- **1N3016B THRU 1N3045B AVAILABLE IN JANHC PER MIL-PRF-19500/115**
- **1 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**

CD3016B thru CD3045B

MAXIMUM RATINGS

Operating Temperature: -65°C to +175°C
Storage Temperature: -65°C to +175°C
Forward Voltage @ 200mA: 1.2 volts maximum

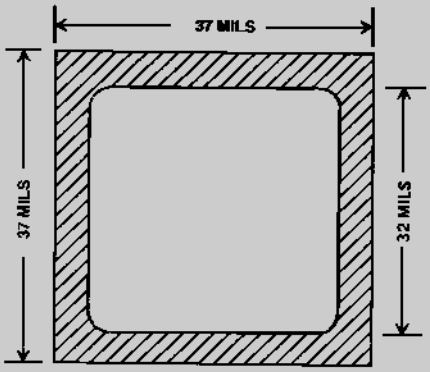
ELECTRICAL CHARACTERISTICS @ 25°C

CDI TYPE NUMBER (NOTE 1)	NOMINAL ZENER VOLTAGE V_Z @ I_{ZT} (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_{ZT} @ I_{ZT}				
	VOLTS	mA	OHMS	OHMS	mA	mA	μA	VOLTS
CD3016B	6.8	37	3.5	700	1.0	140	5.0	5.2
CD3017B	7.5	34	4.0	700	.5	125	5.0	5.7
CD3018B	8.2	31	4.5	700	.5	115	5.0	6.2
CD3019B	9.1	28	5	700	.5	105	5.0	6.9
CD3020B	10	25	7	700	.25	95	5.0	7.6
CD3021B	11	23	8	700	.25	85	1.0	8.4
CD3022B	12	21	9	700	.25	80	1.0	9.1
CD3023B	13	19	10	700	.25	74	0.5	9.9
CD3024B	15	17	14	700	.25	63	0.5	11.4
CD3025B	16	15.5	16	700	.25	60	0.5	12.2
CD3026B	18	14	20	750	.25	52	0.5	13.7
CD3027B	20	12.5	22	750	.25	47	0.5	15.2
CD3028B	22	11.5	23	750	.25	43	0.5	16.7
CD3029B	24	10.5	25	750	.25	40	0.5	18.2
CD3030B	27	9.5	35	750	.25	34	0.5	20.6
CD3031B	30	8.5	40	1000	.25	31	0.5	22.8
CD3032B	33	7.5	45	1000	.25	28	0.5	25.1
CD3033B	36	7.0	50	1000	.25	26	0.5	27.4
CD3034B	39	6.5	60	1000	.25	23	0.5	29.7
CD3035B	43	6.0	70	1500	.25	21	0.5	32.7
CD3036B	47	5.5	80	1500	.25	19	0.5	35.8
CD3037B	51	5.0	95	1500	.25	18	0.5	38.8
CD3038B	56	4.5	110	2000	.25	17	0.5	42.6
CD3039B	62	4.0	125	2000	.25	15	0.5	47.1
CD3040B	68	3.7	150	2000	.25	14	0.5	51.7
CD3041B	75	3.3	175	2000	.25	12	0.5	56.0
CD3042B	82	3.0	200	3000	.25	11	0.5	62.2
CD3043B	91	2.8	250	3000	.25	10	0.5	69.2
CD3044B	100	2.5	350	3000	.25	9.0	0.5	76.0
CD3045B	110	2.3	450	4000	.25	8.3	0.5	83.6

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

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)..... ....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

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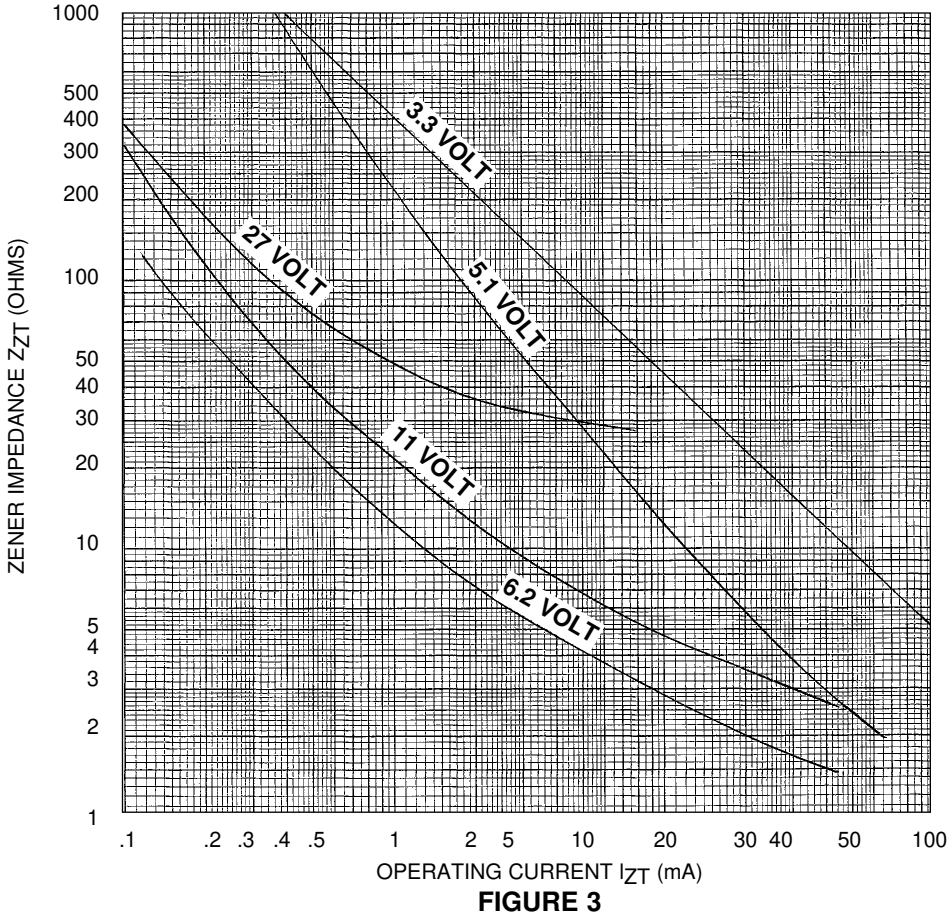

FIGURE 3

ZENER IMPEDANCE VS. OPERATING CURRENT