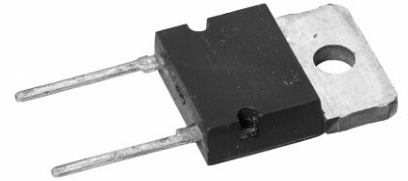


V_{RSM}	I _{FRMS} (maximum values for continuous operation)
V_{RRM}	
V	I _{FAV} (sin. 180; T _{case} = 85 °C; 50 Hz)
600	SKR 67F06

Fast Recovery Rectifier Diodes ¹⁾

SKR 67 F

Preliminary Data



Symbol	Conditions	SKR67F	Units	
I _{FAV}	sin. 180; T _{case} = 85 °C	67	A	
I _{FSM}	T _{vj} = 25 °C; 10 ms	650	A	
	T _{vj} = 150 °C; 10 ms	580	A	
i ² t	T _{vj} = 25 °C; 8,3 ... 10 ms	2100	A ² s	
	T _{vj} = 150 °C; 8,3 ... 10 ms	1700	A ² s	
I _{RRM}	T _{vj} = 25 °C } I _F = 75 A T _{vj} = 125 °C } di/dt = 800 A/μs	30	A	
		53	A	
Q _{rr}	T _{vj} = 25 °C } typ. T _{vj} = 125 °C } V _R = 300 V typ.	2,5	μC	
		6	μC	
t _{rr}	T _{vj} = 25 °C } typ.	60	ns	
I _R	T _{vj} = 25 °C; V _R = V _{RRM}	0,2	mA	
	T _{vj} = 125 °C; V _R = V _{RRM}	4	mA	
V _F	T _{vj} = 25 °C; I _F = 75 A max	1,7	V	
V _(TO)	T _{vj} = 150 °C	0,9	V	
r _T	T _{vj} = 150 °C	11	mΩ	
R _{thjc}		0,35	°C/W	
R _{thch}		0,25	°C/W	
T _{vj}		- 40 ... 150	°C	
T _{stg}		- 40 ... 150	°C	
M ₁	to heatsink	SI units	0,7 ... 1	Nm
		US units	6,2 ... 8,8	lb.in.
w	approx	5	g	
Case	→ page B 9 – 6	E 40		

Features

- Very short recovery times
- Soft recovery under all conditions
- 600 V reverse voltage
- Epoxy meets UL 94V-0 flammability classification

Typical Applications

- Inverse diode for power transistors
- Inverter, UPS
- Snubber and clamping diode

¹⁾ CAL (controlled axial lifetime) technology, patent No. DE 43 10 44

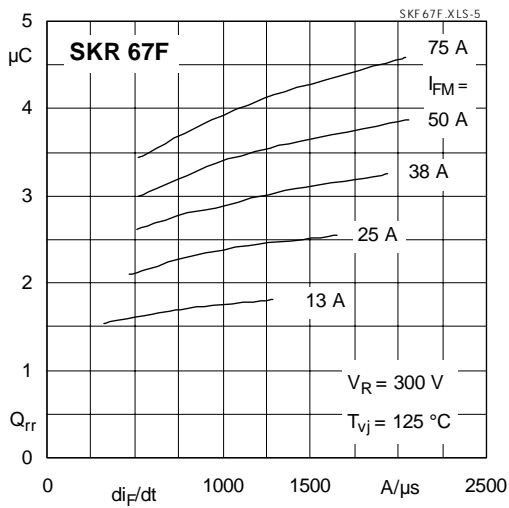


Fig. 5 Typ. recovered charge

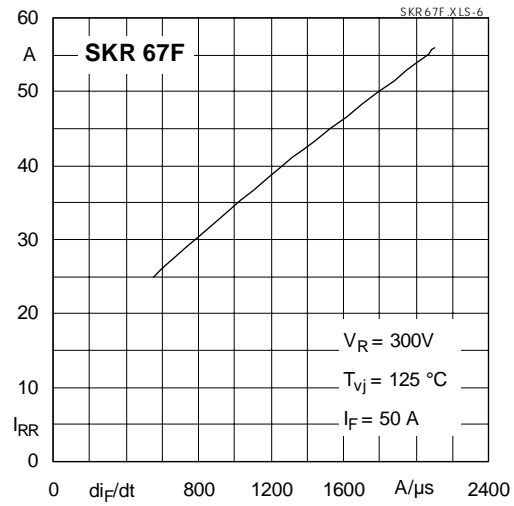


Fig. 6 Typ. peak reverse recovery current

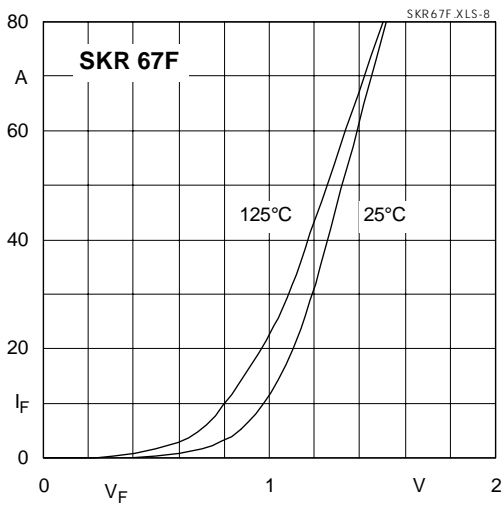


Fig. 8 Typ. forward characteristic

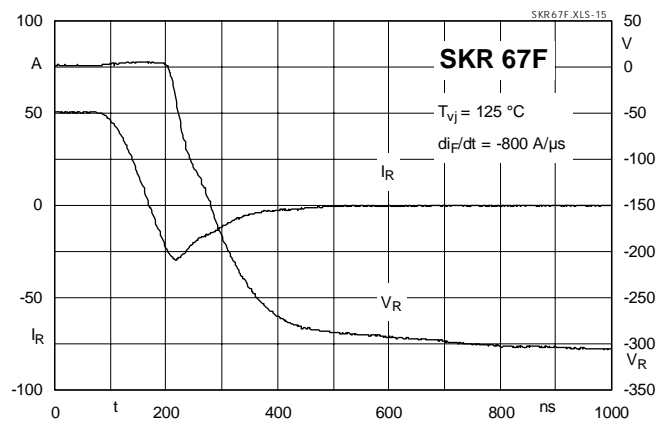
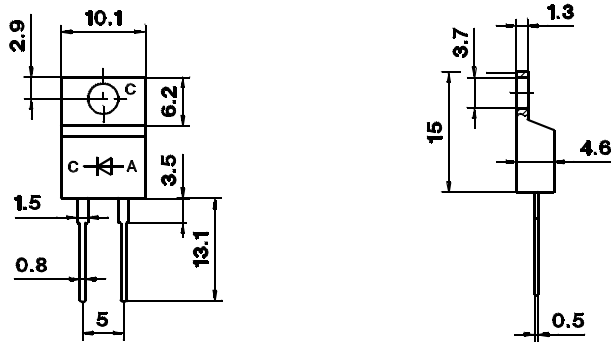


Fig. 15 Typ. reverse recovery characteristic

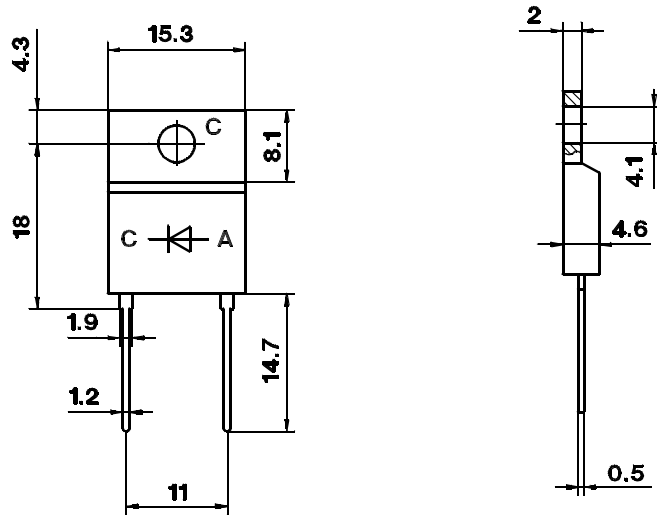
SKR 20 F

Case E 39
TO-220 AC



SKR 31 F
SKR 47 F
SKR 48 F
SKR 67 F

Case E 40
TO-218



Dimensions in mm