

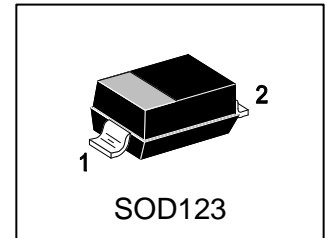
# LBZT52MB3V9T1G

## S-LBZT52MB3V9T1G

### SURFACE MOUNT ZENER DIODE

#### 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.
- 500mw power dissipation
- Ideal for Surface Mounted Application



#### 2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LBZT52MB3V9T1G	B7	3000/Tape&Reel

#### 3. MAXIMUM RATINGS(Ta = 25°C)

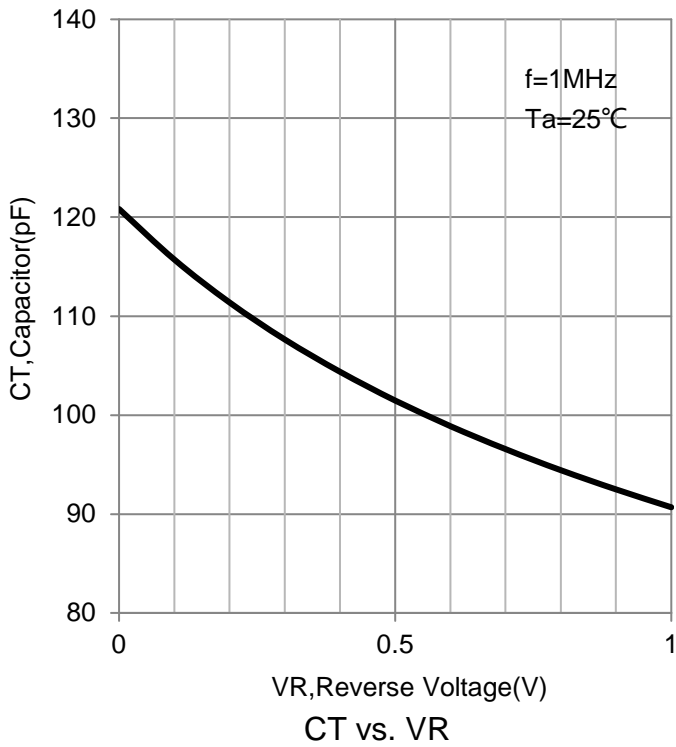
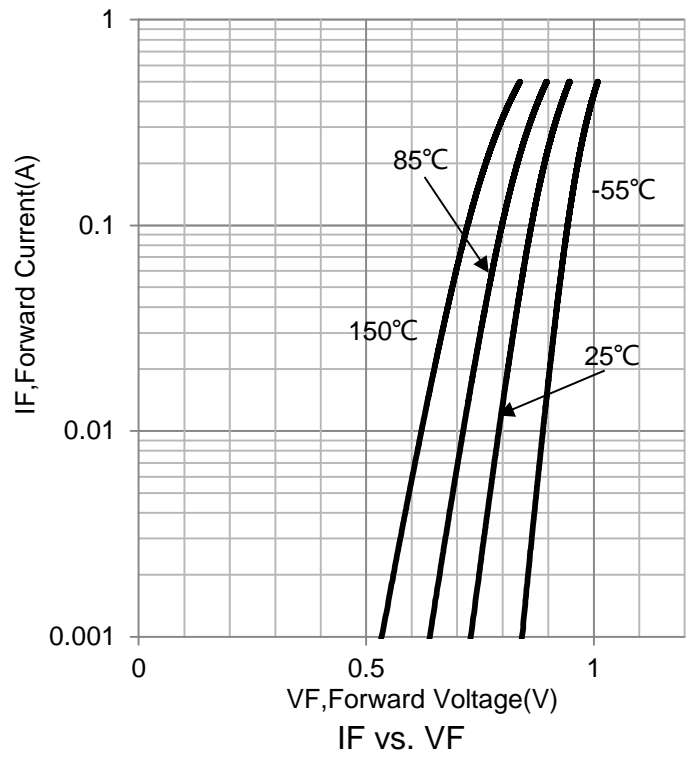
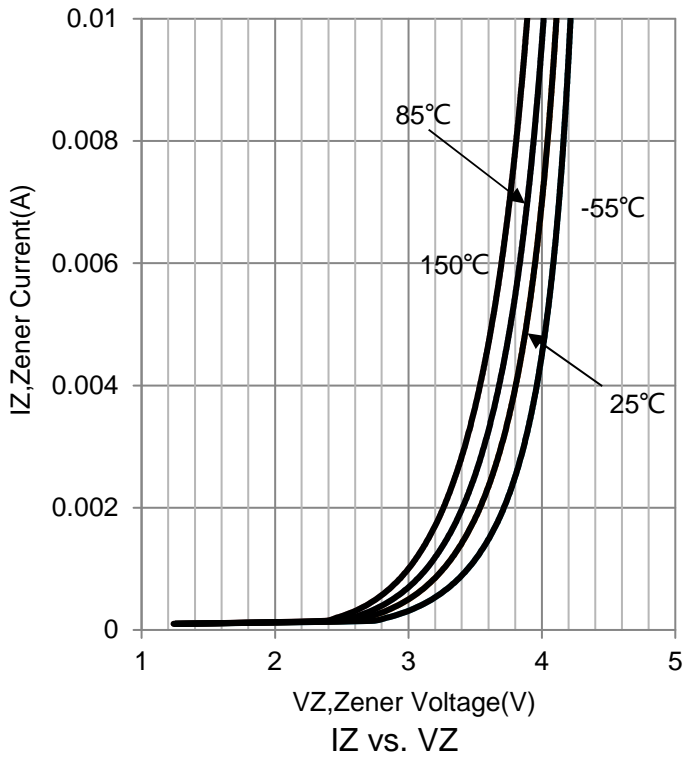
Parameter	Symbol	Limits	Unit
Total Power Dissipation on FR-5 Board(Note 1)	PD	500	mW
Thermal Resistance Junction to Ambient Air(Note 1)	RθJA	305	°C/W
Forward Voltage @ IF=10mA	VF	0.9	V
Junction and Storage Temperature Range	Tj,TSTG	-55~+150	°C

1. Device mounted on ceramic PCB; 7.6mm 9.4mm 0.87mm with pad areas 25mm<sup>2</sup>.

#### 4. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Device	Zener voltage			Operating resistance		Rising operating resistance		Reverse current	
	VZ (V)			ZZ (Ohm)		Zzk (Ohm)		IR(μA)	
	Min.	Max.	IZ (mA)	Max.	IZ (mA)	Max.	IZ (mA)	Max.	VR (V)
LBZT52MB3V9T1G	3.820	3.980	5	85	5	600	1.0	2	1.0

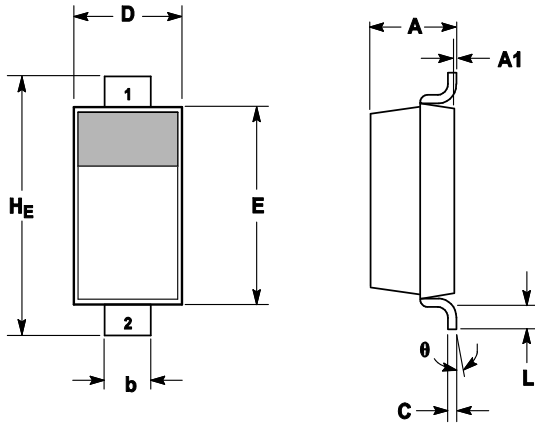
**5.ELECTRICAL CHARACTERISTICS CURVES**



## 6. OUTLINE AND DIMENSIONS

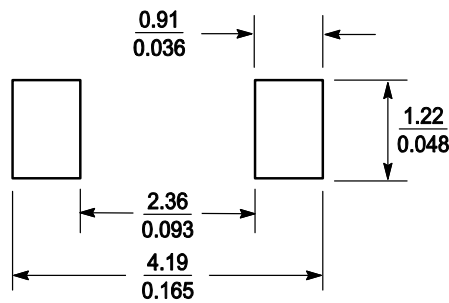
Notes:

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.



DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.94	1.17	1.35	0.037	0.046	0.053
A1	0.00	0.05	0.10	0.000	0.002	0.004
b	0.51	0.61	0.71	0.020	0.024	0.028
c	---	---	0.15	---	---	0.006
D	1.40	1.60	1.80	0.055	0.063	0.071
E	2.54	2.69	2.84	0.100	0.106	0.112
H <sub>E</sub>	3.56	3.68	3.86	0.140	0.145	0.152
L	0.25	---	---	0.010	---	---
θ	0°	---	10°	0°	---	10°

## 7. SOLDERING FOOTPRINT



SCALE 10:1 (  $\frac{\text{mm}}{\text{inches}}$  )