NTE125
General Purpose Silicon Rectifier

**Description:**
The NTE125 is a general purpose silicon rectifier in a DO41 case designed for low power and switching applications.

**Maximum Ratings:**
- Peak Repetitive Reverse Voltage, $V_{RRM}$ .................................................. 1000V
- Working Peak Reverse Voltage, $V_{RWM}$ .................................................. 1000V
- DC Blocking Voltage, $V_R$ ................................................................. 1000V
- Non–Repetitive Peak Reverse Voltage (Halfwave, Single Phase, 60Hz), $V_{RSM}$ .... 1200V
- RMS Reverse Voltage, $V_{R(RMS)}$ .................................................. 700V
- Average Rectified Forward Current, $I_O$ (Single Phase, Resistive Load, 60Hz, $T_A = +75°C$) .................................................. 1A
- Non–Repetitive Peak Surge Current, $I_{FSM}$ (Surge applied at rated load conditions for 1 cycle) .................................................. 50A
- Operating Junction Temperature Range, $T_J$ .................................................. –65° to +175°C
- Storage Temperature Range, $T_{stg}$ .................................................. –65° to +175°C
- Maximum Lead Temperature, $T_L$ (During Soldering, 3/8” from case for 10sec at 5lbs tension) .................................................. +350°C

**Electrical Characteristics:**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Test Conditions</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Instantaneous Forward Voltage Drop</td>
<td>$V_F$</td>
<td>$I_F = 1A, T_J = +25°C$</td>
<td>–</td>
<td>0.93</td>
<td>1.1</td>
<td>V</td>
</tr>
<tr>
<td>Maximum Full–Cycle Average Forward Voltage Drop</td>
<td>$V_{F(AV)}$</td>
<td>$I_O = 1A, T_L +75°C, 1” leads$</td>
<td>–</td>
<td>–</td>
<td>0.8</td>
<td>V</td>
</tr>
<tr>
<td>Maximum Reverse Current</td>
<td>$I_R$</td>
<td>$V_{RRM} = 600V, T_J = +25°C$</td>
<td>–</td>
<td>0.05</td>
<td>10</td>
<td>µA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$V_{RRM} = 600V, T_J = +100°C$</td>
<td>–</td>
<td>1.0</td>
<td>50</td>
<td>µA</td>
</tr>
<tr>
<td>Maximum Full–Cycle Average Reverse Current</td>
<td>$I_{R(AV)}$</td>
<td>$I_O = 1A, T_L +75°C, 1” leads$</td>
<td>–</td>
<td>–</td>
<td>30</td>
<td>µA</td>
</tr>
</tbody>
</table>
Color Band Denotes Cathode

1.100 (27.94) Min

.210 (5.33) Max

.034 (0.87) Dia Max

.107 (2.72) Dia Max