- **1N3154UR-1 THRU 1N3157UR-1 AVAILABLE IN JAN, JANTX, JANTXV AND JANS PER MIL-PRF-19500/158**
- **TEMPERATURE COMPENSATED ZENER REFERENCE DIODES**
- **LEADLESS PACKAGE FOR SURFACE MOUNT**
- **8.4 VOLT NOMINAL ZENER VOLTAGE**
- **METALLURGICALLY BONDED, DOUBLE PLUG CONSTRUCTION**

1N3154UR-1 thru 1N3157UR-1 and CDLL3154 thru CDLL3157A

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

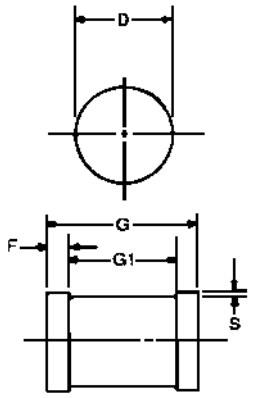
I_R = 10 μA @ 25°C & V_R = 5.5Vdc

ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified.

CDI TYPE NUMBER	ZENER VOLTAGE V_Z @ I_{ZT}	ZENER TEST CURRENT I_{ZT}	MAXIMUM ZENER IMPEDANCE Z_{ZT} (Note 1)	VOLTAGE TEMPERATURE STABILITY ΔV_{ZT} MAXIMUM (Note 2)	TEMPERATURE RANGE	EFFECTIVE TEMPERATURE COEFFICIENT
	VOLTS	mA	OHMS	mV	°C	% / °C
CDLL3154	8.00 - 8.80	10	15	130	-55 to +100	.01
CDLL3154A	8.00 - 8.80	10	15	172	-55 to +150	.01
CDLL3155	8.00 - 8.80	10	15	65	-55 to +100	.005
CDLL3155A	8.00 - 8.80	10	15	86	-55 to +150	.005
CDLL3156	8.00 - 8.80	10	15	26	-55 to +100	.002
CDLL3156A	8.00 - 8.80	10	15	34	-55 to +150	.002
CDLL3157	8.00 - 8.80	10	15	13	-55 to +100	.001
CDLL3157A	8.00 - 8.80	10	15	17	-55 to +150	.001

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.



	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.

COMPENSATED DEVICES INCORPORATED
22 COREY STREET, MELROSE, MASSACHUSETTS 02176
PHONE (781) 665-1071 FAX (781) 665-7379
WEBSITE: http://www.cdi-diodes.com E-mail: mail@cdi-diodes.com

CDLL3154
thru
CDLL3157A

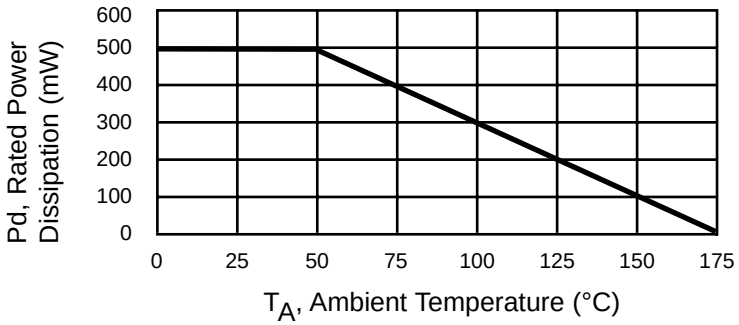


FIGURE 2
POWER DERATING CURVE

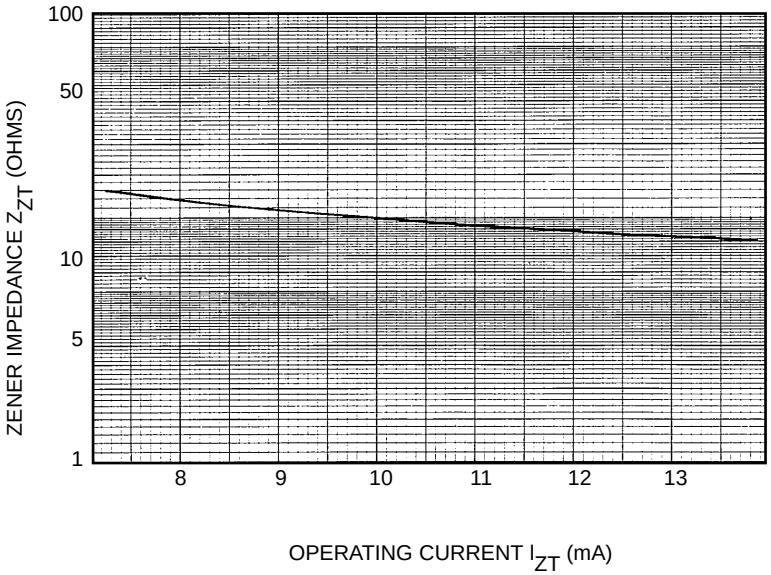


FIGURE 3
ZENER IMPEDANCE VS. OPERATING CURRENT

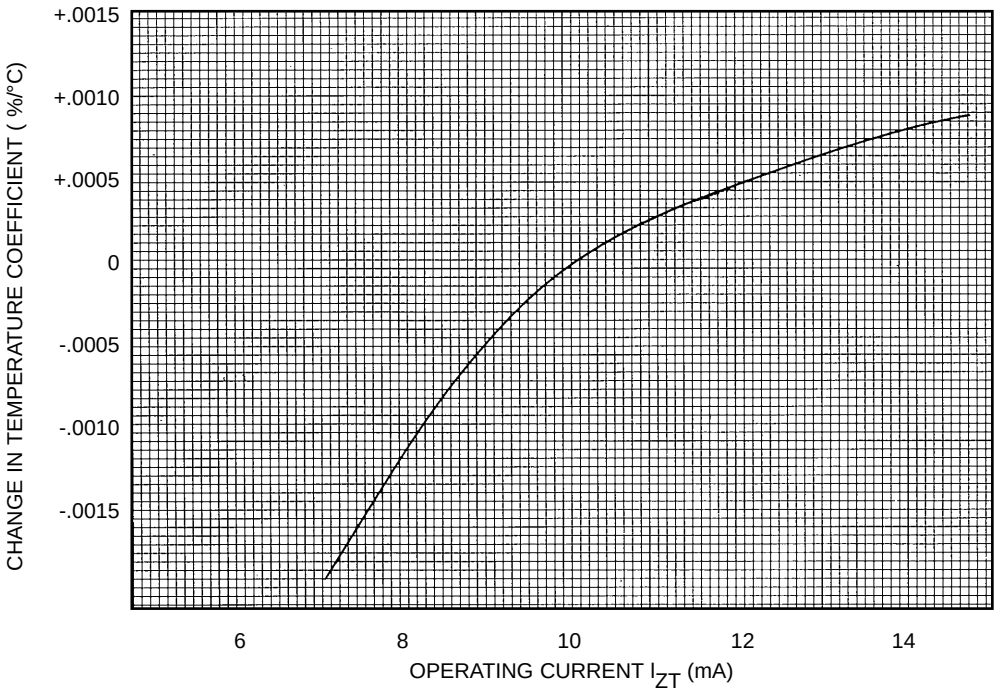


FIGURE 4
TYPICAL CHANGE OF TEMPERATURE COEFFICIENT WITH CHANGE IN OPERATING CURRENT