

- 1N962B THRU 1N986B AVAILABLE IN JANC
- ZENER DIODE CHIPS
- ALL JUNCTIONS COMPLETELY PROTECTED WITH SILICON DIOXIDE
- COMPATIBLE WITH ALL WIRE BONDING AND DIE ATTACH TECHNIQUES

CD957B  
thru  
CD986B

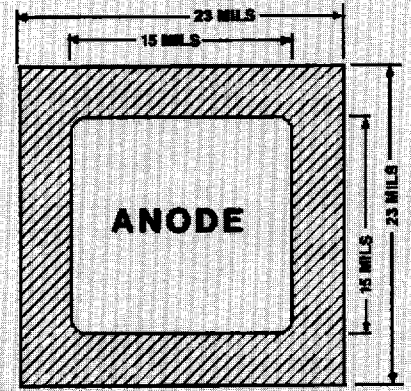
### MAXIMUM RATINGS

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

### ELECTRICAL CHARACTERISTICS @ 25°C

C/DI TYPE NUMBER (NOTE 1)	NOMINAL ZENER VOLTAGE $V_Z$ (NOTE 2)	ZENER TEST CURRENT $I_{ZT}$ mA	MAXIMUM ZENER IMPEDANCE (NOTE 3)			MAX. DC ZENER CURRENT $I_{ZM}$ mA	MAX. REVERSE LEAKAGE CURRENT $I_R @ V_R$	
			$Z_{ZT} @ I_{ZT}$		$Z_{ZK} @ I_{ZK}$		$\mu A$	VOLTS
			OHMS	OHMS				
CC957B	6.8	18.5	4.5	700	1.0	55	5.0	5.2
CC958B	7.5	16.5	5.5	700	.5	50	5.0	5.7
CC959B	8.2	15.0	6.5	700	.5	45	5.0	6.2
CC960B	9.1	14.0	7.5	700	.5	41	5.0	6.9
CC961B	10	12.5	8.5	700	.25	38	2.0	7.6
CC962B	11	11.5	9.5	700	.25	32	1.0	8.4
CC963B	12	10.5	11.5	700	.25	31	1.0	9.1
CC964B	13	9.5	13	700	.25	28	0.5	9.9
CC965B	15	8.5	16	700	.25	25	0.5	11.4
CC966B	16	7.8	17	700	.25	24	0.5	12.2
CC967B	18	7.0	21	750	.25	20	0.5	13.7
CC968B	20	6.2	25	750	.25	18	0.5	15.2
CC969B	22	5.6	29	750	.25	16	0.5	16.7
CC970B	24	5.2	33	750	.25	15	0.5	18.2
CC971B	27	4.6	41	750	.25	13	0.5	20.6
CC972B	30	4.2	49	1000	.25	12	0.5	22.8
CC973B	33	3.8	58	1000	.25	11	0.5	25.1
CC974B	36	3.4	70	1000	.25	10	0.5	27.4
CC975B	39	3.2	90	1000	.25	9.5	0.5	29.7
CC976B	43	3.0	93	1500	.25	8.8	0.5	32.7
CC977B	47	2.7	105	1500	.25	7.9	0.5	35.8
CC978B	51	2.5	125	1500	.25	7.4	0.5	38.8
CC979B	56	2.2	150	2000	.25	6.8	0.5	42.6
CC980B	62	2.0	185	2000	.25	6.0	0.5	47.1
CC981B	68	1.8	230	2000	.25	5.5	0.5	51.7
CC982B	75	1.7	270	2000	.25	5.0	0.5	56.0
CC983B	82	1.5	330	3000	.25	4.6	0.5	62.2
CC984B	91	1.4	400	3000	.25	4.1	0.5	69.2
CC985B	100	1.3	500	3000	.25	3.7	0.5	76.0
CC986B	110	1.1	750	4000	.25	3.3	0.5	83.6

- NOTE 1** Zener voltage range equals nominal voltage  $\pm 5\%$  for "B" Suffix. "A" Suffix denotes  $\pm 10\%$ . No Suffix denotes  $\pm 20\%$ .
- NOTE 2** Zener voltage is read using a pulse measurement, 10 milliseconds maximum.
- NOTE 3** 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) ..... A1  
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  $\pm 2$  mils



**COMPENSATED DEVICES INCORPORATED**

166 TREMONT STREET, MELROSE, MASSACHUSETTS 02176  
PHONE (617) 665-1071 FAX (617) 665-7379

# CD957B thru CD986B

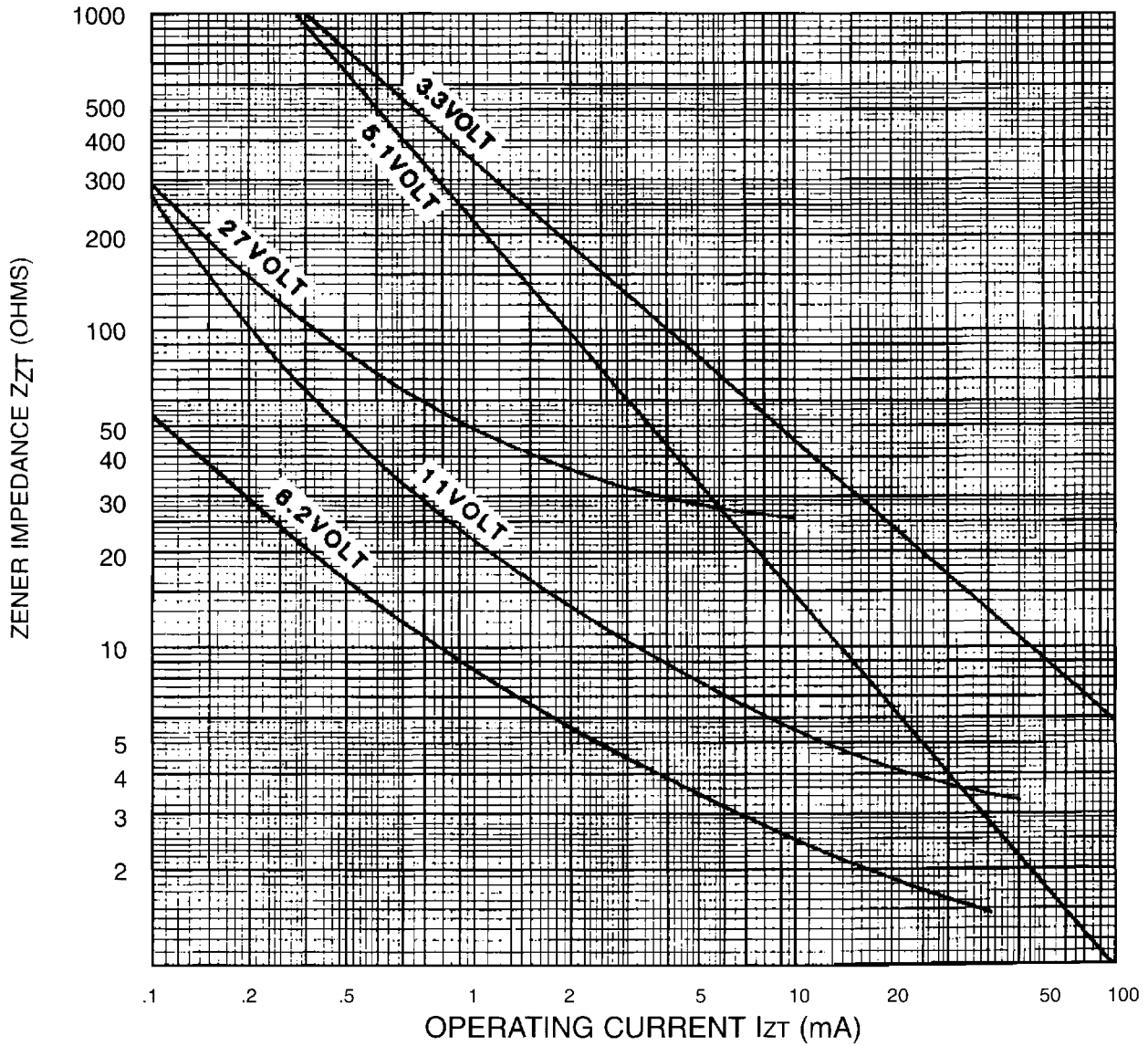


FIGURE 2

TYPICAL CHANGE OF ZENER IMPEDANCE WITH CHANGE  
IN OPERATING CURRENT FOR NOMINAL VOLTAGES SHOWN