- **1N746A THRU 1N759A AVAILABLE IN JANHC AND JANKC PER MIL-PRF-19500/127**
- **1N4370A THRU 1N4372A AVAILABLE IN JANHC AND JANKC PER MIL-PRF-19500/127**
- **ZENER DIODE CHIPS**
- **0.5 WATT CAPABILITY WITH PROPER HEAT SINKING**
- **COMPATIBLE WITH ALL WIRE BONDING DIE ATTACH TECHNIQUES, WITH THE EXCEPTION OF SOLDER REFLOW**

CD746A thru CD759A and CD4370A thru CD4372A

MAXIMUM RATINGS

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

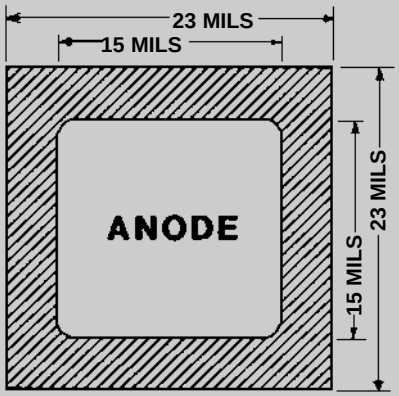
ELECTRICAL CHARACTERISTICS @ 25℃

CDI TYPE NUMBER (NOTE 1)	NOMINAL ZENER VOLTAGE V_Z @ I_{ZT} (NOTE 2)	ZENER TEST CURRENT I_{ZT}	MAXIMUM ZENER IMPEDANCE (NOTE 3) Z_{ZT} @ I_{ZT}	MAXIMUM REVERSE CURRENT I_R @ V_R		MAXIMUM ZENER CURRENT 1_{ZM}
	VOLTS	mA	OHMS	μA	VOLTS	mA
CD4370A	2.4	20	30	100	1.0	155
CD4371A	2.7	20	30	75	1.0	140
CD4372A	3.0	20	29	50	1.0	125
CD746A	3.3	20	28	10	1.0	120
CD747A	3.6	20	24	5	1.0	110
CD748A	3.9	20	23	5	1.0	100
CD749A	4.3	20	22	2	1.0	90
CD750A	4.7	20	19	5	1.5	85
CD751A	5.1	20	17	5	2.0	75
CD752A	5.6	20	11	5	2.5	70
CD753A	6.2	20	7	5	3.5	65
CD754A	6.8	20	5	2	4.0	60
CD755A	7.5	20	6	2	5.0	55
CD756A	8.2	20	8	1	6.0	50
CD757A	9.1	20	10	1	7.0	45
CD758A	10.0	20	17	1	8.0	40
CD759A	12.0	20	30	1	9.0	35

NOTE 1 Zener voltage range equals nominal voltage ±5% for “A” Suffix types. No Suffix denotes ± 10%. "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

Microsemi

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PHONE (978) 620-2600 FAX (978) 689-0803
WEBSITE: http://www.microsemi.com

CD746A thru CD759A
and
CD4370A thru CD4372A

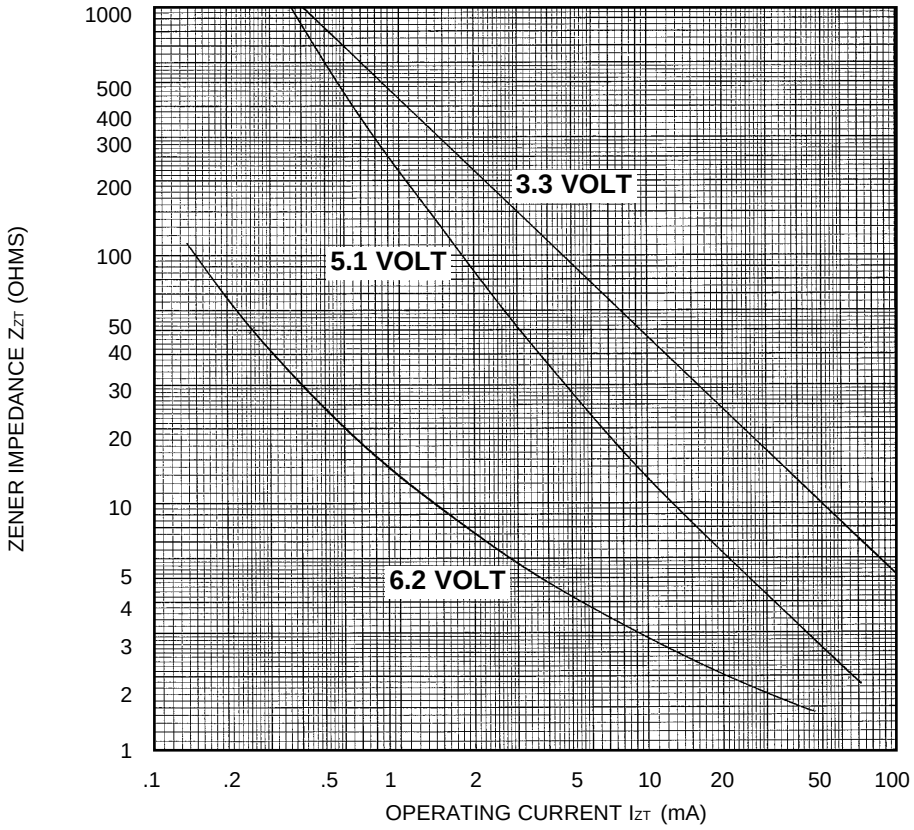

FIGURE 3

ZENER IMPEDANCE VS. OPERATING CURRENT