BAV100W THRU BAV103W

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-123
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight:16mg/0.00056oz

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

Simplified outline SOD-123 and symbol

Absolute Maximum Ratings at 25 °C

Parameter	Symbols	BAV100W	BAV101W	BAV102W	BAV103W	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)	$R_{\theta JA}$	500				°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 °C

Parameter	Symbols	BAV100W	BAV101W	BAV102W	BAV103W	Units
Reverse BreakdownVoltage at I_R=100μA	$V_{(BR)R}$	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 °C at Rated DC Blocking Voltage T_a =100 °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 IF = 0.5 A, IR = 1 A, Irr = 0.25 A

Fig.1 Power Derating Curve

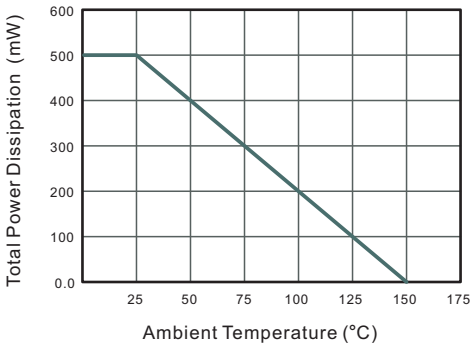


Fig.2 Typical Reverse Characteristics

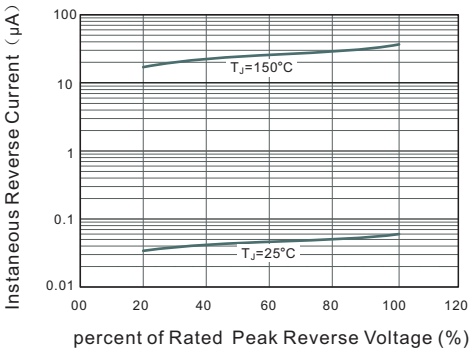


Fig.3 Typical Instaneous Forward Characteristics

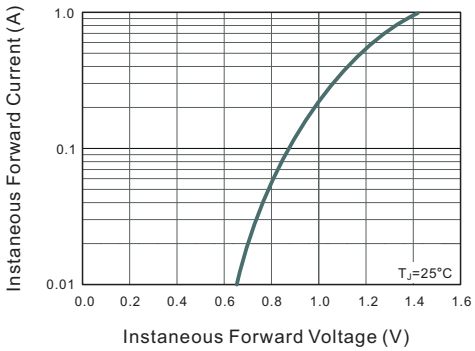
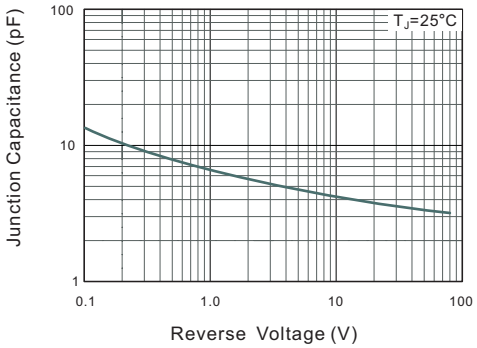


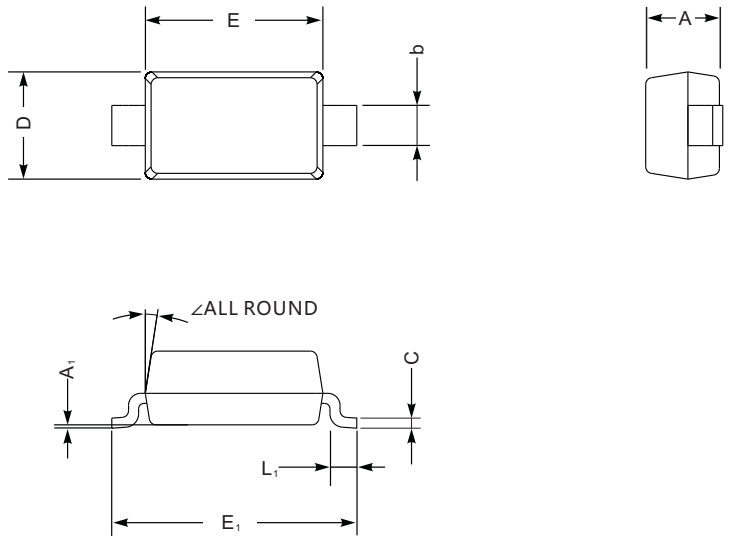
Fig.4 Typical Junction Capacitance



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

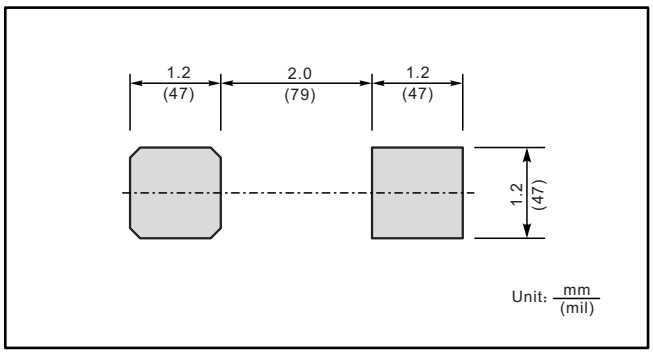
SOD-123



SOD-123 mechanical data

UNIT		A	C	D	E	E_1	L_1	b	A_1	∠
mm	max	1.3	0.22	1.8	2.8	3.9	0.45	0.7	0.2	9°
	min	0.9	0.09	1.5	2.5	3.6	0.25	0.5	—	
mil	max	51	8.7	71	110	154	18	28	8	
	min	35	3.5	59	98	142	10	20	—	

The recommended mounting pad size



Marking

Type number	Marking code
BAV100W	B100
BAV101W	B101
BAV102W	B102
BAV103W	B103