- **1N4614UR-1 THRU 1N4627UR-1 AVAILABLE IN JAN, JANTX, JANTXV AND JANS PER MIL-PRF-19500/435**
- **LEADLESS PACKAGE FOR SURFACE MOUNT**
- **LOW CURRENT OPERATION AT 250 μA**
- **METALLURGICALLY BONDED**

1N4614UR-1 thru 1N4627UR-1 and CDLL4614 thru CDLL4627

MAXIMUM RATINGS

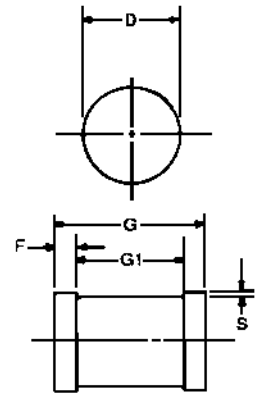
Operating Temperatures: -65°C to +175°C
DC Power Dissipation: 500mW @ T_{EC} = +125°C
Power Derating: 10 mW / °C above T_{EC} = +125°C
Forward Voltage @ 200 mA: 1.1 Volts maximum

ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified.

CDI TYPE NUMBER	NOMINAL ZENER VOLTAGE V_Z @ I_{ZT} (Note 1)	ZENER TEST CURRENT I_{ZT}	MAXIMUM ZENER IMPEDANCE Z_{ZT} @ I_{ZT} (Note 2)	MAXIMUM REVERSE LEAKAGE CURRENT 1_R @ V_R		MAXIMUM DC ZENER CURRENT
	VOLTS	μ A	OHMS	μ A	VOLTS	mA
CDLL4614	1.8	250	1200	7.5	1	120
CDLL4615	2.0	250	1250	5.0	1	110
CDLL4616	2.2	250	1300	4.0	1	100
CDLL4617	2.4	250	1400	2.0	1	95
CDLL4618	2.7	250	1500	1.0	1	90
CDLL4619	3.0	250	1600	0.8	1	87
CDLL4620	3.3	250	1650	7.5	1.5	85
CDLL4621	3.6	250	1700	7.5	2	83
CDLL4622	3.9	250	1650	5.0	2	80
CDLL4623	4.3	250	1600	4.0	2	77
CDLL4624	4.7	250	1550	10.0	3	75
CDLL4625	5.1	250	1500	10.0	3	70
CDLL4626	5.6	250	1400	10.0	4	65
CDLL4627	6.2	250	1200	10.0	5	61

NOTE 1 The CDI type numbers shown above have a Zener voltage tolerance of ±5.0%. Nominal Zener voltage is measured with the device junction in thermal equilibrium at an ambient temperature of 25°C ± 3°C. "C" suffix denotes a + 2% tolerance and "D" suffix denotes a + 1% tolerance.

NOTE 2 Zener impedance is derived by superimposing on 1_{ZT} A 60Hz rms a.c. current equal to 10% of I_{ZT}.



	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

THERMAL RESISTANCE: ($R_{\Theta JEC}$): 100 ˚C/W maximum at L = 0 inch

THERMAL IMPEDANCE: ($Z_{\Theta JX}$): 35 ˚C/W maximum

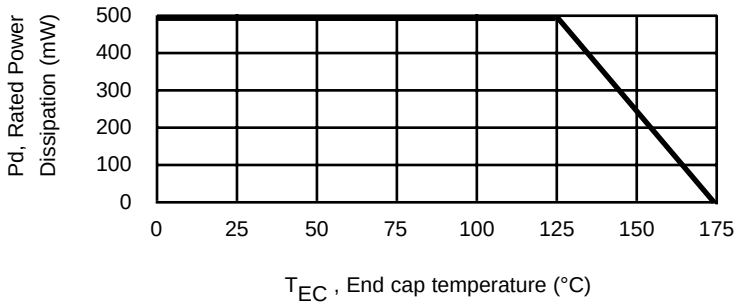
POLARITY: Diode to be operated with the banded (cathode) end positive.

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

CDLL4614 thru CDLL4627

FIGURE 2



POWER DERATING CURVE

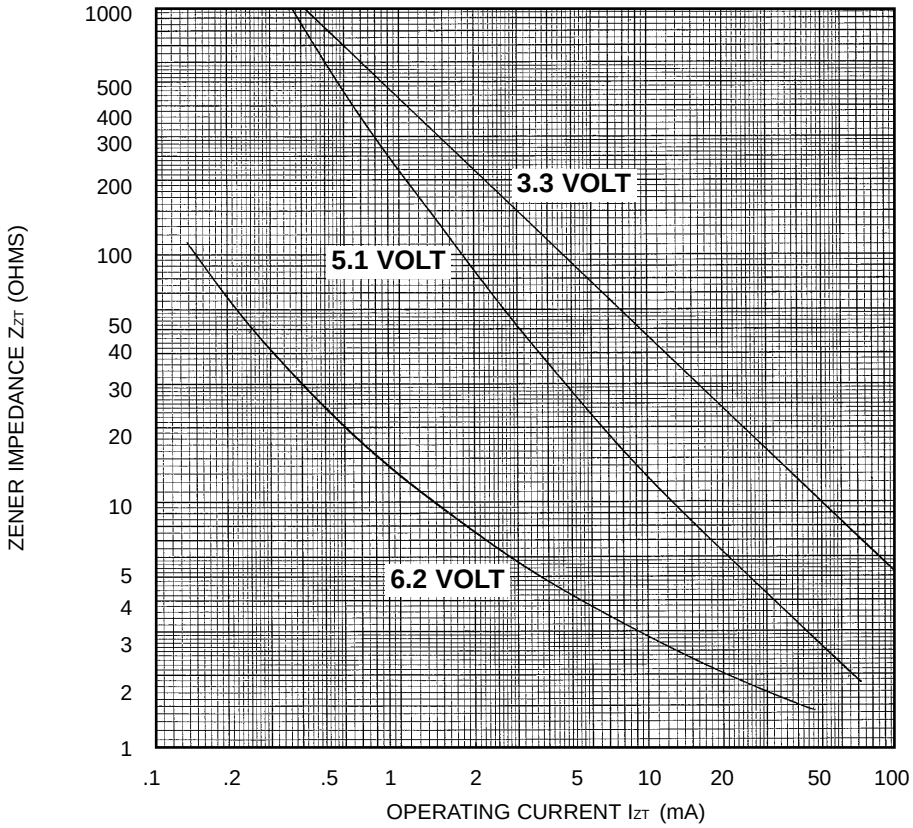


FIGURE 3

ZENER IMPEDANCE VS. OPERATING CURRENT