- **1N962B THRU 1N986B AVAILABLE IN JANHC AND JANKC PER MIL-PRF-19500/117**
- **ZENER DIODE CHIPS**
- **0.5 WATT CAPABILITY WITH PROPER HEAT SINKING**
- **ALL JUNCTIONS COMPLETELY PROTECTED WITH SILICON DIOXIDE**
- **COMPATIBLE WITH ALL WIRE BONDING AND DIE ATTACH TECHNIQUES, WITH THE EXCEPTION OF SOLDER REFLOW**

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

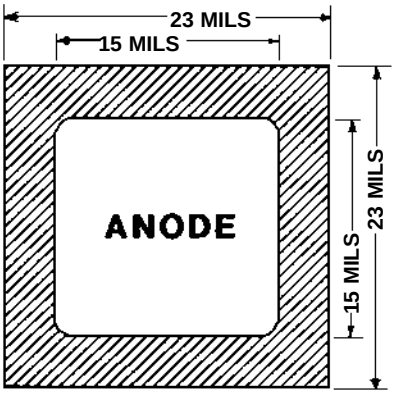
ELECTRICAL CHARACTERISTICS @ 25°C

CDI TYPE NUMBER (NOTE 1)	NOMINAL ZENER VOLTAGE V_Z (NOTE 2)	ZENER TEST CURRENT I_{ZT}	MAXIMUM ZENER IMPEDANCE (NOTE 3)			MAX. DC ZENER CURRENT I_{ZM}	MAX. REVERSE LEAKAGE CURRENT I_R @ V_R	
			Z_{ZT} @ I_{ZT}	Z_{ZK} @ I_{ZK}				
	VOLTS	mA	OHMS	OHMS	mA	mA	μA	VOLTS
CD957B	6.8	18.5	4.5	700	1.0	55	5.0	5.2
CD958B	7.5	16.5	5.5	700	.5	50	5.0	5.7
CD959B	8.2	15.0	6.5	700	.5	45	5.0	6.2
CD960B	9.1	14.0	7.5	700	.5	41	5.0	6.9
CD961B	10	12.5	8.5	700	.25	38	2.0	7.6
CD962B	11	11.5	9.5	700	.25	32	1.0	8.4
CD963B	12	10.5	11.5	700	.25	31	1.0	9.1
CD964B	13	9.5	13	700	.25	28	0.5	9.9
CD965B	15	8.5	16	700	.25	25	0.5	11
CD966B	16	7.8	17	700	.25	24	0.5	12
CD967B	18	7.0	21	750	.25	20	0.5	14
CD968B	20	6.2	25	750	.25	18	0.5	15
CD969B	22	5.6	29	750	.25	16	0.5	17
CD970B	24	5.2	33	750	.25	15	0.5	18
CD971B	27	4.6	41	750	.25	13	0.5	21
CD972B	30	4.2	49	1000	.25	12	0.5	23
CD973B	33	3.8	58	1000	.25	11	0.5	25
CD974B	36	3.4	70	1000	.25	10	0.5	27
CD975B	39	3.2	90	1000	.25	9.5	0.5	30
CD976B	43	3.0	93	1500	.25	8.8	0.5	33
CD977B	47	2.7	105	1500	.25	7.9	0.5	36
CD978B	51	2.5	125	1500	.25	7.4	0.5	39
CD979B	56	2.2	150	2000	.25	6.8	0.5	43
CD980B	62	2.0	185	2000	.25	6.0	0.5	47
CD981B	68	1.8	230	2000	.25	5.5	0.5	52
CD982B	75	1.7	270	2000	.25	5.0	0.5	56
CD983B	82	1.5	330	3000	.25	4.6	0.5	62
CD984B	91	1.4	400	3000	.25	4.1	0.5	69
CD985B	100	1.3	500	3000	.25	3.7	0.5	76
CD986B	110	1.1	750	4000	.25	3.3	0.5	84

NOTE 1 Zener voltage range equals nominal voltage ± 5% for “B” Suffix. “A” Suffix denotes ± 10%, No Suffix denotes ± 20%. "C" suffix = ± 2% and "D" suffix = ± 1%.

NOTE 2 Zener voltage is read using a pulse measurement, 10 milliseconds maximum.

NOTE 3 Zener impedance is derived by superimposing on 1_{ZT} A 60Hz rms a.c. current equal to 10% of 1_{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
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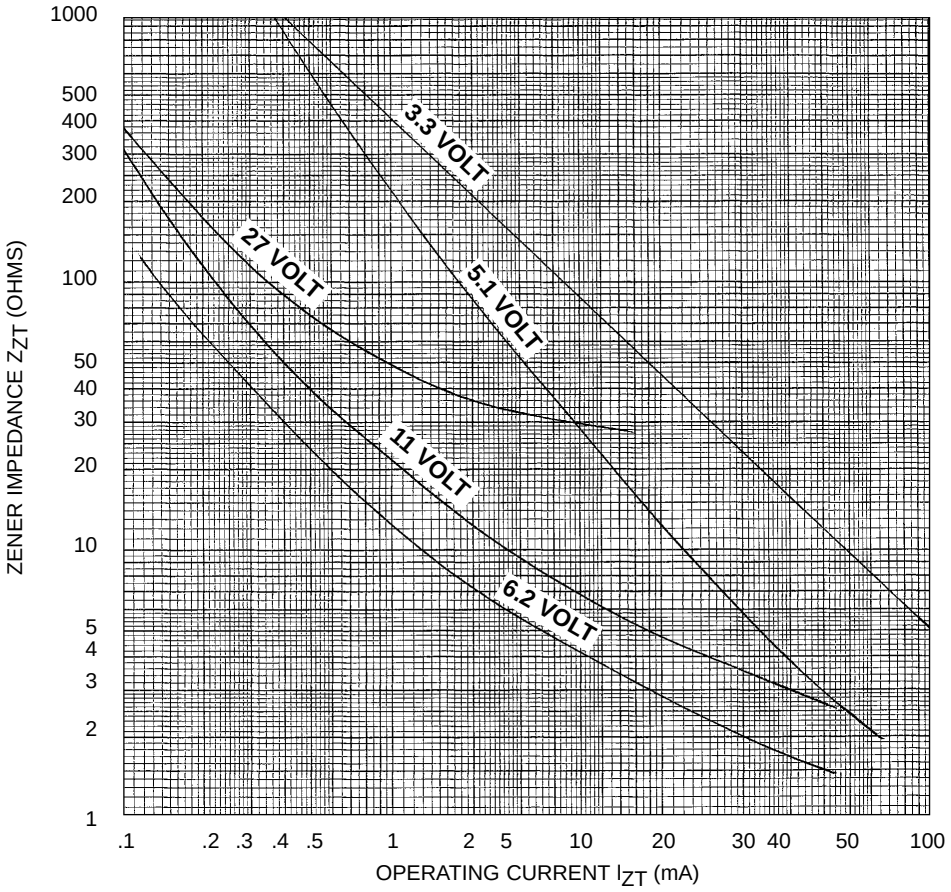


FIGURE 3

ZENER IMPEDANCE VS. OPERATING CURRENT