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# 1N3154 thru 1N3157A

## TEMPERATURE COMPENSATED ZENER REFERENCE DIODES 8.4 VOLT NOMINAL ZENER VOLTAGE

### 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

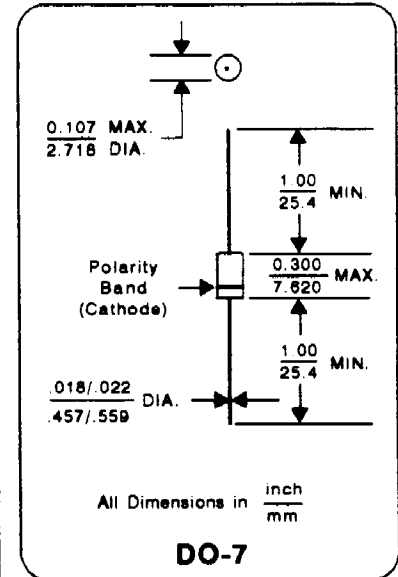
### \* ELECTRICAL CHARACTERISTICS @ 25 °C, unless otherwise specified

JEDEC TYPE NUMBERS	ZENER VOLTAGE $V_z @ I_{zt}$	ZENER TEST CURRENT $I_{zt}$	MAXIMUM ZENER IMPEDANCE (Note 1) $Z_{zt}$	VOLTAGE TEMPERATURE STABILITY (Note 2) $\Delta V_{zt}$ MAXIMUM	TEMPERATURE RANGE	EFFECTIVE TEMPERATURE COEFFICIENT
	VOLTS	mA	OHMS	mV	°C	%/C
1N3154 1N3154A	8.00-8.80	10	15	132	-55 to +100	.01
	8.00-8.80	10	15	170	-55 to +150	.01
1N3155 1N3155A	8.00-8.80	10	15	65	-55 to +100	.005
	8.00-8.80	10	15	86	-55 to +150	.005
1N3156 1N3156A	8.00-8.80	10	15	28	-55 to +100	.002
	8.00-8.80	10	15	34	-55 to +150	.002
1N3157 1N3157A	8.00-8.80	10	15	13	-55 to +100	.001
	8.00-8.80	10	15	17	-55 to +150	.001

\* JEDEC Registered Data.

**NOTE 1:** Zener impedance is derived by superimposing on  $I_{zt}$  a 60 Hz 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.



### 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:** 0.2 Grams

**MOUNTING POSITION:** Any