

TEMPERATURE COMPENSATED ZENER REFERENCE DIODES
6.2 and 6.55 VOLT NOMINAL ZENER VOLTAGE

1N821
thru
1N829A

MAXIMUM RATINGS *

Operating Temperature: -55 °C to +200 °C
Storage Temperature: -55 °C to +200 °C
DC Power Dissipation: 500 mW at 50 °C
Power Derating: 3.33 mW/°C above 50 °C

* ELECTRICAL CHARACTERISTICS @ 25 C, unless otherwise specified

JEDEC TYPE NUMBERS	ZENER VOLTAGE (Notes 1 & 4)	ZENER TEST CURRENT	MAXIMUM ZENER IMPEDANCE	VOLTAGE TEMPERATURE STABILITY (Note 2)	TEMPERATURE RANGE	EFFECTIVE TEMPERATURE COEFFICIENT
	Vz @ Izt	Izt	Zzt	ΔVz/Δt MAXIMUM (Notes 3 & 4)		%/°C
	VOLTS	mA	OHMS	mV	°C	%/°C
1N821	5.9-6.5	7.5	15	98	-55 to +100	0.01
1N821A	5.9-6.5	7.5	10	98	-55 to +100	0.01
1N822	5.9-6.5	7.5	15	98	-55 to +100	0.01
1N823	5.9-6.5	7.5	15	48	-55 to +100	0.005
1N823A	5.9-6.5	7.5	10	48	-55 to +100	0.005
1N824	5.9-6.5	7.5	15	48	-55 to +100	0.005
1N825	5.9-6.5	7.5	15	19	-55 to +100	0.002
1N825A	5.9-6.5	7.5	10	19	-55 to +100	0.002
1N826	5.2-6.9	7.5	15	20	-55 to +100	0.002
1N827	5.9-6.5	7.5	15	9	-55 to +100	0.001
1N827A	5.9-6.5	7.5	10	9	-55 to +100	0.001
1N829	5.9-6.5	7.5	15	5	-55 to +100	0.0005
1N829A	5.9-6.5	7.5	10	5	-55 to +100	0.0005

* JEDEC Registered Data.

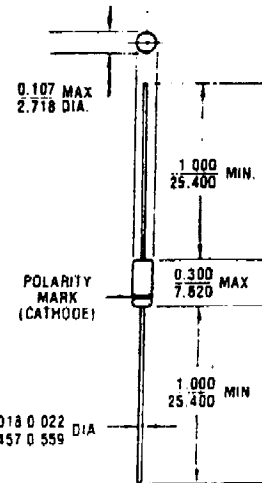
Double Anode; Electrical Specifications Apply In Both Directions

NOTE 1 When ordering devices with tighter tolerances specified, use a nominal VZ voltage of 6.35 V.

NOTE 2 Zener impedance is derived by superimposing on Izt a 60 Hz a.c. current equal to 10% of Izt.

NOTE 3 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.

NOTE 4 Voltage measurements to be performed 15 seconds after application of DC current.



All dimensions in INCH / m.m.

FIGURE 1
DO-7

DESIGN DATA

CASE: Hermetically sealed glass case.

LEAD MATERIAL: Copper Clad Steel

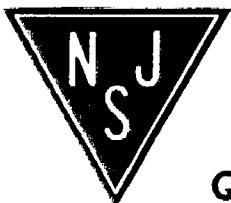
LEAD FINISH: Tin Plate

THERMAL RESISTANCE:
250 °C/w (Typical)
junction to ambient.

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

WEIGHT: 0.14 Grams

MOUNTING POSITION: Any



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