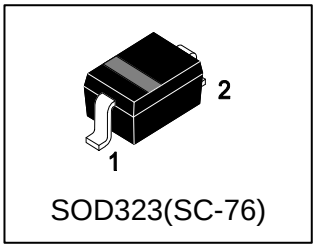
LUDZS13BT1G

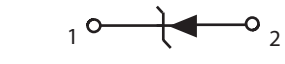
Zener Voltage Regulators
200 mW SOD-323 Surface Mount



SOD323(SC-76)

1. FEATURES

- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- Silicon epitaxial planar



Cathode Anode

2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LUDZS13BT1G	35	3000/Tape&Reel
LUDZS13BT3G	35	13000/Tape&Reel

3. MAXIMUM RATINGS (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Power dissipation	PD	200	mW
Thermal Resistance from Junction to Ambient(Note 1)	RθJA	400	°C/W
Thermal Resistance from Junction to Case	RθJC	175	°C/W
Junction temperature	Tj	150	℃
Storage temperature	Tstg	−55 to +150	℃
Operating temperature	Topr	−55 to +150	℃

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

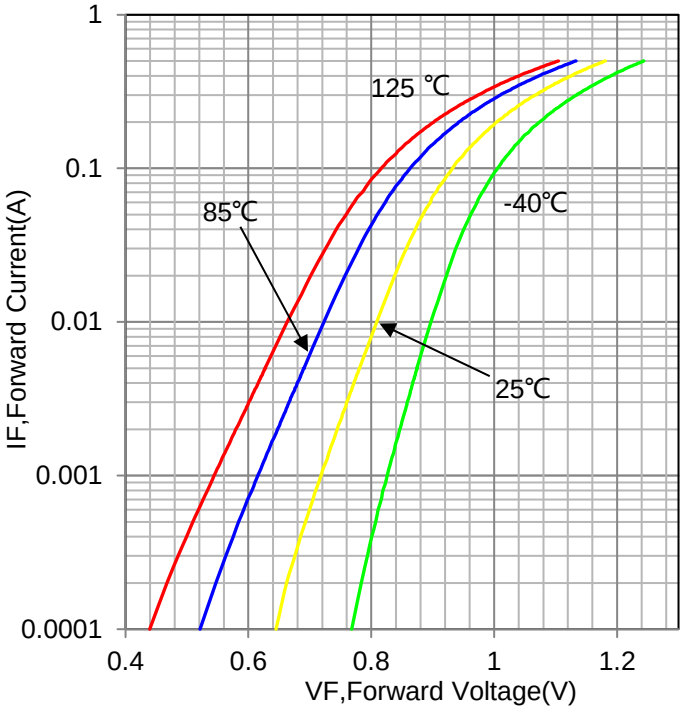
4. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

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

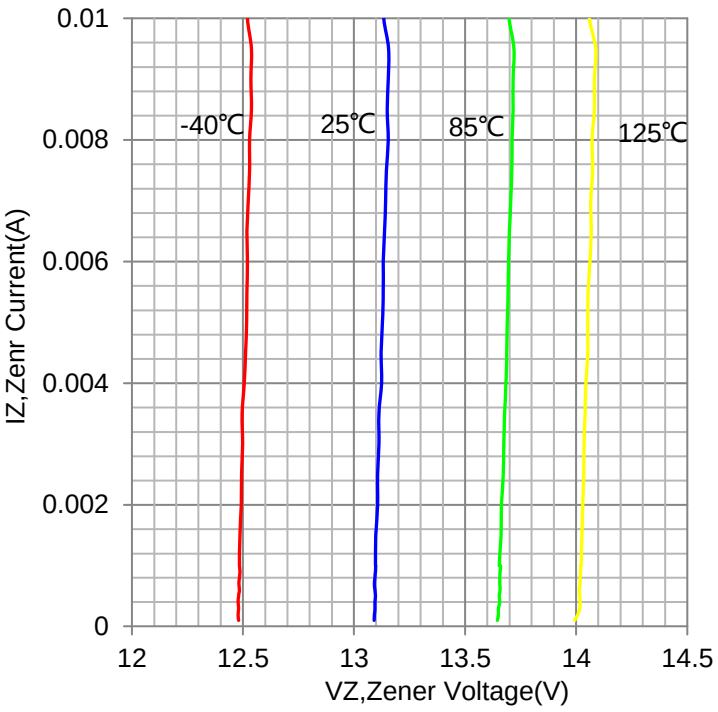
2. The Zener voltage (Vz) is measured 40ms after power is supplied.

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

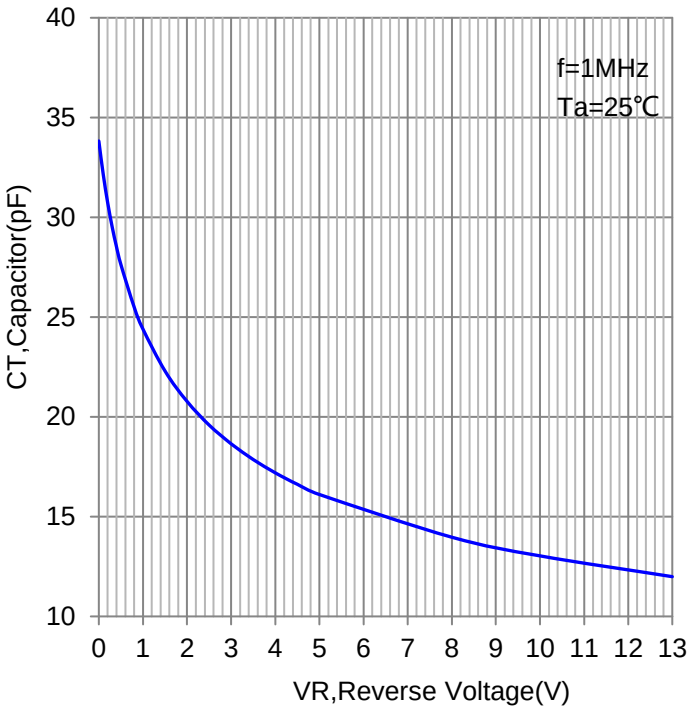
5.ELECTRICAL CHARACTERISTICS CURVES



IF vs. VF

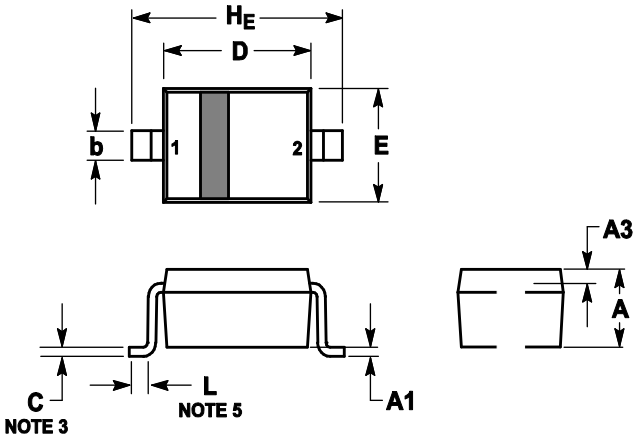


IZ vs. VZ



Capacitance

6.OUTLINE AND DIMENSIONS

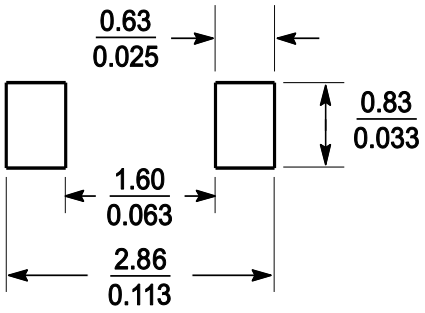


Notes:

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.
5. DIMENSION L IS MEASURED FROM END OF RADIUS.

	MILLIMETERS			INCHES		
DIM	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



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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