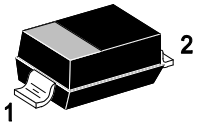
LBZT52B6V2T1G
S-LBZT52B6V2T1G

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 mountted application



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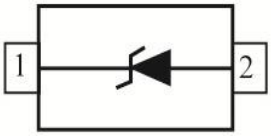


2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LBZT52B6V2T1G	E2	3000/Tape&Reel
LBZT52B6V2T3G	E2	10000/Tape&Reel

3. MAXIMUM RATINGS(Ta = 25ºC)

Parameter	Symbol	Limits	Unit
Forward Voltage @ IF=10mA	VF	0.9	V

4. THERMAL CHARACTERISTICS

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	ºC/W
Junction and Storage temperature	TJ,Tstg	−55～+150	° C

1. Device mounted on ceramic PCB; 7.6mm×9.4mm×0.87mm with pad areas 25mm²

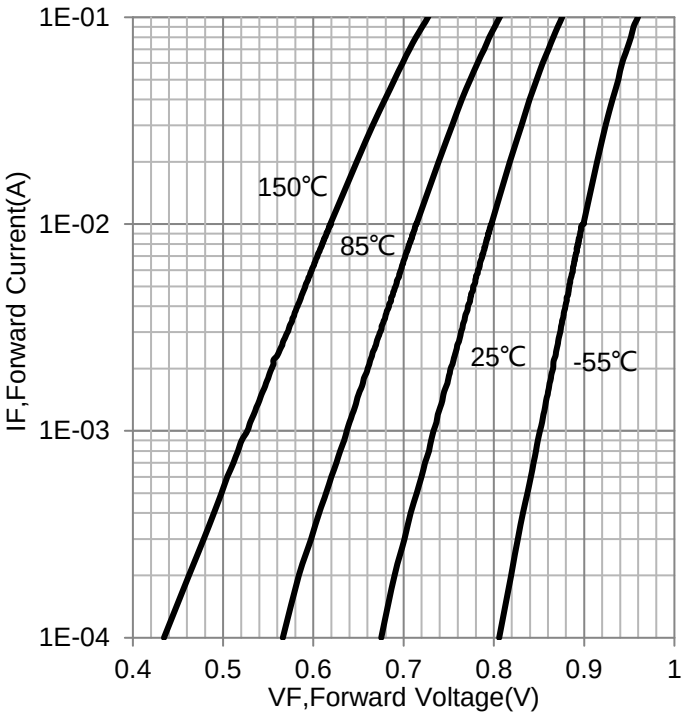
5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Zener Voltage (IZT=5mA)	VZ	6.06	-	6.33	V
Operating Resistance (IZT=5mA)	ZZT	-	-	60	Ω
Rising Operating Resistance (IZK=0.5mA)	ZZK	-	-	100	Ω
Reverse Current (VR=3V)	IR	-	-	1	μA

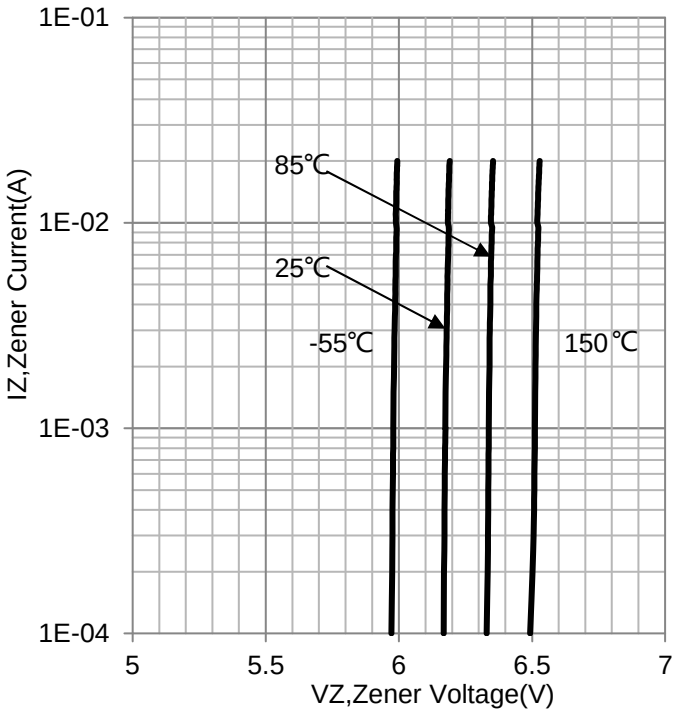
2. The Zener voltage (Vz) is measured 40ms after power is supplied.

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

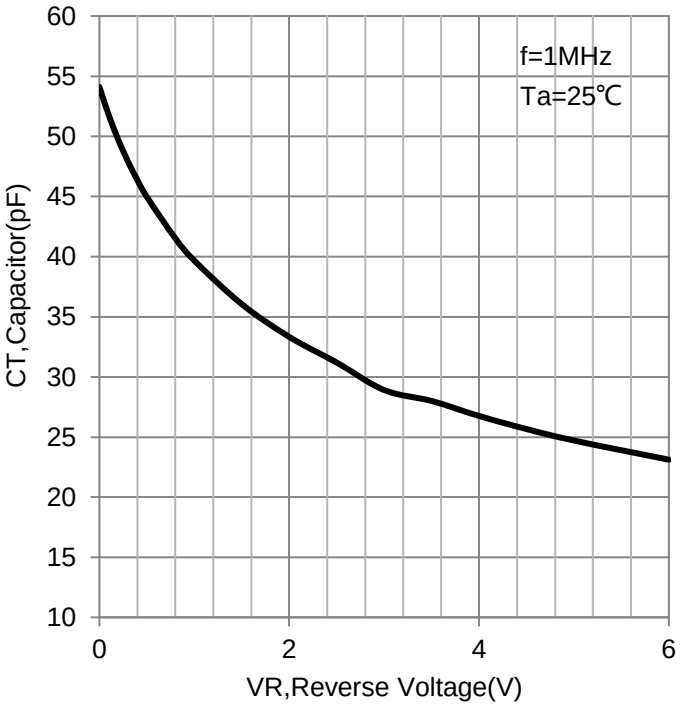
6.ELECTRICAL CHARACTERISTICS CURVES



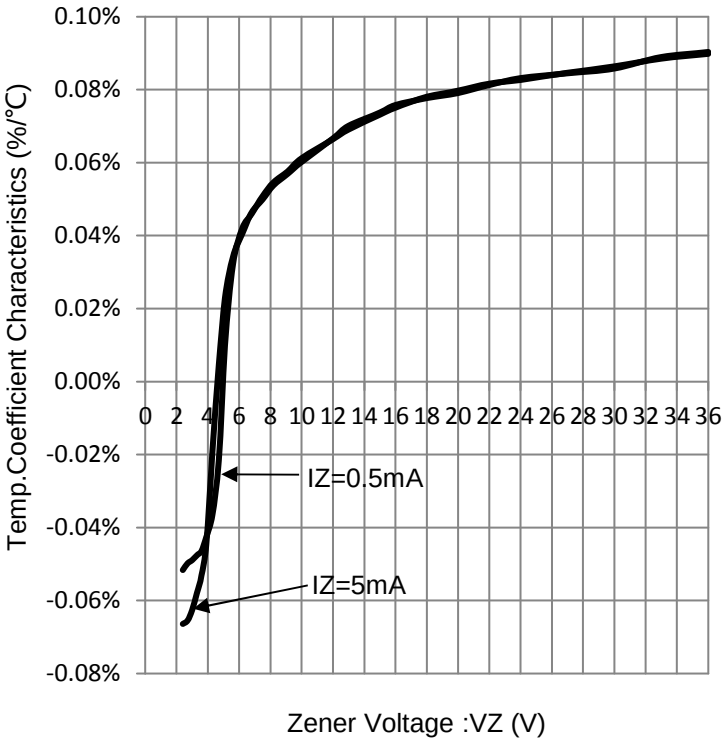
IF vs. VF



IZ vs. VZ

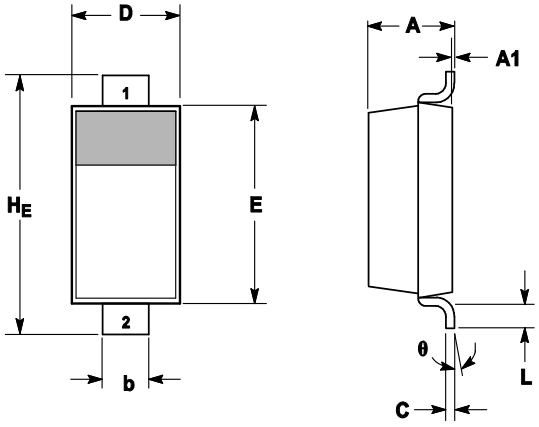


Capacitance



Zener Voltage-temp.coefficient 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	0.94	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°

8.SOLDERING FOOTPRINT