

- 1N746AUR-1 THRU 1N759AUR-1 AVAILABLE IN JAN, JANTX AND JANTXV
PER MIL-PRF-19500/127
- 1N4370AUR-1 THRU 1N4372AUR-1 AVAILABLE IN JAN, JANTX AND JANTXV
PER MIL-PRF-19500/127
- LEADLESS PACKAGE FOR SURFACE MOUNT
- METALLURGICALLY BONDED

1N746AUR-1 thru 1N759AUR-1
and
1N4370AUR-1 thru 1N4372AUR-1
and
CDLL746 thru CDLL759A
and
CDLL4370 thru CDLL4372A

MAXIMUM RATINGS

Operating Temperature: -65°C to +175°C
Storage Temperature: -65°C to +175°C
DC Power Dissipation: 500 mW @ $T_{EC} = +125^{\circ}\text{C}$
Power Derating: 10 mW / °C above $T_{EC} = +125^{\circ}\text{C}$
Forward Voltage @ 200mA: 1.1 volts maximum

ELECTRICAL CHARACTERISTICS @ 25°C

CDI TYPE NUMBER	NOMINAL ZENER VOLTAGE	ZENER TEST CURRENT	MAXIMUM ZENER IMPEDANCE (NOTE 3)	MAXIMUM REVERSE CURRENT		MAXIMUM ZENER CURRENT
				I_R @ V_R	I_{ZM}	
(NOTE 1)	V_Z @ I_{ZT} (NOTE 2)	I_{ZT}	Z_{ZT} @ I_{ZT}	μA	VOLTS	mA
	VOLTS	mA	OHMS			
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	5.1	20	17	5	2.0	75
CDLL752A	5.6	20	11	5	2.5	70
CDLL753A	6.2	20	7	5	3.5	65
CDLL754A	6.8	20	5	2	4.0	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 $\pm 2\%$ tolerance 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, $\pm 3^{\circ}\text{C}$.

NOTE 3 Zener impedance is derived by superimposing on I_{ZT} A 60Hz rms a.c. current equal to 10% of I_{ZT} .

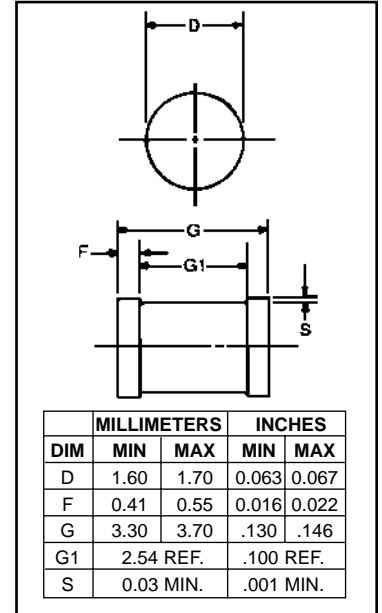


FIGURE 1

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: ($Z_{\theta JX}$): 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 +6PPM/°C. The COE of the Mounting Surface System Should Be Selected To Provide A Suitable Match With This Device.

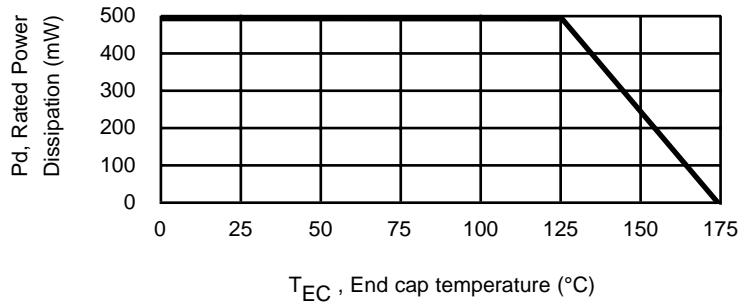


COMPENSATED DEVICES INCORPORATED

22 COREY STREET, MELROSE, MASSACHUSETTS 02176
PHONE (781) 665-1071 FAX (781) 665-7379
WEBSITE: <http://www.cdi-diodes.com> E-mail: mail@cdi-diodes.com

CDLL746 thru CDLL759A and CDLL4370 thru CDLL4372A

FIGURE 2



POWER DERATING CURVE

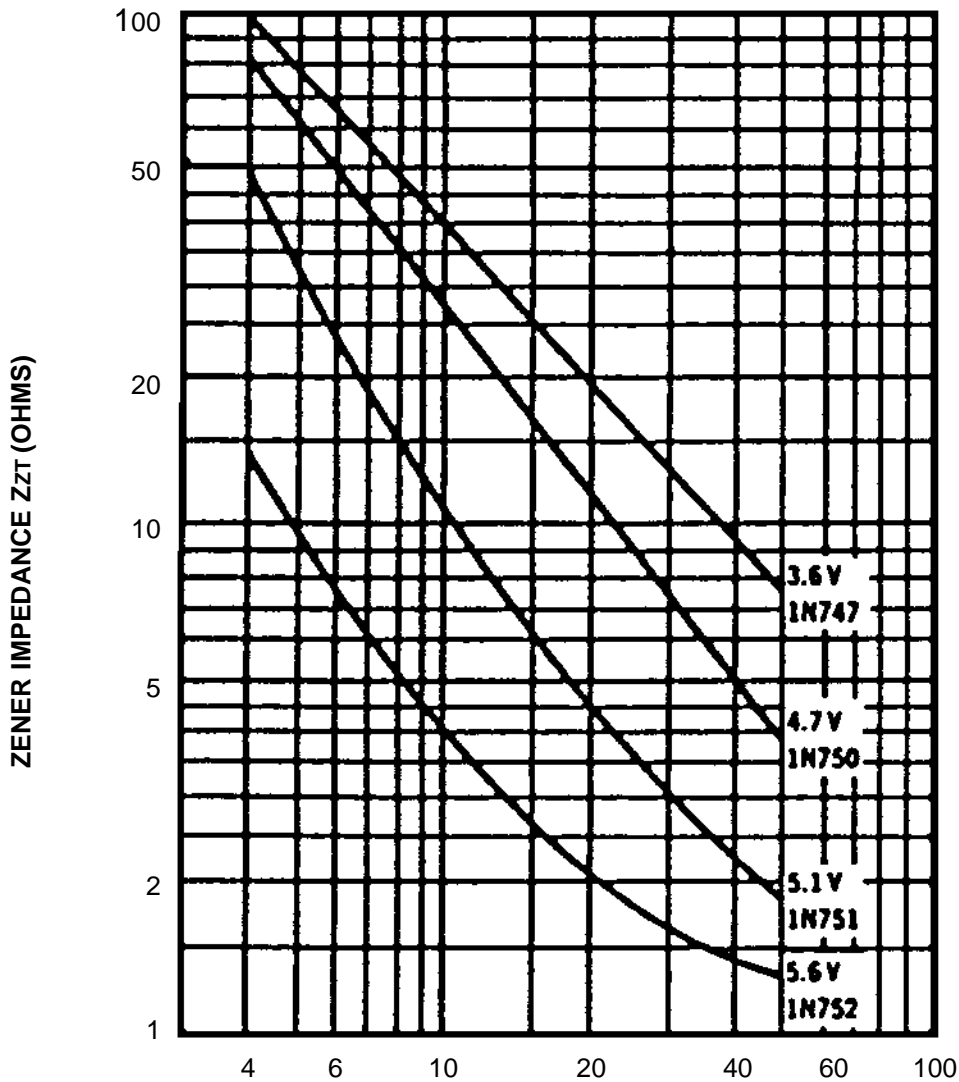


FIGURE 3

operating current (mA)

ZENER IMPEDANCE VS. OPERATING CURRENT