



44 FARRAND STREET
BLOOMFIELD, NJ 07003
(973) 748-5089

NTE622
Silicon Rectifier, General Purpose, High Voltage,
Fast Recovery
(Surface Mount)

Features:

- High Temperature Metallurgically Bonded
- Glass Passivated Junction
- High Temperature Soldering Guaranteed:
+450°C/5 Seconds at Terminals. Complete Device Submersible Temperature of
+260°C/10 Seconds in Solder Bath.

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

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|---|----------------|
| Maximum Recurrent Peak Reverse Voltage, V_{RRM} | 400V |
| Maximum RMS Voltage, V_{RMS} | 280V |
| Maximum DC Blocking Voltage, V_{DC} | 400V |
| Maximum Average Forward Rectified Current ($T_T = +75^\circ\text{C}$), $I_{T(AV)}$ | 0.5A |
| Peak Forward Surge Current, I_{FSM} (8.3ms Single Half Sine-Wave Superimposed on Rated Load) | 10A |
| Maximum Instantaneous Forward Voltage ($I_T = 0.5\text{A}$), V_F | 1.2V |
| Maximum DC Reverse Current ($V_{DC} = 400\text{V}$), I_R $T_A = +25^\circ\text{C}$ | 5μA |
| $T_A = +125^\circ\text{C}$ | 50μA |
| Maximum Reverse Recovery Time ($T_J = +25^\circ\text{C}$, Note 1), t_{rr} | 50ns |
| Typical Junction Capacitance (Note 2), C_J | 4pF |
| Operating Junction Temperature Range, T_J | -65° to +175°C |
| Storage Temperature Range, T_{stg} | -65° to +175°C |
| Maximum Thermal Resistance, Junction-to-Terminal (Note 3), R_{thJL} | 70°C/W |
| Maximum Thermal Resistance, Junction-to-Ambient (Note 4), R_{thJA} | 150°C/W |

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

Note 2. Measured at 1MHz and applied reverse voltage of $4V_{DC}$.

Note 2. Thermal resistance, junction-to-terminal, 5.0mm² copper pads to each terminal.

Note 3. Thermal resistance, junction-to-ambient, 5.0mm² copper pads to each terminal.

