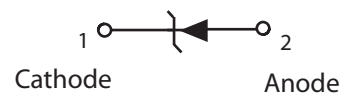
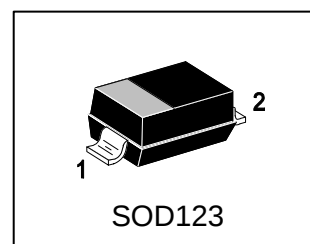


LBZT52B13T1G

SURFACE MOUNT ZENER DIODE

1. FEATURES

- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- 300mW power dissipation
- Ideal for surface mounted application



2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LBZT52B13T1G	35	3000/Tape&Reel

3. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR-4 Board (Note 1) @ TA = 25°C	PD	300	mW
Thermal Resistance Junction-to-Ambient	R θ JA	440	°C/W
Thermal Resistance Junction-to-Case	R θ JC	200	°C/W
Junction temperature	TJ	-55 ~ +150	°C
Storage temperature	Tstg	-55 ~ +150	°C

1. Device mounted on an FR-4 PCB, single-sided copper, tin-plated and standard footprint.

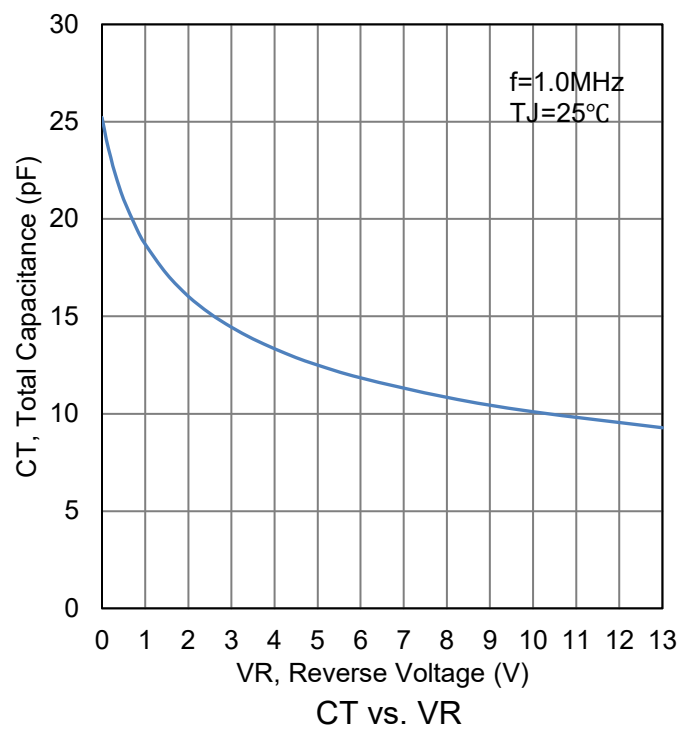
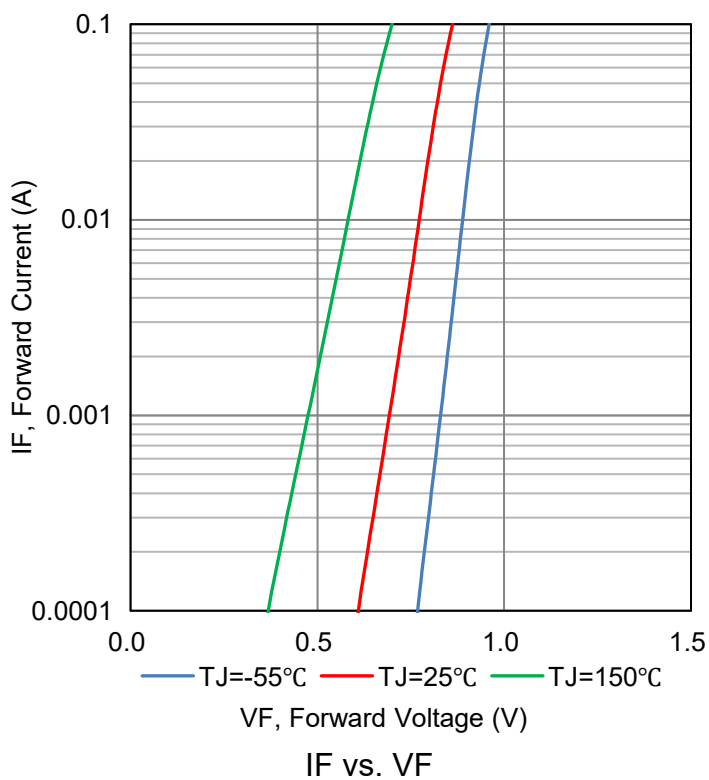
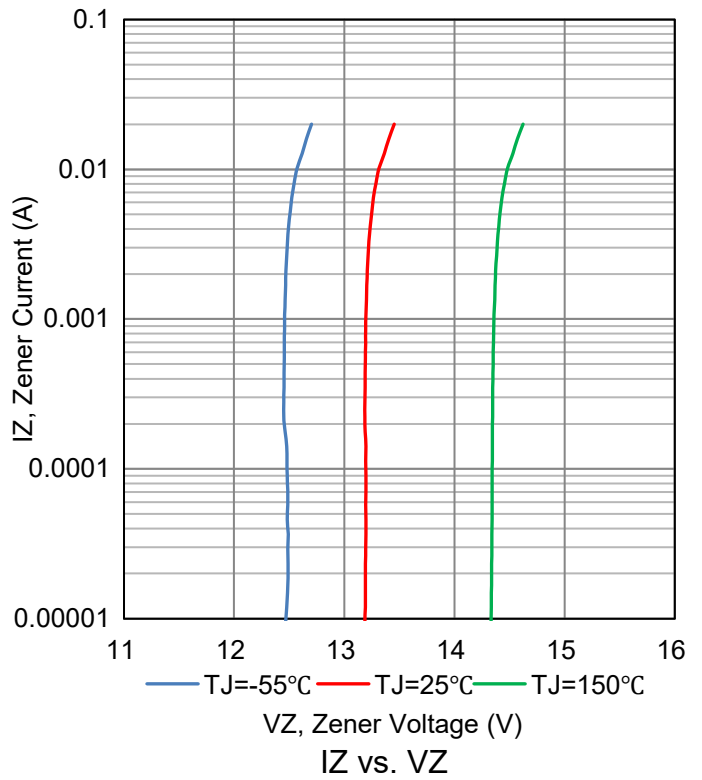
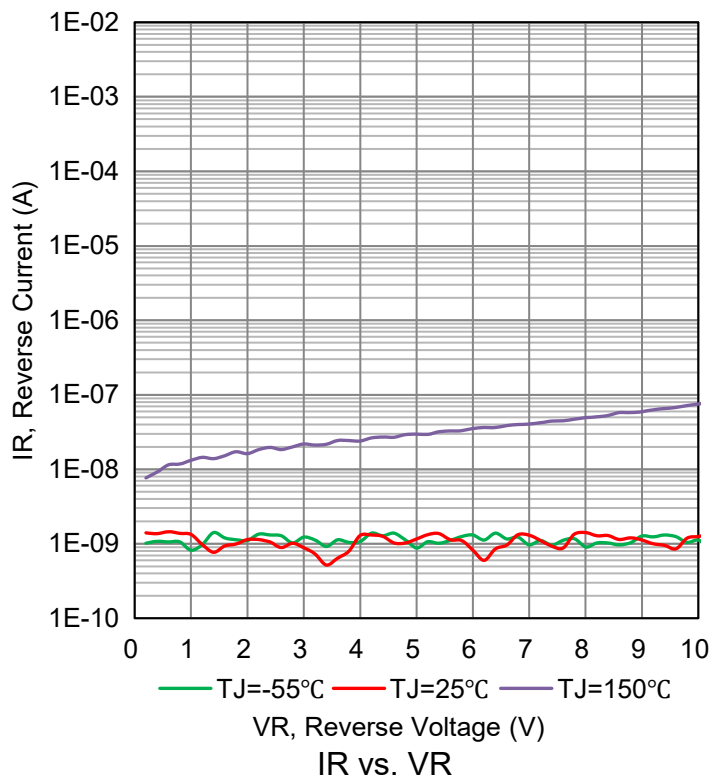
4. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage (IF = 10 mA)	VF	-	-	0.9	V
Zener Voltage (IZT=5mA)	VZ	12.91	-	13.49	V
Operating Resistance (IZT=5mA)	ZZT	-	-	37	Ω
Rising Operating Resistance (IZK=0.5mA)	ZZK	-	-	80	Ω
Reverse Current (VR=10V)	IR	-	-	0.1	μA

2. The Zener voltage (Vz) is measured 40ms after power is supplied.

3. The operating resistances (ZZT,ZZK) are measured by superimposing a minute alternating current on the regulated current (Iz).

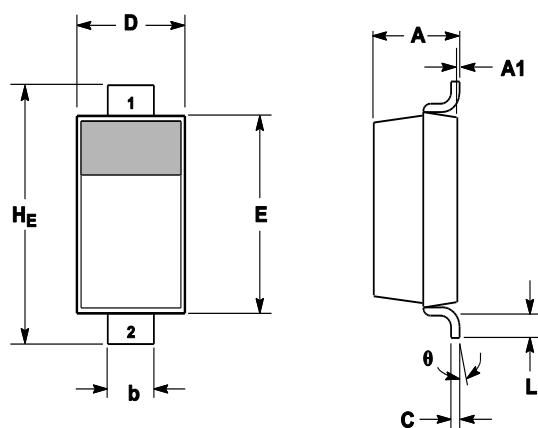
5.ELECTRICAL CHARACTERISTICS CURVES



6.OUTLINE AND DIMENSIONS

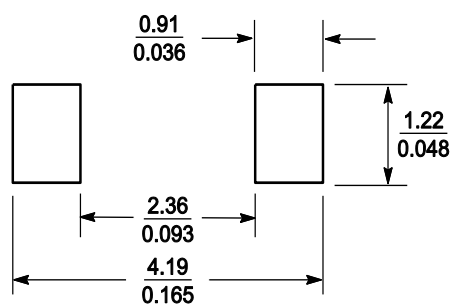
Notes:

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 _E	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 (mm/inches)

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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