

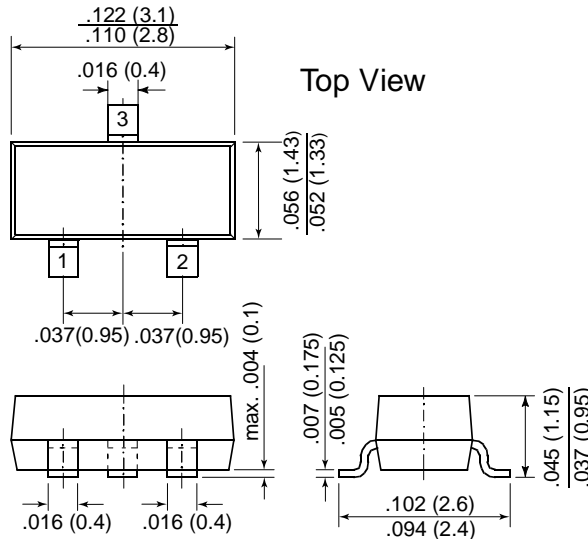
Signal Diodes

Order code	Manufacturer code	Description
73-0170	n/a	BAV99 DUAL SWITCH DIODE (3000)

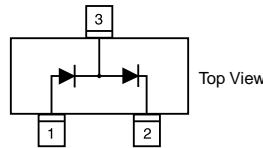
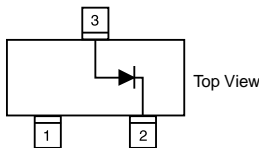
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The enclosed information is believed to be correct, Information may change 'without notice' due to product improvement. Users should ensure that the product is suitable for their use. E. & O. E.	Revision A 04/07/2003



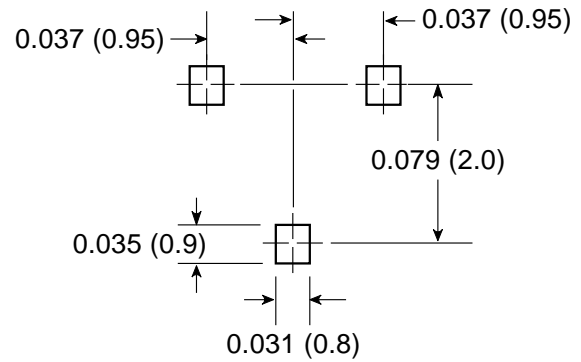
TO-236AB (SOT-23)



Dimensions in inches and (millimeters)



Mounting Pad Layout



Features

- Silicon Epitaxial Planar Diode
- Fast switching diodes, especially suited for automatic insertion
- This diode is also available in other configurations including a dual common anode with type designation BAW56

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

Maximum Ratings and Thermal Characteristics (T_A = 25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Reverse Voltage, Peak Reverse Voltage	V _R , V _{RM}	70	V
Forward Current (continuous)	I _F	250	mA
Non-Repetitive Peak Forward Current at t = 1μs	I _{FSM}	2	A
at t = 1ms	I _{FSM}	1	A
at t = 1s	I _{FSM}	0.5	A
Power Dissipation at T _{amb} = 25°C	P _{tot}	350 ⁽¹⁾	mW
Thermal Resistance Junction to Ambient Air	R _{θJA}	430 ⁽¹⁾	°C/W
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _s	-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	V
		at $I_F = 50\text{mA}$	—	—	1.0	V
		at $I_F = 150\text{mA}$	—	—	1.25	V
Leakage Current	I_R	$V_R = 70\text{V}$	—	—	2.5	μA
		$V_R = 70\text{V}, T_J = 150^\circ\text{C}$	—	—	100	μA
		$V_R = 25\text{V}, T_J = 150^\circ\text{C}$	—	—	30	μA
Capacitance	C_{iss}	$V_F = V_R = 0$ $f = 1\text{MHz}$	—	—	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

(1) Device on fiberglass substrate, see layout

Layout for R_{thJA} test

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

