

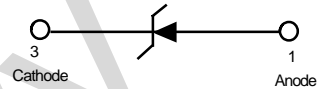
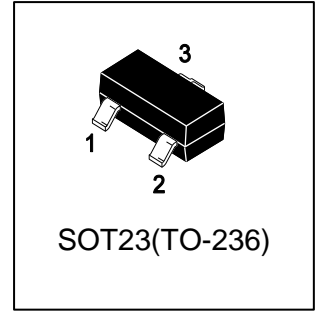
LBZX84C27LT1G

S-LBZX84C27LT1G

Zener Voltage Regulator Diodes

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.



2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LBZX84C27LT1G	Y10	3000/Tape&Reel
LBZX84C27LT3G	Y10	10000/Tape&Reel

3. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR-5 Board (Note 1) @ TA = 25°C Derate above 25°C	PD	225 1.8	mW mW/°C
Thermal Resistance Junction-to-Ambient	RθJA	556	°C/W
Total Device Dissipation, Alumina Substrate (Note 2) @ TA = 25°C Derate above 25°C	PD	300 2.4	mW mW/°C
Thermal Resistance Junction-to-Ambient	RθJA	417	°C/W
Junction and Storage temperature	TJ,Tstg	-55 ~ +150	°C

1.FR-5 = 1.0 × 0.75 × 0.062 in.

2.Alumina = 0.4 × 0.3 × 0.024 in. 99.5% alumina.

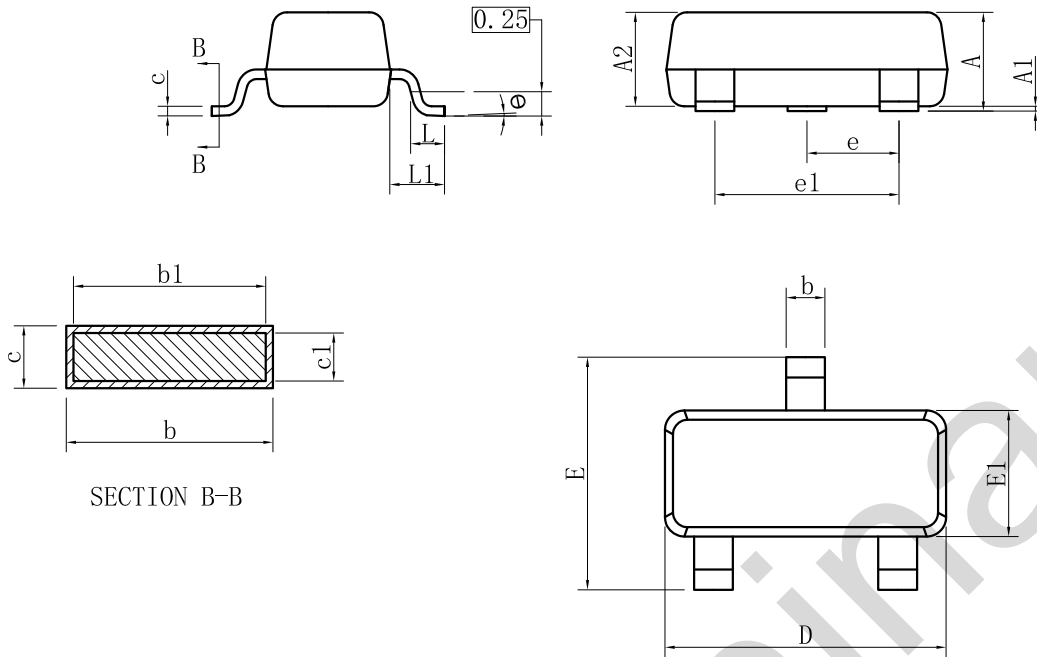
4. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Zener Voltage(Note 3) (IZT1 = 2 mA) (IZT2 = 0.1 mA) (IZT3 = 10 mA)	VZ	25.1 25 25.2	27 - -	28.9 28.9 29.3	V
Zener Impedance (IZT1 = 2 mA) (IZT2 = 0.5 mA) (IZT3 = 10 mA)	ZZT	- - -	- - -	80 300 45	Ω
Reverse Leakage Current (VR=18.9V)	IR	-	-	0.05	μA
Capacitance (VR=0,f=1MHz)	C	-	70	-	pF
Temperature Coefficient (IZT1 = 2mA)	θVZ	21.4	-	25.3	mV/k

3.Zener voltage is measured with a pulse test current IZ at an ambient temperature of 25°C.

Preliminary

5.OUTLINE AND DIMENSIONS

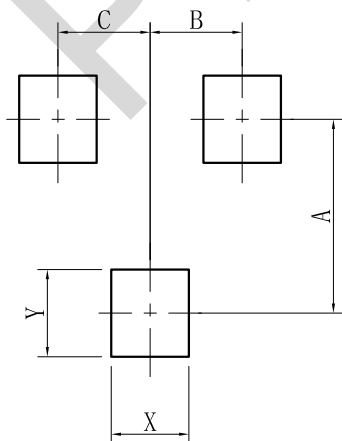


SOT23			
DIM	MIN	NOR	MAX
A	0.89	-	1.12
A1	0.01	-	0.10
A2	0.88	0.95	1.02
b	0.30	-	0.50
b1	0.30	0.40	0.45
c	0.08	-	0.20
c1	0.08	0.10	0.16
D	2.80	2.90	3.04
E	2.10	-	2.64
E1	1.20	1.30	1.40
e	0.95BSC		
e1	1.90BSC		
L	0.40	0.46	0.60
L1	0.54REF		
θ	0°	-	8°
All Dimensions in mm			

GENERAL NOTES

- 1.Top package surface finish Ra0.4±0.2um
- 2.Bottom package surface finish Ra0.7±0.2um
- 3.Side package surface finish Ra0.4±0.2um

6.SOLDERING FOOTPRINT



SOT-23	
DIM	(mm)
X	0.80
Y	0.90
A	2.00
B	0.95
C	0.95

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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Preliminary