

# BAV19S / BAV20S / BAV21S

## HIGH VOLTAGE SWITCHING DIODE

### FEATURES

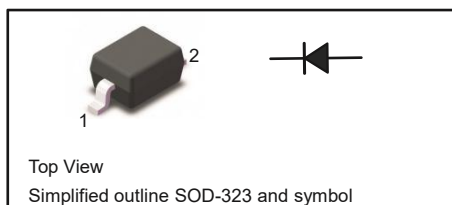
- ◆ For surface mounted applications
- ◆ Glass Passivated Chip Junction
- ◆ Fast reverse recovery time
- ◆ Ideal for automated placement
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives

### MECHANICAL DATA

- ◆ Case: SOD-323
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



### ABSOLUTE MAXIMUM RATINGS (at $T_a = 25\text{ }^\circ\text{C}$ )

PARAMETER	SYMBOLS	BAV19S	BAV20S	BAV21S	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	$I_{FSM}$	1 3 9			A
Total Power Dissipation	$P_{tot}$	500			mW
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150			$^\circ\text{C}$

### CHARACTERISTICS (at $T_a = 25\text{ }^\circ\text{C}$ )

PARAMETER	SYMBOLS	BAV19S	BAV20S	BAV21S	UNITS
Reverse Breakdown Voltage	$V_{(BR)R}$	120	200	250	V
Maximum Forward Voltage	$V_F$	1.00 1.25			V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	0.1 100			$\mu\text{A}$
Typical Junction Capacitance at $V_R=4\text{V}$ , $f=1\text{MHz}$	$C_j$	5			pF
Maximum Reverse Recovery Time	$t_{rr}$	50			ns

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## RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

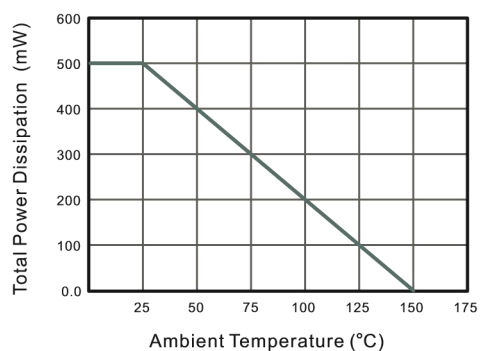


Fig.2 Typical Reverse Characteristics

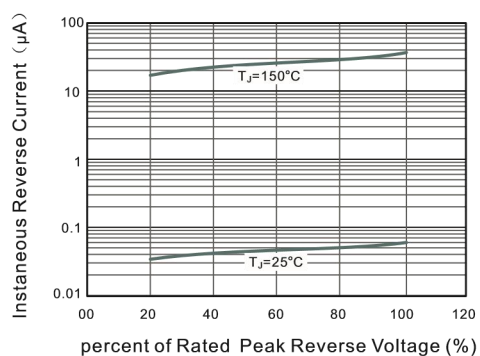


Fig.3 Typical Instantaneous Forward Characteristics

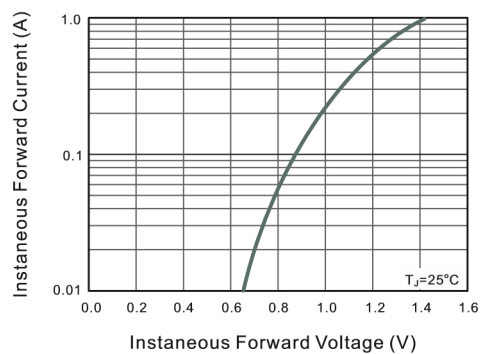
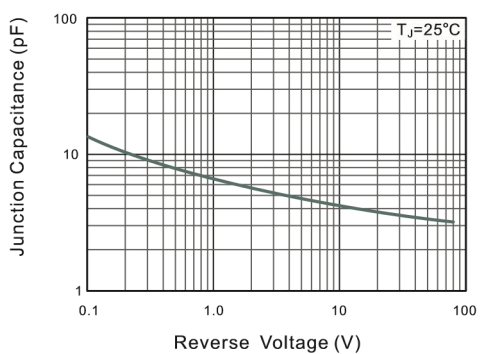


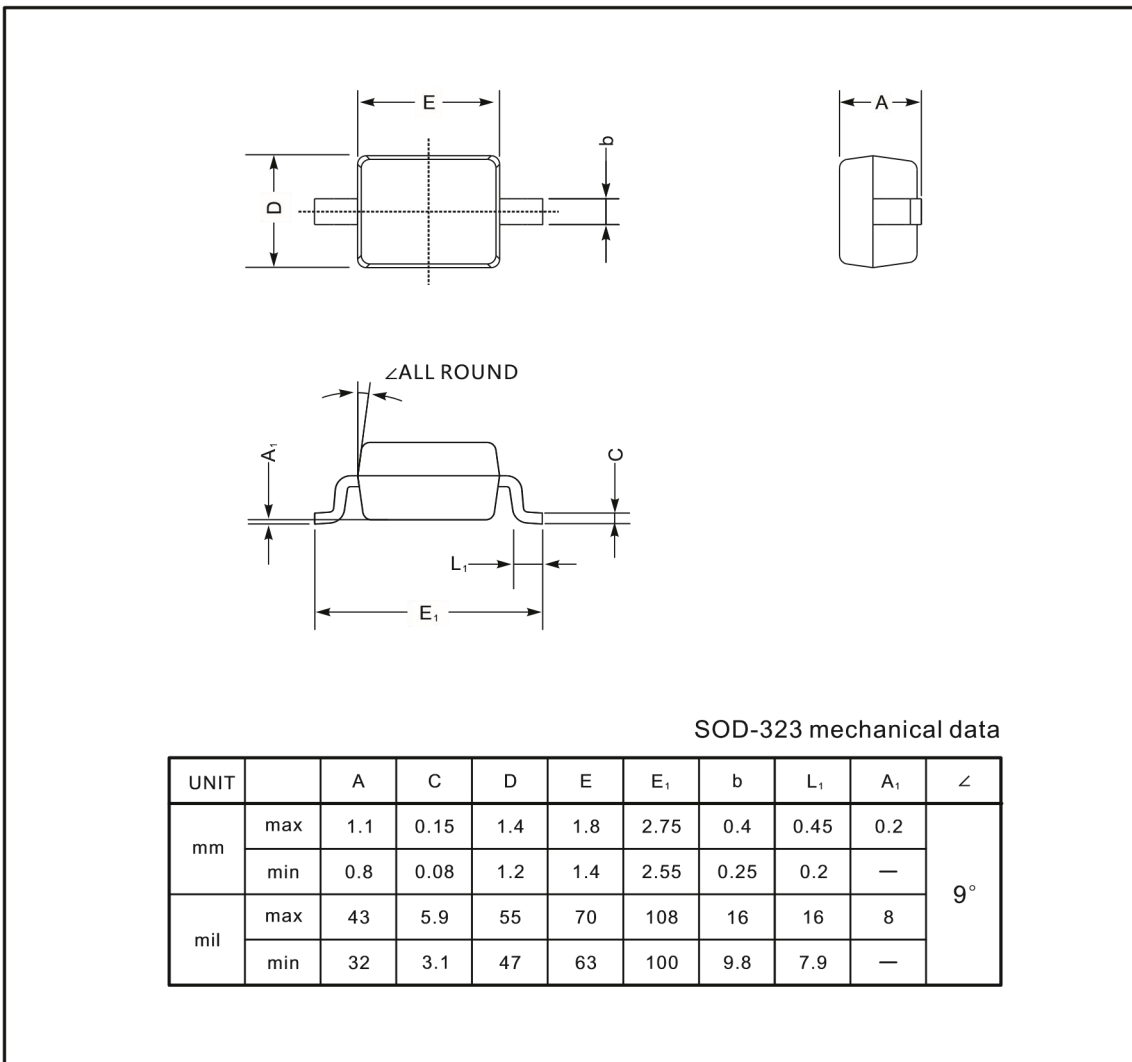
Fig.4 Typical Junction Capacitance



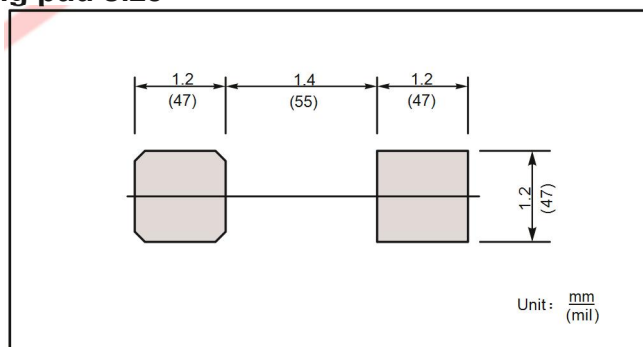
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## PACKAGE OUTLINE

SOD-323



### The recommended mounting pad size



### ORDERING INFORMATION

Device	Package	Shipping
BAV19S/BAV20S/BAV21S	SOD-323	3000PCS/Reel(7inch)

Dated: 02/2017  
Rev:1.0