- **TEMPERATURE COMPENSATED ZENER REFERENCE DIODES**
- **LEADLESS PACKAGE FOR SURFACE MOUNT**
- **12.8 VOLT NOMINAL ZENER VOLTAGE ± 5%**
- **LOW NOISE**
- **METALLURGICALLY BONDED**
- **DOUBLE PLUG CONSTRUCTION**

CDLL4896 thru CDLL4915A

MAXIMUM RATINGS

Operating Temperature: -65°C to +175°C
Storage Temperature: -65°C to +175°C
DC Power Dissipation: 500mW @ +50°C
Power Derating: 4 mW / °C above +50°C

REVERSE LEAKAGE CURRENT

I_R = 15μA @ 25°C & V_R = 8Vdc

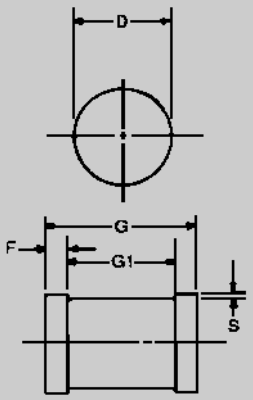
ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified.

CDI TYPE NUMBER (Note 3)	TEST CURRENT I_{ZT}	VOLTAGE TEMPERATURE STABILITY $^3V_{ZT}$ (Note 2)	TEMPERATURE RANGE	EFFECTIVE TEMPERATURE COEFFICIENT	MAXIMUM DYNAMIC IMPEDANCE Z_{ZT} (Note 1)	MAXIMUM NOISE DENSITY N_D
	mA	mV	°C	%/°C	OHMS	μV/ Hz
CDLL4896	0.5	96	+25 to +100	0.01	400	0.8
CDLL4896A	0.5	198	-55 to +100	0.01	400	0.8
CDLL4897	0.5	48	+25 to +100	0.005	400	0.8
CDLL4897A	0.5	99	-55 to +100	0.005	400	0.8
CDLL4898	0.5	19	+25 to +100	0.002	400	0.8
CDLL4898A	0.5	40	-55 to +100	0.002	400	0.8
CDLL4899	0.5	10	+25 to +100	0.001	400	0.8
CDLL4899A	0.5	20	-55 to +100	0.001	400	0.8
CDLL4900	1.0	96	+25 to +100	0.01	200	0.4
CDLL4900A	1.0	198	-55 to +100	0.01	200	0.4
CDLL4901	1.0	48	+25 to +100	0.005	200	0.4
CDLL4901A	1.0	99	-55 to +100	0.005	200	0.4
CDLL4902	1.0	19	+25 to +100	0.002	200	0.4
CDLL4902A	1.0	40	-55 to +100	0.002	200	0.4
CDLL4903	1.0	10	+25 to +100	0.001	200	0.4
CDLL4903A	1.0	20	-55 to +100	0.001	200	0.4
CDLL4904	2.0	96	+25 to +100	0.01	100	0.25
CDLL4904A	2.0	198	-55 to +100	0.01	100	0.25
CDLL4905	2.0	48	+25 to +100	0.005	100	0.25
CDLL4905A	2.0	99	-55 to +100	0.005	100	0.25
CDLL4906	2.0	19	+25 to +100	0.002	100	0.25
CDLL4906A	2.0	40	-55 to +100	0.002	100	0.25
CDLL4907	2.0	10	+25 to +100	0.001	100	0.25
CDLL4907A	2.0	20	-55 to +100	0.001	100	0.25
CDLL4908	4.0	96	+25 to +100	0.01	50	0.22
CDLL4908A	4.0	198	-55 to +100	0.01	50	0.22
CDLL4909	4.0	48	+25 to +100	0.005	50	0.22
CDLL4909A	4.0	99	-55 to +100	0.005	50	0.22
CDLL4910	4.0	19	+25 to +100	0.002	50	0.22
CDLL4910A	4.0	40	-55 to +100	0.002	50	0.22
CDLL4911	4.0	10	+25 to +100	0.001	50	0.22
CDLL4911A	4.0	20	-55 to +100	0.001	50	0.22
CDLL4912	7.5	96	+25 to +100	0.01	25	0.20
CDLL4912A	7.5	198	-55 to +100	0.01	25	0.20
CDLL4913	7.5	48	+25 to +100	0.005	25	0.20
CDLL4913A	7.5	99	-55 to +100	0.005	25	0.20
CDLL4914	7.5	19	+25 to +100	0.002	25	0.20
CDLL4914A	7.5	40	-55 to +100	0.002	25	0.20
CDLL4915	7.5	10	+25 to +100	0.001	25	0.20
CDLL4915A	7.5	20	-55 to +100	0.001	25	0.20

NOTE 1 Zener impedance is derived by superimposing on I_{ZT} A 60Hz rms a.c. current equal to 10% of I_{ZT}.

NOTE 2 The maximum allowable change observed over the entire temperature range, per JEDEC standard No.5.

NOTE 3 Zener voltage range equals 12.8 volts ± 5%.



	MILLIMETERS		INCHES	
DIM	MIN	MAX	MIN	MAX
D	1.60	1.70	0.063	0.067
F	0.41	0.55	0.016	0.022
G	3.30	3.70	.130	.146
G1	2.54 REF.		.100 REF.	
S	0.03 MIN.		.001 MIN.	

FIGURE 1

DESIGN DATA

CASE: DO-213AA**,** Hermetically sealed glass case. (MELF, SOD-80, LL34)

LEAD FINISH: Tin / Lead

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.

Microsemi

6 LAKE STREET, LAWRENCE, MASSACHUSETTS 01841
PHONE (978) 620-2600 FAX (978) 689-0803
WEBSITE: http://www.microsemi.com

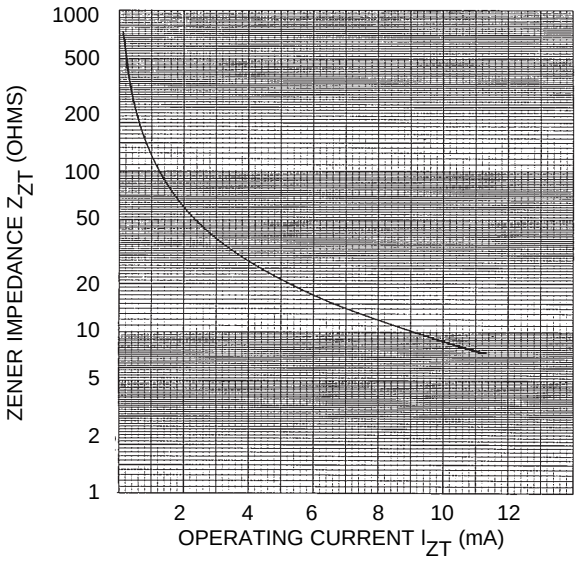


FIGURE 2

ZENER IMPEDANCE VS. OPERATING CURRENT

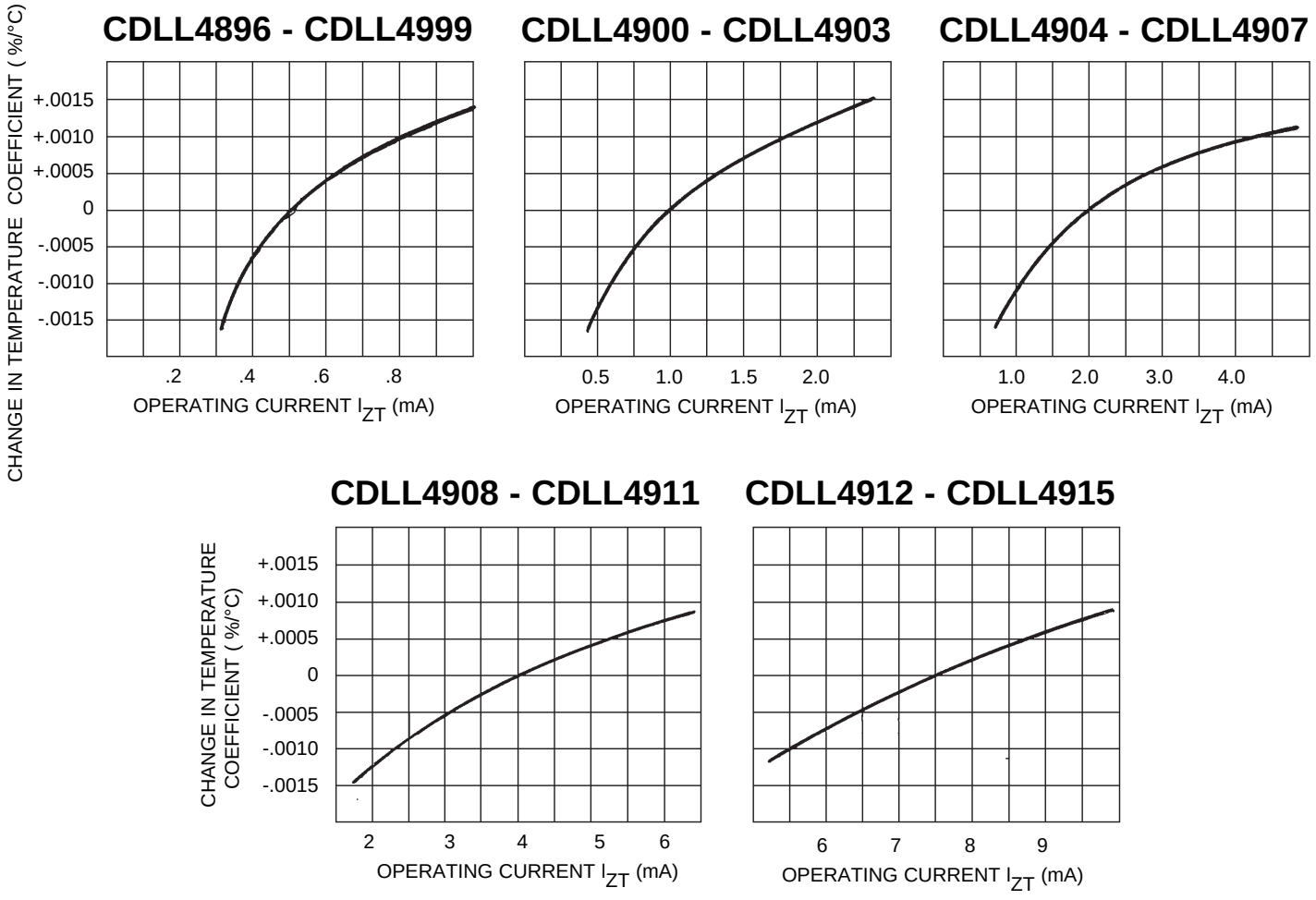


FIGURE 3

TYPICAL CHANGE OF TEMPERATURE COEFFICIENT WITH CHANGE IN OPERATING CURRENT