

# Silicon Zener Diode Series

1N746AUR thru 1N759AUR, 1N4370AUR thru 1N4372AUR, CDLL746A thru CDLL759A & CDLL4370A thru CDLL4372A

### **Features**

- Available in JAN, JANTX and JANTXV per MIL-PRF-19500/127
- Leadless Package for Surface Mount
- Metallurgically Bonded

## **Maximum Ratings**

Operating Temperature: -65°C to +175°C Storage Temperature: -65°C to +175°C

DC Power Dissipation: 500 mW @  $T_{FC} = +125$ °C Power Derating: 10 mW /  $^{\circ}$ C above  $T_{FC} = +125 ^{\circ}$ C Forward Voltage @ 200mA: 1.1 volts maximum









## Electrical Specifications @ +25 °C (Unless Otherwise Specified)

JEDEC TYPE NUMBER (NOTE 1)	NOMINAL ZENER VOLTAGE Vz @ IZT	ZENER TEST CURRENT IZT (NOTE 2)	MAXIMUM ZENER IMPEDANCE (NOTE 3) Z <sub>ZT</sub> @ I <sub>ZT</sub>	MAXIMUM REVERSE CURRENT I <sub>R</sub> @ V <sub>R</sub>		MAXIMUM ZENER CURRENT IZM
	VOLTS	mA	OHMS	μΑ	VOLTS	mA
CDLL4370A	2.4	20	30	100	1.0	155
CDLL4371A	2.7	20	30	60	1.0	140
CDLL4372A	3.0	20	29	30	1.0	125
CDLL746A	3.3	20	28	5	1.0	120
CDLL747A	3.6	20	24	3	1.0	110
CDLL748A	3.9	20	23	2	1.0	100
CDLL749A	4.3	20	22	2	1.0	90
CDLL750A	4.7	20	19	5	1.5	85
CDLL751A CDLL752A CDLL753A CDLL754A	5.1 5.6 6.2 6.8	20 20 20 20 20	17 11 7 5	5 5 5 2	2.0 2.5 3.5 4.0	75 70 65 60
CDLL755A	7.5	20	6	2	5.0	55
CDLL756A	8.2	20	8	1	6.0	50
CDLL757A	9.1	20	10	1	7.0	45
CDLL758A	10.0	20	17	1	8.0	40
CDLL759A	12.0	20	30	1	9.0	35

NOTE 1: Zener voltage tolerance on "A" suffix is  $\pm 5\%$ . No Suffix denotes  $\pm 10\%$  tolerance, "C" suffix denotes  $\pm 2\%$  tollerance and "D" suffix denotes  $\pm 1\%$  tolerance.

NOTE 2: Zener voltage is measured with the device junction in thermal equilibrium at an ambient temperature of 25°C ± 3°C.

NOTE 3: Zener impedance is derived by superimposing on I<sub>ZT</sub> A 60Hz rms a.c. current equal to 10% of I<sub>ZT</sub>



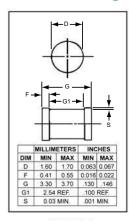
Revision Date: 11/4/2009

**New Product** 



## 1N746AUR thru 1N759AUR, 1N4370AUR thru 1N4372AUR, CDLL746A thru CDLL759A & CDLL4370A thru CDLL4372A

## **Outline Drawing**



#### **LEADED DESIGN DATA**

CASE: DO-213AA, Hermetically sealed glass case. (MELF, SOD-80, LL34)

LEAD FINISH: Tin / Lead

**THERMAL RESISTANCE:** ( $R_{\Theta,JEC}$ ): 100 °C/W maximum at L = 0 inch

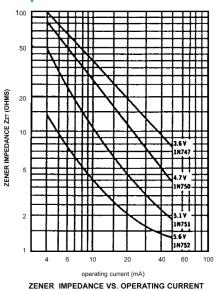
THERMAL IMPEDANCE: (Z<sub>O, IX</sub>): 25 °C/W maximum

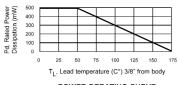
**POLARITY**: Diode to be operated with the banded (cathode) end positive.

**MOUNTING POSITION:** Any.

MOUNTING SURFACE SELECTION: The Axial Coefficient of Expansion (COE) Of this Device is Approximately +6 PPM/°C. The COE of the Mounting Surface System Should Be Selected To Provide A Suitable Match With This Device.

## **Graphs**





POWER DERATING CURVE

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