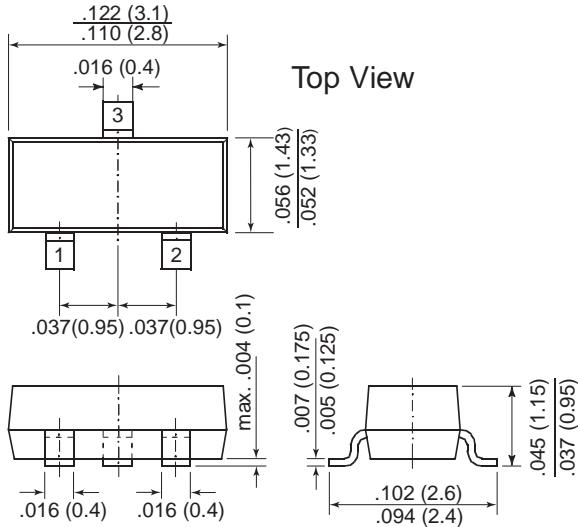
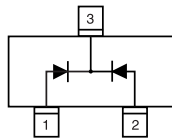


## Dual Small-Signal Diode


**TO-236AB (SOT-23)**


Dimensions in inches and (millimeters)

**Marking Code: JJ**


### Features

- Silicon Epitaxial Planar Diode
- Fast switching dual diode with common cathode
- This diode is also available in other configurations including: a dual common anode to cathode with type designation BAV99, a dual common anode with type designation BAW56, and a single diode with type designation BAL99.

### Mechanical Data

**Case:** SOT-23 Plastic Package

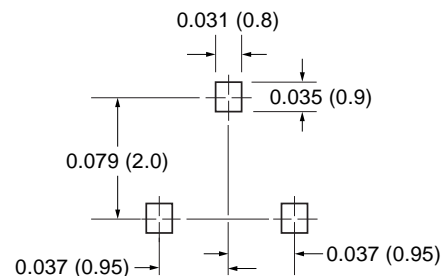
**Weight:** approx. 0.008g

**Packaging Codes/Options:**

E8/10K per 13" reel (8mm tape), 30K/box

E9/3K per 7" reel (8mm tape), 30K/box

### Mounting Pad Layout



### Maximum Ratings and Thermal Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Reverse Voltage, Peak Reverse Voltage	V <sub>R</sub> , V <sub>RM</sub>	70	V
Forward Current (continuous)	I <sub>F</sub>	250	mA
Non-repetitive Peak Forward Current	I <sub>FSM</sub>	2	A
at t = 1μs		1	
at t = 1ms		0.5	
Power Dissipation at T <sub>amb</sub> = 25°C	P <sub>tot</sub>	350 <sup>(1)</sup>	mW
Thermal Resistance Junction to Ambient Air	R <sub>θJA</sub>	430 <sup>(1)</sup>	°C/W
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>s</sub>	-65 to +150	°C

**Note:**

(1) Device on Fiberglass substrate, see layout on second page.

**Electrical Characteristics** ( $T_J = 25^\circ\text{C}$  unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Forward Voltage	$V_F$	at $I_F = 1\text{mA}$	—	—	0.715	V
		at $I_F = 10\text{mA}$	—	—	0.855	
		at $I_F = 50\text{mA}$	—	—	1.0	
		at $I_F = 150\text{mA}$	—	—	1.25	
Leakage Current	$I_R$	$V_R = 70\text{V}$	—	—	2.5	$\mu\text{A}$
		$V_R = 70\text{V}, T_J = 150^\circ\text{C}$	—	—	100	
		$V_R = 25\text{V}, T_J = 150^\circ\text{C}$	—	—	30	
Capacitance	$C_{tot}$	$V_F = V_R = 0$ $f = 1\text{MHz}$	—	—	1.5	pF
Reverse Recovery Time	$t_{rr}$	$I_F = 10\text{mA}, I_R = 10\text{mA}$ $I_{rr} = 1\text{mA}, R_L = 100\Omega$	—	—	6	ns

**Layout for R $\theta$ JA test**

Thickness: Fiberglass 0.059 in. (1.5 mm)  
Copper leads 0.012 in. (0.3 mm)

