

SOD-123
RoHS
COMPLIANT

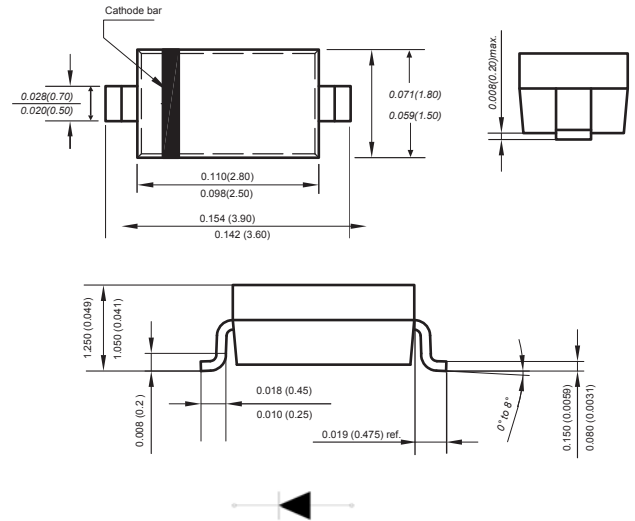
Pb
Pb-Free

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



Dimensions in inches and (millimeters)

Absolute Maximum Ratings at 25 °C

Parameter	Symbols	BAV19W	BAV20W	BAV21W	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-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
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150			°C

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

Parameter	Symbols	BAV19W	BAV20W	BAV21W	Units
Reverse Breakdown Voltage at $I_R=100\mu A$	$V_{(BR)R}$	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 $T_a = 150\text{ °C}$	I_R	0.1 100			μA
Typical Junction Capacitance at $V_R=4V, f=1MHz$	C_j	5			pF
Maximum Reverse Recovery Time ⁽¹⁾	t_{rr}	50			ns

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

Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

Fig.1 Forward Current Derating Curve

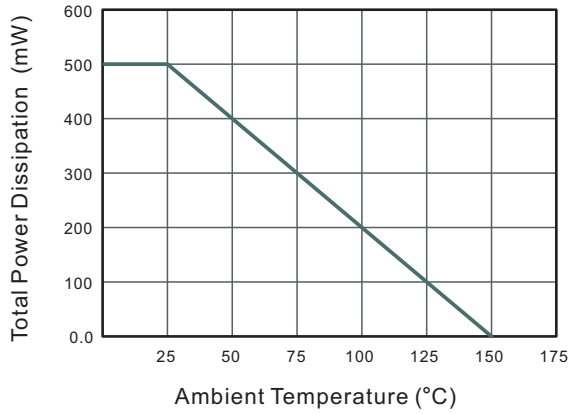


Fig.2 Typical Reverse Characteristics

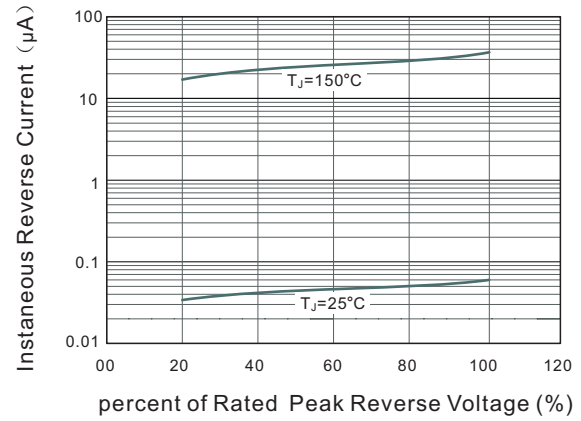


Fig.3 Typical Instantaneous Forward Characteristics

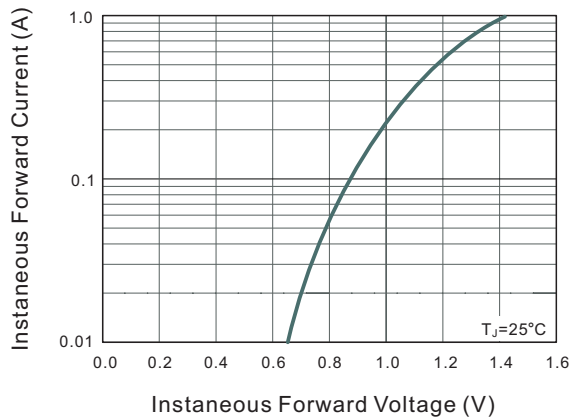
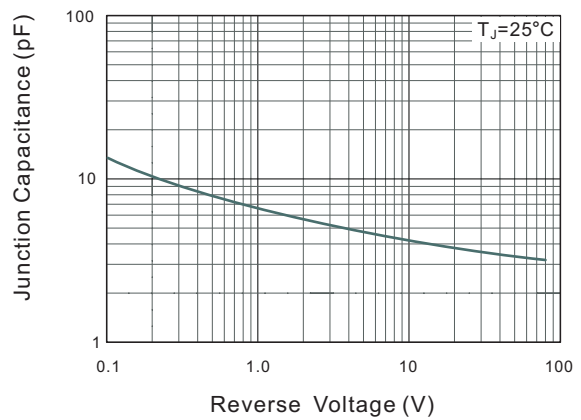
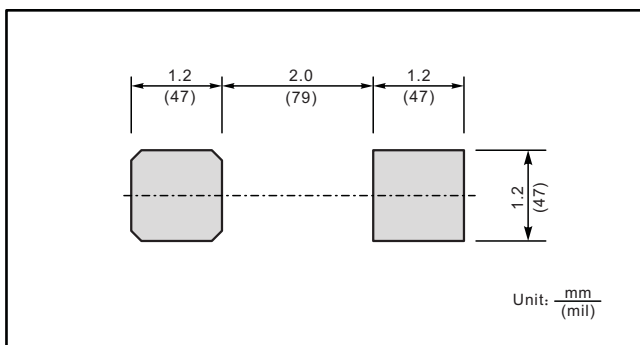


Fig.4 Typical Junction Capacitance



The recommended mounting pad size



Marking

Type number	Marking code
BAV19W	A8
BAV20W	T2
BAV21W	T3