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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 $+90^\circ\text{C}$ |
| 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 |

