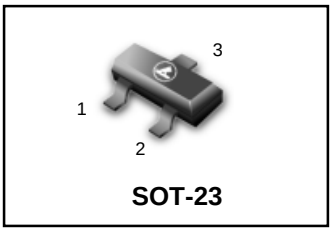
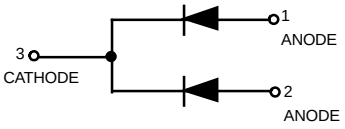
Monolithic Dual Switching Diode
Common Cathode

LBAV70LT1G
S-LBAV70LT1G



SOT-23



●FEATURES

1)We declare that the material of product compliant with RoHS requirements and Halogen Free.

2)S- Prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.

●DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LBAV70LT1G	A4	3000/Tape&Reel
LBAV70LT3G	A4	10000/Tape&Reel

●MAXIMUM RATINGS(Ta = 25℃)

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

●THERMAL CHARACTERISTICS

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

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

Parameter	Symbol	Min	Max.	Unit
Reverse Breakdown Voltage($I_{(BR)}$=100uA)	$V_{(BR)}$	70	—	Vdc
Reverse Voltage Leakage Current	I_R			uAdc
(V_R = 25 Vdc, T_J = 150°C)		—	60	
(V_R = 70 Vdc)		—	2.5	
(V_R = 70 Vdc, TJ = 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 (Figure 1) I_F=I_R=10mAdc,$i_{R(REC)}$=1.0 mAdc,R_L =100 Ω	trr	—	6	ns

1. FR–5 = 1.0 x 0.75 x 0.062 in.

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

LBAV70LT1G，S-LBAV70LT1G

ELECTRICAL CHARACTERISTIC CURVES

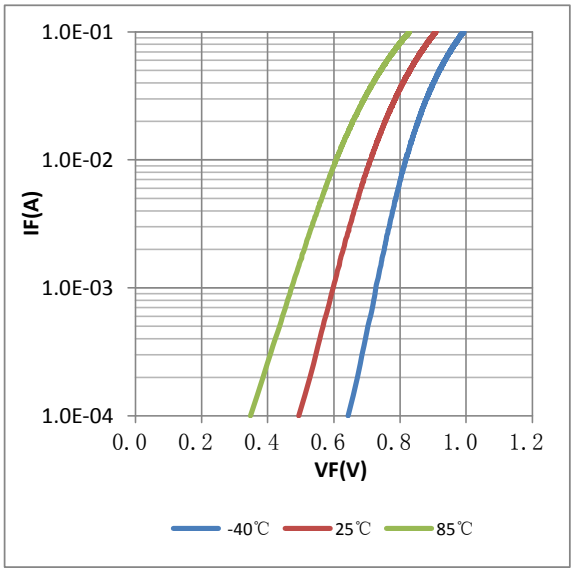


FIG. 1 Forward Characteristics

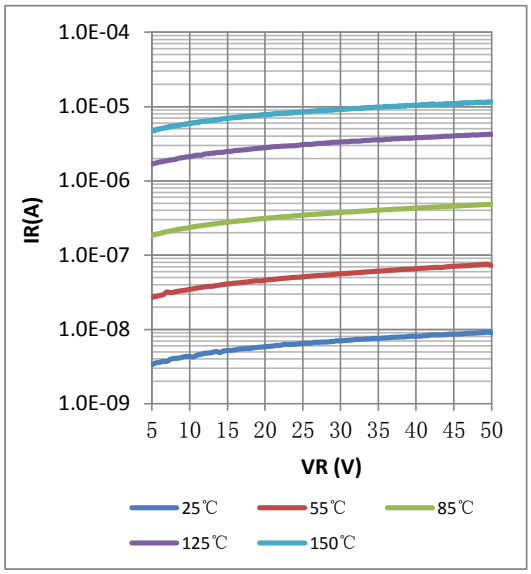


FIG. 2 Reverse Characteristics

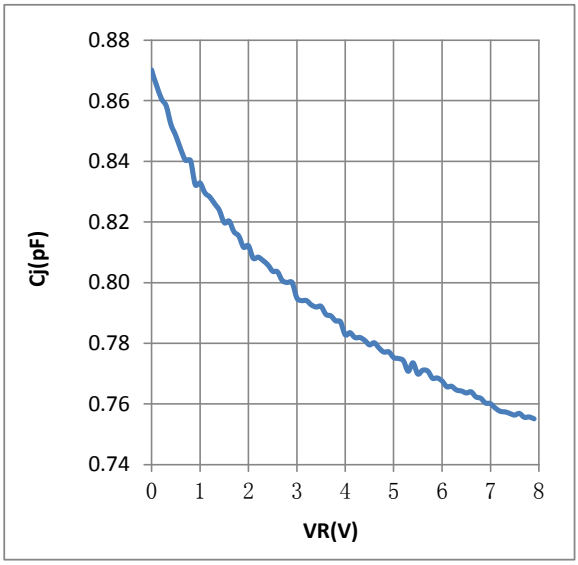
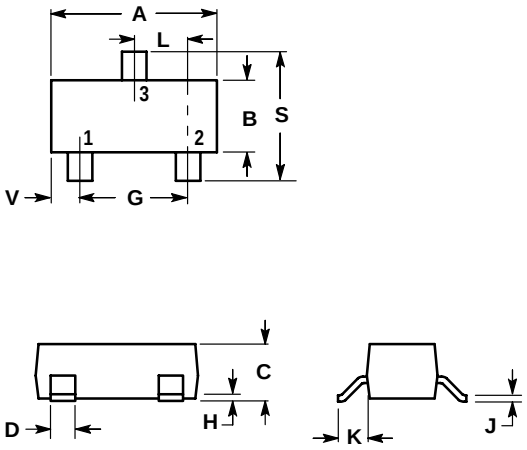


FIG. 3 Capacitance

LBAV70LT1G，S-LBAV70LT1G

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