

- 1 WATT ZENER DIODES
- LEADLESS PACKAGE FOR SURFACE MOUNT
- DOUBLE PLUG CONSTRUCTION
- METALLURGICALLY BONDED

**CDLL4728
thru
CDLL4764A
and
CDLL1W110**

MAXIMUM RATINGS

Operating Temperature: -65°C to +175°C
Storage Temperature: -65°C to +175°C
Power Derating: 20mW / °C above T_{EC} = +125°C
Forward voltage @ 200mA: 1.2 volts maximum

ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified.

| CDI TYPE NUMBER | NOMINAL ZENER VOLTAGE V _Z | TEST CURRENT I _{ZT} | MAXIMUM ZENER IMPEDANCE Z _{ZT} @ I _{ZT} | MAXIMUM REVERSE CURRENT I _R @ V _R | TEST VOLTAGE V _R | MAXIMUM KNEE IMPEDANCE Z _{ZK} @ I _{ZK} | TEST CURRENT I _{ZK} |
|-----------------|--------------------------------------|------------------------------|---|---|-----------------------------|--|------------------------------|
| | (Note 1&3) VOLTS | mA | (Note 2) OHMS | μ A | VOLTS | (Note 2) OHMS | mA |
| CDLL4728A | 3.3 | 76 | 10 | 100 | 1 | 400 | 1.0 |
| CDLL4729A | 3.6 | 69 | 10 | 100 | 1 | 400 | 1.0 |
| CDLL4730A | 3.9 | 64 | 9 | 100 | 1 | 400 | 1.0 |
| CDLL4731A | 4.3 | 58 | 9 | 10 | 1 | 400 | 1.0 |
| CDLL4732A | 4.7 | 53 | 8 | 10 | 1 | 500 | 1.0 |
| CDLL4733A | 5.1 | 49 | 7 | 5 | 1 | 550 | 1.0 |
| CDLL4734A | 5.6 | 45 | 5 | 5 | 2 | 600 | 1.0 |
| CDLL4735A | 6.2 | 41 | 2 | 5 | 3 | 700 | 1.0 |
| CDLL4736A | 6.8 | 37 | 3.5 | 3 | 4 | 700 | 1.0 |
| CDLL4737A | 7.5 | 34 | 4.0 | 3 | 5 | 700 | 0.5 |
| CDLL4738A | 8.2 | 31 | 4.5 | 3 | 6 | 700 | 0.5 |
| CDLL4739A | 9.1 | 28 | 5.0 | 3 | 7 | 700 | 0.5 |
| CDLL4740A | 10 | 25 | 7 | 3 | 7.6 | 700 | 0.25 |
| CDLL4741A | 11 | 23 | 8 | 2 | 8.4 | 700 | 0.25 |
| CDLL4742A | 12 | 21 | 9 | 1 | 9.1 | 700 | 0.25 |
| CDLL4743A | 13 | 29 | 10 | 0.5 | 9.9 | 700 | 0.25 |
| CDLL4744A | 15 | 17 | 14 | 0.1 | 11.4 | 700 | 0.25 |
| CDLL4745A | 16 | 15.5 | 16 | 0.1 | 12.2 | 700 | 0.25 |
| CDLL4746A | 18 | 14 | 20 | 0.1 | 13.7 | 750 | 0.25 |
| CDLL4747A | 20 | 12.5 | 22 | 0.1 | 15.2 | 750 | 0.25 |
| CDLL4748A | 22 | 11.5 | 23 | 0.1 | 16.7 | 750 | 0.25 |
| CDLL4749A | 24 | 10.5 | 25 | 0.1 | 18.2 | 750 | 0.25 |
| CDLL4750A | 27 | 9.5 | 35 | 0.1 | 20.6 | 750 | 0.25 |
| CDLL4751A | 30 | 8.5 | 40 | 0.1 | 22.8 | 1000 | 0.25 |
| CDLL4752A | 33 | 7.5 | 45 | 0.1 | 25.1 | 1000 | 0.25 |
| CDLL4753A | 36 | 7.0 | 50 | 0.1 | 27.4 | 1000 | 0.25 |
| CDLL4754A | 39 | 6.5 | 60 | 0.1 | 29.7 | 1000 | 0.25 |
| CDLL4755A | 43 | 6.0 | 70 | 0.1 | 32.7 | 1500 | 0.25 |
| CDLL4756A | 47 | 5.5 | 80 | 0.1 | 35.8 | 1500 | 0.25 |
| CDLL4757A | 51 | 5.0 | 95 | 0.1 | 38.8 | 1500 | 0.25 |
| CDLL4758A | 56 | 4.5 | 110 | 0.1 | 42.6 | 2000 | 0.25 |
| CDLL4759A | 62 | 4.0 | 125 | 0.1 | 47.1 | 2000 | 0.25 |
| CDLL4760A | 68 | 3.7 | 150 | 0.1 | 51.7 | 2000 | 0.25 |
| CDLL4761A | 75 | 3.3 | 175 | 0.1 | 56.0 | 2000 | 0.25 |
| CDLL4762A | 82 | 3.0 | 200 | 0.1 | 62.2 | 3000 | 0.25 |
| CDLL4763A | 91 | 2.8 | 250 | 0.1 | 69.2 | 3000 | 0.25 |
| CDLL4764A | 100 | 2.5 | 350 | 0.1 | 76.0 | 3000 | 0.25 |
| CDLL1W110A | 110 | 2.3 | 450 | 0.1 | 83.6 | 4000 | 0.25 |

NOTE 1 "A" suffix = ± 5%, no suffix = ± 10%, "C" SUFFIX = ± 2% and "D" suffix = ± 1%.

NOTE 2 Zener impedance is derived by superimposing on I_{ZT} A 60Hz rms a.c. current equal to 10% of I_{ZT} or I_{ZK}.

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

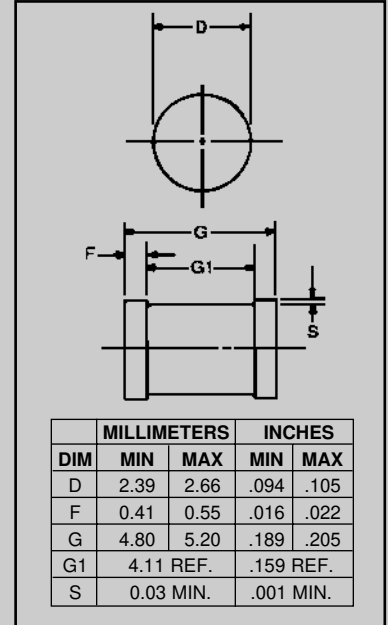


FIGURE 1

DESIGN DATA

CASE: DO-213AB, Hermetically sealed glass case. (MELF, LL41)

LEAD FINISH: Tin / Lead

THERMAL RESISTANCE: (R_{θJC}): 100 °C/W maximum at L = 0 inch

THERMAL IMPEDANCE: (Z_{θJX}): 15 °C/W maximum

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

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.



CDLL4728 thru CDLL4764A and CDLL1W110

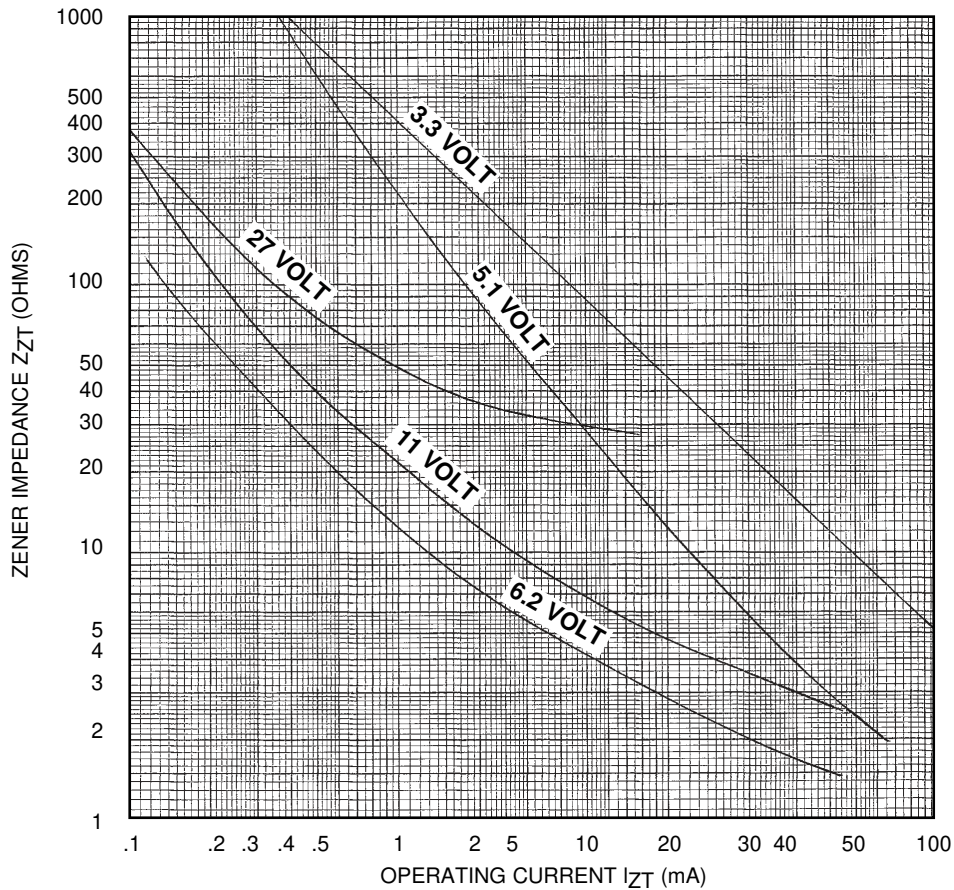


FIGURE 3

ZENER IMPEDANCE VS. OPERATING CURRENT