- **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

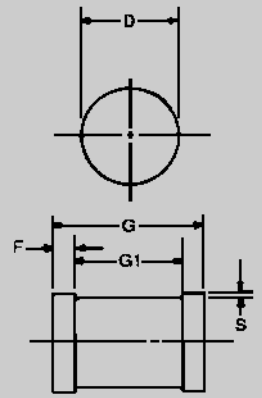
Operating Temperatures: -65°C to +175°C
DC Power Dissipation: 500mW @ T_{EC} = +125°C
Power Derating: 10 mW / °C above T_{EC} = +125°C
Forward Voltage @ 200 mA: 1.1 Volts maximum

ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise speci½ed.

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

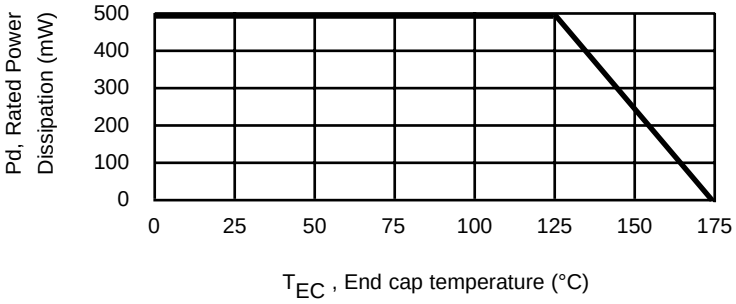
POLARITY: Diode to be operated with the banded (cathode) end positive.

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.

Microsemi

6 LAKE STREET, LAWRENCE, MASSACHUSETTS 01841
PHONE (978) 620-2600 FAX (978) 689-0803
WEBSITE: http://www.microsemi.com

FIGURE 2



POWER DERATING CURVE

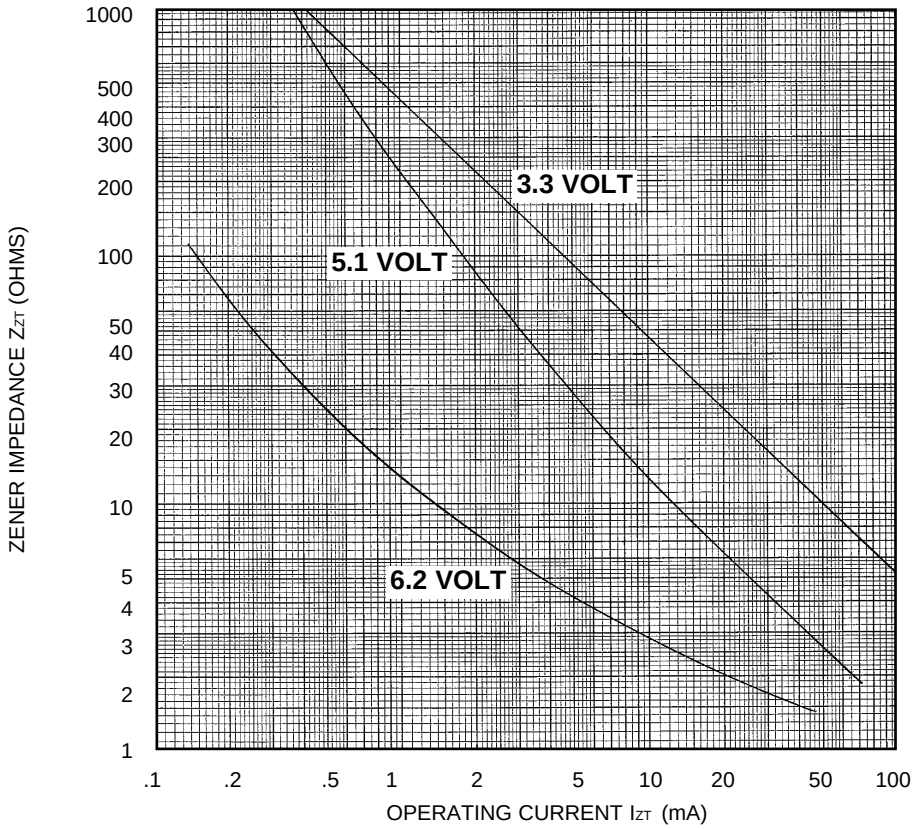


FIGURE 3

ZENER IMPEDANCE VS. OPERATING CURRENT

littlediode
COMPONENTS FOR ALL

Littlediode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

LittleDiode.com

Looking forward to providing you with the best possible service.