

**FEATURES**

- For surface mounted applications
- Glass Passivated Chip Junction
- Fast reverse recovery time
- Ideal for automated placement
- Lead free in comply with EU RoHS 2011/65/EU directives



SOD-123F

**Absolute Maximum Ratings at 25°C**

Parameter	Symbols	BAS16H,115-JSM	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	250	V
Maximum RMS voltage	$V_{RMS}$	200	V
Continuous Forward Current	$I_F$	250	mA
Repetitive Peak Forward Current	$I_{FRM}$	625	mA
Non-reptitive Peak Forward Surge Current at 1s at 1ms at 1 us	$I_{FSM}$	139	A
Total Power Dissipation	$P_{tot}$	500	mW
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150	°C

**Characteristics at  $T_a = 25\text{ °C}$** 

Parameter	Symbols	BAS16H,115-JSM	Units
Reverse Breakdown Voltage at $I_R=100\mu A$	$V_{(BR)R}$	250	V
Maximum Forward Voltage at 100 m A at 200 m A	$V_F$	1.00 1.25	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25\text{ °C}$ $T_a = 150\text{ °C}$	$I_R$	0.1 100	$\mu A$
Typical Junction Capacitance at $V_R=4V, f=1MHz$	$C_j$	5	pF
Maximum Reverse Recovery Time	$t_{rr}$	50	ns

Fig.1 Forward Current Derating Curve

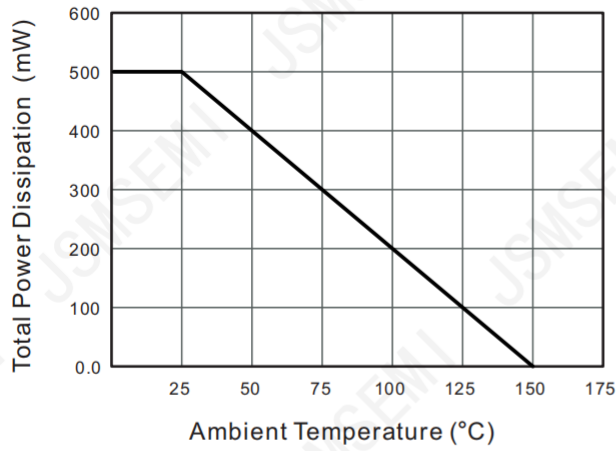


Fig.2 Typical Reverse Characteristics

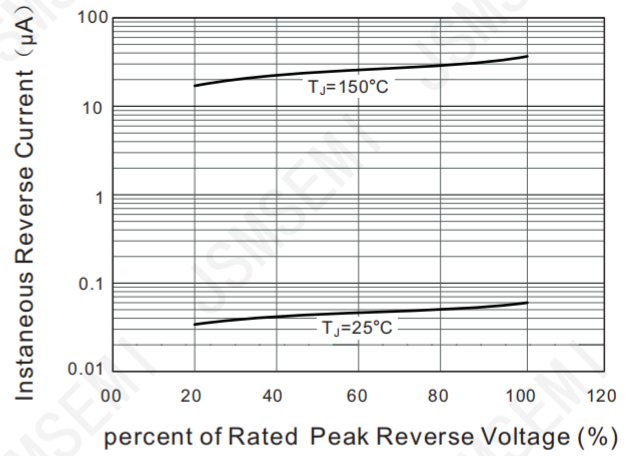


Fig.3 Typical Instantaneous Forward Characteristics

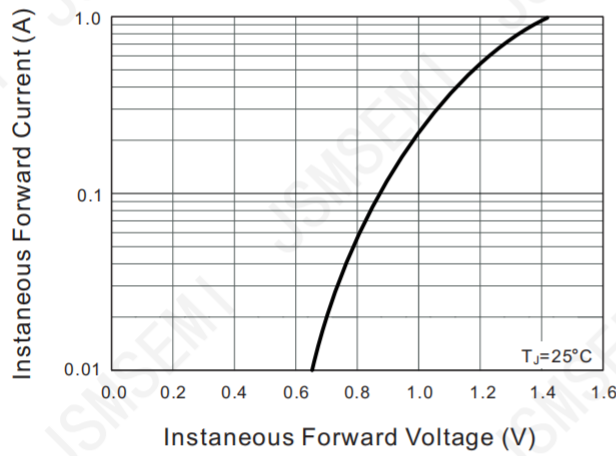
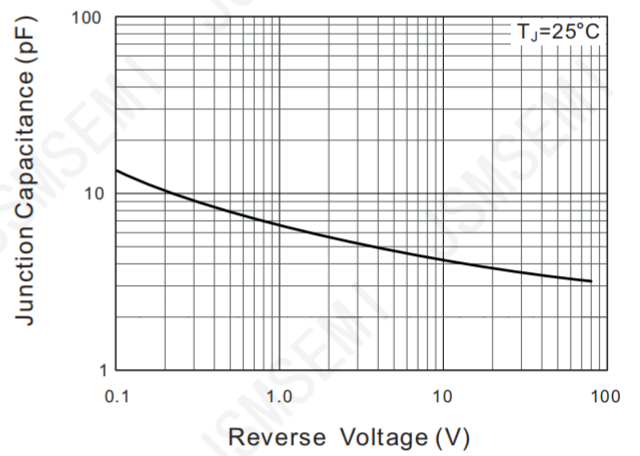
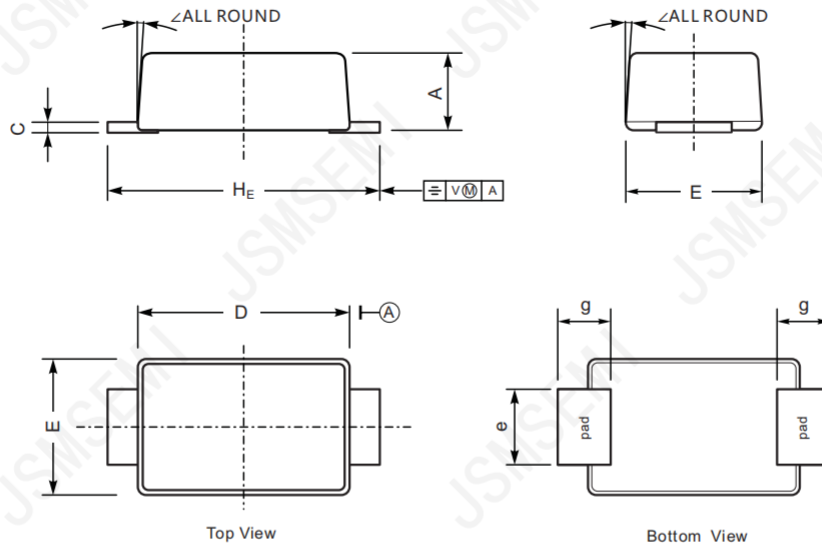


Fig.4 Typical Junction Capacitance

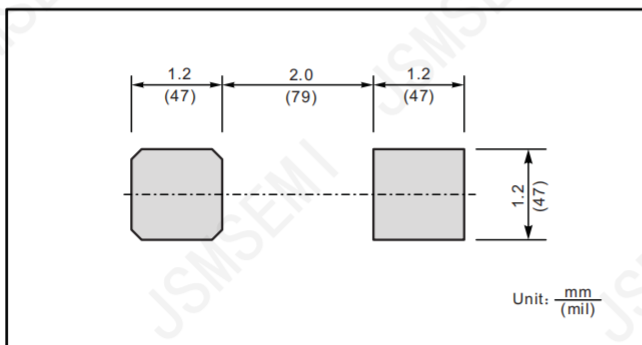


■ SOD-123FL



UNIT		A	C	D	E	e	g	H <sub>E</sub>	$\angle$
mm	max	1.1	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	
	min	35	4.7	102	67	31	28	138	

■ The recommended mounting pad size



## Revision History

Rev.	Change	Date
V1.0	Initial version	2/23/2024

## Important Notice

JSMSEMI Semiconductor (JSMSEMI) PRODUCTS ARE NEITHER DESIGNED NOR INTENDED FOR USE IN MILITARY AND/OR AEROSPACE, AUTOMOTIVE OR MEDICAL DEVICES OR SYSTEMS UNLESS THE SPECIFIC JSMSEMI PRODUCTS ARE SPECIFICALLY DESIGNATED BY JSMSEMI FOR SUCH USE. BUYERS ACKNOWLEDGE AND AGREE THAT ANY SUCH USE OF JSMSEMI PRODUCTS WHICH JSMSEMI HAS NOT DESIGNATED FOR USE IN MILITARY AND/OR AEROSPACE, AUTOMOTIVE OR MEDICAL DEVICES OR SYSTEMS IS SOLELY AT THE BUYER' S RISK.

JSMSEMI assumes no liability for application assistance or customer product design. Customers are responsible for their products and applications using JSMSEMI products.

Resale of JSMSEMI products or services with statements diferent from or beyond the parameters stated by JSMSEMI for that product or service voids all express and any implied warranties for the associated JSMSEMI product or s ervice. JSMSEMI is not responsible or liable for any such statements.

JSMSEMI All Rights Reserved. Information and data in this document are owned by JSMSEMI wholly and may not be edited, reproduced, or redistributed in any way without the express written consent from JSMSEMI.

Any and all information described or contained herein are subject to change without notice due to product/technology improvement, etc. When designing equipment, refer to the "Delivery Specification" for the JSMSEMI product that you intend to use.

For additional information please contact [Kevin@jsmsemi.com](mailto:Kevin@jsmsemi.com) or visit [www.jsmsemi.com](http://www.jsmsemi.com)