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## NTE109

### Fast Switching General Purpose Diode

### DO-7 Glass Package

#### Description:

The NTE109 is a fast switching general purpose diode in a DO-7 glass package optimized for radio frequency response. This device can be used in many AM, FM, and TV-IF applications, replacing point contact devices.

#### Applications:

- AM/FM Detectors
- Radio Detectors
- FM Discriminators
- TV Auto Detectors
- RF Input Probes
- TV Video Detectors

#### Features:

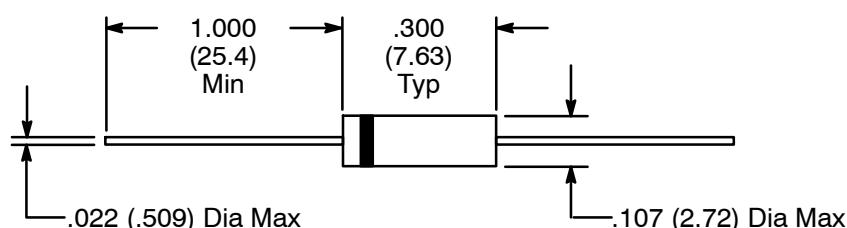
- Lower Leakage Current
- Flat Junction Capacitance
- High Mechanical Strength
- At Least 1 Million Hours MTBF

#### Absolute Maximum Ratings: ( $T_A = +25^\circ\text{C}$ unless otherwise specified)

Peak Inverse Voltage, $P_{IV}$ .....	100V
Forward Surge Current (1 sec), $I_{FSM}$ .....	500mA
Average Rectified Forward Current, $I_O$ .....	40mA
Peak Operating Current, $I_{OS}$ .....	325mA
Operating Junction Temperature Range, $T_J$ .....	-65° to +90°C
Storage Temperature Range, $T_{STG}$ .....	-65° to +90°C

#### Electrical Characteristics: ( $T_A = +25^\circ\text{C}$ unless otherwise specified)

Maximum Forward Voltage Drop ( $I_F = 200\text{mA}$ ), $V_F$ .....	1.0V
Minimum Breakdown Voltage ( $I_R = 1.0\text{mA}$ ), $P_{IV}$ .....	100V
Maximum Reverse Leakage ( $V_R = 50\text{V}$ ), $I_R$ .....	100 $\mu\text{A}$
Typical Junction Capacitance ( $V_R = 1\text{V}$ , $f = 1\text{MHz}$ ), $C_J$ .....	0.8pF



Color Band Denotes Cathode