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**1N3501 thru
 1N3504 WITH
 CERTIFIED
 ZENER VOLTAGE
 STABILITY**

MAXIMUM RATINGS

Operating Temperature Range: -65° to $+150^{\circ}\text{C}$

Maximum Lead Temperature $1/8 \pm 1/32$ inch
 from case for 8 seconds: 230°C

Maximum DC Power Dissipation at or below
 25°C Ambient: 250 mW

Linear Derating: 2.0 mW/ $^{\circ}\text{C}$ (See Figure 5)

Maximum Steady State Current (I_{ZM}) at
 125°C : 7.5 mA

ELECTRICAL CHARACTERISTICS @ 25°C unless otherwise specified

JEDEC TYPE NUMBER	NOMINAL ZENER VOLTAGE	ZENER TEST CURRENT ± 0.01 mA	MAXIMUM ZENER IMPEDANCE Z_{ZT} @ I_{ZT}	VOLTAGE TEMPERATURE STABILITY ΔV_{ZT} MAXIMUM (NOTE 2)	TEMPERATURE RANGE	EFFECTIVE TEMPERATURE COEFFICIENT	VOLTAGE TIME STABILITY @ 80°C INITIAL-TO PEAK ΔV_{ZT} MAXIMUM (NOTE 3)	EFFECTIVE VOLTAGE TIME STABILITY INITIAL-TO- PEAK
	VOLTS	mA	OHMS	mV			$\mu\text{V}/1000$ HRS.	
1N3501	6.2-6.5	7.5	12	6	25 to 100	.001	635	100
1N3502	6.2-6.5	7.5	12	3	25 to 100	.0005	635	100
1N3503	6.2-6.5	7.5	12	6	25 to 100	.001	318	50
1N3504	6.2-6.5	7.5	12	6	25 to 100	.001	127	20

NOTE 1

The zener impedance is derived from the 60 Hz ac voltage which results when an ac current having an rms value equal to 10% of the DC zener current (I_{ZT}) is superimposed on I_{ZT} .

NOTE 2

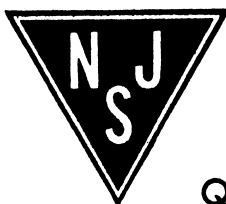
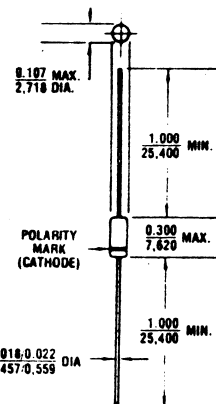
The maximum allowable change observed over the entire temperature range i.e., the diode voltage will not exceed the specified mV change at any discrete temperature between the established limits.

NOTE 3

When operated at:

$$I_{ZT} = 7.5 \text{ mA} \pm 0.0001 \text{ mA}$$

$$T_A = 80^{\circ}\text{C} \pm 0.1^{\circ}\text{C}$$



Quality Semi-Conductors

All dimensions in $\frac{\text{INCH}}{\text{M.M.}}$