



FEATURES

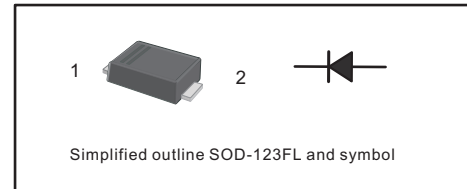
- For surface mounted applications
- Glass Passivated Chip Junction
- Fast reverse recovery time
- Ideal for automated placement
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

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

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings at 25 °C

Parameter	Symbols	BAV100WL	BAV101WL	BAV102WL	BAV103WL	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	60	120	200	250	V
Maximum RMS voltage	V_{RMS}	50	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 1us	I_{FSM}	1 3 9				A
Total Power Dissipation	P_{tot}	500				mW
Typical Thermal Resistance ⁽¹⁾	$R_{\theta JA}$	450				°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150				°C

(1) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

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

Parameter	Symbols	BAV100WL	BAV101WL	BAV102WL	BAV103WL	Units
Reverse Breakdown Voltage at $I_R=100\mu A$	$V_{(BR)R}$	60	120	200	250	V
Maximum Forward Voltage at 100 mA at 200 mA	V_F	1.00 1.25				V
Maximum DC Reverse Current $T_a = 25\text{ °C}$ at Rated DC Blocking Voltage $T_a = 100\text{ °C}$	I_R	0.1 15				μA
Typical Junction Capacitance at $V_R=4V, f=1MHz$	C_j	5				pF
Maximum Reverse Recovery Time	t_{rr}	50				ns



Fig.1 Power Derating Curve

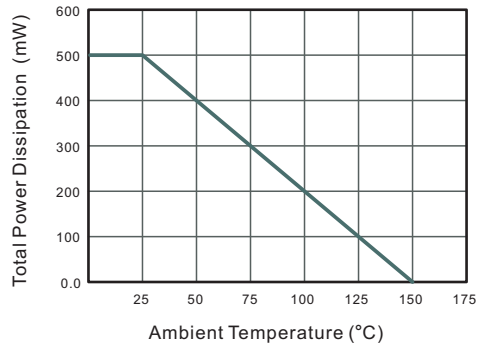


Fig.2 Typical Reverse Characteristics

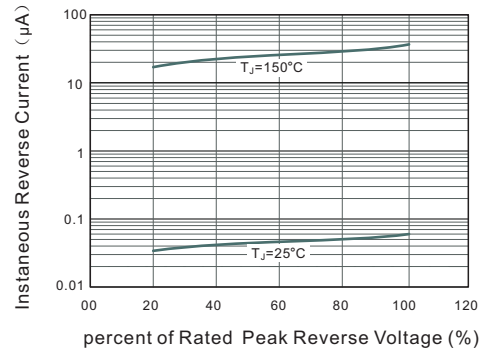


Fig.3 Typical Instantaneous Forward Characteristics

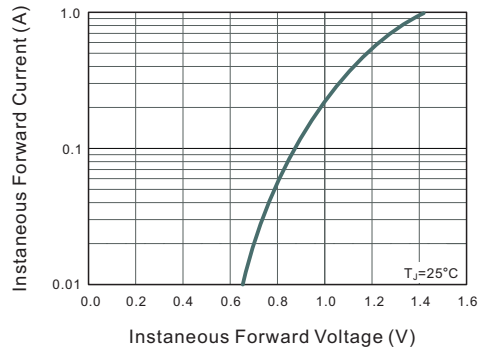
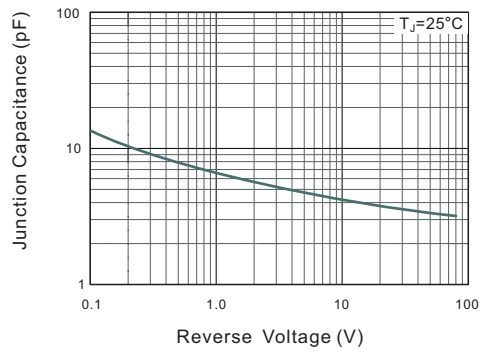


Fig.4 Typical Junction Capacitance

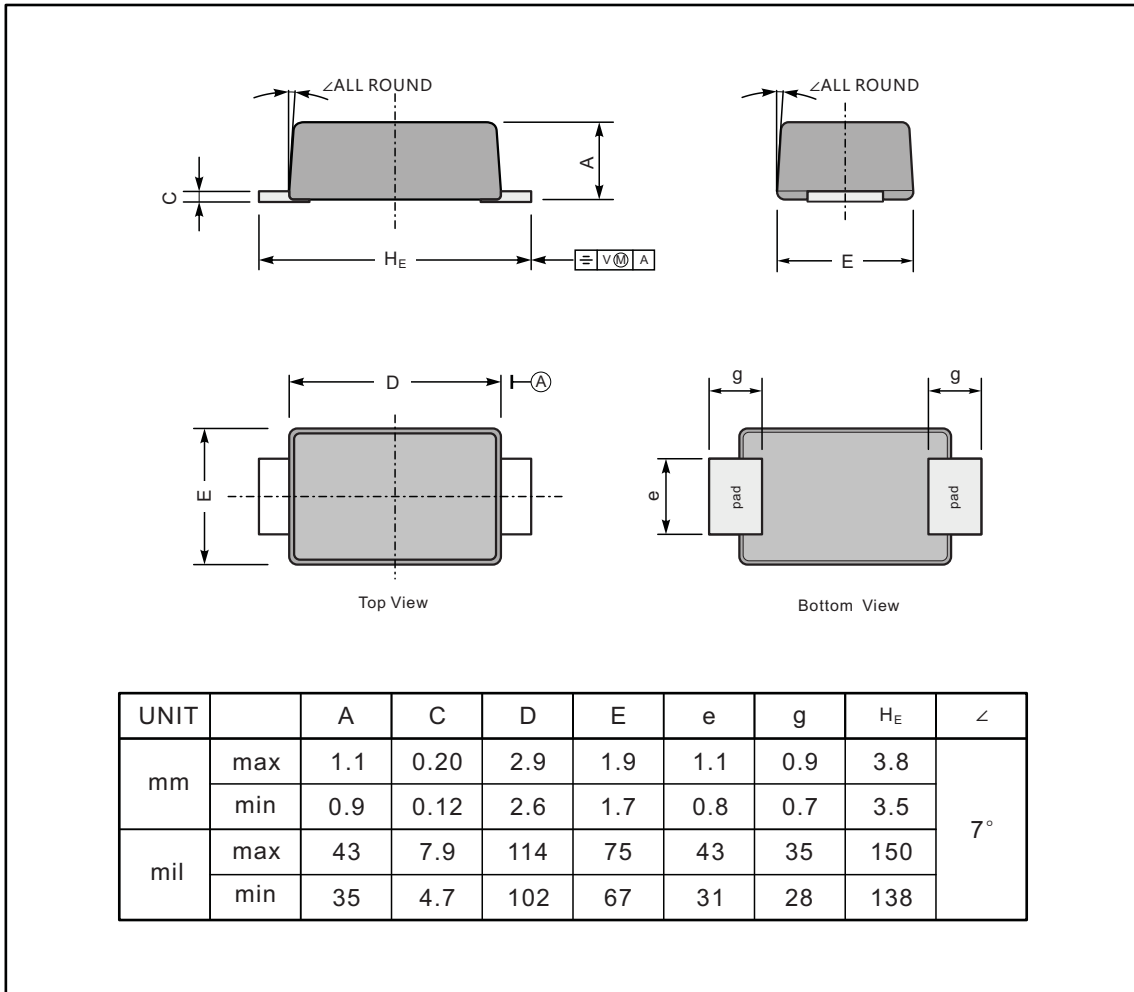




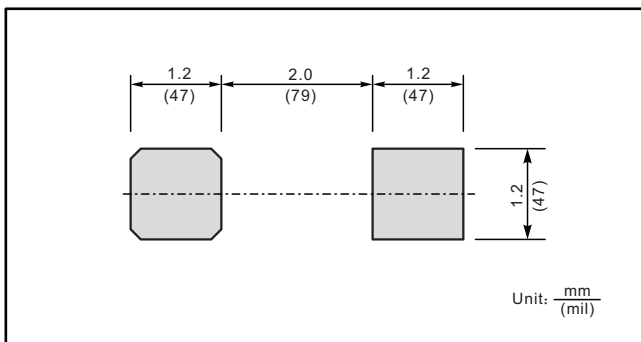
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123FL



The recommended mounting pad size



Marking

Type number	Marking code
BAV100WL	B100
BAV101WL	B101
BAV102WL	B102
BAV103WL	B103