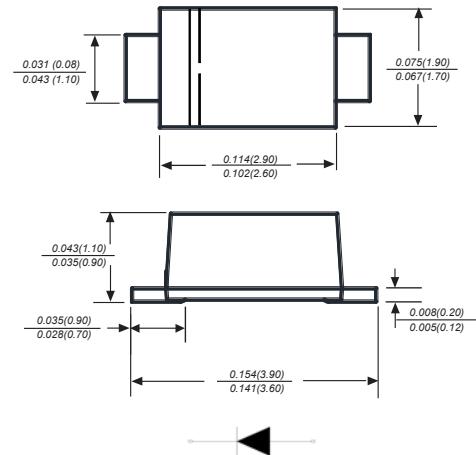


### Features

- 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 directive

### 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	$I_{FSM}$	1 3 9			A
at 1s at 1ms at 1 us					
Total Power Dissipation	$P_{tot}$	500			mW
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150			°C

### Characteristics at $T_a = 25 °C$

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	$V_F$	1.00 1.25			V
at 100 m A at 200 m A					
Maximum DC Reverse Current	$I_R$	0.1 100			$\mu A$
$T_a = 25 °C$ at Rated DC Blocking Voltage $T_a = 150 °C$					
Typical Junction Capacitance	$C_j$	5			pF
at $V_R=4V, f=1MHz$					
Maximum Reverse Recovery Time <sup>(1)</sup>	$t_{rr}$	50			ns

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

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

Fig.1 Forward Current Derating Curve

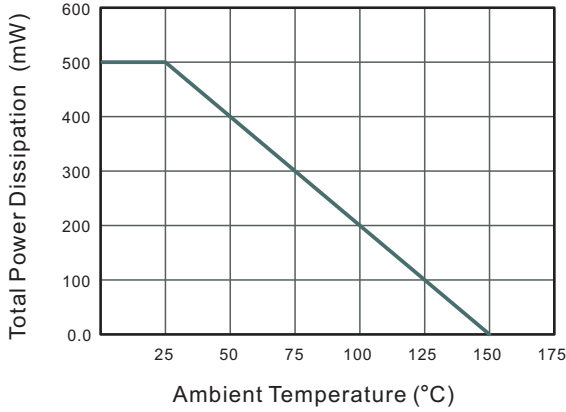


Fig.2 Typical Reverse Characteristics

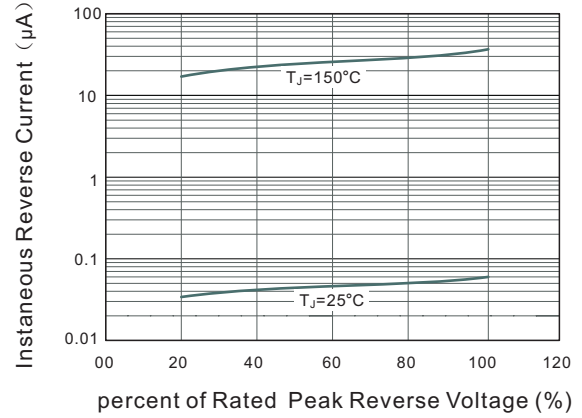


Fig.3 Typical Instantaneous Forward Characteristics

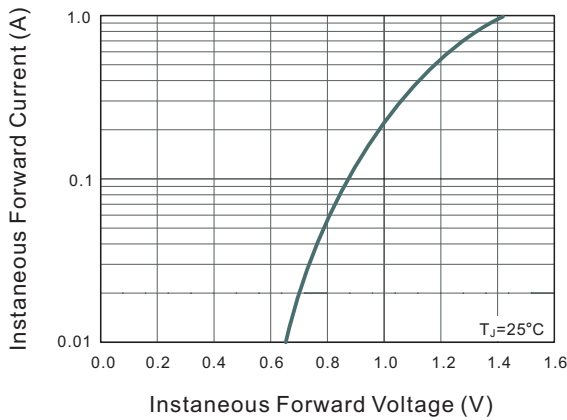
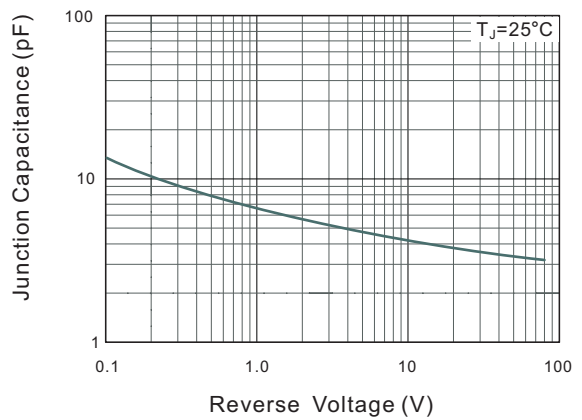
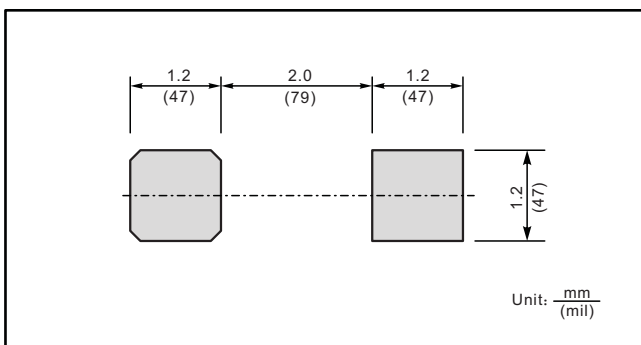


Fig.4 Typical Junction Capacitance



### The recommended mounting pad size



### Marking

Type number	Marking code
BAV19W	A8
BAV20W	T2
BAV21W	T3