



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

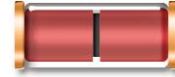
Operating Temperature: -65°C to +175°C

Storage Temperature: -65°C to +175°C

DC Power Dissipation: 500 mW @ $T_{EC} = +125^{\circ}\text{C}$

Power Derating: 10 mW / °C above $T_{EC} = +125^{\circ}\text{C}$

Forward Voltage @ 200mA: 1.1 volts maximum



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

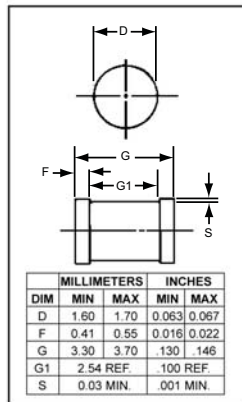
JEDEC TYPE NUMBER (NOTE 1)	NOMINAL ZENER VOLTAGE $V_Z @ I_{ZT}$	ZENER TEST CURRENT I_{ZT} (NOTE 2)	MAXIMUM ZENER IMPEDANCE (NOTE 3) $Z_{ZT} @ I_{ZT}$	MAXIMUM REVERSE CURRENT $I_R @ V_R$		MAXIMUM ZENER CURRENT I_{ZM}
	VOLTS	mA	OHMS	μA	VOLTS	mA
CDLL4370A CDLL4371A	2.4 2.7	20 20	30 30	100 60	1.0 1.0	155 140
CDLL4372A CDLL746A CDLL747A	3.0 3.3 3.6	20 20 20	29 28 24	30 5 3	1.0 1.0 1.0	125 120 110
CDLL748A CDLL749A CDLL750A	3.9 4.3 4.7	20 20 20	23 22 19	2 2 5	1.0 1.0 1.5	100 90 85
CDLL751A CDLL752A CDLL753A CDLL754A	5.1 5.6 6.2 6.8	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 CDLL756A CDLL757A	7.5 8.2 9.1	20 20 20	6 8 10	2 1 1	5.0 6.0 7.0	55 50 45
CDLL758A CDLL759A	10.0 12.0	20 20	17 30	1 1	8.0 9.0	40 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 $25^{\circ}\text{C} \pm 3^{\circ}\text{C}$.

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

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

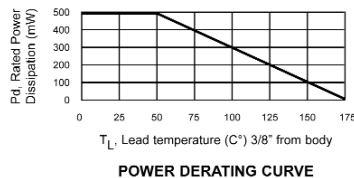
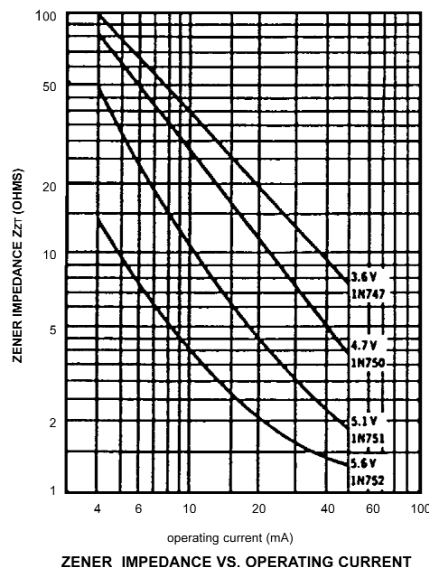
THERMAL IMPEDANCE: ($Z_{\theta JX}$): 25 °C/W maximum

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 +6 PPM/°C. The COE of the Mounting Surface System Should Be Selected To Provide A Suitable Match With This Device.

Graphs



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