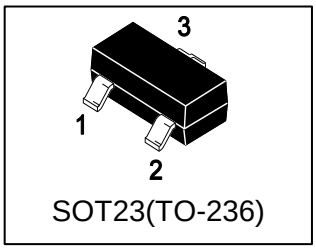
LBAV99LT1G
S-LBAV99LT1G

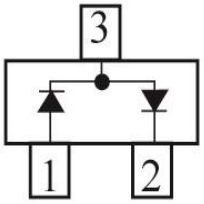
Dual Series Switching Diode



SOT23(TO-236)

1. FEATURES

- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.



2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LBAV99LT1G	A7	3000/Tape&Reel
LBAV99LT3G	A7	10000/Tape&Reel

3. MAXIMUM RATINGS(Ta = 25ºC)

Parameter	Symbol	Limits	Unit
Reverse Voltage	VR	75	V
Forward Current	IF	215	mA
Peak Forward Surge Current	IFM(surge)	500	mA
Repetitive Peak Reverse Voltage	VRRM	70	V
Average Rectified Forward Current (averaged over any 20 ms period)	IF(AV)	 715	mA
Repetitive Peak Forward Current	IFRM	500	mA
Non-Repetitive Peak Forward Current t=1μs t=1ms t=1s	IFSM	 2 1 0.5	A

4. THERMAL CHARACTERISTICS

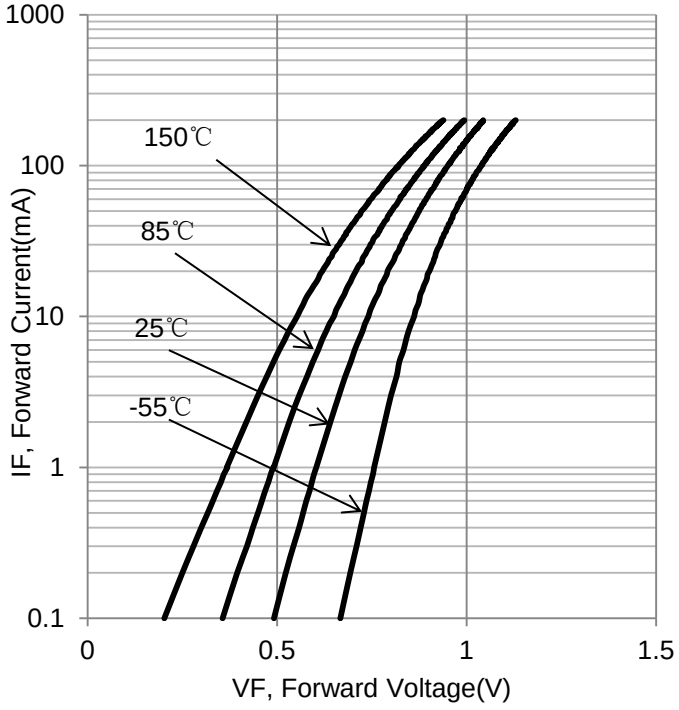
Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR−4 Board (Note 1) @ TA = 25ºC Derate above 25ºC	PD	 225 1.8	 mW mW/ºC
Thermal Resistance, Junction–to–Ambient(Note 1)	RΘJA	556	ºC/W
Junction and Storage temperature	TJ,Tstg	−65～+150	° C

1. FR–4 = 1.0×0.75×0.062 in.

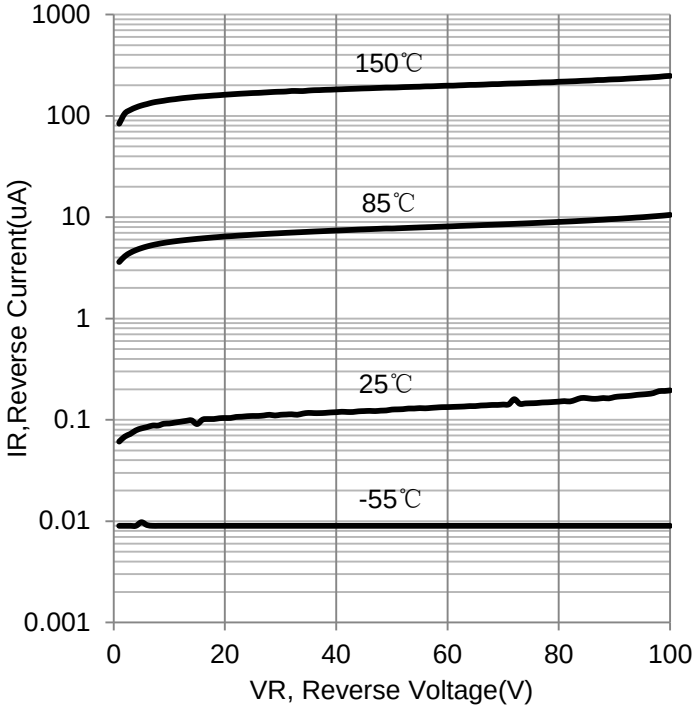
5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage (I(BR)=100μA)	VBR	70	-	-	V
Forward Voltage	VF				mV
(IF = 1.0 mAdc)		-	-	715	
(IF = 10 mAdc)		-	-	855	
(IF = 50 mAdc)		-	-	1000	
(IF = 150 mAdc)		-	-	1250	
Reverse Voltage Leakage Current	IR				μA
(VR = 70Vdc)		-	-	2.5	
(VR = 70Vdc,TJ = 150°C)		-	-	50	
(VR = 25Vdc,TJ = 150°C)		-	-	30	
Diode Capacitance (VR = 0V, f = 1.0 MHz)	CD	-	-	2.0	pF
Reverse Recovery Time (IF=IR=10mAd,RL =50Ω)	trr	-	-	6.0	ns
Forward Recovery Voltage (IF = 10 mAdc, tr = 20 ns)	VFR	-	-	1.75	V

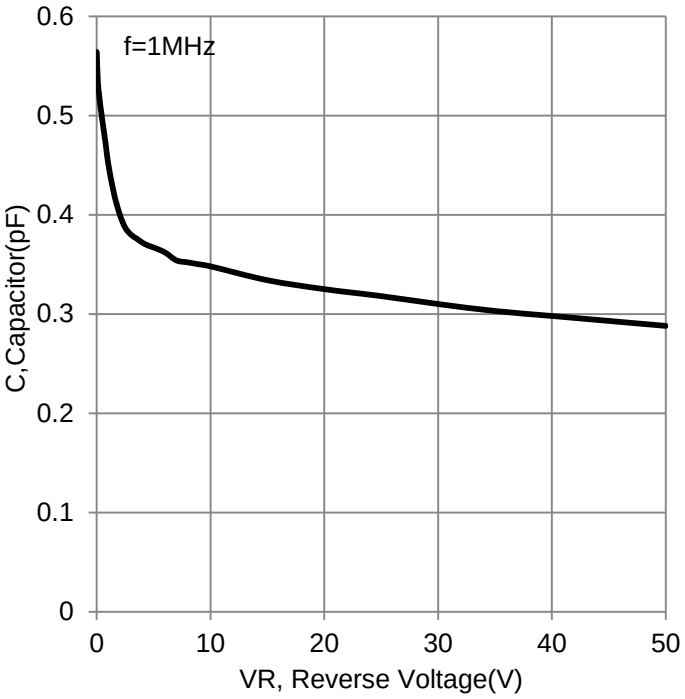
6. ELRCTRICAL CHARACTERISTICS CURVES



Forward Characteristics

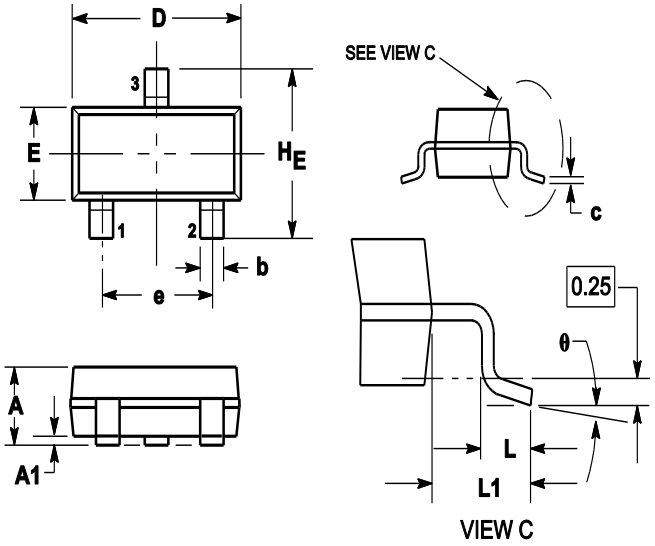


Reverse Characteristics



Capacitor Characteristics

7.OUTLINE AND DIMENSIONS



Notes:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.

	MILLIMETERS			INCHES		
DIM	MIN	NOM	MAX	MIN	NOM	MAX
A	0.89	1	1.11	0.035	0.04	0.044
A1	0.01	0.06	0.1	0.001	0.002	0.004
b	0.37	0.44	0.5	0.015	0.018	0.02
c	0.09	0.13	0.18	0.003	0.005	0.007
D	2.80	2.9	3.04	0.11	0.114	0.12
E	1.20	1.3	1.4	0.047	0.051	0.055
e	1.78	1.9	2.04	0.07	0.075	0.081
L	0.10	0.2	0.3	0.004	0.008	0.012
L1	0.35	0.54	0.69	0.014	0.021	0.029
H_E	2.10	2.4	2.64	0.083	0.094	0.104
θ	0°	---	10°	0°	---	10°

8.SOLDERING FOOTPRINT