

## NTE116 General Purpose Silicon Rectifier

**Description:**

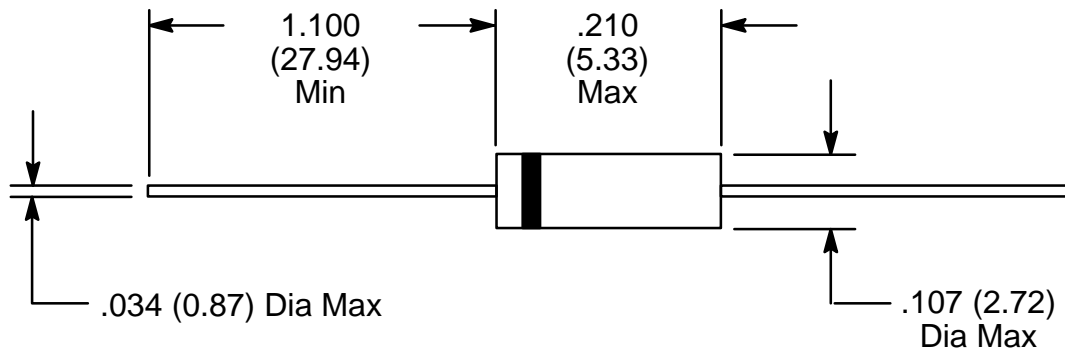
The NTE116 is a general purpose silicon rectifier in a DO-41 case designed for low power and switching applications.

**Absolute Maximum Ratings:**

|  |                |
|--|----------------|
| Peak Repetitive Reverse Voltage, $V_{RRM}$ .....   | 600V           |
| Working Peak Reverse Voltage, $V_{RWM}$ .....  | 600V           |
| DC Blocking Voltage, $V_R$ .....   | 600V           |
| Non-Repetitive Peak Reverse Voltage (Halfwave, Single Phase, 60Hz), $V_{RSM}$ .....                                | 720V           |
| RMS Reverse Voltage, $V_{R(RMS)}$ .....  | 420V           |
| Average Rectified Forward Current, $I_O$<br>(Single Phase, Resistive Load, 60Hz, $T_A = +75^\circ\text{C}$ ) ..... | 1A             |
| Non-Repetitive Peak Surge Current, $I_{FSM}$<br>(Surge applied at rated load conditions for 1 cycle) .....         | 30A            |
| Operating Junction Temperature Range, $T_J$ .....  | -65° to +175°C |
| Storage Temperature Range, $T_{stg}$ .....   | -65° to +175°C |
| Maximum Lead Temperature, $T_L$<br>(During Soldering, 3/8" from case for 10sec at 5lbs tension) .....              | +350°C         |

**Electrical Characteristics:**

| Parameter                                       | Symbol      | Test Conditions                                      | Min | Typ  | Max | Unit          |
|---|-------------|--|-----|------|-----|---------------|
| Maximum Instantaneous Forward Voltage Drop      | $v_F$       | $i_F = 1A, T_J = +25^\circ\text{C}$                  | -   | 0.93 | 1.1 | V             |
| Maximum Full-Cycle Average Forward Voltage Drop | $V_{F(AV)}$ | $I_O = 1A, T_L +75^\circ\text{C}, 1'' \text{ leads}$ | -   | -    | 0.8 | V             |
| Maximum Reverse Current                         | $I_R$       | $V_{RRM} = 600V, T_J = +25^\circ\text{C}$            | -   | 0.05 | 10  | $\mu\text{A}$ |
|   |             | $V_{RRM} = 600V, T_J = +100^\circ\text{C}$           | -   | 1.0  | 50  |               |
| Maximum Full-Cycle Average Reverse Current      | $I_{R(AV)}$ | $I_O = 1A, T_L +75^\circ\text{C}, 1'' \text{ leads}$ | -   | -    | 30  | $\mu\text{A}$ |



Color Band Denotes Cathode