- **1N4614 THRU 1N4627 AVAILABLE IN JANHC AND JANKC PER MIL-PRF-19500/435**
- **ZENER DIODE CHIPS**
- **ALL JUNCTIONS COMPLETELY PROTECTED WITH SILICON DIOXIDE**
- **ELECTRICALLY EQUIVALENT TO 1N4614 THRU 1N4627**
- **0.5 WATT CAPABILITY WITH PROPER HEAT SINKING**
- **COMPATIBLE WITH ALL WIRE BONDING AND DIE ATTACH TECHNIQUES, WITH THE EXCEPTION OF SOLDER REFLOW**

CD4614 thru CD4627

MAXIMUM RATINGS

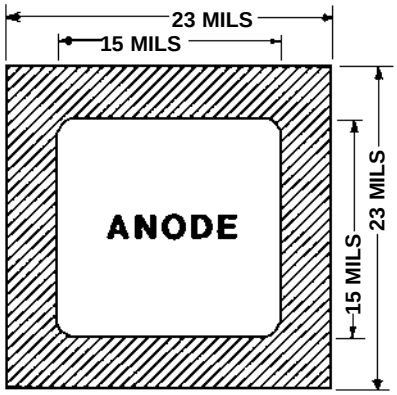
Operating Temperatures: -65°C to +175°C
Storage Temperatures: -65°C to +175°C
Forward Voltage @ 200 mA: 1.5 Volts maximum

ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified.

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 I_R @ V_R	
	VOLTS	μA	OHMS	μA	VOLTS
CD4614	1.8	250	1200	7.5	1
CD4615	2.0	250	1250	5.0	1
CD4616	2.2	250	1300	4.0	1
CD4617	2.4	250	1400	2.0	1
CD4618	2.7	250	1500	1.0	1
CD4619	3.0	250	1600	0.8	1
CD4620	3.3	250	1650	7.5	1.5
CD4621	3.6	250	1700	7.5	2
CD4622	3.9	250	1650	5.0	2
CD4623	4.3	250	1600	4.0	2
CD4624	4.7	250	1550	10.0	3
CD4625	5.1	250	1500	10.0	3
CD4626	5.6	250	1400	10.0	4
CD4627	6.2	250	1200	10.0	5

NOTE 1 Zener voltage range equals nominal Zener voltage ± 5% for no suffix types. Zener voltage is read using a pulse measurement, 10 milliseconds maximum. "C" suffix = ± 2% tolerance and "D" suffix = ± 1% tolerance.

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



BACKSIDE IS CATHODE

FIGURE 1

DESIGN DATA

METALLIZATION:
Top: (Anode).....Al
Back: (Cathode)..... ..Au

AL THICKNESS.....25,000 Å Min

GOLD THICKNESS... .....4,000 Å Min

CHIP THICKNESS..... .....10 Mils

CIRCUIT LAYOUT DATA:
For Zener operation, cathode must be operated positive with respect to anode.

TOLERANCES: ALL
Dimensions ± 2 mils

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

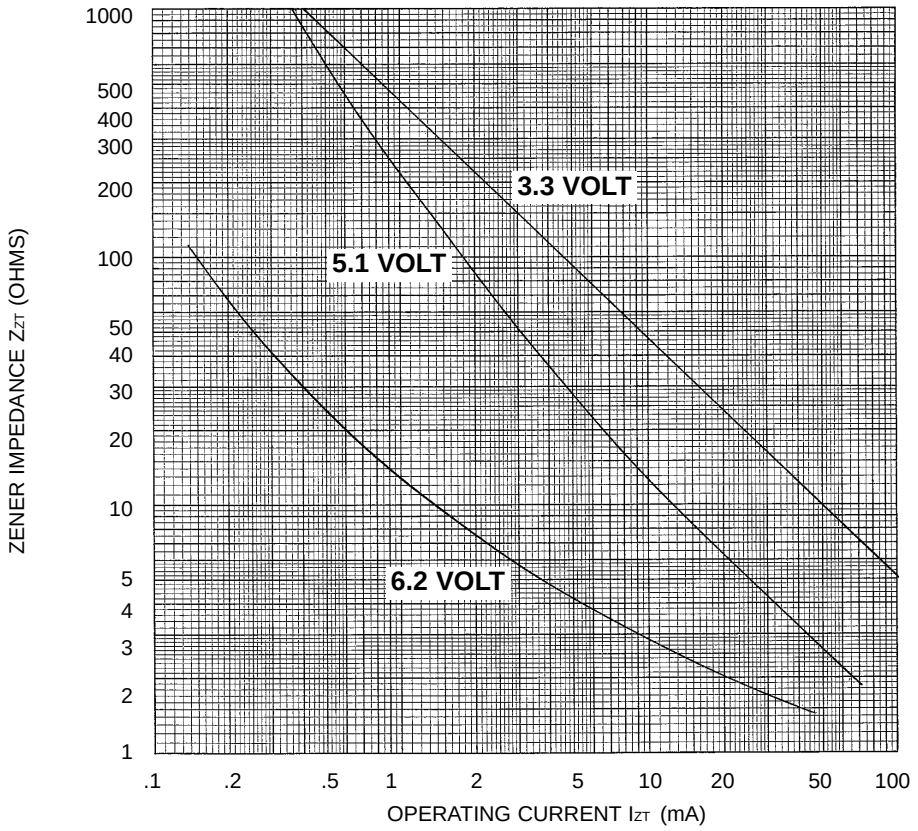


FIGURE 3

ZENER IMPEDANCE VS. OPERATING CURRENT