



RS1000FL~RS1010FL FAST RECOVERY RECTIFIER

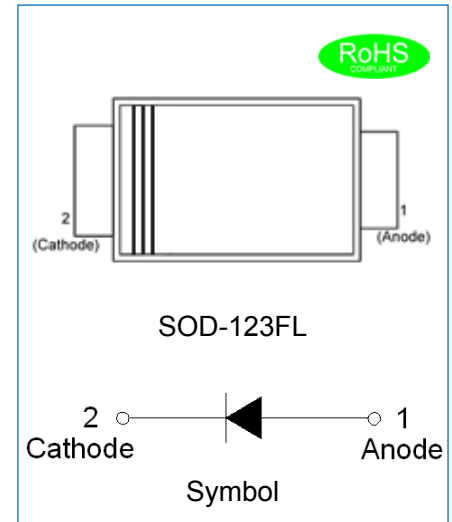
Rev.4.1

DESCRIPTION:

- ✧ Plastic package has underwriters laboratory flammability classification 94V-0
- ✧ For surface mounted applications in order to optimize board space
- ✧ Lead free in compliance with EU RoHS 2011/65/EU directive
- ✧ Glass passivated chip junction
- ✧ Fast recovery time

MECHANICAL DATA

- ✧ Case: SOD-123FL, molded plastic over passivated junction
- ✧ Terminals: Solder plated, solderable per J-STD-002
- ✧ Polarity: Color band denotes cathode end
- ✧ Weight: 0.016 gram



ABSOLUTE MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS

(Rating at 25°C ambient temperature unless otherwise specified.)

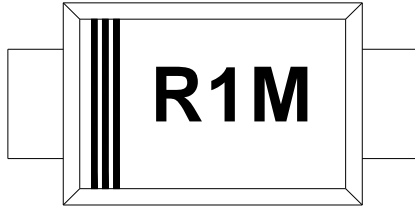
Parameter	Symbol	RS1000 FL	RS1001 FL	RS1002 FL	RS1004 FL	RS1006 FL	RS1008 FL	RS1010 FL	Unit	
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V	
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V	
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V	
Maximum average forward current at $T_A=75^\circ\text{C}$	$I_{F(AV)}$	1.0							A	
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	25							A	
Maximum forward voltage@ $I_F=1\text{A}$	V_F	1.3							V	
Maximum DC reverse current at rated DC blocking voltage	$T_j=25^\circ\text{C}$	I_R							5	μA
	$T_j=100^\circ\text{C}$								50	μA
Typical junction capacitance $V_R=4.0\text{V}$, $f=1\text{MHz}$	C_J	7							pF	
Maximum reverse recovery time $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{rr}=0.25\text{A}$	t_{rr}	150				250	500		ns	
Operating junction and storage temperature range	T_j, T_{stg}	-55 to +150							$^\circ\text{C}$	

THERMAL RESISTANCES

Symbol	Parameter	RS1000 FL	RS1001 FL	RS1002 FL	RS1004 FL	RS1006 FL	RS1008 FL	RS1010 FL	Unit
$R_{th(j-a)}$	Junction to ambient (note1)	50							$^{\circ}C/W$

Note1: Thermal resistance from junction to ambient mounted on P.C.B. with 5.0 mm x 5.0 mm copper pad areas.

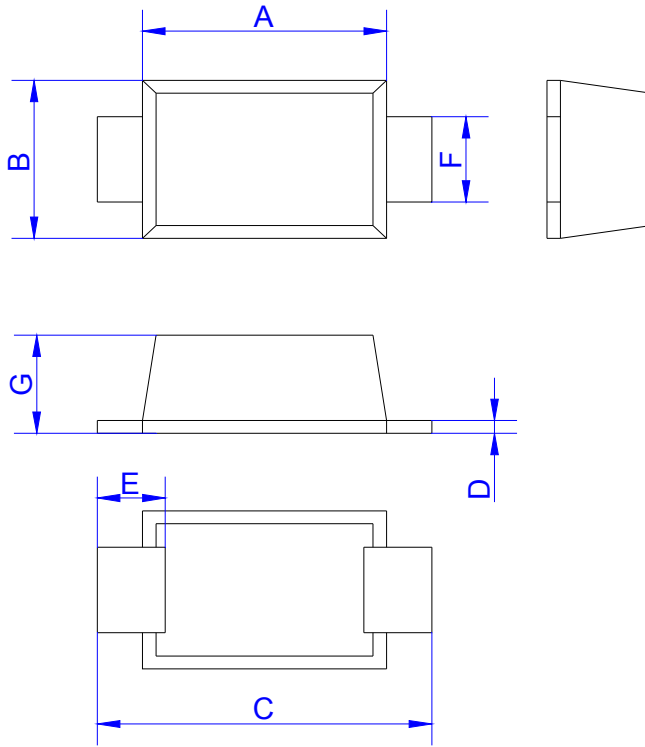
MARKING



R	Fast Recovery Rectifier
1	$I_{F(AV)}=1.0A$
M	$V_{RRM}:1000V$

A:50V B:100V D:200V G:400V J:600V K:800V M:1000V

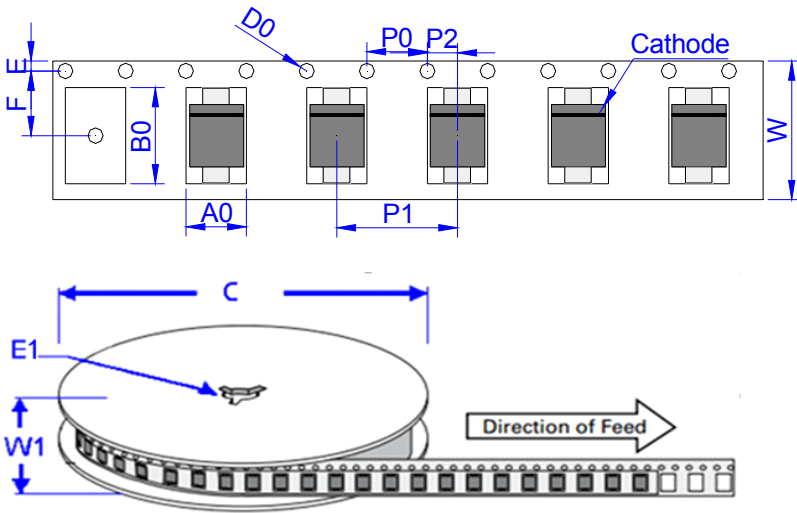
PACKAGE MECHANICAL DATA



SOD-123FL

Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	2.40	3.00	0.094	0.118
B	1.60	2.10	0.063	0.083
C	3.40	4.00	0.134	0.157
D	0.10	0.30	0.004	0.012
E	0.35	0.85	0.014	0.033
F	0.80	1.20	0.031	0.047
G	0.90	1.40	0.035	0.055

TAPE AND REEL SPECIFICATION-SOD-123FL



Ref.	Dimensions	
	Millimeters	Inches
A0	1.95 ± 0.3	0.077± 0.012
B0	3.95 ± 0.3	0.156 ± 0.012
C	178	7.0
D0	1.55 ± 0.1	0.061 ± 0.004
E	1.75 ± 0.2	0.069 ± 0.008
E1	13.3 ± 0.3	0.524± 0.012
F	3.50 ± 0.2	0.138 ± 0.008
P0	4.00 ± 0.2	0.157 ± 0.008
P1	4.00 ± 0.2	0.157 ± 0.008
P2	2.00 ± 0.2	0.079 ± 0.008
W	8.0± 0.2	0.315 ± 0.008
W1	11.5 ± 1.0	0.453 ± 0.039

OUTLINE	UNIT WEIGHT (g/PCS) typ.	REEL (PCS)	PER CARTON (PCS)	REEL DIAMETERS (mm)
TAPING	0.016	3,000	150,000	178

CHARACTERISTICS CURVE

FIG.1: Typical forward characteristics (25°C)

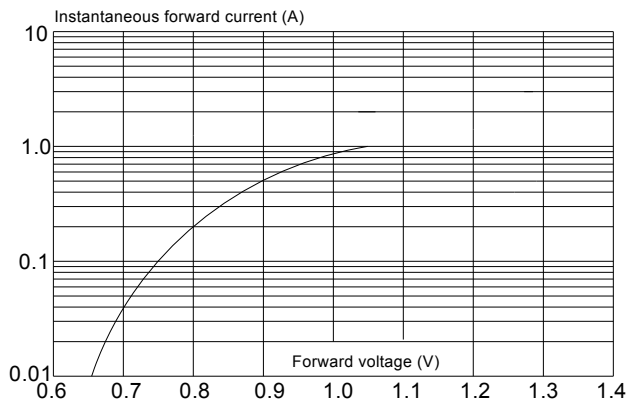


FIG.2: Typical reverse characteristics

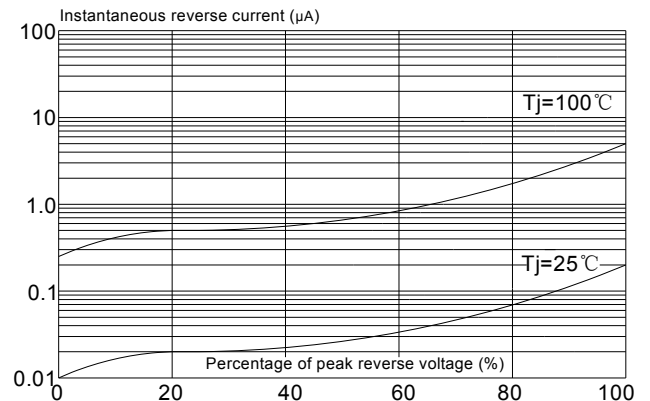


FIG.3: Maximum non-repetitive peak forward surge current

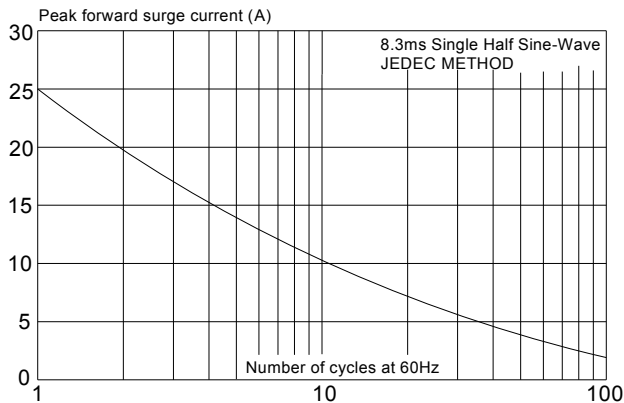
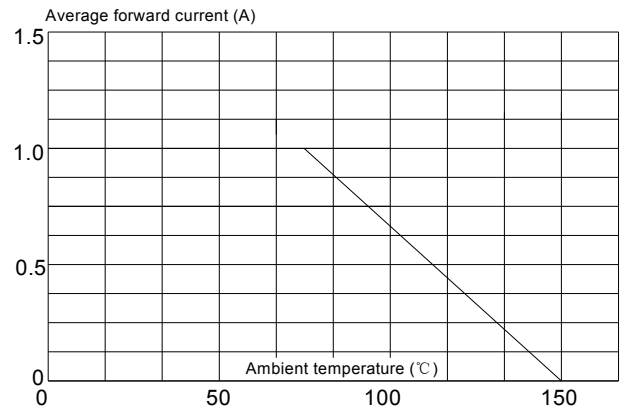


FIG.4: Forward current derating curve



Information furnished in this document is believed to be accurate and reliable. However, Jiangsu JieJie Microelectronics Co.,Ltd assumes no responsibility for the consequences of use without consideration for such information nor use beyond it.

Information mentioned in this document is subject to change without notice, apart from that when an agreement is signed, Jiangsu JieJie complies with the agreement.

Products and information provided in this document have no infringement of patents. Jiangsu JieJie assumes no responsibility for any infringement of other rights of third parties which may result from the use of such products and information.

This document is the 4.1st version which is made in 28-Mar.-2020. This document supersedes and replaces all information previously supplied.

 is a registered trademark of Jiangsu JieJie Microelectronics Co.,Ltd.

Copyright ©2020 Jiangsu JieJie Microelectronics Co.,Ltd. Printed All rights reserved.