

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} (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 $+125^\circ\text{C}$
Storage Temperature Range, T_{stg}	-65° to $+125^\circ\text{C}$

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

