



JSPI3100A

3A Schottky Barrier Rectifier

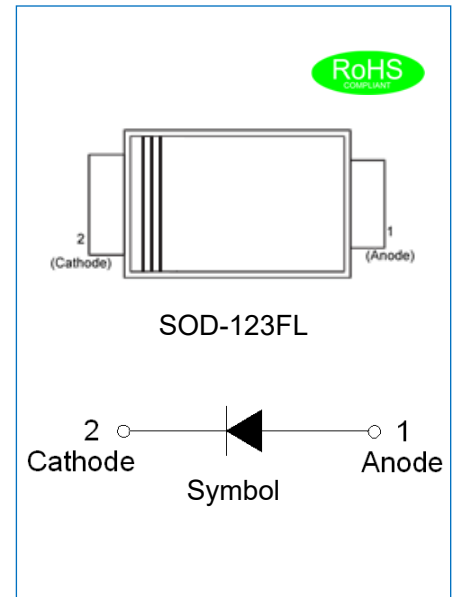
Rev.1.4

DESCRIPTION

- ✧ Plastic package has underwriters laboratories 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
- ✧ Ultra low forward voltage drop
- ✧ Low power losses, high efficiency operation
- ✧ High current capability and surge capability
- ✧ Low thermal resistance package

MECHANICAL DATA

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



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

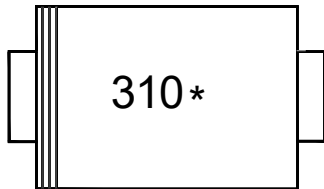
Parameter	Symbol	JSPI3100A	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	100	V
Maximum RMS voltage	V_{RMS}	70	V
Maximum DC blocking voltage	V_{DC}	100	V
Average forward current	$I_{F(AV)}$	3.0	A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	80	A
Operating junction temperature range	T_j	-55 to +150	°C
Storage temperature range	T_{stg}	-55 to +150	°C

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

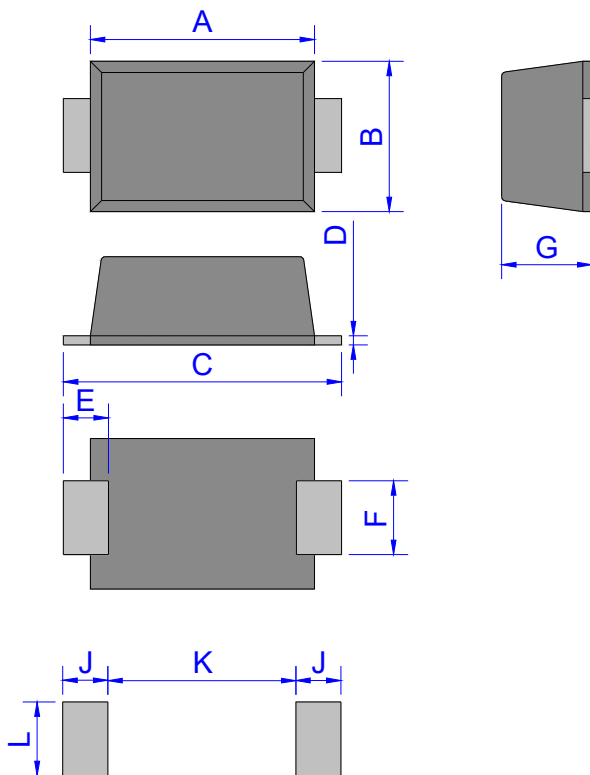
Parameter	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F=3A$ V_F			0.85	V
Reverse current at rated DC blocking voltage	$T_A=25^\circ C$ I_R			0.1	mA
	$T_A=100^\circ C$			8	
Junction capacitance	$V_R=4.0V, f=1MHz$ C_J		90		pF

THERMAL RESISTANCES

Symbol	Parameter	JSPI3100A	Unit
$R_{th(j-a)}$	Thermal resistances from junction to ambient	85	$^{\circ}C/W$

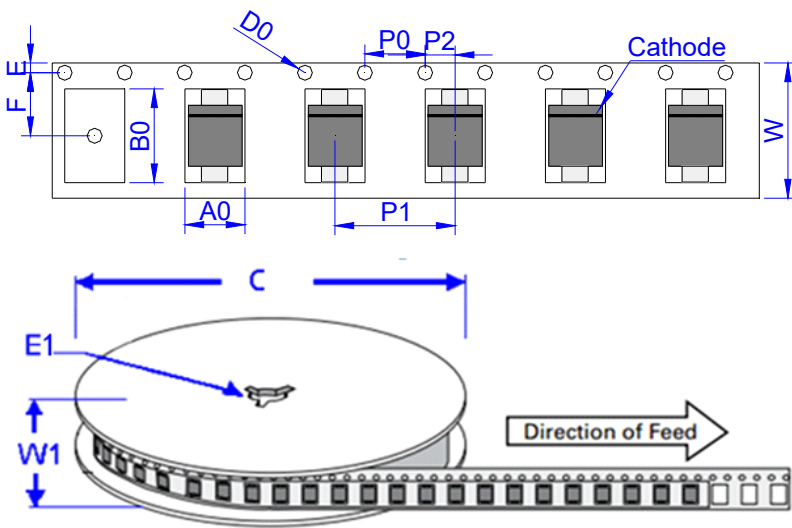
MARKING


3	$I_{F(AV)}:3A$
10	$V_{RRM}:100V$
*	Chip code

PACKAGE MECHANICAL DATA


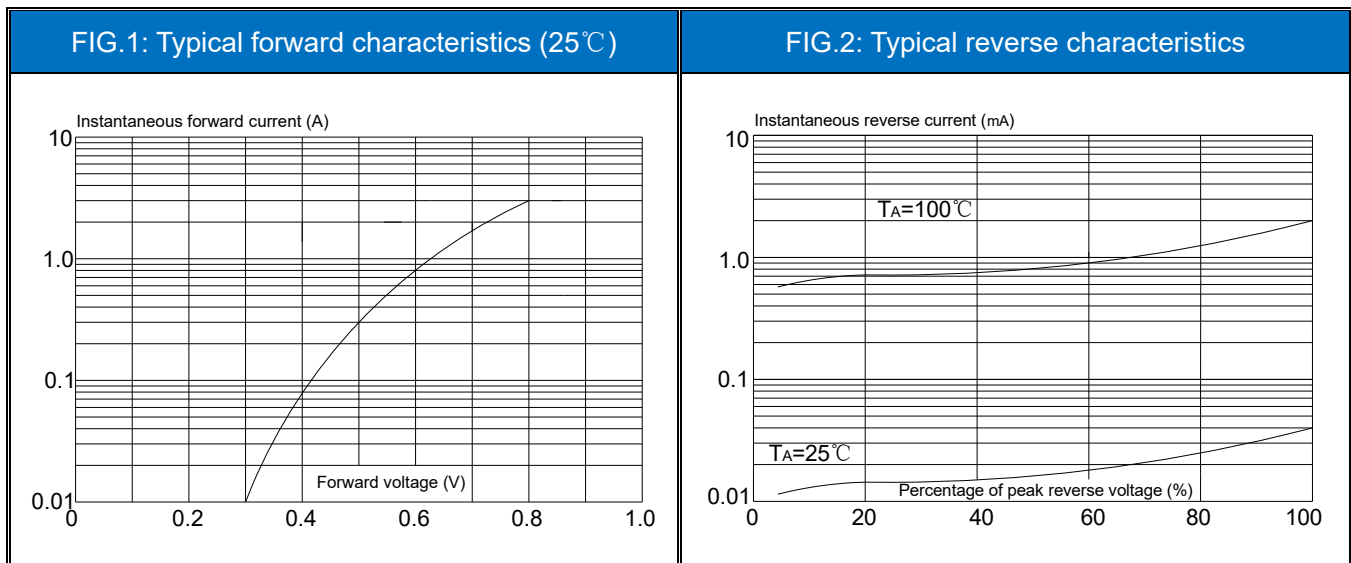
SOD-123FL

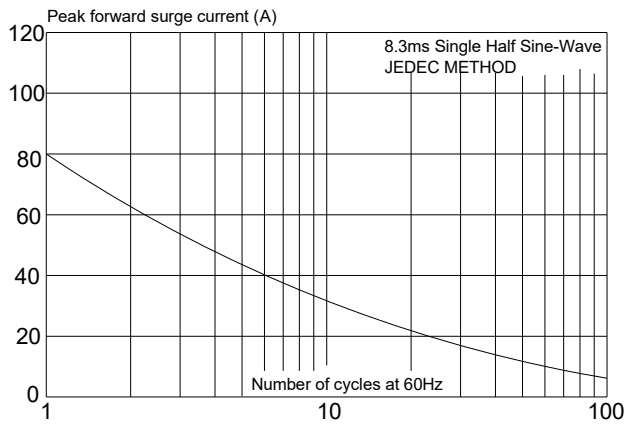
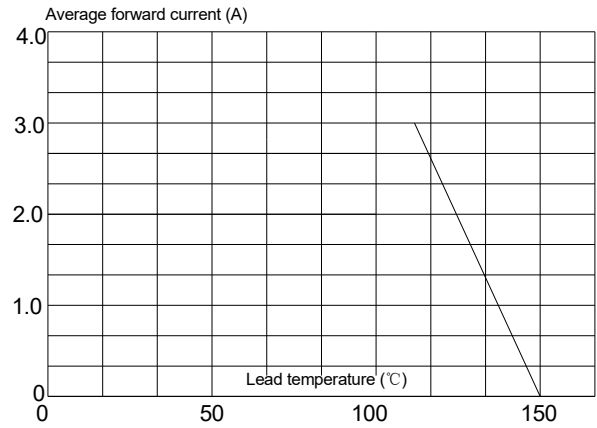
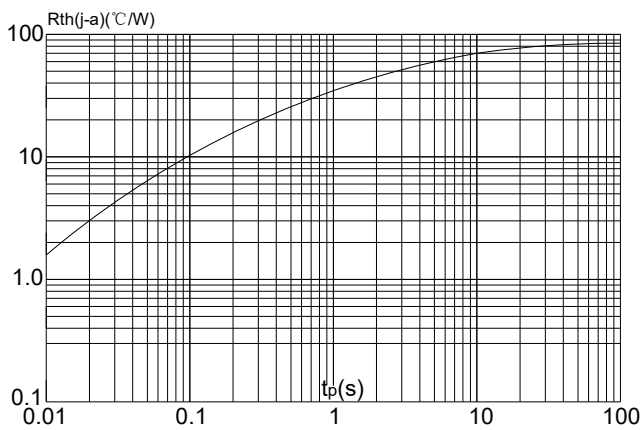
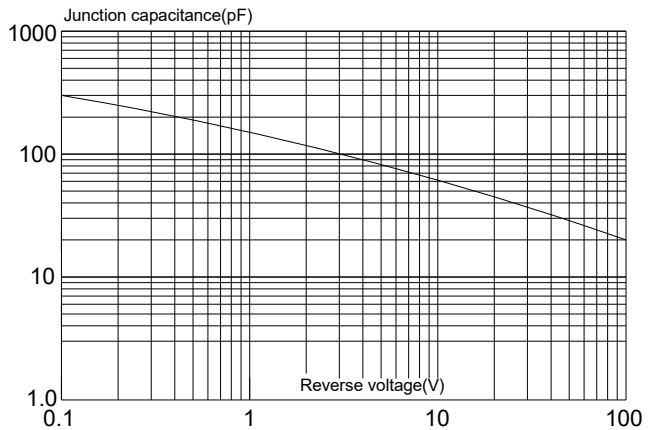
Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	2.60	3.00	0.102	0.118
B	1.60	2.00	0.063	0.079
C	3.45	3.95	0.136	0.156
D	0.10	0.25	0.004	0.01
E	0.3	0.9	0.012	0.035
F	0.80	1.20	0.031	0.047
G	0.95	1.35	0.037	0.053
J	1.30		0.051	
K		1.70		0.067
L	1.30		0.051	

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

PART No.	UNIT WEIGHT (g/PCS) typ.	REEL (PCS)	PER CARTON (PCS)	DESCRIPTION
JSPI3100A	0.0144	3,000	150,000	7 inch reel pack

CHARACTERISTICS CURVE


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

FIG.4: Forward current derating curve

FIG.5: Maximum transient thermal impedance

FIG.6: Typical junction capacitance



JieJie products are not designed for, and shall not be used for, any purpose (including, without limitation, automotive, military, aerospace, medical, life-saving, life-sustaining or nuclear facility applications, devices intended for surgical implant into the body, or any other application in which the failure or lack of desired operation of the product may result in personal injury, death, or property damage) other than those expressly set forth in applicable JieJie product documentation. Warranties granted by JieJie shall be deemed void for products used for any purpose not expressly set forth in applicable JieJie documentation. JieJie shall not be liable for any claims or damages arising out of products used in applications not expressly intended by JieJie as set forth in applicable JieJie documentation. The sale and use of JieJie products is subject to JieJie terms and conditions of sale, unless otherwise agreed by JieJie.

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 1.4th version which is made in 17-Oct.-2023. This document supersedes and replaces all information previously supplied.

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

Copyright ©2023 Jiangsu JieJie Microelectronics Co., Ltd. Printed All rights reserved.