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## NTE586 Silicon Rectifier Diode Schottky Barrier, Fast Switching

**Features:**

- Low Switching Noise
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Capability

**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 Current  | 40V            |
| Maximum RMS Voltage   | 28V            |
| Maximum DC Blocking Voltage   | 40V            |
| Maximum Average Forward Rectified Current (375" . (9.5mm) lead length at $T_L = +95^\circ\text{C}$ ).             | 3.0A           |
| Peak Forward Surge Current<br>(8.3ms single half sine-wave superimposed on rated load $T_L = +75^\circ\text{C}$ ) | 80A            |
| Maximum Instantaneous Forward Voltage at 3A DC (Note 1)   | .525V          |
| Maximum Average Reverse Current at Rated DC Blocking Voltage  |                |
| $T_A = +25^\circ\text{C}$   | 1.0mA          |
| $T_A = +100^\circ\text{C}$  | 10mA           |
| Typical Thermal Resistance, Junction-to-Ambient (Note 2), $R_{thJA}$  | 80°C/W         |
| Typical Junction Capacitance (Note 3)   | 110pF          |
| Operating Junction Temperature Range $T_J$  | -65° to +125°C |
| Storage Temperature Range $T_{STG}$   | -65° to +125°C |

Note 1. measured at Pulse Width 300µs, Duty Cycle 2%.

Note 2. Thermal Resistance Junction to Ambient Vertical PC Board Mounting, 0.5" (12.7mm) Lead Length.

Note 3. Measured at 1MHz and applied reverse voltage of 4.0 Volts.

