

F1 (F1A) THRU F7 (F1M)

Surface Mount Fast Recovery Rectifier

Essential information; basic information

Features

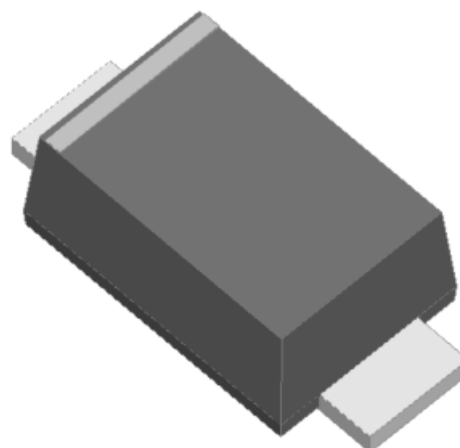
- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- Switching for general purpose
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

Typical Applications

For use in high frequency rectification of power supplies, inverters, converters, and freewheeling diodes for consumer, and telecommunication.

Mechanical Data

- Package: SOD-123FL
- Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: Cathode line denotes the cathode end

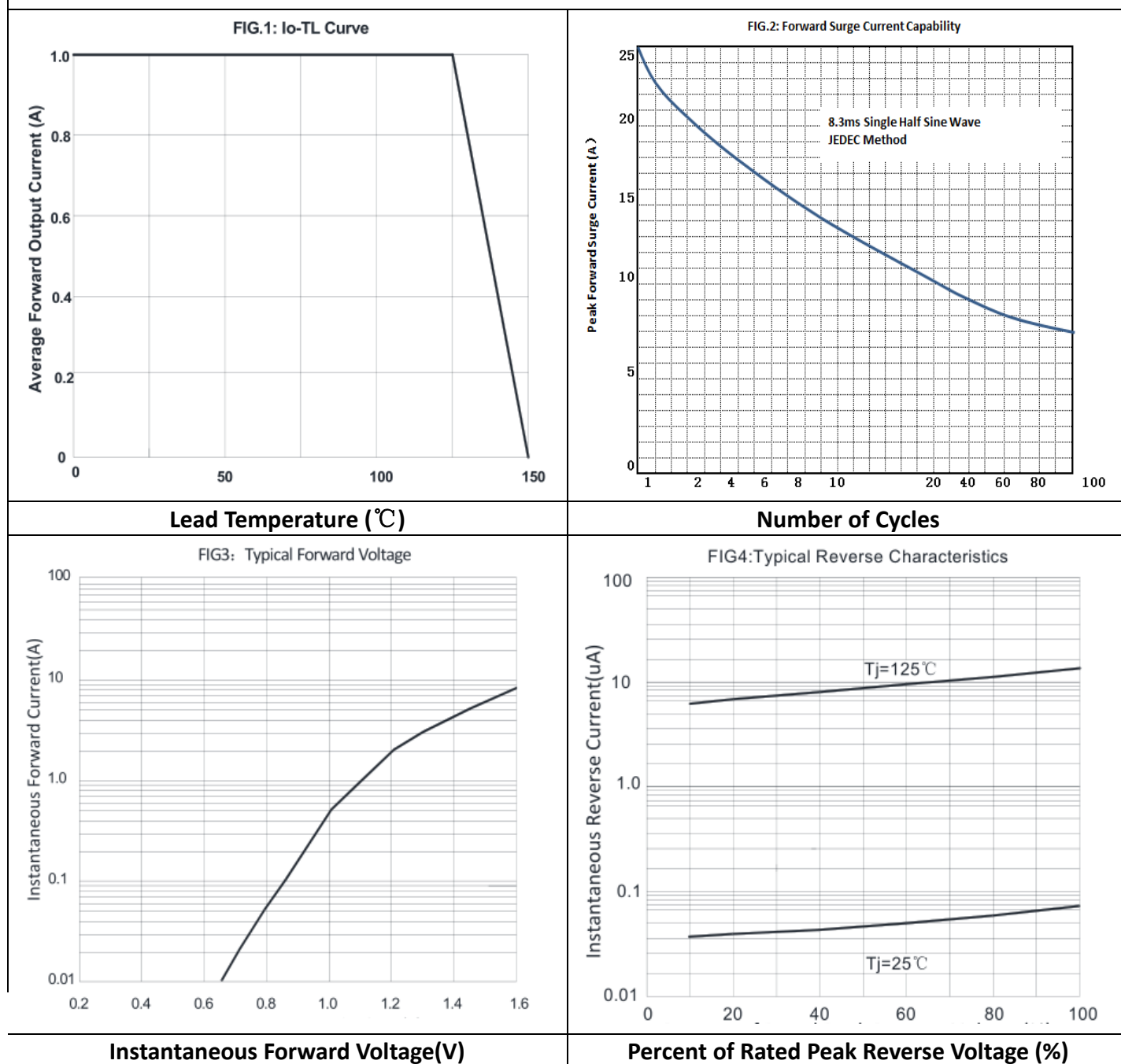


Maximum Ratings (Ta=25 °C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	F1	F2	F3	F4	F5	F6	F7
Alternate Name			F1A	F1B	F1D	F1G	F1J	F1K	F1M
Maximum Repetitive peak reverse voltage	VRRM	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	VRMS	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	VDC	V	50	100	200	400	600	800	1000
Average rectified output current@60Hz sine wave, resistance load, TL (Fig.1)	IO	A	1.0						
Forward Surge Current (Non-repetitive)@60Hz Half-sine wave,1 cycle, Tj=25℃	IFSM	A	25						
Storage temperature	Tstg	℃	-55 ~ +125						
Junction temperature	Tj	℃	-55 ~ +125		-55 ~ +150				
Maximum instantaneous forward voltage drop per diode	VF (IFM=1.0A)	V	1.3						
Maximum DC reverse current at rated DC blocking voltage per diode	IR (Tj =25℃)	μ A	5						
	IR (Tj =100℃)		100						

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Alternate Name			F1A	F1B	F1D	F1G	F1J	F1K	F1M
Maximum reverse recovery time	Trr (ns)	F=0.5A,IR=1.0A, Irr=0.25A	150				250	500	

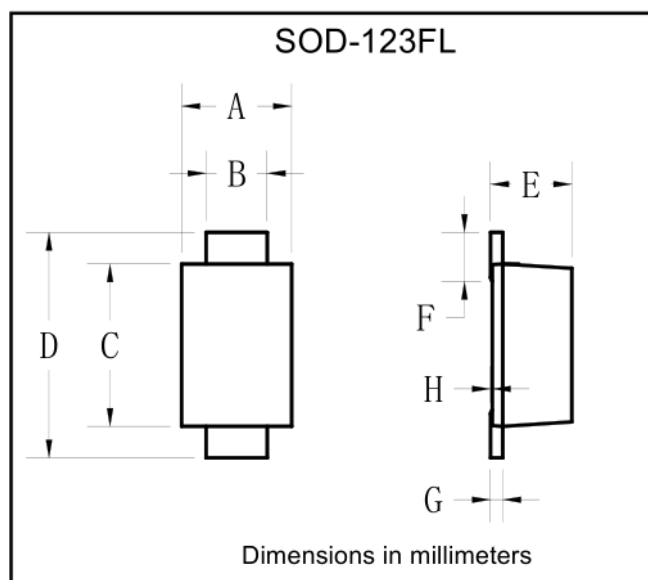
Characteristics (Typical)



Ordering Information (Example)

type specification	manner of packin	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
F1-F7	T/B	3000	24000	240000	7" reel
F1A-F1M (SOD-123FL)		10000	30000	300000	13" reel

Outline Dimensions



SOD-123FL		
Dim	Min	Max
A	1.60	1.90
B	0.90	1.10
C	2.55	2.85
D	3.60	3.90
E	1.00	1.20
F	0.40	0.90
G	0.10	0.25
H	0.02	0.05

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