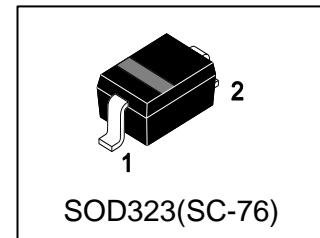


# LUDZS5.1BPT1G

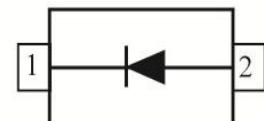
## S-LUDZS5.1BPT1G

Zener Voltage Regulators  
400 mW SOD-323 Surface Mount



### 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.
- Silicon epitaxial planar



### 2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LUDZS5.1BPT1G	A2	3000/Tape&Reel
LUDZS5.1BPT3G	A2	10000/Tape&Reel

### 3. MAXIMUM RATINGS ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Limits	Unit
Power dissipation	PD	400	mW
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C
Operating temperature	T <sub>opr</sub>	-55 to +150	°C

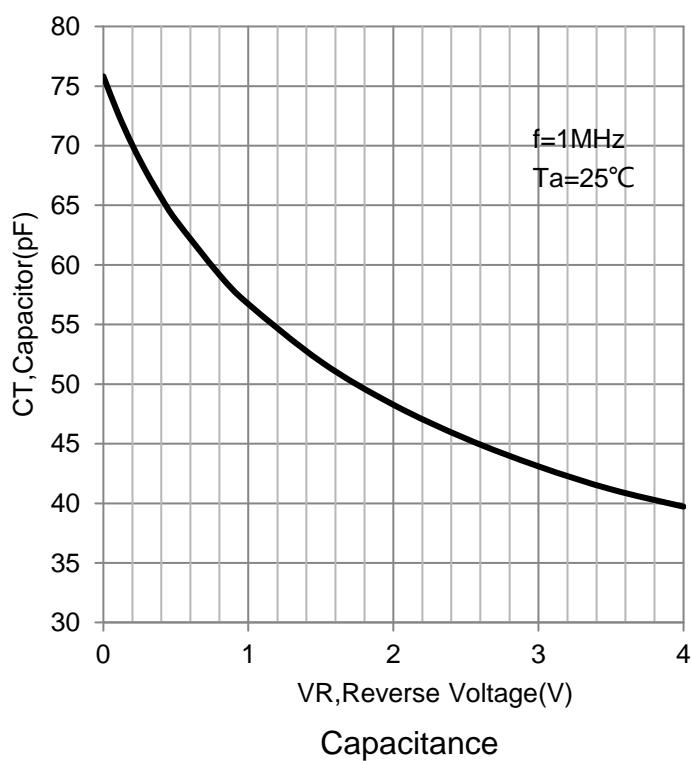
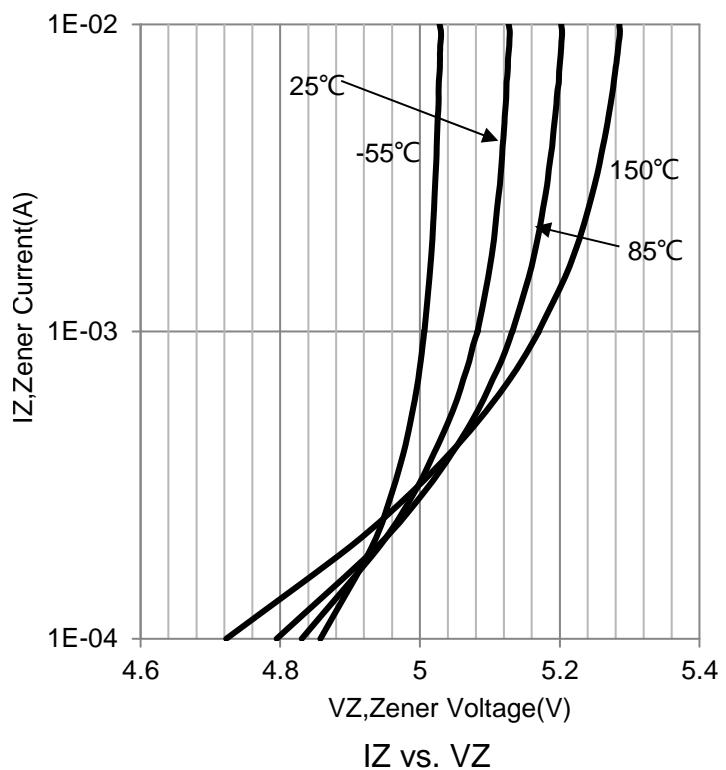
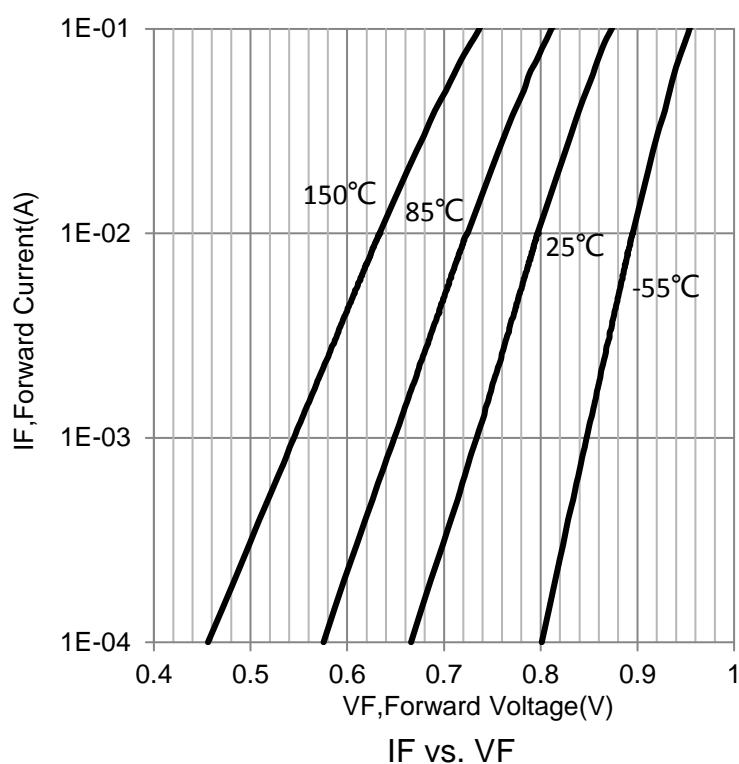
### 4. ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Zener voltage (IZT=5mA)	V <sub>Z</sub>	4.98	-	5.2	V
Operating resistance (IZT=5mA)	Z <sub>zT</sub>	-	-	80	Ω
Rising operating resistance (IZK=0.5mA)	Z <sub>zk</sub>	-	-	500	Ω
Reverse current (VR=1.5V)	I <sub>R</sub>	-	-	2	μA

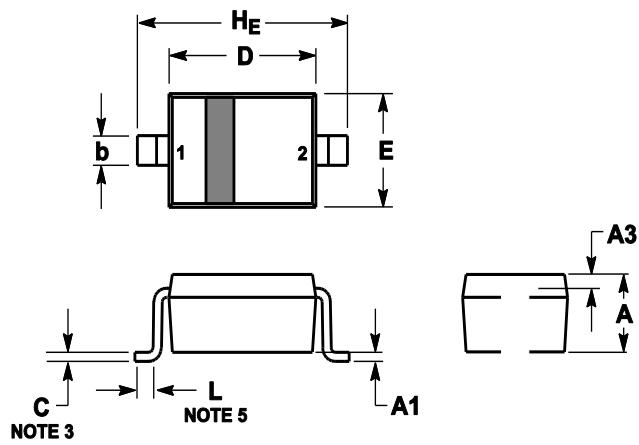
1. The Zener voltage (V<sub>Z</sub>) is measured 40ms after power is supplied.

2. The operating resistances (Z<sub>z</sub>, Z<sub>zk</sub>) are measured by superimposing a minute alternating current on the regulated current (I<sub>Z</sub>).

## 5.ELECTRICAL CHARACTERISTICS CURVES



## 6.OUTLINE AND DIMENSIONS

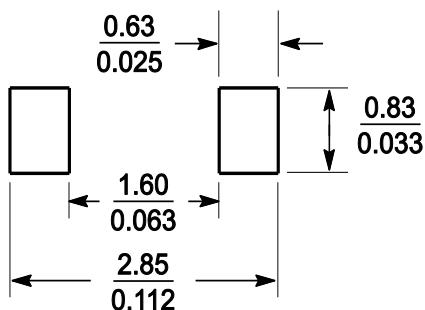


Notes:

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	0.8	0.9	1	0.031	0.035	0.04
A1	0	0.05	0.1	0	0.002	0.004
A3	0.15REF			0.006REF		
b	0.25	0.32	0.4	0.01	0.012	0.016
C	0.089	0.12	0.177	0.003	0.005	0.007
D	1.6	1.7	1.8	0.062	0.066	0.07
E	1.15	1.25	1.35	0.045	0.049	0.053
L	0.08			0.003		
$H_E$	2.3	2.5	2.7	0.09	0.098	0.105

## 7.SOLDERING FOOTPRINT





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