



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.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Temperature Compensated Zener Reference Diode Series



1N821 thru 1N829A & 1N821-1 thru 1N829-1

Features

- 1N821-1, 1N823-1, 1N825-1, 1N827-1 and 1N829-1 available in JAN, JANTX, JANTXV, JANS
- Metallurgically Bonded, Double Plug Construction

Maximum Ratings

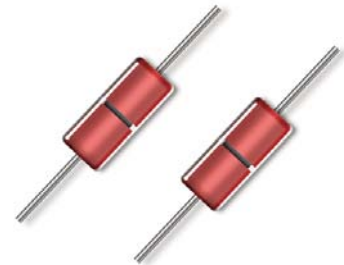
Operating & Storage Temperature: -65°C to +175°C

DC Power Dissipation: 500mW @ +50°C

Power Derating: 4 mW / °C above +50°C

REVERSE LEAKAGE CURRENT

$$I_R = 2 \mu A @ 25^\circ C \text{ \& } V_R = 3 \text{ Vdc}$$



Electrical Specifications @ +25 °C (Unless Otherwise Specified)

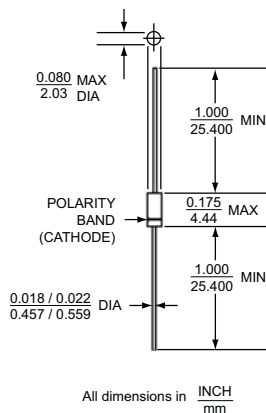
JEDEC TYPE Number (Note 1)	Normal Zener Voltage $V_Z @ I_{ZT}$ Volts	Zener Test Current I_{ZT} mA	Maximum Zener Impedance (Note 1) Z_{ZT} Ohms	Voltage Temperature Stability $^3V_{ZT}$ -55° to +100°C (Note 2) mV	Effective Temperature Coefficient %/°C
1N821	5.9–6.5	7.5	15	96	0.01
1N821A	5.9–6.5	7.5	10	96	0.01
1N822 †	5.9–6.5	7.5	15	96	0.01
1N823	5.9–6.5	7.5	15	48	0.005
1N823A	5.9–6.5	7.5	10	48	0.005
1N824 †	5.9–6.5	7.5	15	48	0.005
1N825	5.9–6.5	7.5	15	19	0.002
1N825A	5.9–6.5	7.5	10	19	0.002
1N826	6.2–6.9	7.5	15	20	0.002
1N827	5.9–6.5	7.5	15	9	0.001
1N827A	5.9–6.5	7.5	10	9	0.001
1N828	6.2–6.9	7.5	15	10	0.001
1N829	5.9–6.5	7.5	15	5	0.0005
1N829A	5.9–6.5	7.5	10	5	0.0005

† Double Anode: Electrical Specifications Apply Under Both Bias Polarities.

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

NOTE 2: The maximum allowable change observed over the entire temperature range i.e., the diode voltage will not exceed the specified mV at any discrete temperature between the established limits, per JEDEC standard No. 5.

Outline Drawing



LEADED DESIGN DATA

CASE: Hermetically sealed, DO – 35

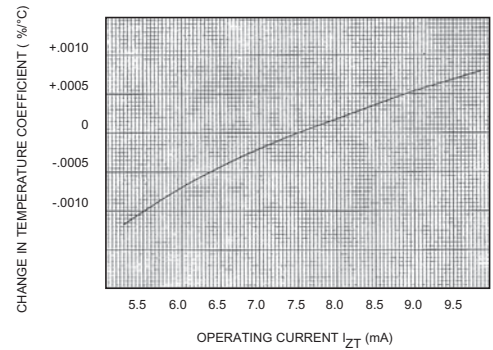
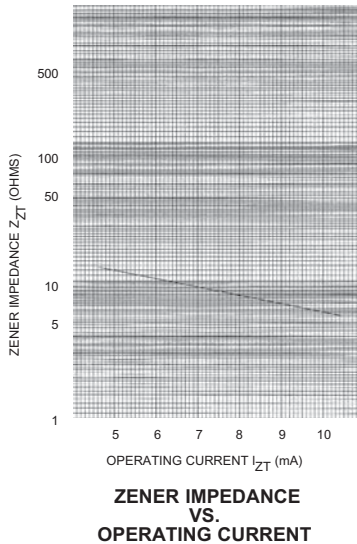
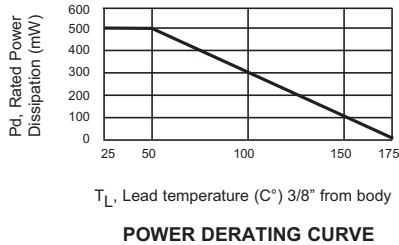
LEAD MATERIAL: Copper clad steel

LEAD FINISH: Tin / Lead

POLARITY: Cathode end is banded.

MOUNTING POSITION: Any





Aeroflex / Metelics, Inc.

975 Stewart Drive,
Sunnyvale, CA 94085
Tel: (408) 737-8181
Fax: (408) 733-7645

Sales: 888-641-SEMI (7364)

Hi-Rel Components

9 Hampshire Street,
Lawrence, MA 01840
Tel: (603) 641-3800
Fax: (978) 683-3264

www.aeroflex.com/metelics-hirelcomponents

54 Grenier Field Road,
Londonderry, NH 03053
Tel: (603) 641-3800
Fax: (603)-641-3500

ISO 9001: 2008 certified companies

www.aeroflex.com/metelics metelics-sales@aeroflex.com

Aeroflex / Metelics, Inc. reserves the right to make changes to any products and services herein at any time without notice. Consult Aeroflex or an authorized sales representative to verify that the information in this data sheet is current before using this product. Aeroflex does not assume any responsibility or liability arising out of the application or use of any product or service described herein, except as expressly agreed to in writing by Aeroflex; nor does the purchase, lease, or use of a product or service from Aeroflex convey a license under any patent rights, copyrights, trademark rights, or any other of the intellectual rights of Aeroflex or of third parties.

Copyright 2010 Aeroflex / Metelics. All rights reserved.



Our passion for performance is defined by three attributes represented by these three icons: solution-minded, performance-driven and customer-focused.