

## 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

## MECHANICAL DATA

- Case: SOD-123FL
- Approx. Weight: 15mg 0.00053oz

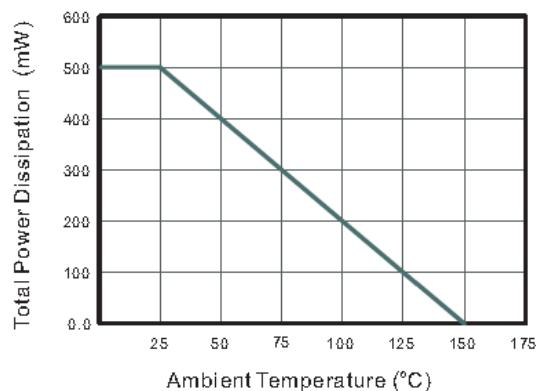
## Absolute Maximum Ratings at 25 °C

Parameter	Symbols	BAV19WL	BAV20WL	BAV21WL	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	120	200	250	V
Maximum RMS voltage	$V_{RMS}$	100	150	200	V
Continuous Forward Current	$I_F$		250		mA
Repetitive Peak Forward Current	$I_{FRM}$		625		mA
Non-repetitive Peak Forward Surge Current at 1s at 1ms at 1 us	$I_{FSM}$		1 3 9		A
Total Power Dissipation	$P_{tot}$		500		mW
Operating and Storage Temperature Range	$T_j, T_{stg}$		-55 ~ +150		°C

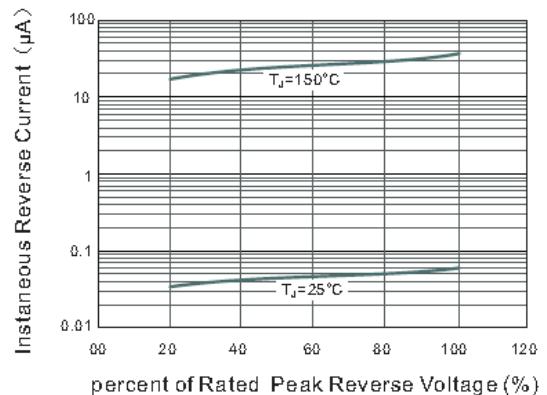
## Characteristics at Ta = 25 °C

Parameter	Symbols	BAV19WL	BAV20WL	BAV21WL	Units
Reverse Breakdown Voltage at $I_R=100\mu A$	$V_{(BR)R}$	120	200	250	V
Maximum Forward Voltage at 100 mA at 200 mA	$V_F$		1.00 1.25		V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25\text{ }^{\circ}\text{C}$ $T_a = 150\text{ }^{\circ}\text{C}$	$I_R$		0.1 100		μA
Typical Junction Capacitance at $V_R=4V$ , $f=1MHz$	$C_J$		5		pF
Maximum Reverse Recovery Time	$t_{rr}$		50		ns

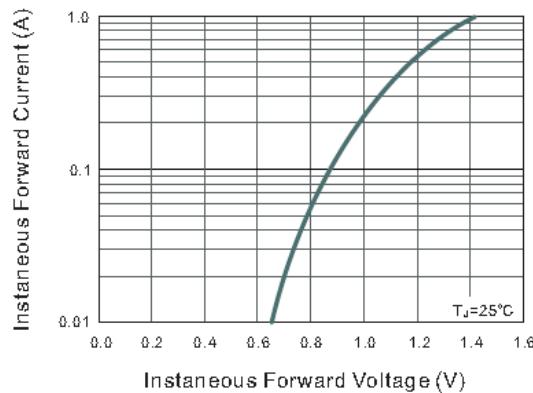
**Fig.1 Forward Current Derating Curve**



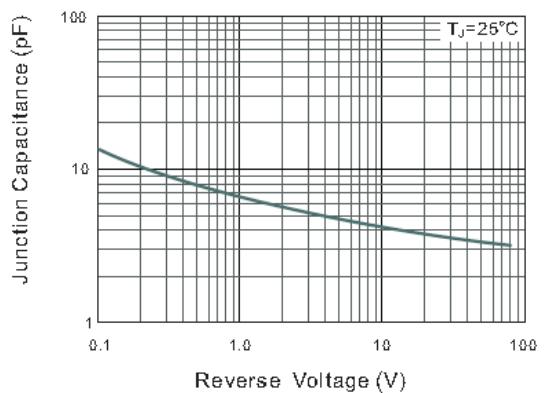
**Fig.2 Typical Reverse Characteristics**



**Fig.3 Typical Instantaneous Forward Characteristics**



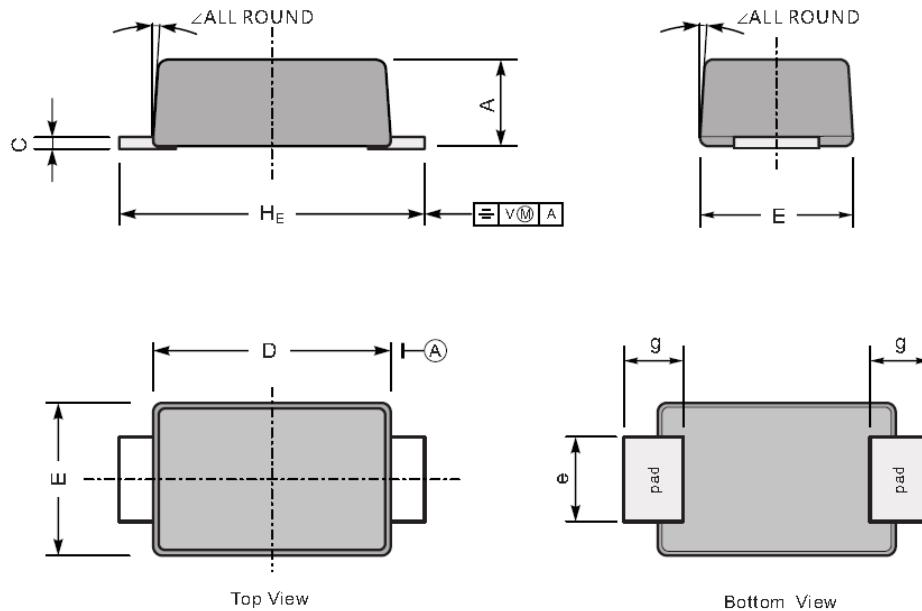
**Fig.4 Typical Junction Capacitance**



## PACKAGE OUTLINE

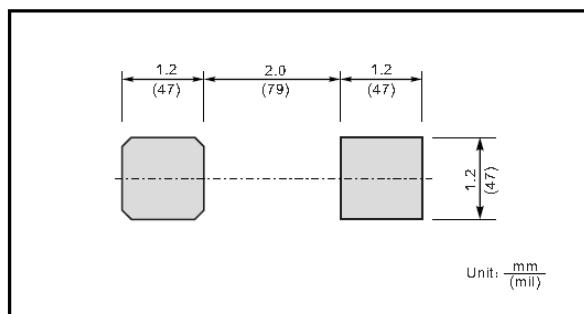
Plastic surface mounted package; 2 leads

SOD-123FL



UNIT		A	C	D	E	e	g	H <sub>E</sub>	∠
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	7°
	min	35	4.7	102	67	31	28	138	

### The recommended mounting pad size



### Marking

Type number	Marking code
BAV19WL	A8
BAV20WL	T2
BAV21WL	T3