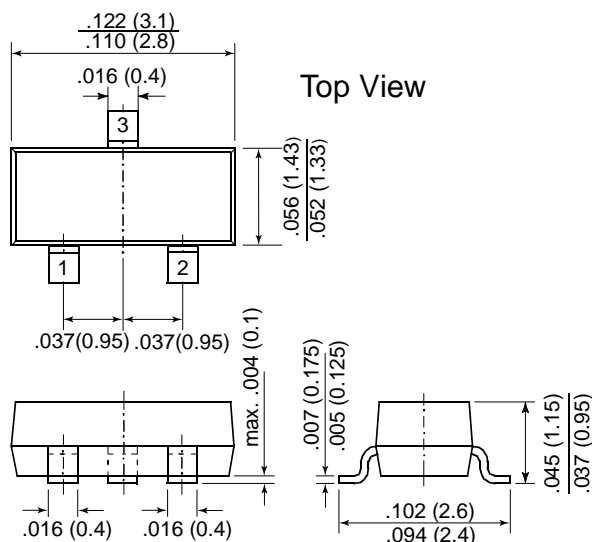




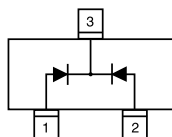
Dual Small-Signal Diode

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

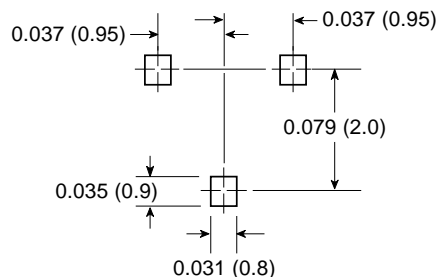
Weight: approx. 0.008g

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_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 at t = 1ms at t = 1s	I_{FSM}	2 1 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.

Dual Small-Signal Diode

Electrical Characteristics (T_J = 25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Forward Voltage	V _F	at I _F = 1mA	—	—	0.715	V
		at I _F = 10mA	—	—	0.855	
		at I _F = 50mA	—	—	1.0	
		at I _F = 150mA	—	—	1.25	
Leakage Current	I _R	V _R = 70V	—	—	2.5	μA
		V _R = 70V, T _J = 150°C	—	—	100	
		V _R = 25V, T _J = 150°C	—	—	30	
Capacitance	C _{tot}	V _F = V _R = 0 f = 1MHz	—	—	1.5	pF
Reverse Recovery Time	t _{rr}	I _F = 10mA, I _R = 10mA I _{rr} = 1mA, R _L = 100Ω	—	—	6	ns

Layout for R_{ΘJA} test

Thickness: Fiberglass 0.059 in. (1.5 mm)

Copper leads 0.012 in. (0.3 mm)

