

## 500 mW LL-34 Hermetically Sealed Glass Zener Voltage Regulators

### Specification Features:

- Zener Voltage Range 5.1 Volts (Graded)
- LL-34 (Mini-MELF) Package
- Surface Device Type Mounting
- Hermetically Sealed Glass
- Compression Bonded Construction
- All External Surfaces Are Corrosion Resistant And Terminals Are Readily Solderable
- Matte Tin (Sn) Terminal Finish
- Color band Indicates Negative Polarity


**SURFACE MOUNT  
LL34**
**DEVICE MARKING DIAGRAM**

**Cathode Band Color : Blue**

**ELECTRICAL SYMBOL**

### Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise noted

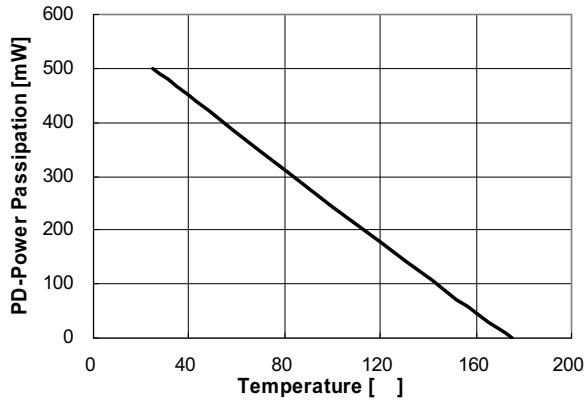
Parameter	Value	Units
Power Dissipation	500	mW
Forward Voltage @ IF = 100 mA	1.05	V
Storage Temperature Range	-65 to +175	°C
Operating Junction Temperature	+175	°C

These ratings are limiting values above which the serviceability of the diode may be impaired.

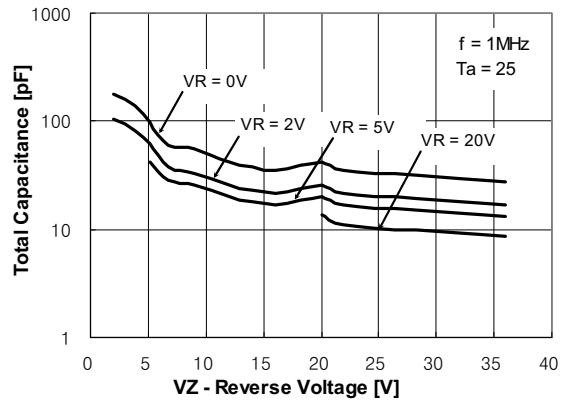
### Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Device Type	VZ@IZT		IZT (mA)	Zzt@IZT (Ohms) Max	Zzk@IZK (Ohms) Max	IZK (mA)	IR@VR (uA) Max	VR (V)
	Min	Max						
TCL5V1B-T-A01	4.94	5.2	20	17	685	1	0.19	1.5

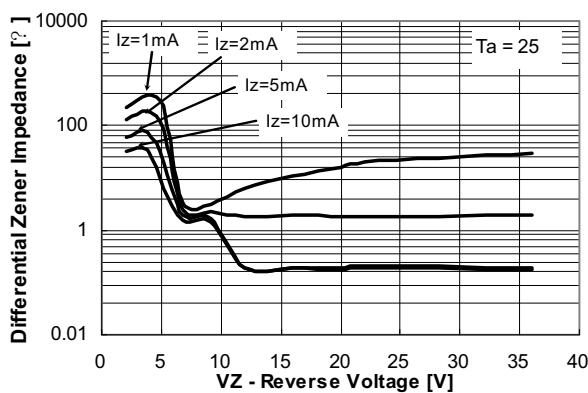
## RATING AND CHARACTERISTICS CURVES (TCL5V1B)



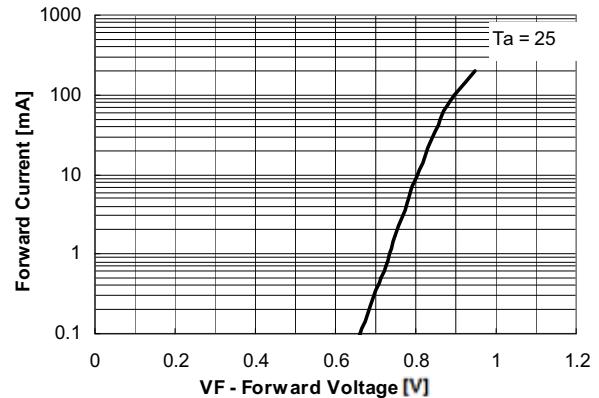
**Figure 1. Power Dissipation vs Ambient Temperature**  
Valid provided leads at a distance of 0.8mm from case are kept at ambient temperature



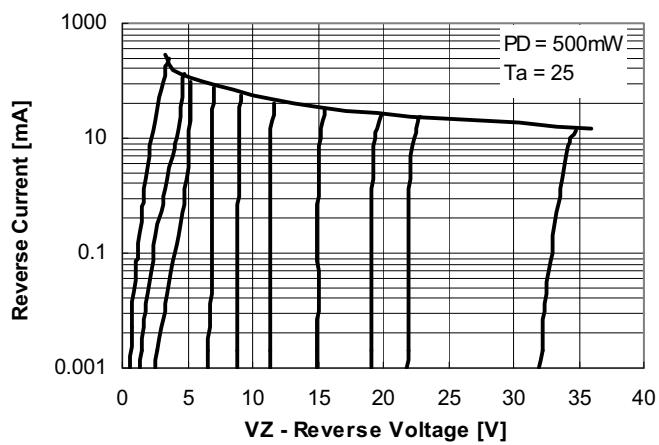
**Figure 2. Total Capacitance**



**Figure 3. Differential Impedance vs. Zener Voltage**



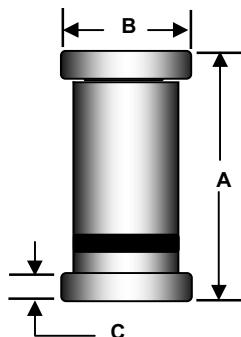
**Figure 4. Forward Current vs. Forward Voltage**



**Figure 5. Reverse Current vs. Reverse Voltage**

## Package Outline

LL34



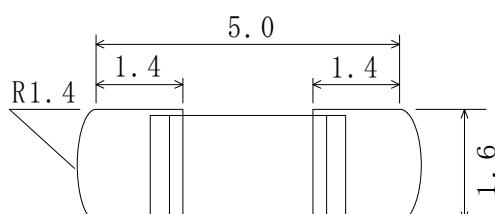
DIM	LL-34			
	Millimeters		Inches	
	Min	Max	Min	Max
<b>A</b>	3.302	3.600	0.130	0.142
<b>B</b>	1.397	1.499	0.055	0.059
<b>C</b>	0.350	0.500	0.014	0.020

### Notes:

1. All dimensions are within DO213AC JEDEC standard.
2. LL-34 polarity denoted by cathode band.

## Recommendation of Mounting Pad Layout

(Unit : mm)



## PACKAGING OF DIODE AND BRIDGE RECTIFIERS

### REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
LL-34	-T	2,500	-----	----	----	178	390*205*310	100,000	8.40

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