NTE639
General Purpose Silicon Rectifier
High Voltage, Standard Recovery
DO201AD Type Package

Features:
- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

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

- Maximum Peak Repetitive Reverse Voltage, \(V_{RRM}\) ................................................................. 1300V
- Maximum Working Peak Reverse Voltage, \(V_{RWM}\) ................................................................. 1300V
- Maximum DC Blocking Voltage, \(V_R\) ...................................................................................... 1300V
- Maximum RMS Reverse Voltage, \(V_{R(RMS)}\) ................................................................. 910V
- Maximum Average Rectified Output Current (.375" (9.5mm) Lead Length, \(T_A = +75^\circ C\), \(I_O \ldots \ldots 3A\)
- Non-Repetitive Peak Forward Surge Current, \(I_{FSM}\) (8.3ms Single Half Sine-Wave Superimposed on Rated Load) ........................................... 200A
- Maximum Instantaneous Forward Voltage (\(I_F = 3A\), \(V_{FM}\) ........................................................... 1.0V
- Maximum Peak Reverse Current (\(V_R = 1300V\), \(I_{RM}\) \(T_A = +25^\circ C\) ................................................................. 5°A
\(T_A = +100^\circ C\) ................................................................. 100°A
- Typical Junction Capacitance (Note 1), \(C_{j}\) ............................................................................... 50pF
- Operating Junction Temperature Range, \(T_J\) .............................................................................. –65° to +125°C
- Storage Temperature Range, \(T_{stg}\) .................................................................................. –65° to +150°C
- Typical Thermal Resistance, Junction–to–Ambient, \(R_{thJA}\) (0.375" (9.5mm) Lead Length, \(T_A = +25^\circ C\)) ................................................................. 20°C/W

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

![Diagram with dimensions](image)