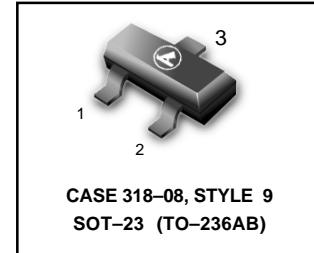
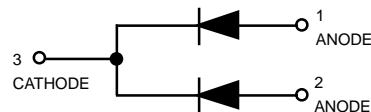


# Monolithic Dual Switching Diode

## Common Cathode

**BAV70LT1**

**DEVICE MARKING**

BAV70LT1 = A4

**MAXIMUM RATINGS (EACH DIODE)**

Rating	Symbol	Value	Unit
Reverse Voltage	$V_R$	70	Vdc
Forward Current	$I_F$	200	mAdc
Peak Forward Surge Current	$I_{FM(surge)}$	500	mAdc

**THERMAL CHARACTERISTICS**

Characteristic	Symbol	Max	Unit
Total Device Dissipation FR-5 Board (1) $T_A = 25^\circ\text{C}$	$P_D$	225	mW
Derate above $25^\circ\text{C}$		1.8	$\text{mW}/^\circ\text{C}$
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	556	$^\circ\text{C}/\text{W}$
Total Device Dissipation Alumina Substrate, (2) $T_A = 25^\circ\text{C}$	$P_D$	300	mW
Derate above $25^\circ\text{C}$		2.4	$\text{mW}/^\circ\text{C}$
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	417	$^\circ\text{C}/\text{W}$
Junction and Storage Temperature	$T_J, T_{stg}$	-55 to +150	°C

**ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$  unless otherwise noted) (EACH DIODE)**

Characteristic	Symbol	Min	Max	Unit
<b>OFF CHARACTERISTICS</b>				
Reverse Breakdown Voltage ( $I_{(BR)} = 100 \mu\text{Adc}$ )	$V_{(BR)}$	70	—	Vdc
Reverse Voltage Leakage Current ( $V_R = 25 \text{ Vdc}, T_J = 150^\circ\text{C}$ )	$I_R$	—	60	$\mu\text{Adc}$
( $V_R = 70 \text{ Vdc}$ )		—	2.5	
( $V_R = 70 \text{ Vdc}, T_J = 150^\circ\text{C}$ )		—	100	
Diode Capacitance ( $V_R = 0, f = 1.0 \text{ MHz}$ )	$C_D$	—	1.5	pF
Forward Voltage ( $I_F = 1.0 \text{ mAdc}$ )	$V_F$	—	715	mVdc
( $I_F = 10 \text{ mAdc}$ )		—	855	
( $I_F = 50 \text{ mAdc}$ )		—	1000	
( $I_F = 150 \text{ mAdc}$ )		—	1250	
Reverse Recovery Time ( $I_F = I_R = 10 \text{ mAdc}, V_R = 5.0 \text{ Vdc}, I_{R(REC)} = 1.0 \text{ mAdc}$ ) (Figure 1)	$R_L = 100 \Omega$ $t_{rr}$	—	6.0	ns

 1. FR-5 =  $1.0 \times 0.75 \times 0.062$  in.

 2. Alumina =  $0.4 \times 0.3 \times 0.024$  in. 99.5% alumina.