Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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- **1N3821A-1 THRU 1N3828A-1 AVAILABLE IN JAN, JANTX AND JANTXV PER MIL-PRF-19500/115**
- **1 WATT ZENER DIODE**
- **DOUBLE PLUG CONSTRUCTION**
- **METALLURGICALLY BONDED**

1N3821A thru 1N3828A and 1N3821A-1 thru 1N3828A-1

MAXIMUM RATINGS

Operating Temperature: -65°C to +175°C
Storage Temperature: -65°C to +175°C
DC Power Dissipation: 1 watt @T_L = 95°C
Power Derating: 12.5 mW / °C above T_L = 95°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 3)	ZENER TEST CURRENT I_{ZT}	MAXIMUM ZENER IMPEDANCE Z_{ZT} @ I_{ZT} (NOTE 2)	Z_{ZK} @ $I_{ZK=1mA}$ (NOTE 2)	MAX. DC ZENER CURRENT I_{ZM}	MAX. REVERSE LEAKAGE CURRENT I_R @ V_R	
	VOLTS	mA	OHMS	OHMS	mA	μA	VOLTS
1N3821	3.3	76	10	400	276	100	1
1N3821A	3.3	76	10	400	276	100	1
1N3822	3.6	69	10	400	252	75	1
1N3822A	3.6	69	10	400	252	75	1
1N3823	3.9	64	9	400	238	25	1
1N3823A	3.9	64	9	400	238	25	1
1N3824	4.3	58	9	400	213	5	1
1N3824A	4.3	58	9	400	213	5	1
1N3825	4.7	53	8	500	194	5	1
1N3825A	4.7	53	8	500	194	5	1
1N3826	5.1	49	7	550	178	3	1
1N3826A	5.1	49	7	550	178	3	1
1N3827	5.6	45	5	600	162	3	2
1N3827A	5.6	45	5	600	162	3	2
1N3828	6.2	41	2	700	146	3	3
1N3828A	6.2	41	2	700	146	3	3

NOTE 1 No suffix = ± 10% tolerance on nominal Zener voltage, suffix "A" signifies ±5%, suffix "C" signifies ± 2%, suffix "D" signifies ± 1%.

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

NOTE 3 Zener voltage is measured with the device junction in thermal equilibrium at an ambient temperature of 25°C ± 3°C.

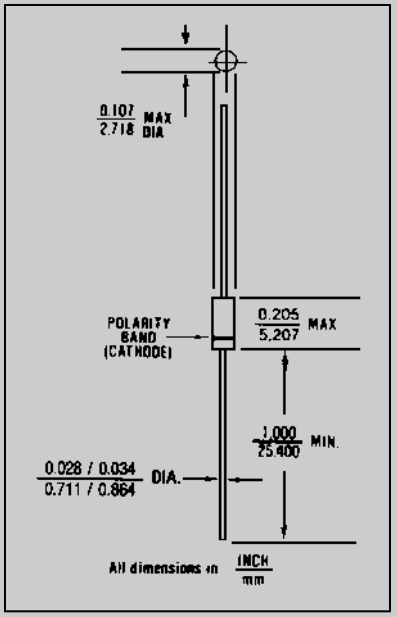

FIGURE 1

DESIGN DATA

CASE: Hermetically sealed glass case, DO41.

LEAD MATERIAL: Copper clad steel

LEAD FINISH: Tin / Lead

THERMAL RESISTANCE: ($R_{\Theta JEC}$): 80 °C/W maximum at L = .375 inch

THERMAL IMPEDANCE: ($Z_{\Theta JX}$): 15 °C/W maximum

POLARITY: Diode to be operated with the banded (cathode) end positive.

MOUNTING POSITION: Any.

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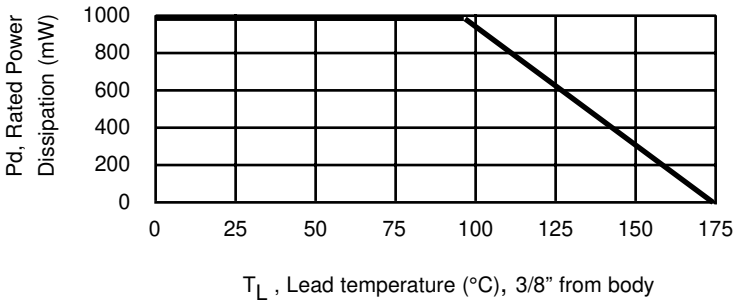
WEBSITE: http://www.microsemi.com

FIGURE 2



POWER DERATING CURVE

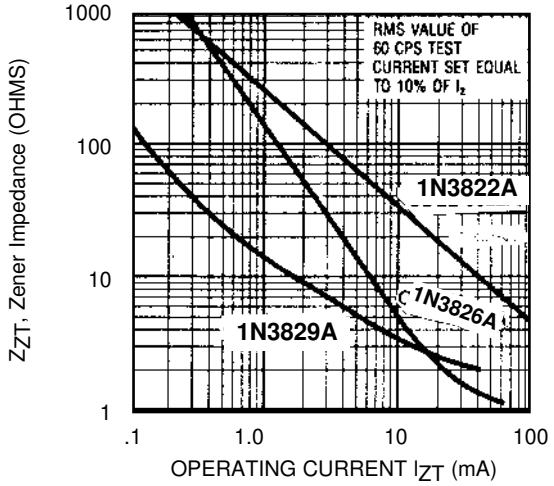


FIGURE 3
ZENER IMPEDANCE VS. OPERATING CURRENT