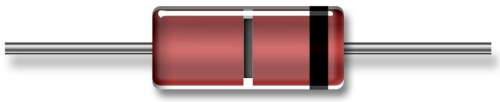
1N821-1 thru 1N829-1 &
1N821A-1 thru 1N829A-1

Temperature Compensated
Zener Reference Diode Series

Rev. V2

Features

- 1N821-1, 1N823-1, 1N825-1, 1N827-1 and 1N829-1 available in JAN, JANTX, JANTXV and JANS
- Metallurgically Bonded, Double Plug Construction
- 500 mW Power Handling
- Axial-leaded Glass DO-35 Style Package
- Also Available in a Hermetically sealed MELF DO-213AA package



Electrical Specifications: T_A = +25°C (unless otherwise specified)

JEDEC Type #	Nominal Zener Voltage V_Z @ I_{ZT}	Zener Test Current I_{ZT}	Maximum Zener Impedance[1]	Voltage Temperature Stability ΔV_{ZT} max.[2]	Effective Temperature Coefficient
	V	mA	Ω	mV	%/°C
1N821-1 1N821A-1	5.9 - 6.5	7.5	15 10	96	0.01
1N823-1 1N823A-1	5.9 - 6.5	7.5	15 10	48	0.005
1N825-1 1N825A-1	5.9 - 6.5	7.5	15 10	19	0.002
1N826-1	6.2 - 6.9	7.5	15	20	0.002
1N827-1 1N827A-1	5.9 - 6.5	7.5	15 10	9	0.001
1N828-1	6.2 - 6.9	7.5	15	10	0.001
1N829-1 1N829A-1	5.9 - 6.5	7.5	15 10	5	0.0005

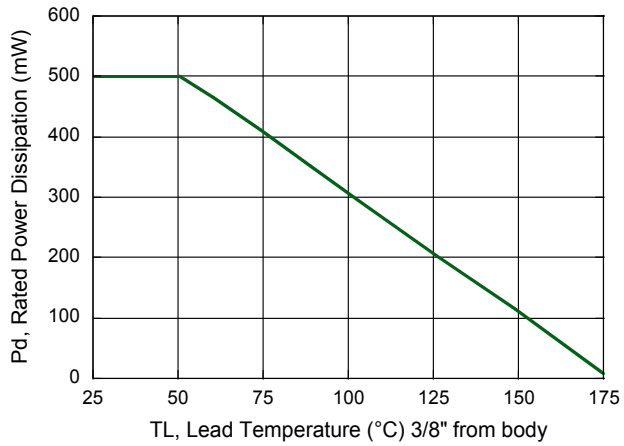
1. Zener impedance is derived by superimposing on I_{ZT} A 60Hz rms a.c. current equal to 10% of I_{ZT}.
2. The maximum allowable change observed over the entire temperature range i.e., the diode voltage will not exceed the specified mV at any discrete temperature between the established limits, per JEDEC standard No. 5.

Absolute Maximum Ratings

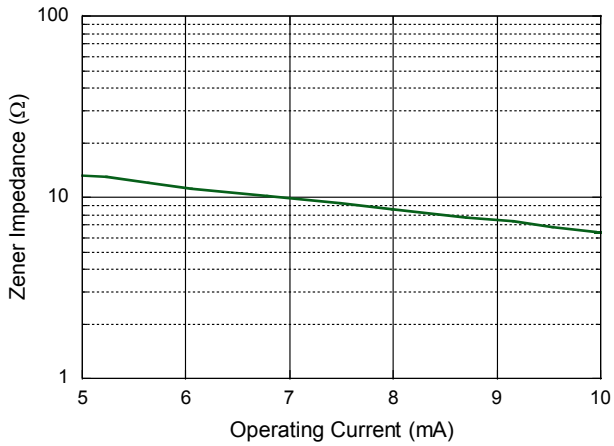
Parameter	Absolute Maximum
DC Power Dissipation	500 mW @ +50°C
Power Derating	4 mW/°C above +50°C
Operating & Storage Temperature	-65°C to +175°C

Typical Performance Curves

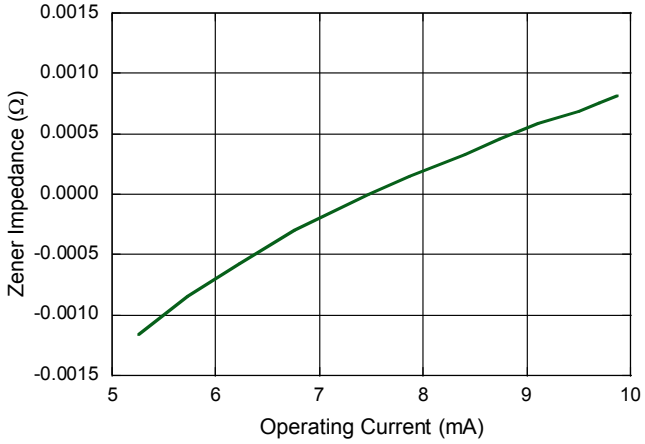
Power Derating Dissipation



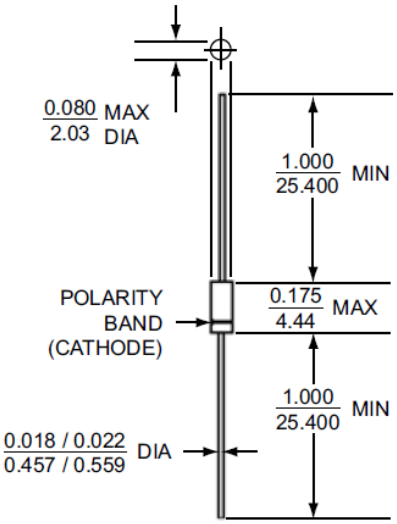
Zener Impedance



Change in Temperature Coefficient



Outline



All dimensions in INCH / mm

Leaded Design Data

Case: DO-35, Hermetically sealed
Lead Material: Copper Clad Steel
Lead Finish: Tin / Lead
Polarity: Cathode end is banded.
Mounting Position: Any.