- TEMPERATURE COMPENSATED ZENER REFERENCE DIODES
- LEADLESS PACKAGE FOR SURFACE MOUNT
- 9.1 VOLT NOMINAL ZENER VOLTAGE ± 5%
- LOW CURRENT OPERATING RANGE: 0.5 and 1.0 mA
- METALLURGICALLY BONDED
- DOUBLE PLUG CONSTRUCTION

CDLL4765 thru CDLL4774A

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 = 10 μA @ 25°C & V_R = 6Vdc

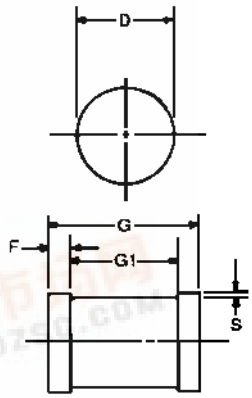
ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified.

TYPE NUMBERS	ZENER VOLTAGE v_z @ I_{ZT} (Note 3)	ZENER TEST CURRENT I_{ZT}	MAXIMUM ZENER IMPEDANCE Z_{ZT} (Note 1)	MAXIMUM VOLTAGE TEMPERATURE STABILITY ΔV_{ZT} MAXIMUM (Note 2)	TEMPERATURE RANGE	EFFECTIVE TEMPERATURE COEFFICIENT
	VOLTS	mA	OHMS	mV	°C	% / °C
CDLL4765	9.1	0.5	350	68	0 to + 75	0.01
CDLL4765A	9.1	0.5	350	141	-55 to + 100	0.01
CDLL4766	9.1	0.5	350	34	0 to + 75	0.005
CDLL4766A	9.1	0.5	350	70	-55 to + 100	0.005
CDLL4767	9.1	0.5	350	14	0 to + 75	0.002
CDLL4767A	9.1	0.5	350	28	-55 to + 100	0.002
CDLL4768	9.1	0.5	350	6.8	0 to + 75	0.001
CDLL4768A	9.1	0.5	350	14	-55 to + 100	0.001
CDLL4769	9.1	0.5	350	3.4	0 to + 75	0.0005
CDLL4769A	9.1	0.5	350	7	-55 to + 100	0.0005
CDLL4770	9.1	1.0	200	68	0 to + 75	0.01
CDLL4770A	9.1	1.0	200	141	-55 to + 100	0.01
CDLL4771	9.1	1.0	200	34	0 to + 75	0.005
CDLL4771A	9.1	1.0	200	70	-55 to + 100	0.005
CDLL4772	9.1	1.0	200	14	0 to + 75	0.002
CDLL4772A	9.1	1.0	200	28	-55 to + 100	0.002
CDLL4773	9.1	1.0	200	6.8	0 to + 75	0.001
CDLL4773A	9.1	1.0	200	14	-55 to + 100	0.001
CDLL4774	9.1	1.0	200	3.4	0 to + 75	0.0005
CDLL4774A	9.1	1.0	200	7	-55 to + 100	0.0005

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 9.1 volts ±5%



DIM	MILLIMETERS MIN	MILLIMETERS MAX	INCHES MIN	INCHES 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.

COMPENSATED DEVICES INCORPORATED
22 COREY STREET, MELROSE, MASSACHUSETTS 02176
PHONE (781) 665-1071 FAX (781) 665-7379

CDLL4765
thru
CDLL4774A

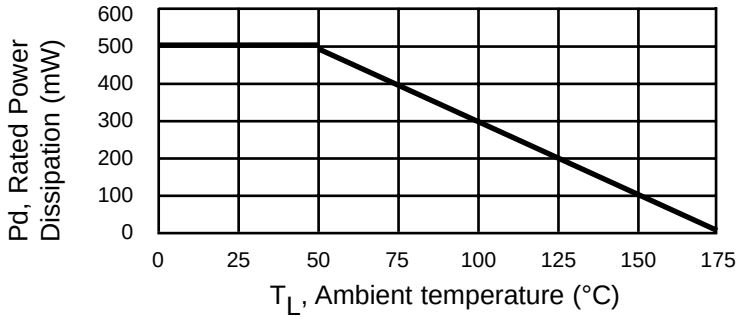


FIGURE 2
POWER DERATING CURVE

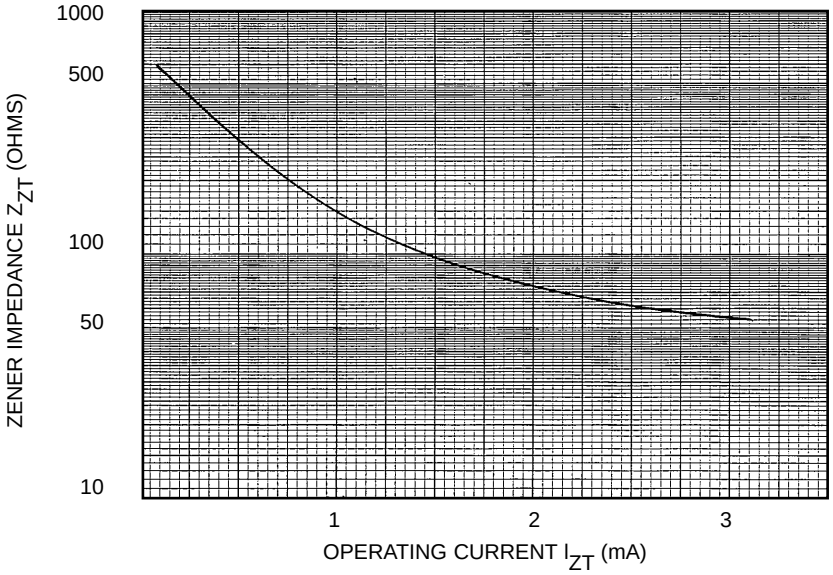


FIGURE 3
ZENER IMPEDANCE VS. OPERATING CURRENT

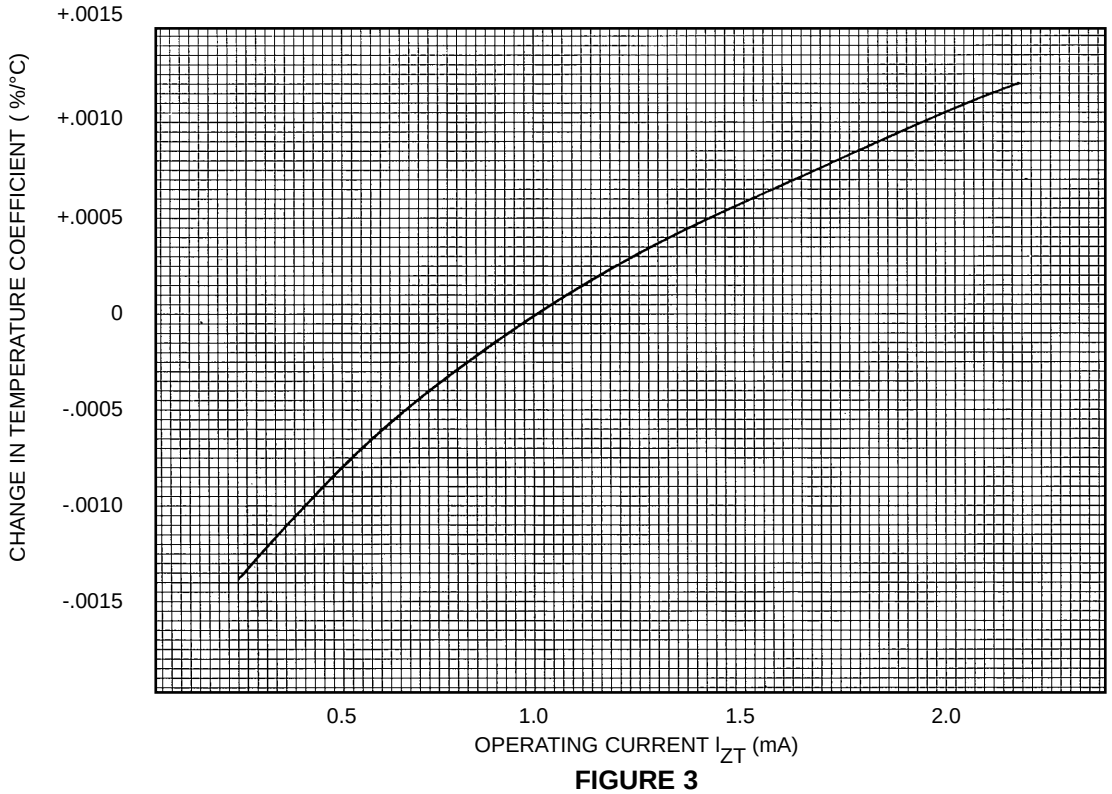


FIGURE 3
TYPICAL CHANGE OF TEMPERATURE COEFFICIENT WITH CHANGE IN OPERATING CURRENT