Features:
- High speed silicon switching diodes, axial leaded.
- General purpose, industrial, military and space applications.
- Hermetically sealed glass with a stud on either side of the glass passivated chip provides excellent stability.
- Extremely low leakage and very high reliability.

DO-35 Glass Axial Package

Dimensions: Millimetres

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>25.40</td>
<td>-</td>
</tr>
<tr>
<td>B</td>
<td>3.03</td>
<td>4.44</td>
</tr>
<tr>
<td>C</td>
<td>0.46</td>
<td>0.56</td>
</tr>
<tr>
<td>D</td>
<td>1.52</td>
<td>2.29</td>
</tr>
</tbody>
</table>

Absolute Maximum Ratings (\(T_A = 25^\circ C\) unless otherwise specified)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Repetitive Reverse Voltage</td>
<td>(V_{RRM})</td>
<td>100</td>
<td>V</td>
</tr>
<tr>
<td>Reverse Voltage (Continuous)</td>
<td>(V_R)</td>
<td>75</td>
<td>V</td>
</tr>
<tr>
<td>Average Forward Current</td>
<td>(I_{F(AV)})</td>
<td>150</td>
<td>mA</td>
</tr>
<tr>
<td>Forward Current (DC)</td>
<td>(I_F)</td>
<td>200</td>
<td>mA</td>
</tr>
<tr>
<td>Repetitive Peak Forward Current</td>
<td>(I_{FRM})</td>
<td>450</td>
<td>mA</td>
</tr>
<tr>
<td>Non Repetitive Peak Surge Current (t_p = 1\mu) second (t_p = 1) second</td>
<td>(I_{FSM})</td>
<td>2000 500</td>
<td>mA</td>
</tr>
<tr>
<td>Power Dissipation Derating Factor</td>
<td>(P_{TA})</td>
<td>500 2.85</td>
<td>mW mW/°C</td>
</tr>
<tr>
<td>Operating and Storage Junction Temperature Range</td>
<td>(T_J, T_{stg})</td>
<td>-65 to +200</td>
<td>°C</td>
</tr>
</tbody>
</table>
1N4148
Small Signal Diode

Electrical Characteristics (T_a = 25°C unless otherwise specified)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Test Condition</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward Voltage</td>
<td>V_F</td>
<td>I_F = 10mA</td>
<td>-</td>
<td>1.0</td>
<td>V</td>
</tr>
<tr>
<td>Reverse Current</td>
<td>I_R</td>
<td>V_R = 20V, V_R = 75V, V_R = 20V, T_j = 150°C, V_R = 75V, T_j = 150°C</td>
<td>-</td>
<td>25</td>
<td>nA</td>
</tr>
<tr>
<td>Reverse Breakdown Voltage</td>
<td>V_BR</td>
<td>I_R = 100µA, I_R = 5µA</td>
<td>100</td>
<td>75</td>
<td>V</td>
</tr>
</tbody>
</table>

Dynamic Characteristics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Test Condition</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diode Capacitance</td>
<td>C_d</td>
<td>V_R = 0, f = 1MHz</td>
<td>-</td>
<td>4.0</td>
<td>pF</td>
</tr>
<tr>
<td>Forward Recovery Voltage</td>
<td>V_f</td>
<td>I_F = 50mA, t_r = 20ns</td>
<td>-</td>
<td>2.5</td>
<td>V</td>
</tr>
<tr>
<td>Reverse Recovery Time</td>
<td>t_rr</td>
<td>I_F = 10mA, to I_R = 60mA, R_L = 100Ω, Measured at I_R = 1mA</td>
<td>-</td>
<td>4.0</td>
<td>ns</td>
</tr>
</tbody>
</table>

DO-35, 52mm Taping Specification

52mm Taping Specification
1. T and A indicates axial tape and ammo packing (52mm tape spacing).
2. 300mm (minimum) leader tape on every spool.
3. Number of empty places allowed 0.25% without consecutive empty places.
4. Ends of leads shall preferably not protrude beyond the tapes.
5. Components shall be held sufficiently in the tape or tapes so that they can not come free in normal handling.
## Specifications

<table>
<thead>
<tr>
<th>$V_{RRM}$ (V)</th>
<th>$I_{F(ON)}$ (mA)</th>
<th>$V_T$ (V) at $I_T = 10$mA</th>
<th>Length</th>
<th>Diameter</th>
<th>Package</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>150</td>
<td>1</td>
<td>4.25</td>
<td>1.85</td>
<td>DO-35</td>
<td>1N4148</td>
</tr>
</tbody>
</table>

Order Multiple = 10

Dimensions: Millimetres
1N4148
Small Signal Diode

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