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°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: 3.0A

Peak Forward Surge Current:
(8.3ms single half sine-wave superimposed on rated load T_L = +75°C) 80A

- Maximum Instantaneous Forward Voltage at 3A DC (Note 1): 0.525V
- Maximum Average Reverse Current at Rated DC Blocking Voltage:
  - T_A = +25°C: 1.0mA
  - T_A = +100°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°C to +125°C
- Storage Temperature Range: T_STG: -65°C 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.

![Diagram of the NTE586 Silicon Rectifier Diode with dimensions and color band notation for cathode.]