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## NTE506 Silicon Rectifier Diode

### Description

The NTE506 is a silicon rectifier diode in an axial lead package designed for fast recovery, damper and blanking applications.

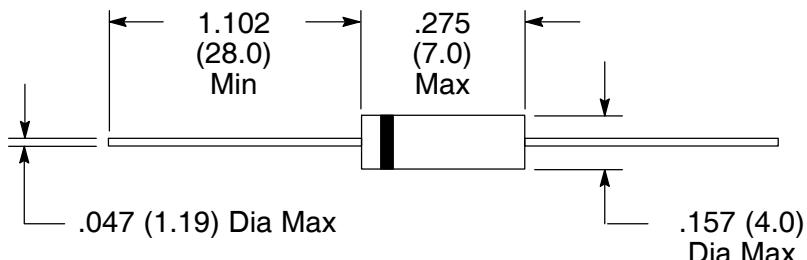
**Maximum Ratings and Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%)

|  |                 |
|--|-----------------|
| Peak Repetitive Reverse Voltage, $V_{RRM}$ .....   | 1500V           |
| Working Peak Reverse Voltage, $V_{RWM}$ .....  | 1500V           |
| DC Blocking Voltage, $V_R$ .....   | 1500V           |
| RMS Reverse Voltage, $V_{R(rms)}$ .....  | 1050V           |
| Average Rectified Forward Current ( $T_L = +55^\circ\text{C}$ , Note 1), $I_O$ .....                                   | 500mA           |
| Non-Repetitive Peak Forward Surge Current, $I_{FSM}$<br>(8.3ms single half sine-wave superimposed on rated load) ..... | 30A             |
| Forward Voltage ( $I_F = 500\text{mA}$ ), $V_{FM}$ .....   | .2V             |
| Peak Reverse Current ( $V_R = 1500\text{V}$ ), $I_{RM}$ .....  | 5 $\mu\text{A}$ |
| Typical Junction Capacitance (Note 2), $C_J$ .....   | 9pF             |
| Typical Reverse Recovery Time (Note 3), $t_{rr}$ .....   | 500ns           |
| Operating Temperature Range, $T_{opr}$ .....   | -65° to +125°C  |
| Storage Temperature Range, $T_{stg}$ .....   | -65° to +125°C  |

Note 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from case.

Note 2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

Note 3. Measured with  $I_F = 500\text{mA}$ ,  $I_R = -1\text{A}$ ,  $I_{rr} = -250\text{mA}$ .



Color Band Denotes Cathode