

Monolithic Dual Switching Diode Common Cathode

- Pb-Free Package is Available.

MAXIMUM RATINGS (T_A = 25°C)

Rating	Symbol	Max	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°C	P _D	225	mW
Derate above 25°C		1.8	mW/°C
Thermal Resistance, Junction to Ambient	R _{θJA}	556	°C/W
Total Device Dissipation Alumina Substrate ⁽²⁾ T _A = 25°C	P _D	300	mW
Derate above 25°C		2.4	mW/°C
Thermal Resistance, Junction to Ambient	R _{θJA}	417	°C/W
Junction and Storage Temperature	T _J , T _{stg}	-55 to +150	°C

DEVICEMARKING

LBAV70LT1 = A4

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
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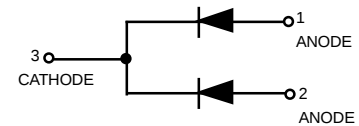
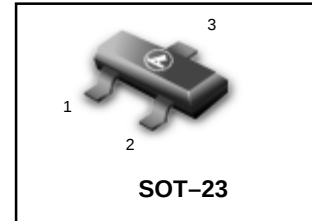
OFF CHARACTERISTICS

Reverse Breakdown Voltage (I _{BR} = 100 μAdc)	V _(BR)	70	—	Vdc
Reverse Voltage Leakage Current (V _R = 25 Vdc, T _J = 150°C)	I _R	—	60	μAdc
(V _R = 70 Vdc)		—	2.5	
(V _R = 70 Vdc, T _J = 150°C)		—	100	
Diode Capacitance (V _R = 0, f = 1.0 MHz)	C _D	—	1.5	pF
Forward Voltage (I _F = 1.0 mAdc)	V _F	—	715	mVdc
(I _F = 10 mAdc)		—	855	
(I _F = 50 mAdc)		—	1000	
(I _F = 150 mAdc)		—	1250	
Reverse Recovery Time R _L = 100Ω (I _F = I _R = 10 mAdc, V _R = 5.0Vdc, I _{R(REC)} = 1.0 mAdc) (Figure 1)	t _{rr}	—	6.0	ns

1. FR-5 = 1.0 × 0.75 × 0.062 in.

2. Alumina = 0.4 × 0.3 × 0.024 in. 99.5% alumina.

LBAV70LT1



ORDERING INFORMATION

Device	Marking	Shipping
LBAV70LT1	A4	3000 Tape & Reel
LBAV70LT1G	A4(Pb-Free)	3000 Tape & Reel

LBAV70LT1

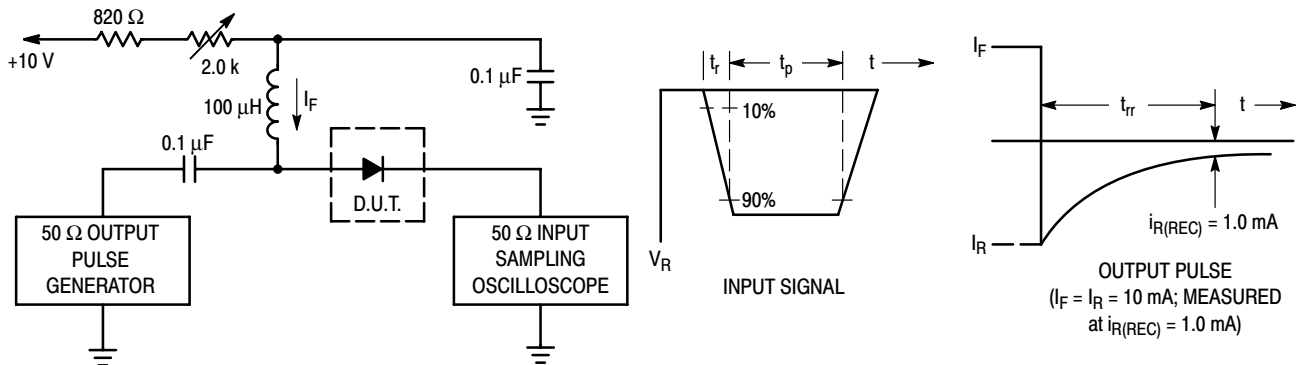


Figure 1. Recovery Time Equivalent Test Circuit

Curves Applicable to Each Anode

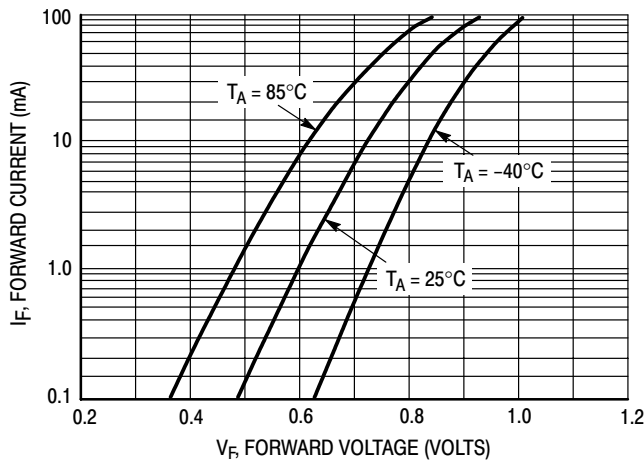


Figure 2. Forward Voltage

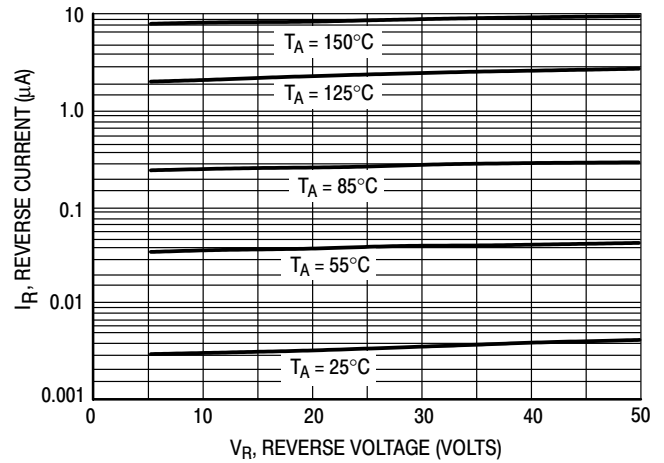


Figure 3. Leakage Current

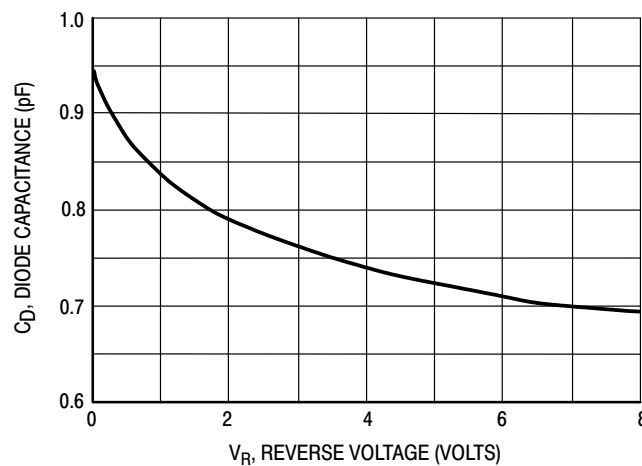
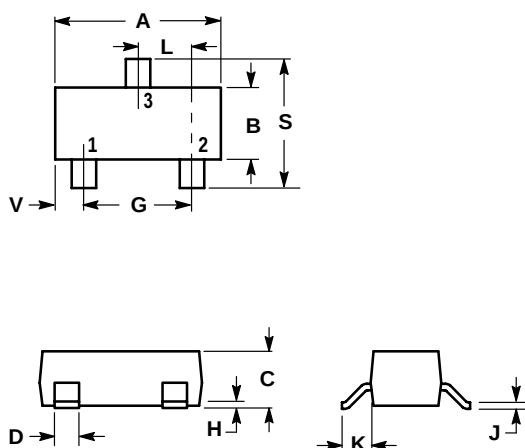


Figure 4. Capacitance

LBAV70LT1
SOT-23

NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.1102	0.1197	2.80	3.04
B	0.0472	0.0551	1.20	1.40
C	0.0350	0.0440	0.89	1.11
D	0.0150	0.0200	0.37	0.50
G	0.0701	0.0807	1.78	2.04
H	0.0005	0.0040	0.013	0.100
J	0.0034	0.0070	0.085	0.177
K	0.0140	0.0285	0.35	0.69
L	0.0350	0.0401	0.89	1.02
S	0.0830	0.1039	2.10	2.64
V	0.0177	0.0236	0.45	0.60

PIN 1. ANODE
2. ANODE
3. CATHODE

