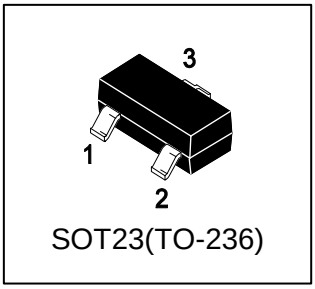
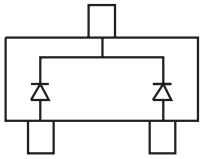
LBAV170LT1G
S-LBAV170LT1G

Surface Mount Low Leakge Diode



SOT23(TO-236)



1. FEATURES

- Ultra-Small Surface Mount Package
- Very Low Leakage Current
- 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 RESISTOR VALUES

Device	Marking	Shipping
LBAV170LT1G	51	3000/Tape&Reel
LBAV170LT3G	51	10000/Tape&Reel

3. MAXIMUM RATINGS(Ta = 25ºC)

Parameter	Symbol	Limits	Unit
Peak Repetitive Reverse Voltage	VRRM	85	V
Working Peak Reverse Voltage	VRWM		
DC Blocking Voltage	VR		
RMS Reverse Voltage	VR(RMS)	60	V
Forward Continuous Current (Note 1) Single Diode	IFM	215	mA
Double Diode		125	
Repetitive Peak Forward Current	IFRM	500	mA
Non-Repetitive Peak Forward Surge Current (t = 1.0μs) (t = 1ms) (t = 1s)	IFSM	 4 1 0.5	A
Power Dissipation (Note 1)	PD	150	mW
Thermal Resistance Junction to Ambient Air (Note 1)	RθJA	833	℃/W
Operating and Storage Temperature Range	Tj,Tstg	-65~+150	℃

1.Device mounted on FR-4 PC board with recommended pad layout

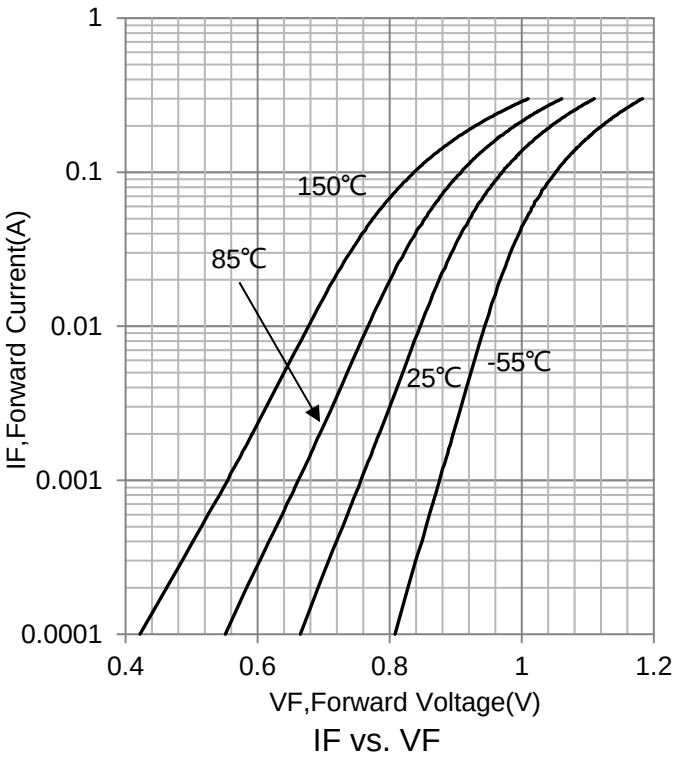
2. No purposefully added lead.

4. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

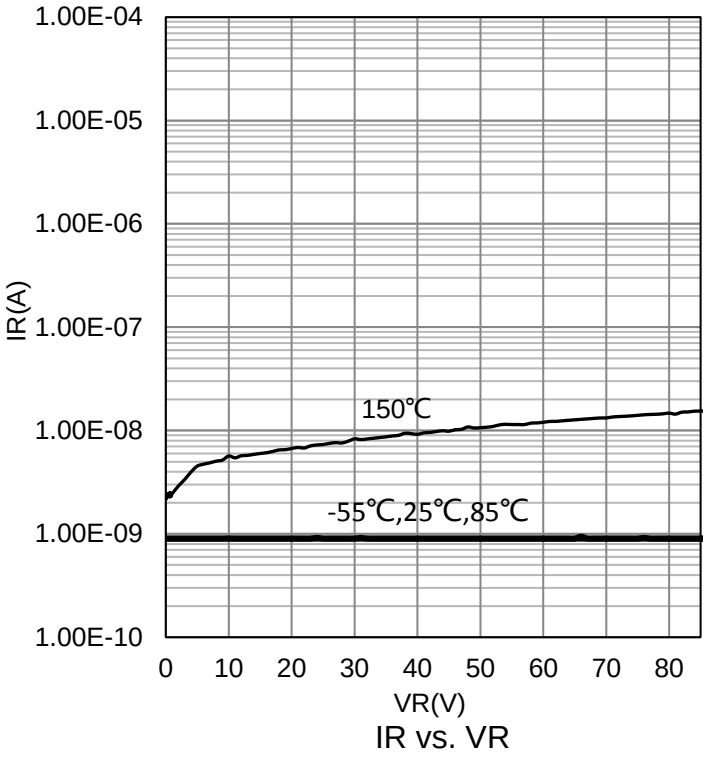
CHARACTERISTICS	Symbol	Min	Typ	Max	Unit
Reverse Breakdown Voltage(Note 3) (IR = 100 μA)	V(BR)R	85	-	-	V
Forward voltage (IF =1mA) (IF =10mA) (IF =50mA) (IF =150mA)	VF	 - - - -	 - - - -	 0.9 1 1.1 1.25	V
Leakage Current (Note 3) (VR = 75V) (VR = 75V,Tj=150℃)	IR	 - -	 - -	 5 80	nA
Total Capacitance (f=1MHz,VR =0)	CT	-	2	-	pF
Reverse Recovery Time (IF = IR = 10mA, RL = 100 Ω,Irr = 0.1 x IR)	trr	-	-	3	μS

3. Short duration test pulse used to minimize self-heating effect.

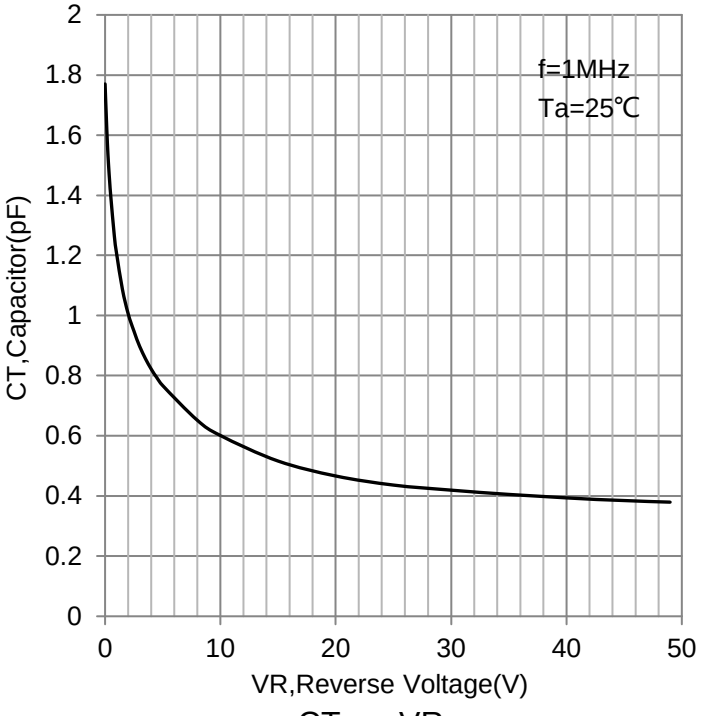
5.ELECTRICAL CHARACTERISTICS CURVES



IF vs. VF

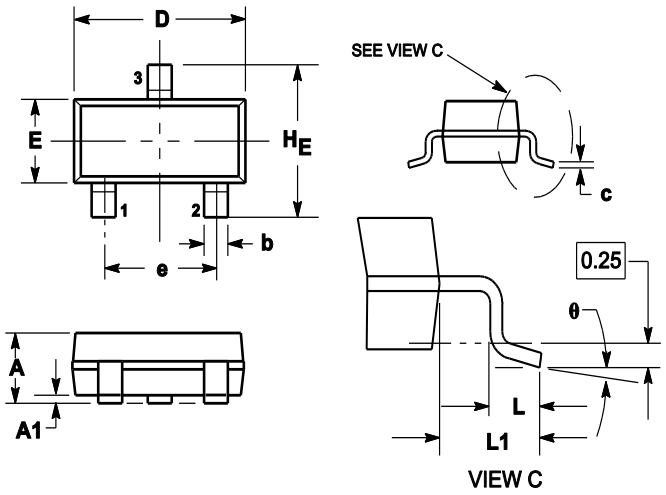


IR vs. VR



CT vs. VR

6.OUTLINE AND DIMENSIONS

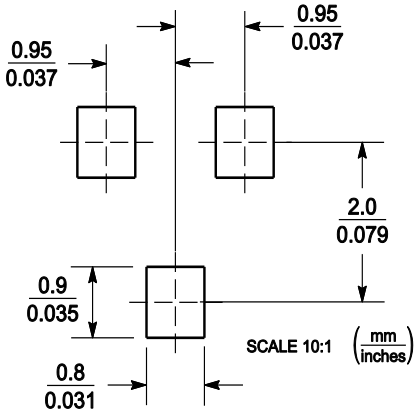


Notes:

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°

7.SOLDERING FOOTPRINT



DISCLAIMER

- Curve guarantee in the specification. The curve of test items with electric parameter is used as quality guarantee. The curve of test items without electric parameter is used as reference only.

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