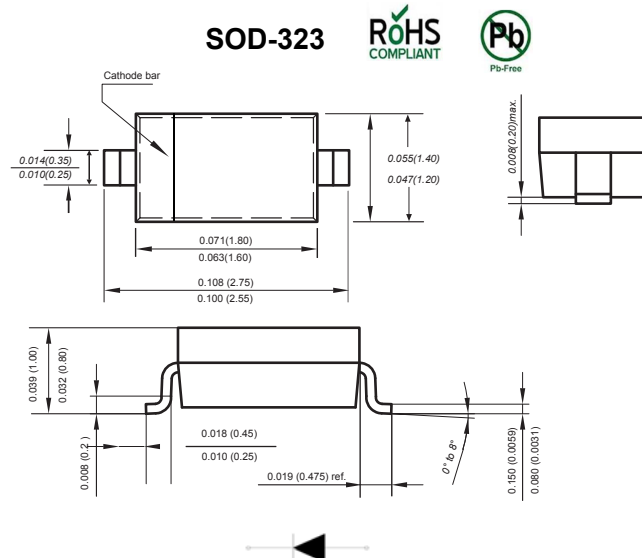


Features

- 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



Absolute Maximum Ratings at 25°C

Dimensions in inches and (millimeters)

Parameter	Symbols	BAV19WS	BAV20WS	BAV21WS	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 1us	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 $T_a = 25^\circ\text{C}$

Parameter	Symbols	BAV19WS	BAV20WS	BAV21WS	Units
Reverse Breakdown Voltage at $I_R=100\mu\text{A}$	$V_{(BR)R}$	120	200	250	V
Maximum Forward Voltage at 100 mA at 200 mA	V_F	1.00 1.25			V
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Blocking Voltage $T_a = 150^\circ\text{C}$	I_R	0.1 100			μA
Typical Junction Capacitance at $V_R=4\text{V}$, $f=1\text{MHz}$	C_j	5			pF
Maximum Reverse Recovery Time ⁽¹⁾	t_{rr}	50			ns

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



BAV19WS~BAV21WS

High Voltage Switching Diode

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

Fig.1 Forward Current Derating Curve

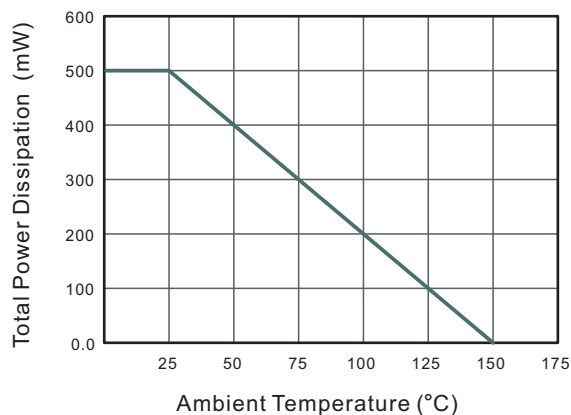


Fig.2 Typical Reverse Characteristics

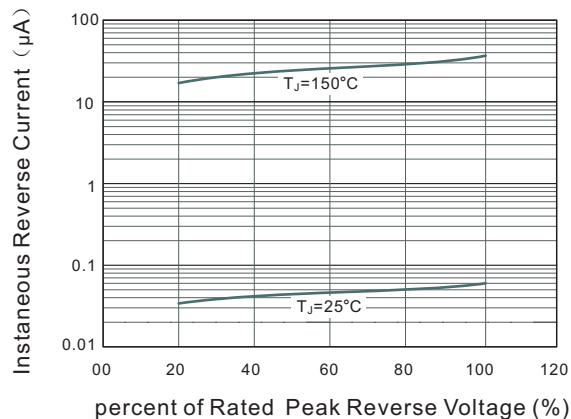


Fig.3 Typical Instantaneous Forward Characteristics

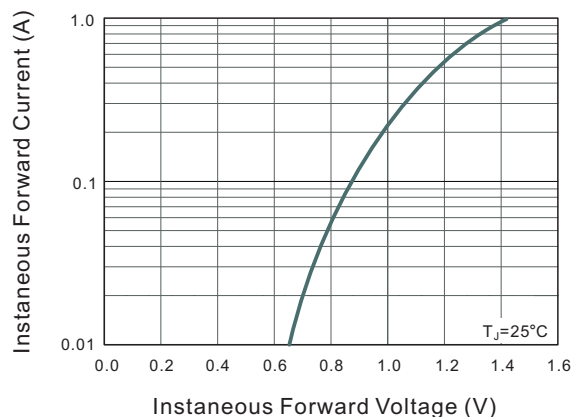
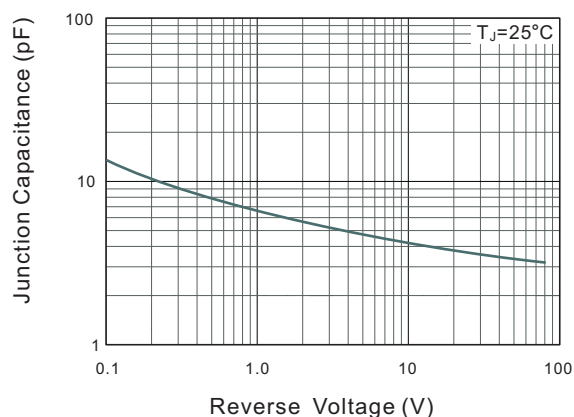
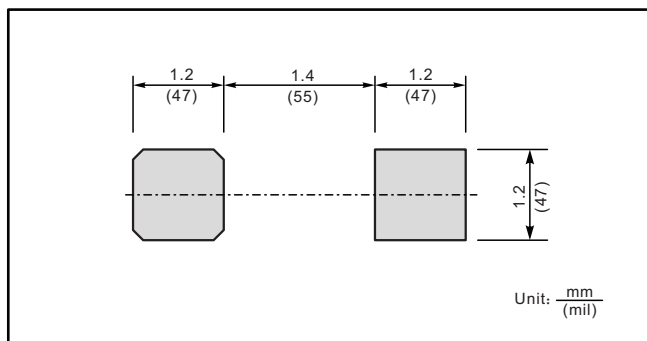


Fig.4 Typical Junction Capacitance



The recommended mounting pad size



Marking

Type number	Marking code
BAV19WS	A8
BAV20WS	T2
BAV21WS	T3