



FEATURES

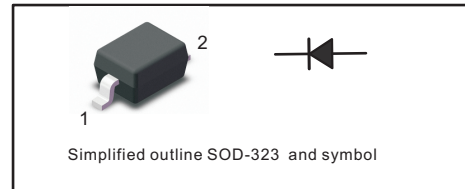
- For surface mounted applications
- Glass Passivated Chip Junction
- Fast reverse recovery time
- Ideal for automated placement
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- Case: SOD-323
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 5.48mg / 0.00019oz

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings at 25 °C

Parameter	Symbols	BAV100WS	BAV101WS	BAV102WS	BAV103WS	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-reptitive Peak Forward Surge Current at 1s at 1ms at 1 us	I_{FSM}	1 3 9				A
Total Power Dissipation	P_{tot}	500				mW
Typical Thermal Resistance ⁽¹⁾	$R_{\theta JA}$	550				°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	BAV100WS	BAV101WS	BAV102WS	BAV103WS	Units
Reverse Breakdown Voltage at $I_R = 100\mu A$	$V_{(BR)R}$	60	120	200	250	V
Maximum Forward Voltage at 100 m A at 200 m A	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 ⁽¹⁾	t_{rr}	50				ns

(1) Measured with $I_F = 0.5 A$, $I_R = 1 A$, $I_{rr} = 0.25 A$



Fig.1 Forward Current Derating Curve

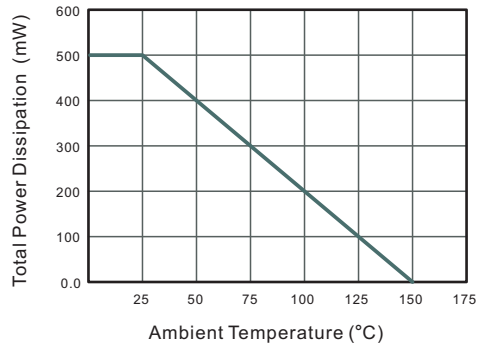


Fig.2 Typical Reverse Characteristics

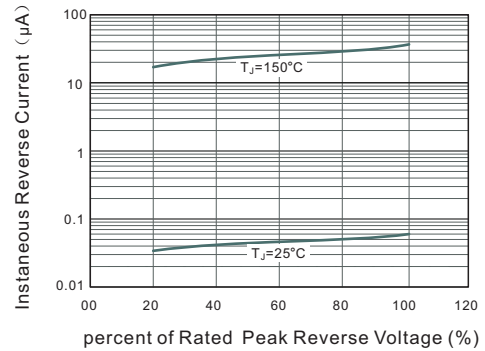


Fig.3 Typical Instaneous Forward Characteristics

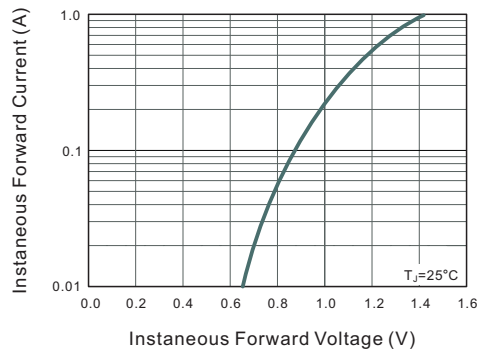
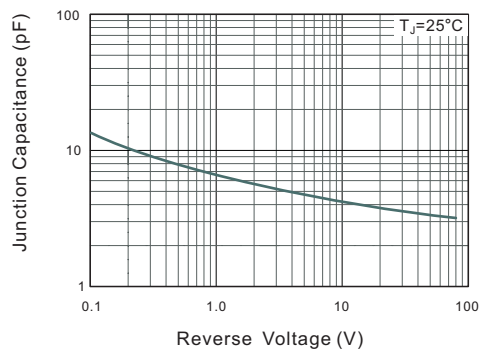


Fig.4 Typical Junction Capacitance

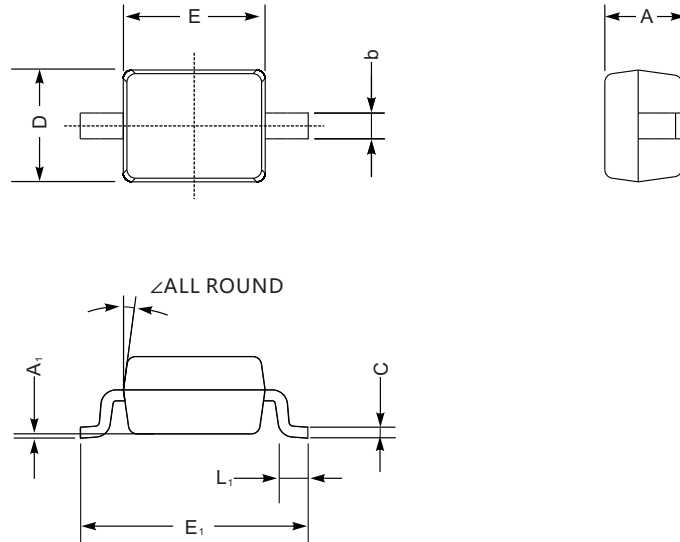




PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

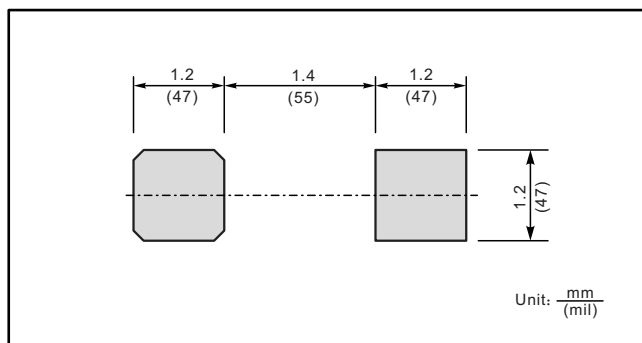
SOD-323



SOD-323 mechanical data

UNIT		A	C	D	E	E ₁	b	L ₁	A ₁	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	—	

The recommended mounting pad size



Marking

Type number	Marking code
BAV100WS	B100
BAV101WS	B101
BAV102WS	B102
BAV103WS	B103