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1N3501 thru 1N3504 WITH CERTIFIED ZENER VOLTAGE STABILITY

MAXIMUM RATINGS

Operating Temperature Range: −65° to +150°C

Maximum Lead Temperature 1/8 ±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/°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 V_Z @ I_{ZT}	ZENER TEST CURRENT ±0.01 mA I_{ZT}	MAXIMUM ZENER IMPEDANCE Z_{ZT} @ I_{ZT} (NOTE 1)	VOLTAGE TEMPERATURE STABILITY $\triangle V_{ZT}$ MAXIMUM (NOTE 2)	TEMPERATURE RANGE	EFFECTIVE TEMPERATURE COEFFICIENT	VOLTAGE TIME STABILITY @ 80°C INITIAL-TO PEAK $\triangle V_Z$, MAXIMUM (NOTE 3)	EFFECTIVE VOLTAGE TIME STABILITY INITIAL-TO-PEAK
	VOLTS	mA	OHMS	mV	°C	%/°C	μV/1000 HRS.	PPM/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}.

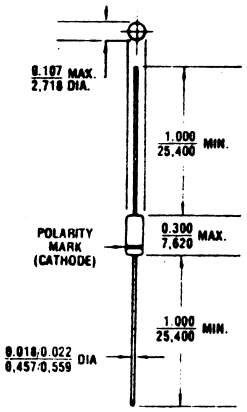
NOTE 2

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 mA ±0.0001 mA
T_A = 80°C ± 0.1°C



All dimensions in INCH / m.m.

Quality Semi-Conductors