SBX201C

Schottky Barrier Diode
Dual Series Schottky Barrier Diode for Mixer and Detector
2V, 50mA, 0.25pF, CP

Features
- Small interterminal capacitance (C=0.25pF typ)
- Less parasitic components
- Small forward voltage
- Series connection of 2 elements in a small-sized package facilitates high density mounting this goods-applied equipment to be made smaller

Specifications

Absolute Maximum Ratings at Ta=25°C

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Conditions</th>
<th>Ratings</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reverse Voltage</td>
<td>VR</td>
<td></td>
<td>2</td>
<td>V</td>
</tr>
<tr>
<td>Forward Current</td>
<td>IF</td>
<td></td>
<td>50</td>
<td>mA</td>
</tr>
<tr>
<td>Junction Temperature</td>
<td>TJ</td>
<td></td>
<td>150</td>
<td>°C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>Tstg</td>
<td></td>
<td>-55 to +150</td>
<td>°C</td>
</tr>
</tbody>
</table>

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

Package Dimensions
unit : mm (typ)
7013A-015

Product & Package Information
- Package : CP
- JEITA, JEDEC : SC-59, TO-236, SOT-23, TO-236AB
- Minimum Packing Quantity : 3,000 pcs./reel

Packing Type: TB

Marking

Electrical Connection

1 : Cathode
2 : Anode
3 : Anode/Cathode

CP
**SBX201C**

**Electrical Characteristics** at Ta=25°C

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Conditions</th>
<th>Ratings</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reverse Voltage</td>
<td>( V_R )</td>
<td>( I_R = 10 \mu A )</td>
<td>2</td>
<td>V</td>
</tr>
<tr>
<td>Forward Voltage</td>
<td>( V_F )</td>
<td>( I_F = 1 mA )</td>
<td>320</td>
<td>mV</td>
</tr>
<tr>
<td>Series Resistance</td>
<td>( R_S )</td>
<td>( I_F = 10 mA )</td>
<td>14</td>
<td>( \Omega )</td>
</tr>
<tr>
<td>Interterminal Capacitance</td>
<td>( C )</td>
<td>( V_R = 0 V, f = 1 MHz )</td>
<td>0.25</td>
<td>pF</td>
</tr>
</tbody>
</table>

Note 1) The specifications shown above for each individual diode.

Note 2) Pay attention to handling since it is liable to be affected by static electricity due to the high-frequency process adopted.

**Ordering Information**

<table>
<thead>
<tr>
<th>Device</th>
<th>Package</th>
<th>Shipping</th>
<th>memo</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBX201C-TB-E</td>
<td>CP</td>
<td>3,000pcs./reel</td>
<td>Pb Free</td>
</tr>
</tbody>
</table>

![IF - VF Graph](image1)

![C - VR Graph](image2)
Embossed Taping Specification
SBX201C-TB-E

1. Packing Format

<table>
<thead>
<tr>
<th>Package Name</th>
<th>Carrier Tape Type</th>
<th>Maximum Number of devices contained (per reel)</th>
<th>Packing format</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Inner box</td>
<td>Outer box</td>
</tr>
<tr>
<td>CP</td>
<td>CP</td>
<td>3,000</td>
<td>15,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Packing method

Reel label, Inner box label

Type No.
LOT No.
Quantity
Origin

Outer box label

69

108

NOTE: The LEAD FREE # description shows that the surface treatment of the terminal is lead free.

Label
LEAD FREE 3
LEAD FREE 4

JEITA Phase
JEITA Phase 3A
JEITA Phase 3

2. Taping configuration

2-1. Carrier tape size (unit: mm)

Device mounting recess square hole

2-2. Device placement direction

Those with one electrode terminal on the feed hole side...TB