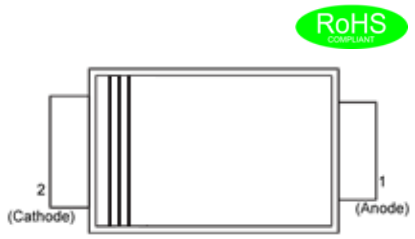
GS1000FL~GS1010FL

GENERAL PURPOSE RECTIFIER

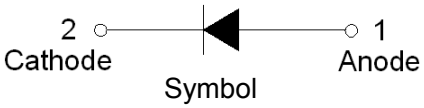
Rev.2.5

DESCRIPTION

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



SOD-123FL



Symbol

MECHANICAL DATA

- ✧ Case: SOD-123FL molded plastic
- ✧ Terminals: Solder plated, solderable per J-STD-002
- ✧ Polarity: Color band denotes cathode end
- ✧ Weight: 0.0144 gram

ABSOLUTE MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS

(Rating at 25℃ ambient temperature unless otherwise specified.)

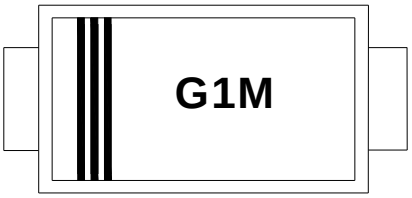
Parameter		Symbol	GS1000 FL	GS1001 FL	GS1002 FL	GS1004 FL	GS1006 FL	GS1008 FL	GS1010 FL	Unit
Maximum repetitive peak reverse voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage		V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage		V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward current at T_L=75℃		$I_{F(AV)}$	1.0							A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load		I_{FSM}	30							A
Maximum forward voltage @ I_F=1.0A		V_F	1.1							V
Maximum DC reverse current at rated DC blocking voltage	T_j=25℃	I_R	5.0							μA
	T_j=150℃		150							
Typical junction capacitance V_R=4.0V, f=1MHz		C_J	7							pF
Operating junction and storage temperature range		T_j , T_{stg}	-55 to +150							℃

THERMAL RESISTANCES

Symbol	Parameter	GS1000 FL	GS1001 FL	GS1002 FL	GS1004 FL	GS1006 FL	GS1008 FL	GS1010 FL	Unit
$R_{th(j-L)}$	Junction to lead (note1)	20							℃/W

Note1：Thermal resistance from junction to lead mounted on P.C.B. with 4.0 mm x 4.0 mm copper pad areas.

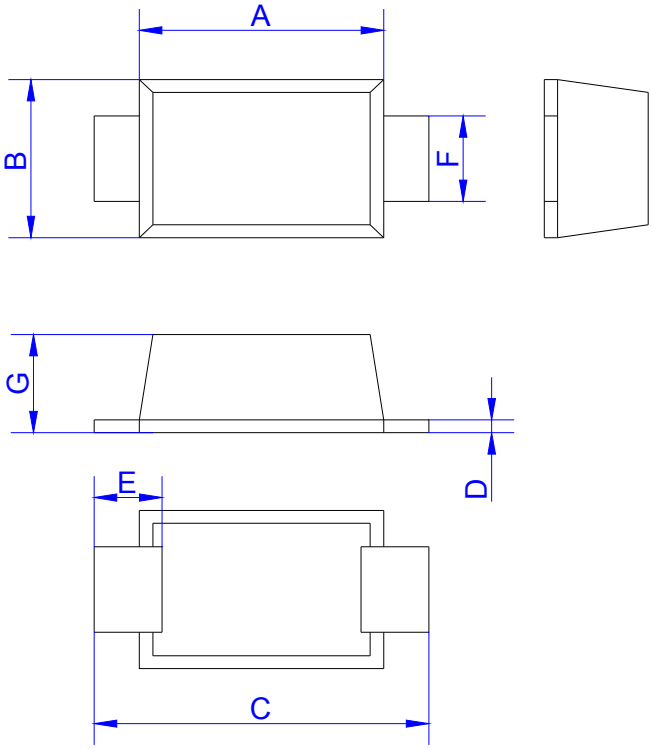
MARKING



G	General Purpose 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

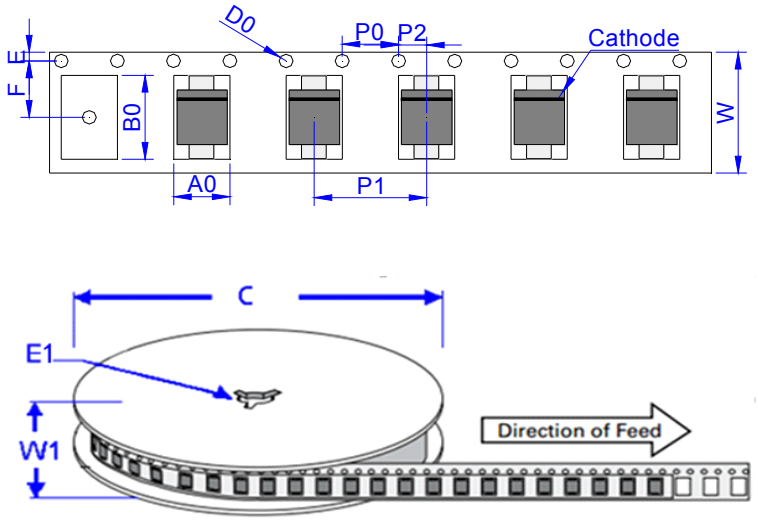
PACKAGE MECHANICAL DATA



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	0.0144	3,000	150,000	178

CHARACTERITICS CURVE

FIG.1: Typical forward characteristics (25℃)

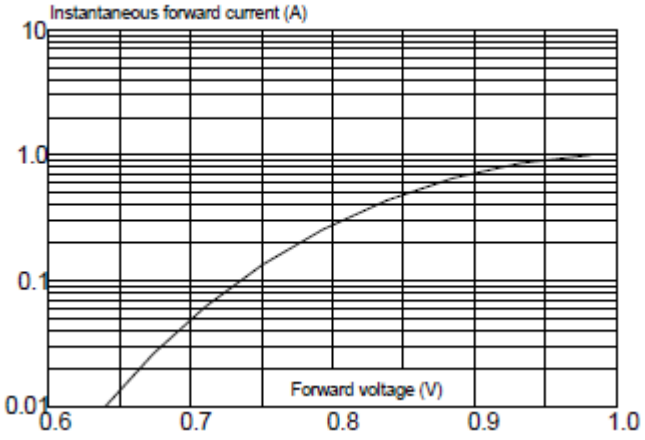


FIG.2: Typical reverse characteristics

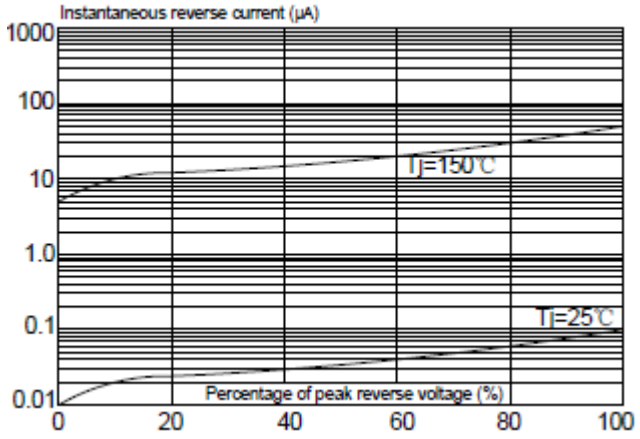


FIG.3: Maximum non-repetitive peak forward surge current

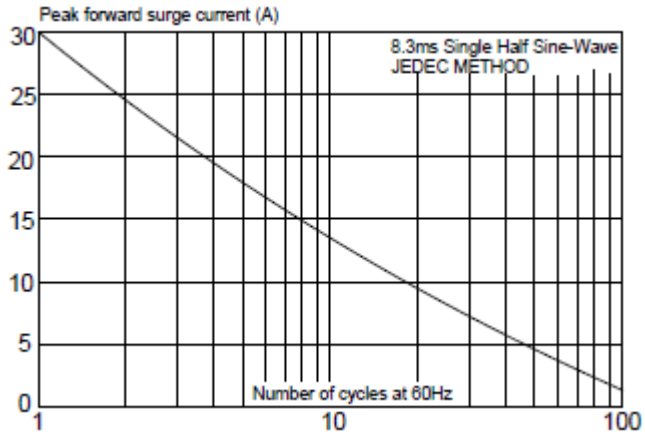
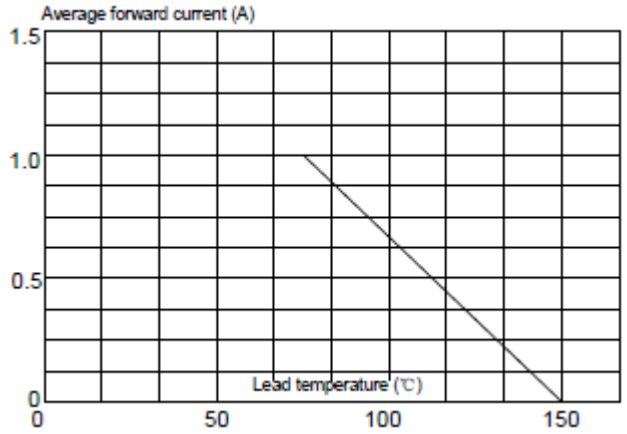


FIG.4: Forward current derating curve



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 2.5th version which is made in 7-Spet.-2021. This document supersedes and replaces all information previously supplied.