1S2638

TUNER AFC DIODE

The 1S2638 is a variable capacitor diode intended for AFC applications, VHF TV applications, FM receivers, Air craft communications gear, and other receivers in the 1 MHz to 500 MHz.

Standard package is DO-35 case, DO-34 case is available upon request.

Absolute Maximum Ratings ($T_a = 25 \, ^\circ C$)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakdown Voltage</td>
<td>BV</td>
<td>10</td>
<td>V</td>
</tr>
<tr>
<td>Forward Current</td>
<td>I_F</td>
<td>250</td>
<td>mA</td>
</tr>
<tr>
<td>Power Dissipation</td>
<td>P_D</td>
<td>350</td>
<td>mW</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>T_{opr}</td>
<td>-65 to +175</td>
<td>^\circ C</td>
</tr>
<tr>
<td>Storage Temperature Range</td>
<td>T_{stg}</td>
<td>-65 to +200</td>
<td>^\circ C</td>
</tr>
</tbody>
</table>

Characteristics at $T_a = 25 \, ^\circ C$

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Min.</th>
<th>Max.</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reverse Current at $V_R = 10 , V$</td>
<td>I_R</td>
<td>-</td>
<td>5</td>
<td>$\mu A$</td>
</tr>
<tr>
<td>Nominal Capacitance at $V_R = 4 , V, f = 1 , MHz$</td>
<td>C</td>
<td>5</td>
<td>20</td>
<td>pF</td>
</tr>
<tr>
<td>at $V_R = 4 , V, f = 100 , MHz$</td>
<td>Q</td>
<td>50</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>