



NTE581
General Purpose Silicon Rectifier
Fast Recovery
2-Lead TO220 Type Package

Features:

- Fast Switching
- Low Leakage
- Low Forward Voltage Drop
- High Current Capability
- High Surge Capability
- High Reliability

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 Voltage	400V
Maximum RMS Voltage	280V
Maximum DC Blocking Voltage	400V
Maximum Average Forward Rectified Current (.375" (9.5mm) Lead Length, $T_A = +75^\circ\text{C}$)	8A
Peak Forward Surge Current (8.3ms Single Half Sine-Wave Superimposed on Rted Load) .	300A
Maximum Instantaneous Forward Voltage ($I_F = 8\text{A}$)	1.3V
Maximum DC Reverse Current ($V_{DC} = 400\text{V}$, $T_A = +25^\circ\text{C}$)	10 μA
Maximum Full Load Reverse Current (Full Cycle Average, .375" (9.5mm) Lead Length, $T_C = +100$)	150 μA
Maximum Reverse Recovery Time (Note 1)	150ns
Typical Junction Capacitance (Note 2)	65pF
Operating Junction Temperature Range, T_J	-65° to $+175^\circ\text{C}$
Storage Temperature Range, T_{stg}	-65° to $+175^\circ\text{C}$

Note 1. Reverse Recovery Test Conditions: $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$.

Note 2. Measured at 1MHz and applied reverse voltage of 4V.

