



ELECTRONICS, INC.
 44 FARRAND STREET
 BLOOMFIELD, NJ 07003
 (973) 748-5089
<http://www.nteinc.com>

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 $+90^\circ\text{C}$
Storage Temperature Range, T_{stg}	-65° to $+90^\circ\text{C}$

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 μA
Typical Junction Capacitance ($V_R = 1\text{V}$, $f = 1\text{MHz}$), C_J	0.8pF

