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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 A |
| Maximum Full Load Reverse Current (Full Cycle Average, .375" (9.5mm) Lead Length, $T_C = +100$) | 150 A |
| 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.

