

NTE506
Silicon Rectifier Diode
DO-41/DO-15 Type Package

Features:

- Low Reverse Leakage
- High Forward Surge Current Capability

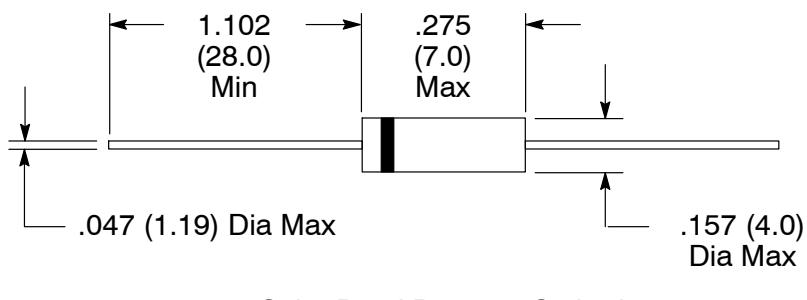
Maximum Ratings and Electrical Characteristics: ($T_A = +25^\circ\text{C}$ unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%)

Peak Repetitive Reverse Voltage, V_{RRM}	1500V
Maximum RMS Voltage, V_{RMS}	1050V
Maximum DC Blocking Voltage, V_{DC}	1500V
Maximum Average Rectified Forward Current (.375" (9.5mm) lead length), $I_{(AV)}$	500mA
Peak Forward Surge Current, I_{FSM} (8.3ms single half sine-wave superimposed on rated load)	30A
Maximum Instantaneous Forward Voltage ($I_F = 500\text{mA}$), V_F	2.5V
Maximum DC Reverse Current ($V_R = 1500\text{V}$), I_R $T_A = +25^\circ\text{C}$	5mA
$T_A = +100^\circ\text{C}$	50mA
Maximum Reverse Recovery Time (Note 1), t_{rr}	500ns
Typical Junction Capacitance (Note 2), C_J	15pF
Typical Thermal Resistance, Junction-to-Ambient (Note 3), R_{thJA}	50°C/W
Operating Temperature Range, T_{opr}	-65° to +150°C
Storage Temperature Range, T_{stg}	-65° to +150°C
Lead Temperature (During soldering, .375" (9.5mm) from case, 10sec max), T_L	+250°C

Note 1. Reverse recovery condition $I_F = 500\text{mA}$, $I_R = 1\text{A}$, $I_{rr} = 250\text{mA}$.

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

Note 3. Thermal resistance from junction to ambient at .375" (9.5mm) lead length, PCB mounted.



Color Band Denotes Cathode