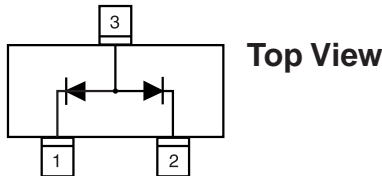
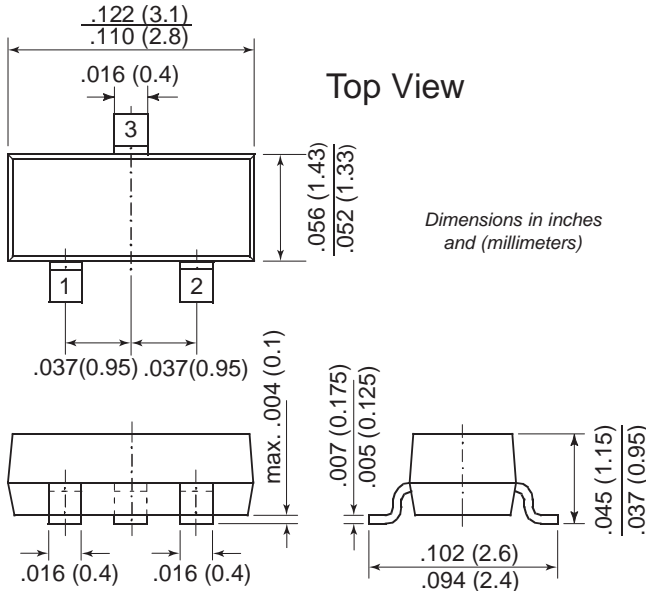


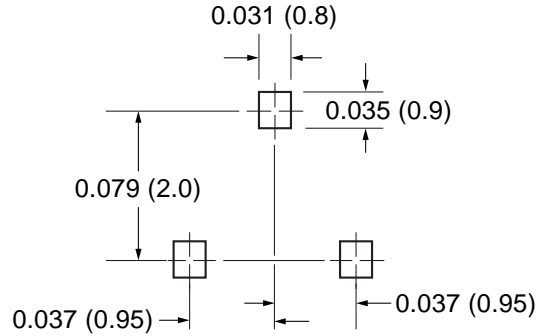


Dual Common-Anode Small-Signal Switching Diode

TO-236AB (SOT-23)



Mounting Pad Layout



Features

- Silicon Epitaxial Planar Diode
- Fast switching dual common-anode diode, especially suited for applications requiring high voltage capability

Mechanical Data

Case: SOT-23 (TO-236AB) Plastic Package

Weight: approx. 0.008g

Marking Code: DBA

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
Continuous Reverse Voltage	V _R	240	V
Peak Repetitive Reverse Voltage	V _{RRM}	300	V
Peak Repetitive Reverse Current	I _{RRM}	200	mA
Forward Current (continuous)	I _F	225	mA
Peak Repetitive Forward Current	I _{RFM}	625	mA
Non-Repetitive Peak Forward Current	I _{FSM}	4.0 1.0	A
		at t _p = 1μs at t _p = 1s	
Power Dissipation	P _{tot}	350 ⁽¹⁾	mW
Typical Thermal Resistance Junction to Ambient Air	R _{θJA}	357 ⁽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 bottom of second page

Electrical Characteristics

$T_J = 25^\circ\text{C}$ unless otherwise noted

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Breakdown Voltage	V_{BR}	$I_R = 100\mu\text{A}$	300	—	—	V
Leakage Current	I_R	$V_R = 240\text{V}$ $V_R = 240\text{V}, T_J = 150^\circ\text{C}$	—	—	100	nA μA
Forward Voltage	V_F	$I_F = 20\text{mA}$ $I_F = 100\text{mA}$	—	0.83	0.87 1.00	V
Capacitance	C_{tot}	$V_F = V_R = 0, f = 1\text{MHz}$	—	—	5.0	pF
Reverse Recovery Time	t_{rr}	$I_F = I_A = 30\text{mA}$ $I_{rr} = 3.0\text{mA}, R_L = 100\Omega$	—	—	50	ns

(1) Device on fiberglass substrate, see layout at bottom of page

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

Fig. 1 – Typical Instantaneous Forward Characteristics

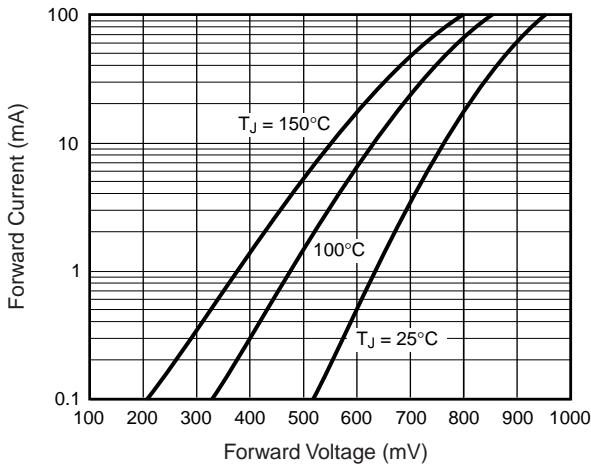
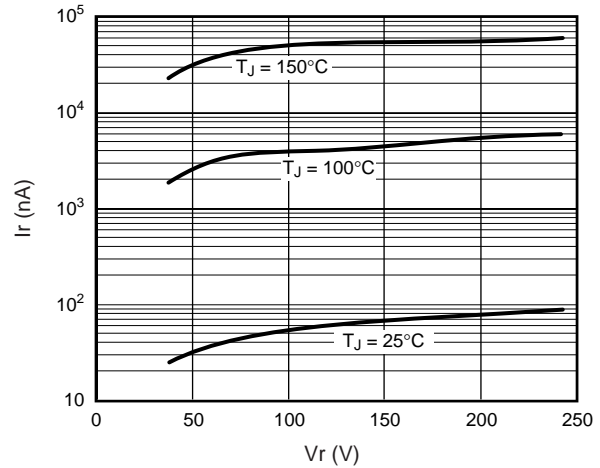
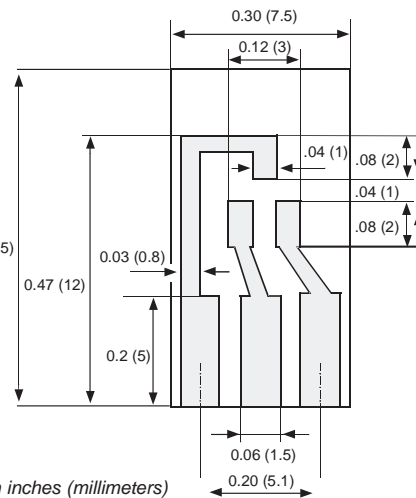


Fig. 2 – Typical Reverse Characteristics



Layout for $R_{\theta JA}$ test
Thickness:
Fiberglass 0.059 in. (1.5 mm)
Copper leads 0.012 in. (0.3 mm)



Dimensions in inches (millimeters)