

## NTE587 Silicon Diode Ultra Fast Switch

**Features:**

- Super Fast Switching Speed
- High Current Capability
- High Surge Current Capability
- Low Forward Voltage Drop
- High Reliability
- DO41 Type Package

**Maximum Ratings and Electrical Characteristics:**

( $T_A = +25^\circ\text{C}$  unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%)

Maximum Recurrent Peak Reverse Voltage .....	200V
Maximum RMS Voltage .....	140V
Maximum Average Forward Rectified Current ( $T_A = +55^\circ\text{C}$ ) .....	1.0A
Peak Forward Surge Current (8.3ms single half wave superimposed on rated load) .....	30A
Maximum Forward Voltage Drop ( $I_O = 1\text{A}$ ) .....	0.95V
Maximum DC Reverse Current ( $V_{DC} = 200\text{V}$ ) .....	5 $\mu\text{A}$
Maximum DC Reverse Current ( $V_{DC} = 200\text{V}$ , $T_A = +150^\circ\text{C}$ ) .....	50 $\mu\text{A}$
Maximum Reverse Recovery Time (Note 1) .....	35ns
Typical Junction Capacitance (Note 2) .....	53pF
Operating Temperature Range, $T_{opr}$ .....	$-65^\circ$ to $+150^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	$-65^\circ$ to $+150^\circ\text{C}$

Note 1. Test Conditions:  $I_F = 0.5\text{A}$ ,  $I_R = 1.0\text{A}$ ,  $I_{RR} = 0.25\text{A}$ .

Note 2. Measured at 1MHz and applied reverse voltage of 4V.

