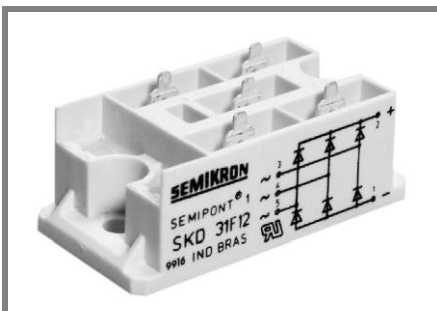


SKD 31F



SEMIPONT® 1

Power Bridge Rectifiers

SKD 31F

Features

- Low generated noise and peak reverse current
- Sturdy isolated metal baseplate
- Fast-on terminals with solder tips
- Suitable for wave soldering
- Blocking voltage up to 2200 V
- High surge current rating
- UL recognized, file no. E 63 532

Typical Applications

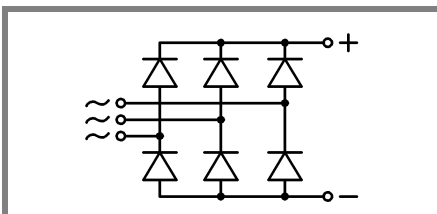
- Low EMI applications
- Input rectifiers for variable frequency drives
- Battery charger rectifiers
- Three phase rectifiers for power supplies
- Recommended snubber network for 50...60 Hz applications:
RC: 50 Ω , 0.1 μ F ($P_R = 1$ W)

- 1) $f = 50 \dots 1000$ Hz
- 2) Freely suspended or mounted on an insulator
- 3) Mounted on a painted metal sheet of min. 250 x 250 x 1 mm
- 4) Recommended

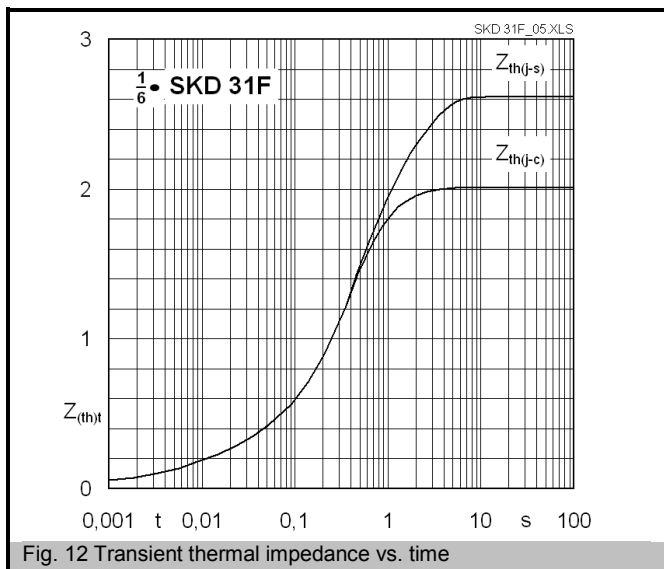
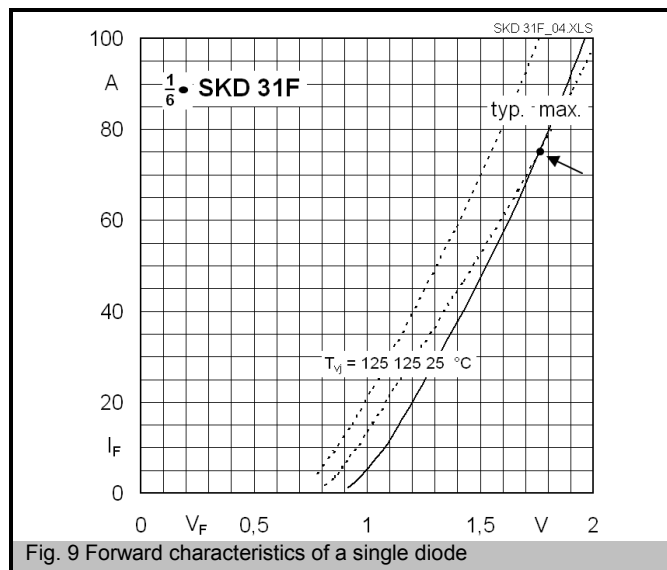
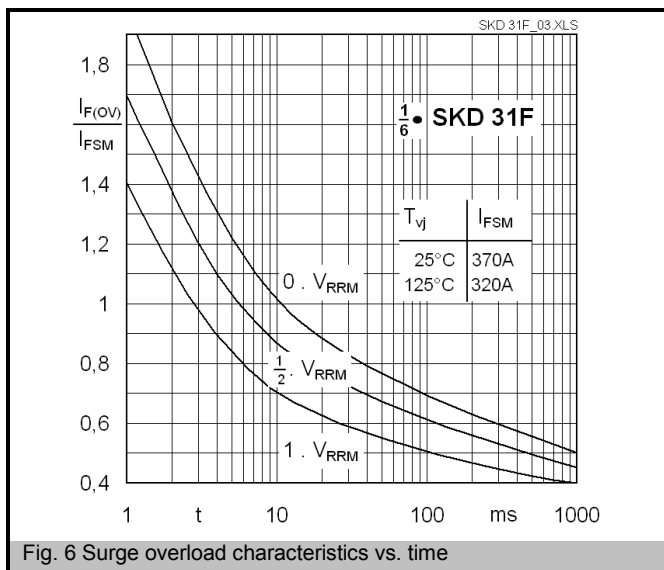
V_{RSM}, V_{RRM} V	$V_{RMS}^{4)}$ V	$I_D = 31$ A ($T_{case} = 100$ °C) ¹⁾ Types
400	125	SKD 31F/04
800	250	SKD 31F/08
1200	400	SKD 31F/12
1600	500	SKD 31F/16
2200	690	SKD 31F/22 *

* Available in limited quantities

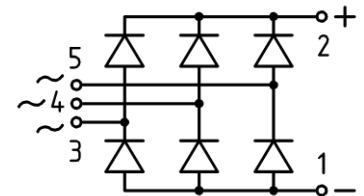
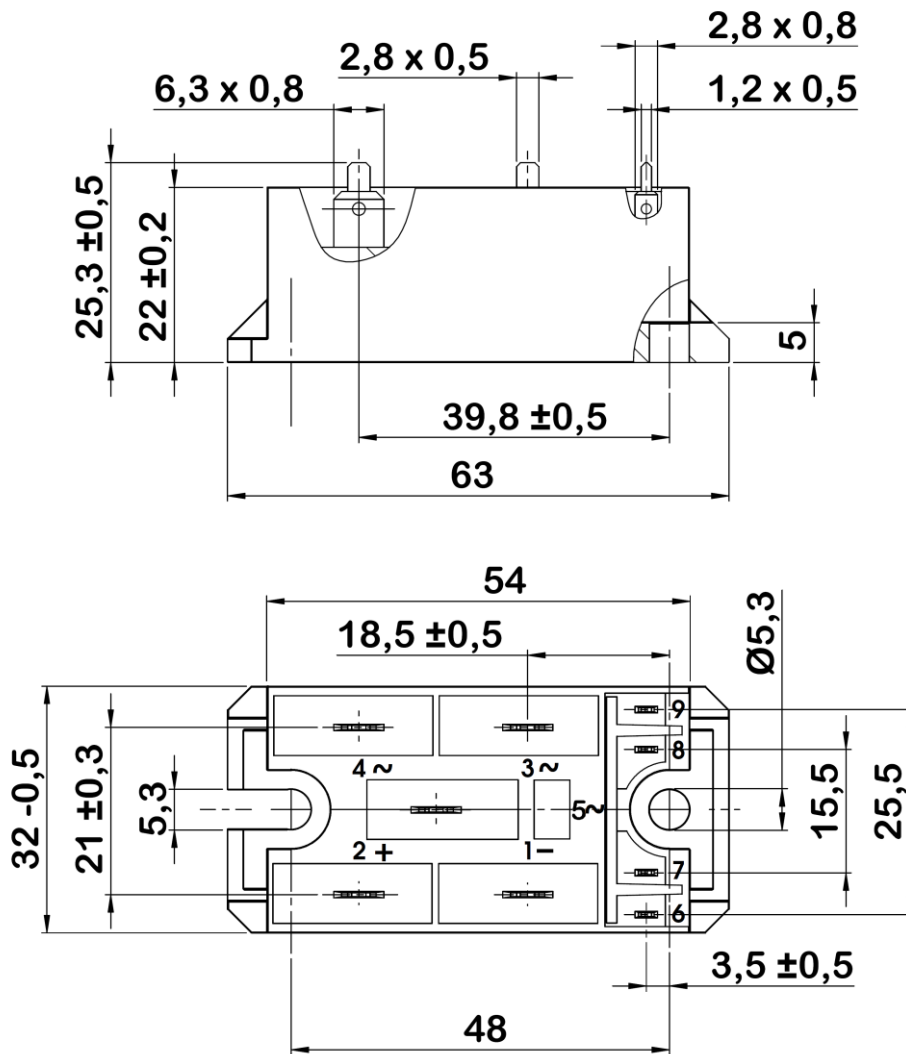
Symbol	Condition	Values	Units
$I_D^{1)}$	$T_{case} = 85$ °C $T_{amb} = 45$ °C, isolated ²⁾ chassis ³⁾ P5A/100 P1A/120 $T_{amb} = 35$ °C, P1A/120F	44 5,3 17 26 32 56	A A A A A A
I_{FSM}	$T_{vj} = 25$ °C ; 10 ms $T_{vj} = 125$ °C ; 10 ms	370 320	A A
i^2t	$T_{vj} = 25$ °C ; 8,3 ... 10 ms $T_{vj} = 125$ °C ; 8,3 ... 10 ms	685 510	A ² s A ² s
V_F $V_{(TO)}$ r_T	$T_{vj} = 25$ °C, $I_F = 75$ A $T_{vj} = 125$ °C $T_{vj} = 125$ °C	max. 1,75 0,85 12	V V m Ω
I_{RD} I_{RD} t_{rr}	$T_{vj} = 25$ °C ; $V_{RD} = V_{RRM}$ $T_{vj} = 125$ °C ; $V_{RD} = V_{RRM}$ $T_{vj} = 25$ °C , $I_F = I_R = 1$ A	200 4 2,5	μ A mA μ s
$R_{th(j-a)}$	isolated ²⁾ chassis ³⁾ P5A/100 P1A/120	15 3 1,85 1,05	K/W K/W K/W K/W
$R_{th(j-c)}$	per diode total	2,0 0,33	K/W K/W
$R_{th(c-s)}$	total	0,1	K/W
T_{vj} T_{stg}		-40 ... +125 -55 ... +125	°C °C
V_{isol} M_s	a. c. 50 ... 60 Hz; r.m.s.; 1 s / 1 min. to heatsink SI units US units	3600 / 3000 2 $\pm$ 15 % 18 $\pm$ 15 %	V~ Nm lb. in.
M	approx.	66	g
Case		G 26	



SKD



Dimensions in millimeters



Case G26

*IMPORTANT INFORMATION AND WARNINGS

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