

- 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	MAXIMUM REVERSE CURRENT		MAXIMUM ZENER CURRENT
(NOTE 1)	$V_Z @ I_{ZT}$	I_{ZT}	(NOTE 3) $Z_{ZT} @ I_{ZT}$	$I_R @ V_R$		I_{ZM}
	(NOTE 2)					
	VOLTS	mA	OHMS	μA	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	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} .

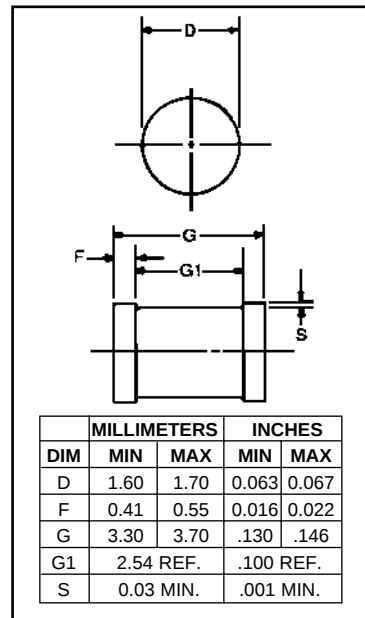


FIGURE 1

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.

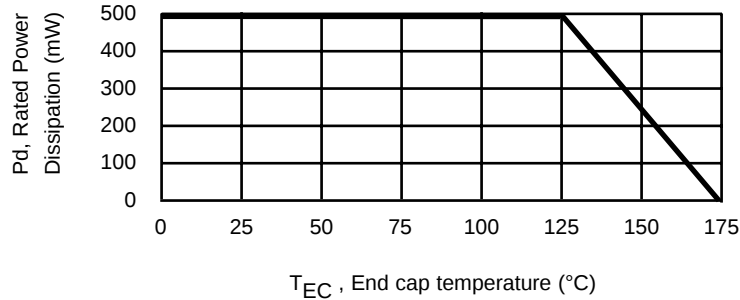
MOUNTING SURFACE SELECTION:

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.



CDLL746 thru CDLL759A and CDLL4370 thru CDLL4372A

FIGURE 2



POWER DERATING CURVE

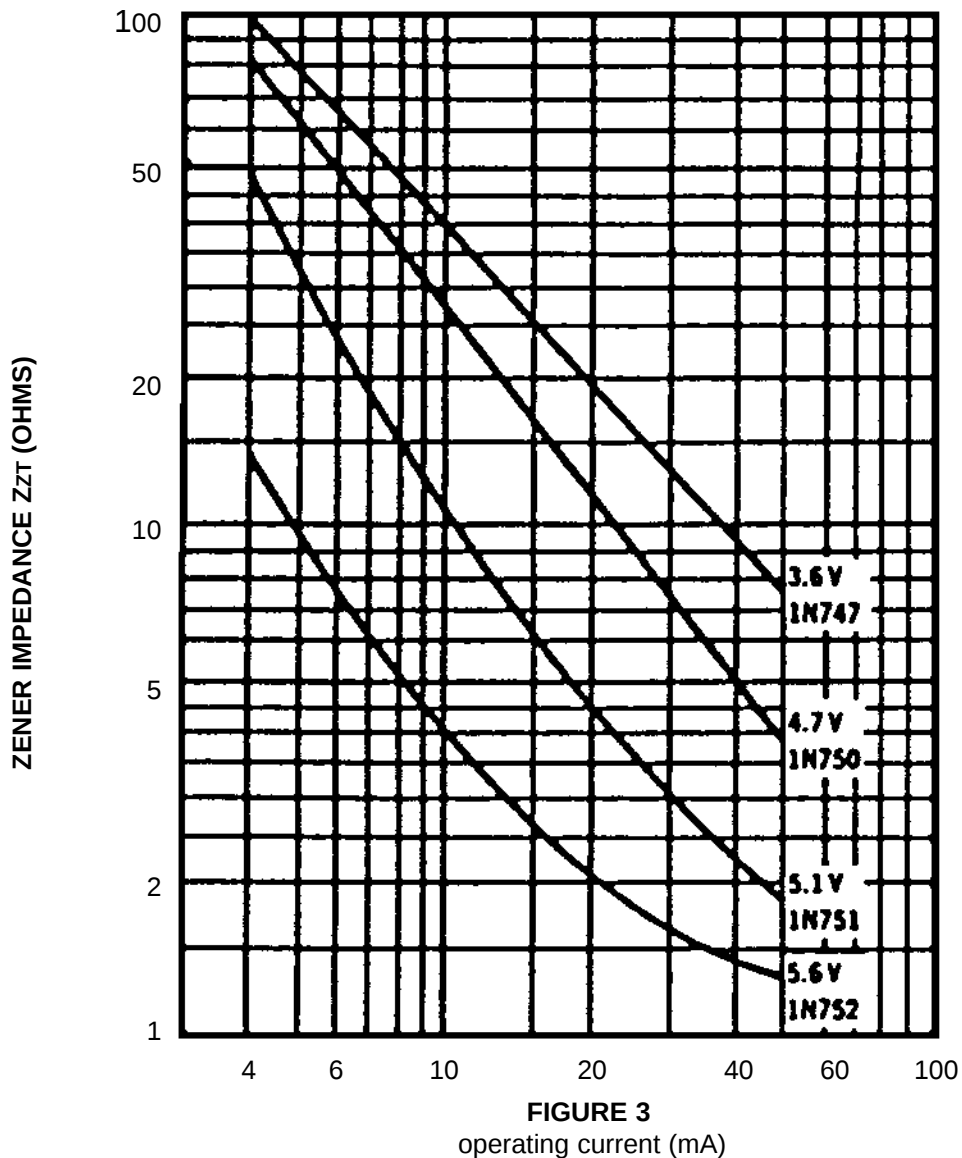


FIGURE 3

operating current (mA)

ZENER IMPEDANCE VS. OPERATING CURRENT