

- TEMPERATURE COMPENSATED ZENER REFERENCE DIODES
- LEADLESS PACKAGE FOR SURFACE MOUNT
- 19.2 VOLT NOMINAL ZENER VOLTAGE $\pm 5\%$
- LOW NOISE
- DOUBLE PLUG CONSTRUCTION
- METALLURGICALLY BONDED

CDLL4916
thru
CDLL4932A

MAXIMUM RATINGS

Operating Temperature: -65°C to $+175^{\circ}\text{C}$
Storage Temperature: -65°C to $+175^{\circ}\text{C}$
DC Power Dissipation: 500mW @ $+50^{\circ}\text{C}$
Power Derating: 4 mW / $^{\circ}\text{C}$ above $+50^{\circ}\text{C}$

REVERSE LEAKAGE CURRENT

$I_R = 15\mu\text{A}$ @ 25°C & $V_R = 12\text{Vdc}$

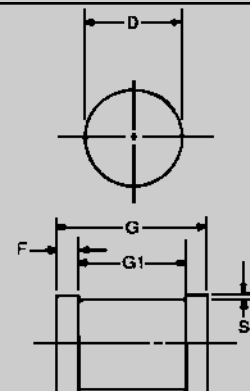
ELECTRICAL CHARACTERISTICS @ 25°C , unless otherwise specified.

CDI TYPE NUMBER (Note 3)	TEST CURRENT I_{ZT}	VOLTAGE TEMPERATURE STABILITY $^{\circ}\text{V}_{ZT}$ (Note 2)	TEMPERATURE RANGE	EFFECTIVE TEMPERATURE COEFFICIENT	MAXIMUM DYNAMIC IMPEDANCE Z_{ZT} (Note 1)	MAXIMUM NOISE DENSITY N_D
	mA	mV	$^{\circ}\text{C}$	$\%/^{\circ}\text{C}$	OHMS	$\mu\text{V}/\text{Hz}$
CDLL4916	0.5	144	+25 to +100	0.01	600	1.0
CDLL4916A	0.5	298	-55 to +100	0.01	600	1.0
CDLL4917	0.5	72	+25 to +100	0.005	600	1.0
CDLL4917A	0.5	149	-55 to +100	0.005	600	1.0
CDLL4918	0.5	29	+25 to +100	0.002	600	1.0
CDLL4918A	0.5	60	-55 to +100	0.002	600	1.0
CDLL4919	1.0	144	+25 to +100	0.01	300	0.5
CDLL4919A	1.0	298	-55 to +100	0.01	300	0.5
CDLL4920	1.0	72	+25 to +100	0.005	300	0.5
CDLL4920A	1.0	149	-55 to +100	0.005	300	0.5
CDLL4921	1.0	29	+25 to +100	0.002	300	0.5
CDLL4921A	1.0	60	-55 to +100	0.002	300	0.5
CDLL4922	2.0	144	+25 to +100	0.01	150	0.25
CDLL4922A	2.0	298	-55 to +100	0.01	150	0.25
CDLL4923	2.0	72	+25 to +100	0.005	150	0.25
CDLL4923A	2.0	149	-55 to +100	0.005	150	0.25
CDLL4924	2.0	29	+25 to +100	0.002	150	0.25
CDLL4924A	2.0	60	-55 to +100	0.002	150	0.25
CDLL4925	4.0	144	+25 to +100	0.01	75	0.22
CDLL4925A	4.0	298	-55 to +100	0.01	75	0.22
CDLL4926	4.0	72	+25 to +100	0.005	75	0.22
CDLL4926A	4.0	149	-55 to +100	0.005	75	0.22
CDLL4927	4.0	29	+25 to +100	0.002	75	0.22
CDLL4927A	4.0	60	-55 to +100	0.002	75	0.22
CDLL4928	4.0	14	+25 to +100	0.001	75	0.22
CDLL4928A	4.0	30	-55 to +100	0.001	75	0.22
CDLL4929	7.5	144	+25 to +100	0.01	36	0.20
CDLL4929A	7.5	298	-55 to +100	0.01	36	0.20
CDLL4930	7.5	72	+25 to +100	0.005	36	0.20
CDLL4930A	7.5	149	-55 to +100	0.005	36	0.20
CDLL4931	7.5	29	+25 to +100	0.002	36	0.20
CDLL4931A	7.5	60	-55 to +100	0.002	36	0.20
CDLL4932	7.5	14	+25 to +100	0.001	36	0.20
CDLL4932A	7.5	30	-55 to +100	0.001	36	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 i.e., the diode voltage will not exceed the specified mV at any discrete temperature between the established limits, per JEDEC standard No.5.

NOTE 3 Zener voltage range equals 19.2 volts $\pm 5\%$.



	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 $+6\text{PPM}/^{\circ}\text{C}$. The COE of the Mounting Surface System Should Be Selected To Provide A Suitable Match With This Device.



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CDLL4916 thru CDLL4932A

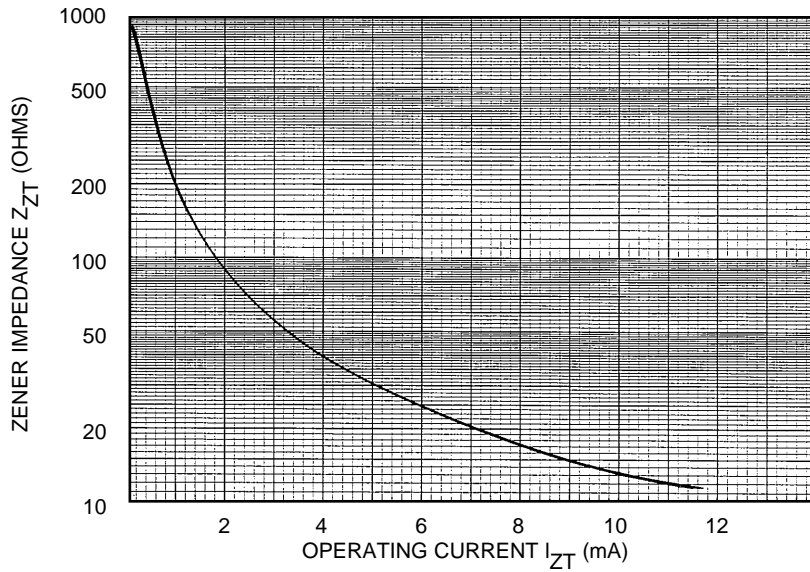


FIGURE 2
ZENER IMPEDANCE VS. OPERATING CURRENT

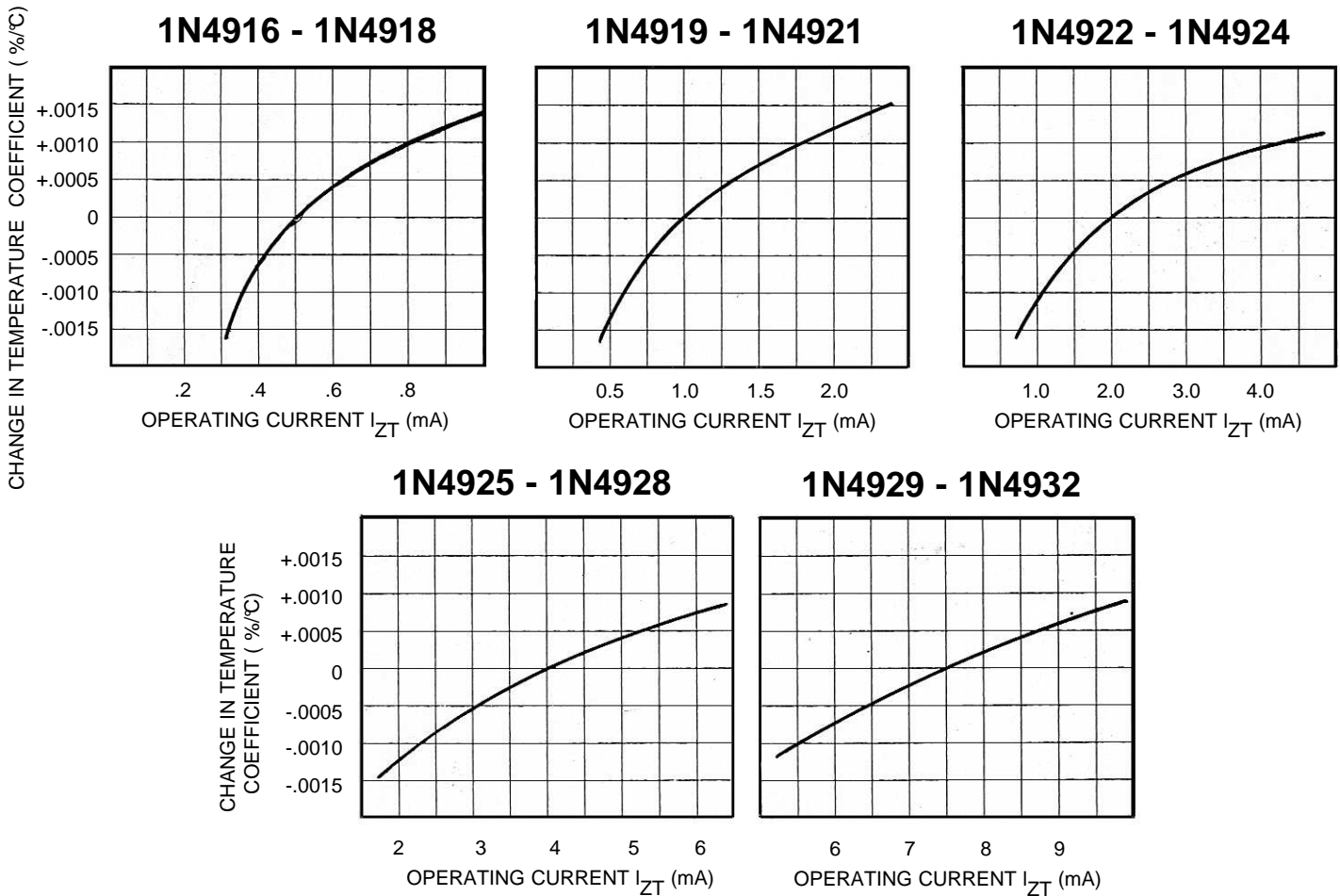


FIGURE 3
TYPICAL CHANGE OF TEMPERATURE COEFFICIENT WITH CHANGE IN OPERATING CURRENT