

## NTE553 Schottky Barrier Diode

### **Description:**

The NTE553 is a silicon schottky barrier diode in a DO35 style package for use in UHF and VHF switching applications.

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

|                                        |       |                                     |
|----------------------------------------|-------|-------------------------------------|
| Reverse Voltage, $V_R$                 | ..... | -35V                                |
| Forward Current, $I_F$                 | ..... | 100mA                               |
| Power Dissipation, $P_D$               | ..... | 150mW                               |
| Operating Temperature Range, $T_{opr}$ | ..... | $-20^\circ$ to $+60^\circ\text{C}$  |
| Storage Temperature range, $T_{stg}$   | ..... | $-45^\circ$ to $+125^\circ\text{C}$ |

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

| Parameter                 | Symbol      | Test Conditions                          | Min | Typ | Max  | Unit          |
|---------------------------|-------------|------------------------------------------|-----|-----|------|---------------|
| Reverse Breakdown Voltage | $V_{(BR)R}$ | $I_R = -10\mu\text{A}$                   | -35 | -   | -    | V             |
| Reverse Leakage Current   | $I_R$       | $V_R = -25\text{V}$                      | -   | -   | -0.1 | $\mu\text{A}$ |
| Forward Voltage           | $V_F$       | $I_F = 10\text{mA}$                      | -   | -   | 1.0  | V             |
| Diode Capacitance         | $C_T$       | $V_R = -6\text{V}$ , $f = 1\text{MHz}$   | -   | -   | 1.2  | pf            |
| Series Resistance         | $R_S$       | $I_F = 2\text{mA}$ , $f = 100\text{MHz}$ | -   | -   | 1.2  | $\Omega$      |
| Series Inductance         | $L_S$       | $f = 250\text{MHz}$                      | -   | 3   | -    | nH            |

