Ultra-High Voltage Protection USB 2.0 1:2 Mux/DeMux

The PI3USB4000A is part of a family of very high performance passive signal Mux/Demux. This family can switch USB 2.0 and UART signals with high voltage protection.

Using a unique design technology, Diodes Incorporated is able to provide 18V DC tolerance on high-speed data pin, which can prevent short to VBUS on a USB Type-C™ connector. This unique technology also offers lower power consumption (~35μA) and compact packaging, which are ideal for mobile applications.

The Diodes Advantage

High voltage tolerance USB 2.0 Mux for premium protection.

- **18V DC Tolerance on Data Pins**
  Premium protection for any damage event on connector

- **9V DC Tolerance on VDD**
  Full protection on system level if the system power sources from VBUS

- **Compact Package Options**
  1.4mm x 1.8mm UQFN and 1.5mm x 2mm UQFN

- **Ultra-Low Power Consumption**
  35μA for IDD and 1µA for IDDQ

Applications

- Server/Storage
- Smartphone
- PC/Notebook
- Type-C Connector Protection

USB Type-C is a trademark of USB Implementers Forum.
## Product Portfolio

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<tr>
<th>Part Number</th>
<th>Configuration</th>
<th>Voltage Tolerance on Data Pin</th>
<th>Voltage Tolerance on VDD</th>
<th>Package</th>
<th>Temperature Range</th>
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</thead>
<tbody>
<tr>
<td>PI3USB4000AZUA</td>
<td>1:2</td>
<td>18V</td>
<td>9V</td>
<td>10-UQFN (1.5 x 2mm)</td>
<td>-40°C to +85°C</td>
</tr>
<tr>
<td>PI3USB4000AZM</td>
<td>1:2</td>
<td>18V</td>
<td></td>
<td>10-UQFN (1.4 x 1.8mm)</td>
<td></td>
</tr>
</tbody>
</table>

## Ordering Information

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<tr>
<th>MPN</th>
<th>Packaging</th>
<th>MOQ</th>
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<tr>
<td>PI3USB4000AZUAEX</td>
<td>U-QFN1520-10</td>
<td>3,500</td>
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<tr>
<td>PI3USB4000AZMEX</td>
<td>U-QFN1418-10</td>
<td>3,500</td>
</tr>
</tbody>
</table>

## Further Information
PI3USB4000A: [https://www.diodes.com/part/PI3USB4000A](https://www.diodes.com/part/PI3USB4000A)