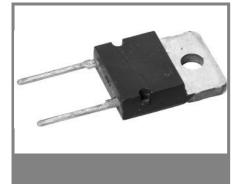
SKR 31F



Fast Recovery Rectifier Diode

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Features

- CAL-Diode (controlled axial lifetime technology), patent no. DE 43104
- Very short recovery timesSoft recovery under all conditions
- Up to 1200 V reverse voltage
- Epoxy meets UL 94V-0 flammability classification

Typical Applications

- Inverse diode for power transistors
- Inverter
- Power supply
- Snubber and clamping diode

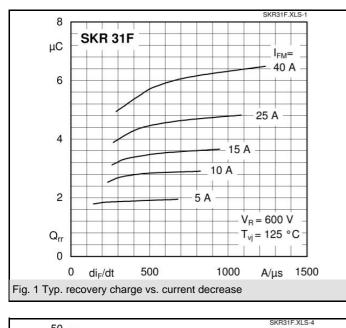
V _{RSM}	V _{RRM}	I _{FRMS} = 47 A (maximum value for continuous operation)		
V	V	I _{FAV} = 31 A (sin. 180; 50 Hz; T _c = 85 °C)		
1000	1000	SKR 31F10		
1200	1200	SKR 31F12		

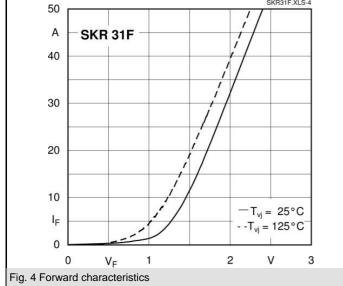
Symbol	Conditions	Values	Units
I _{FAV}	sin. 180; T _c = 85 (100) °C	31 (27)	А
I _{FSM}	T _{vi} = 25 °C; 10 ms	320	Α
	T _{vi} = 150 °C; 10 ms	300	А
i²t	T _{vj} = 25 °C; 8,3 10 ms	510	A²s
	T _{vj} = 150 °C; 8,3 10 ms	450	A²s
V _F	T _{vi} = 25 °C; I _F = 25 A	max. 2,35	V
V _(TO)	T _{vi} = 150 °C	max. 1,2	V
r _T	T _{vj} = 150 °C	max. 44	mΩ
I _{RD}	$T_{vj} = 25 \text{ °C}; V_{RD} = V_{RRM}$	max. 0,1	mA
I _{RD}	T _{vj} = 125 °C; V _{RD} = V _{RRM}	max. 4	mA
Q _{rr}	T _{vj} = 125 °C, I _F = 25 A,	4,5	μC
I _{RM}	-di/dt = 500 A/μs, V _R = 600 V	25	А
t _{rr}		400	ns
E _{rr}		-	mJ
R _{th(j-c)}		0,45	K/W
R _{th(c-s)}		0,3	K/W
T _{vj}		- 40 150	°C
T _{stg}		- 40 150	°C
V _{isol}		-	V~
M _s	to heatsink	0,7 1	Nm
а			m/s²
m	approx.	5	g
Case		E 40	

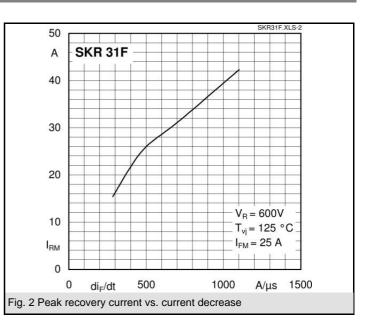


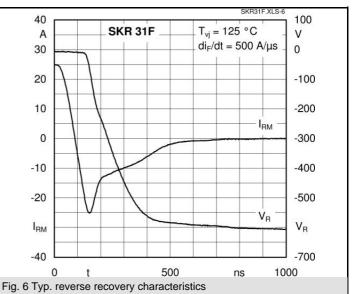
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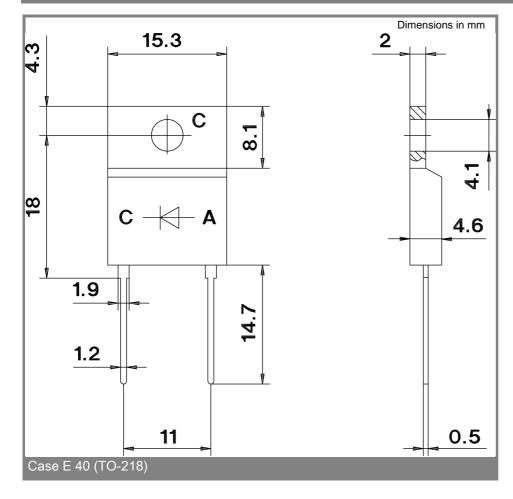








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