

NTE116 General Purpose Silicon Rectifier

Description:

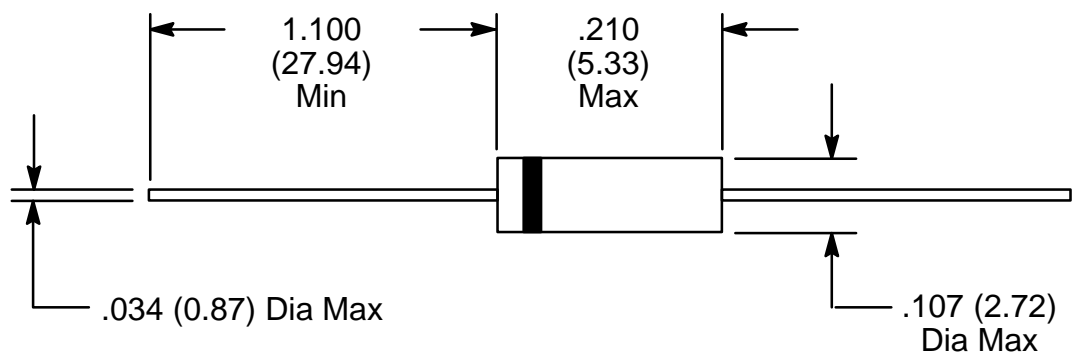
The NTE116 is a general purpose silicon rectifier in a DO-41 case designed for low power and switching applications.

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 (Single Phase, Resistive Load, 60Hz, $T_A = +75^\circ\text{C}$) | 1A |
| Non-Repetitive Peak Surge Current, I_{FSM} (Surge applied at rated load conditions for 1 cycle) | 30A |
| Operating Junction Temperature Range, T_J | -65° to $+175^\circ\text{C}$ |
| Storage Temperature Range, T_{stg} | -65° to $+175^\circ\text{C}$ |
| Maximum Lead Temperature, T_L (During Soldering, 3/8" from case for 10sec at 5lbs tension) | $+350^\circ\text{C}$ |

Electrical Characteristics:

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



Color Band Denotes Cathode