

- TEMPERATURE COMPENSATED ZENER REFERENCE DIODES
- LEADLESS PACKAGE FOR SURFACE MOUNT
- 8.5 VOLT NOMINAL ZENER VOLTAGE $\pm 5\%$
- LOW CURRENT RANGE: 0.5 TO 1.0 mA
- METALLURGICALLY BONDED
- DOUBLE PLUG CONSTRUCTION

CDLL4775
thru
CDLL4784A

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

$I_R = 10\mu A$ @ 25°C & $V_R = 6V_{dc}$

ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified.

CDI TYPE NUMBER	ZENNER VOLTAGE $V_Z @ I_{ZT}$	ZENER TEST CURRENT I_{ZT}	MAXIMUM DYNAMIC IMPEDANCE Z_{ZT}	VOLTAGE TEMPERATURE STABILITY $^{\circ}V_{ZT}$ MAXIMUM (Note 2)	TEMPERATURE RANGE	EFFECTIVE TEMPERATURE COEFFICIENT
	(Note 3)		(Note 1)			
	VOLTS	mA	OHMS	mV	°C	% / °C
CDLL4775	8.5	0.5	200	64	0 to + 75	0.01
CDLL4775A	8.5	0.5	200	132	-55 to + 100	0.01
CDLL4776	8.5	0.5	200	32	0 to + 75	0.005
CDLL4776A	8.5	0.5	200	66	-55 to + 100	0.005
CDLL4777	8.5	0.5	200	13	0 to + 75	0.002
CDLL4777A	8.5	0.5	200	26	-55 to + 100	0.002
CDLL4778	8.5	0.5	200	6.4	0 to + 75	0.001
CDLL4778A	8.5	0.5	200	13	-55 to + 100	0.001
CDLL4779	8.5	0.5	200	3.2	0 to + 75	0.0005
CDLL4779A	8.5	0.5	200	6.6	-55 to + 100	0.0005
CDLL4780	8.5	1.0	100	64	0 to + 75	0.01
CDLL4780A	8.5	1.0	100	132	-55 to + 100	0.01
CDLL4781	8.5	1.0	100	32	0 to + 75	0.005
CDLL4781A	8.5	1.0	100	66	-55 to + 100	0.005
CDLL4782	8.5	1.0	100	13	0 to + 75	0.002
CDLL4782A	8.5	1.0	100	26	-55 to + 100	0.002
CDLL4783	8.5	1.0	100	6.4	0 to + 75	0.01
CDLL4783A	8.5	1.0	100	13	-55 to + 100	0.01
CDLL4784	8.5	1.0	100	3.2	0 to + 75	0.0005
CDLL4784A	8.5	1.0	100	6.6	-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 8.5 volts $\pm 5\%$

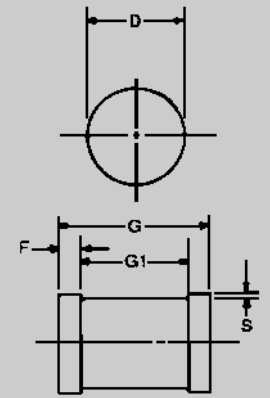


FIGURE 1

	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.	

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.



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

FAX (978) 689-0803

CDLL4775 thru CDLL4784A

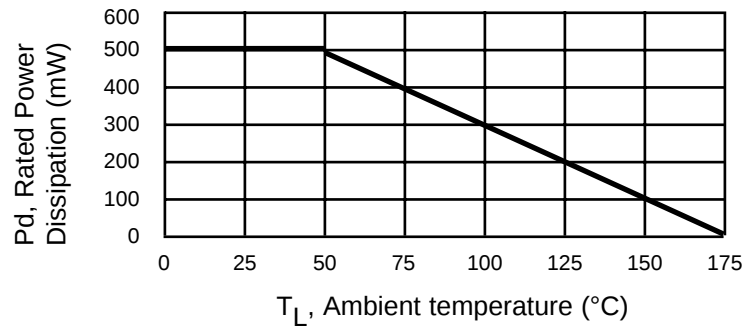


FIGURE 2
POWER DERATING CURVE

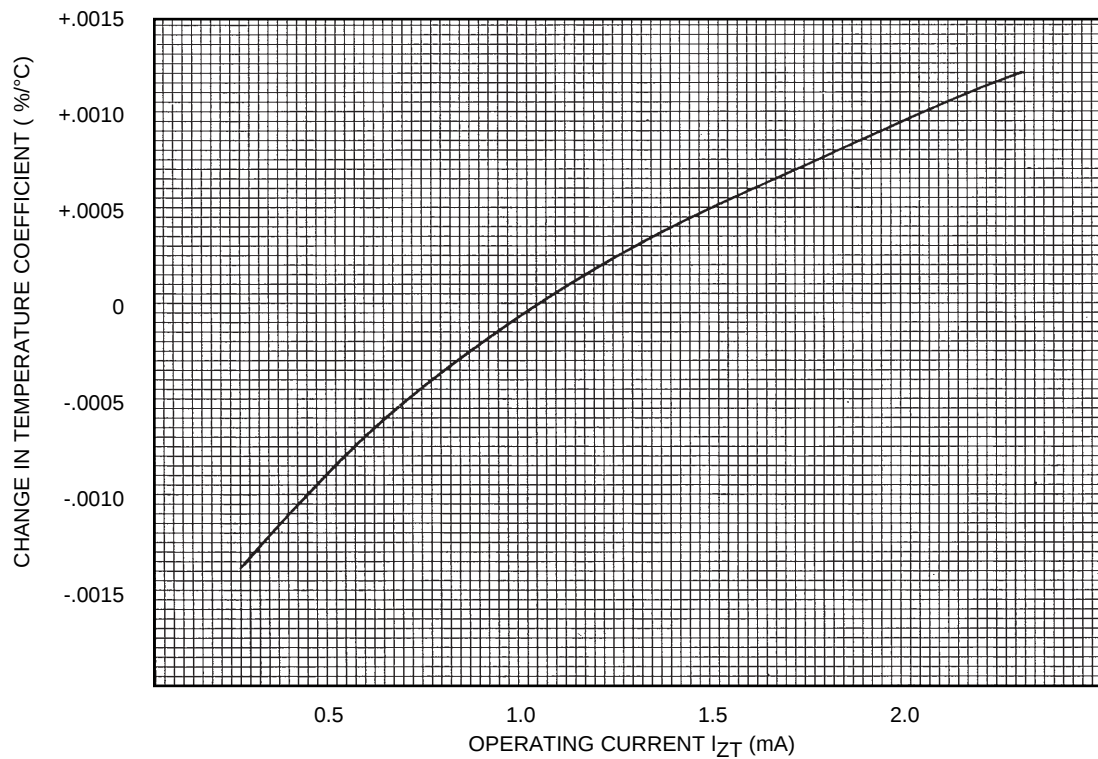


FIGURE 3
TYPICAL CHANGE OF TEMPERATURE COEFFICIENT
WITH CHANGE IN OPERATING CURRENT