- **1.5 WATT ZENER DIODE CHIPS**
- **ALL JUNCTIONS COMPLETELY PROTECTED WITH SILICON DIOXIDE**
- **COMPATIBLE WITH ALL WIRE BONDING AND DIE ATTACHED TECHNIQUES**
- **1.5 WATT CAPABILITY WITH PROPER HEAT SINKING**

CD4460 thru CD4490

MAXIMUM RATINGS

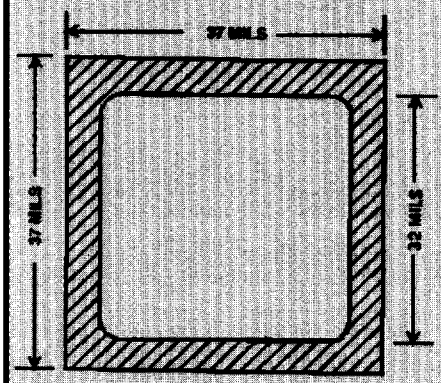
Operating Temperature: -65°C to +175°C
Storage Temperature: -65°C to +175°C
Forward Voltage at 200 mA: 1.5 Volts maximum

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} (Note 2)	MAXIMUM REVERSE LEAKAGE CURRENT I_R @ V_R		MAXIMUM KNEE IMPEDANCE Z_{ZK} @ I_{ZK} (Note 2)	
	VOLTS	mA	OHMS	μA	VOLTS	OHMS	mA
CD4460	6.2	40.0	4	10.0	3.72	200	1.0
CD4461	6.8	37.0	2.5	5.0	4.08	200	1.0
CD4462	7.5	34.0	2.5	1.0	4.50	400	.5
CD4463	8.2	31.0	3	.50	4.92	400	.5
CD4464	9.1	28.0	4	.30	5.46	500	.5
CD4465	10.0	25.0	5	.30	8.00	500	.25
CD4466	11.0	23.0	6	.30	8.80	550	.25
CD4467	12.0	21.0	7	.20	9.60	550	.25
CD4468	13.0	19.0	8	.05	10.40	550	.25
CD4469	15.0	17.0	9	.05	12.00	600	.25
CD4470	16.0	15.5	10	.05	12.80	600	.25
CD4471	18.0	14.0	11	.05	14.40	650	.25
CD4472	20.0	12.5	12	.05	16.00	650	.25
CD4473	22.0	11.5	14	.05	17.60	650	.25
CD4474	24.0	10.5	16	.05	19.20	700	.25
CD4475	27.0	9.5	18	.05	21.60	700	.25
CD4476	30.0	8.5	20	.05	24.00	750	.25
CD4477	33.0	7.5	25	.05	26.40	800	.25
CD4478	36.0	7.0	27	.05	28.80	850	.25
CD4479	39.0	6.5	30	.05	31.20	900	.25
CD4480	43.0	6.0	40	.05	34.40	950	.25
CD4481	47.0	5.5	50	.05	37.60	1000	.25
CD4482	51.0	5.0	60	.25	40.80	1100	.25
CD4483	56.0	4.5	70	.25	44.80	1300	.25
CD4484	62.0	4.0	80	.25	49.60	1500	.25
CD4485	68.0	3.7	100	.25	54.40	1700	.25
CD4486	75.0	3.3	130	.25	60.40	2000	.25
CD4487	82.0	3.0	160	.25	65.60	2500	.25
CD4488	91.0	2.8	200	.25	72.80	3000	.25
CD4489	100.0	2.5	250	.25	80.00	3100	.25
CD4490	110.0	2.0	300	.25	88.00	4000	.25

NOTE 1 The CDI type numbers shown above have a standard tolerance of ± 5% of the nominal Zener voltage. Zener voltage is read using a pulse measurement, 10 milliseconds maximum.

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



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

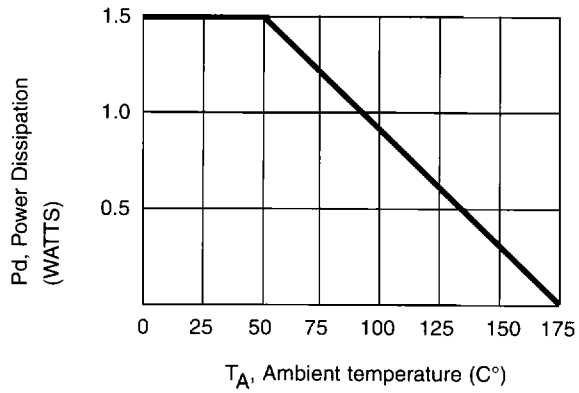
CHIP THICKNESS.....10 Mils

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

TOLERANCES: ALL
Dimensions ± 2 mils

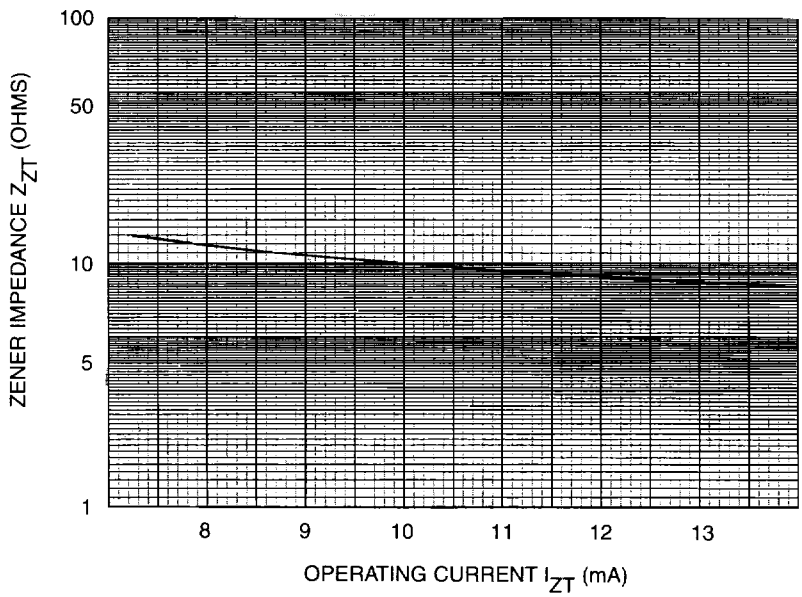
COMPENSATED DEVICES INCORPORATED
166 TREMONT STREET, MELROSE, MASSACHUSETTS 02176
PHONE (617) 665-1071 FAX (617) 665-7379
WWWSITE: http://www.cdi-diodes.com E-mail: mail@cdi-diodes.com

FIGURE 2



POWER DERATING CURVE

FIGURE 3



ZENER IMPEDANCE VS. OPERATING CURRENT