

- 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 $T_{EC} = +125^{\circ}\text{C}$

Forward voltage @ 200mA: 1.2 volts maximum

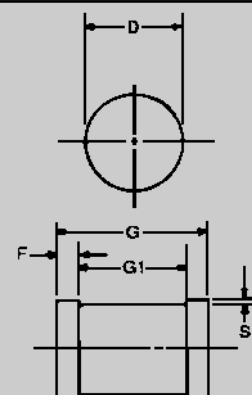
ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified.

CDI TYPE NUMBER	NOMINAL ZENER VOLTAGE V_Z (Note 1&3)	TEST CURRENT I_{ZT}	MAXIMUM ZENER IMPEDANCE $Z_{ZT} @ I_{ZT}$ (Note 2)	MAXIMUM REVERSE CURRENT $I_R @ V_R$	TEST VOLTAGE V_R	MAXIMUM KNEE IMPEDANCE $Z_{ZK} @ I_{ZK}$ (Note 2)	TEST CURRENT I_{ZK}
	VOLTS	mA	OHMS	μA	VOLTS	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 = $\pm 5\%$, no suffix = $\pm 10\%$, "C" SUFFIX = $\pm 2\%$ and "D" suffix = $\pm 1\%$.

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 $25^{\circ}\text{C} \pm 3^{\circ}\text{C}$.



	MILLIMETERS		INCHES	
DIM	MIN	MAX	MIN	MAX
D	2.39	2.66	.094	.105
F	0.41	0.55	.016	.022
G	4.80	5.20	.189	.205
G1	4.11 REF.		.159 REF.	
S	0.03 MIN.		.001 MIN.	

FIGURE 1

DESIGN DATA

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

LEAD FINISH: Tin / Lead

THERMAL RESISTANCE: ($R_{\theta JC}$):
100 °C/W maximum at L = 0 inch

THERMAL IMPEDANCE: ($Z_{\theta JX}$): 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.



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CDLL4728 thru CDLL4764A and CDLL1W110

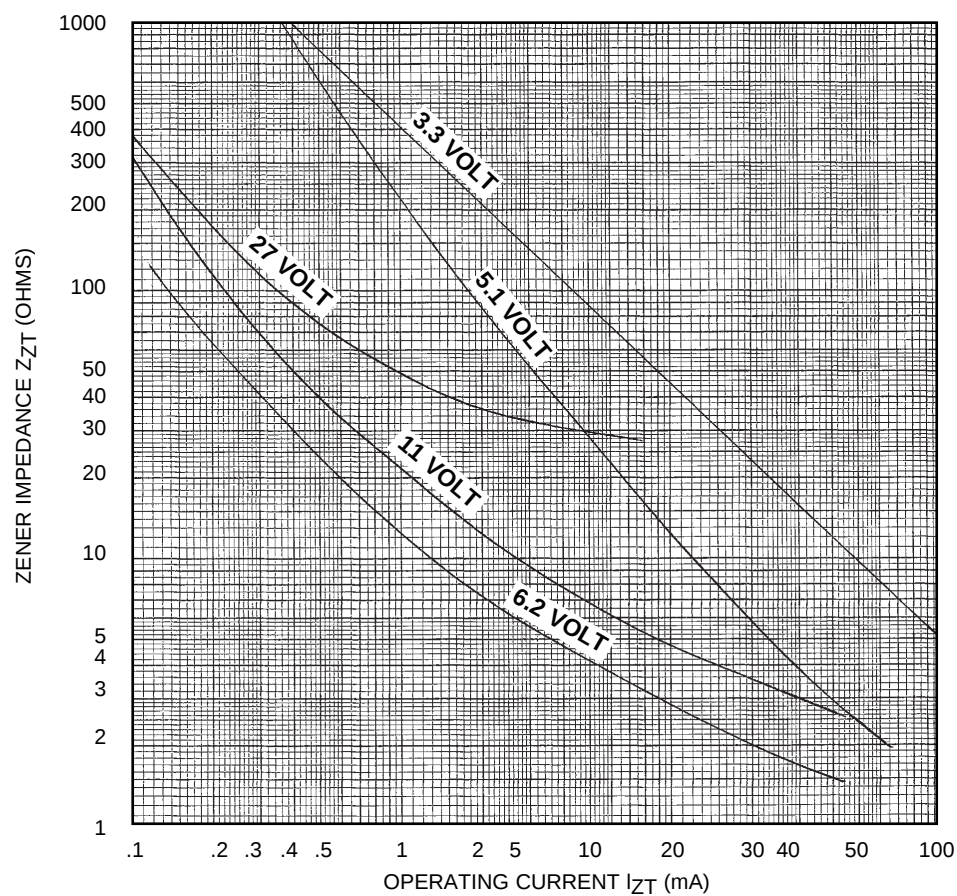


FIGURE 3
ZENER IMPEDANCE VS. OPERATING CURRENT

Mouser Electronics

Authorized Distributor

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Microchip:

[CDLL4752A](#) [CDLL4744](#) [CDLL4758](#) [CDLL4758A](#) [CDLL4763A](#) [CDLL4729A](#) [CDLL4732A](#) [CDLL4748A](#) [CDLL4741](#)
[CDLL4745](#) [CDLL4754A](#) [CDLL4760](#) [CDLL4740](#) [CDLL4728A](#) [CDLL4763](#) [CDLL4738A](#) [CDLL4749A](#) [CDLL4745A](#)
[CDLL4731A](#) [CDLL4734](#) [CDLL4755A](#) [CDLL4739A](#) [CDLL4756](#) [CDLL4755](#) [CDLL4732](#) [CDLL4734A](#) [CDLL4760A](#)
[CDLL4761](#) [CDLL4754](#) [CDLL4729](#) [CDLL4764](#) [CDLL4730](#) [CDLL4757](#) [CDLL4743](#) [CDLL4756A](#) [CDLL4747](#)
[CDLL4753A](#) [CDLL4730A](#) [CDLL4762](#) [CDLL4737A](#) [CDLL4757A](#) [CDLL4728](#) [CDLL4753](#) [CDLL4759A](#) [CDLL4742A](#)
[CDLL4749](#) [CDLL4744A](#) [CDLL4741A](#) [CDLL4752](#) [CDLL4751A](#) [CDLL4762A](#) [CDLL4739](#) [CDLL4733](#) [CDLL1W110](#)
[CDLL4761A](#) [CDLL4736](#) [CDLL4740A](#) [CDLL4738](#) [CDLL4750A](#) [CDLL4759](#) [CDLL4737](#) [CDLL4731](#) [CDLL4742](#)
[CDLL4748](#) [CDLL4735A](#) [CDLL4736A](#) [CDLL4743A](#) [CDLL4764A](#) [CDLL4750](#) [CDLL4746](#) [CDLL4751](#) [CDLL4735](#)
[CDLL4733A](#) [CDLL4747A](#) [CDLL4746A](#)