Advice for soldering LC-Displays with pins

The regulations of RoHS and the thereby related change from leaded to lead-free pins presume higher soldering temperatures.

Therefore it has to be taken care that:

- pulling or pressing exposures may lead to failures at the contact area, glass to pins.
- the contact pins have to be soldered principally without any mechanical tension.
- pins with a length <6 mm do require special precautions.
  Under certain circumstances the LCD’s have to be soldered manually.
- the top and bottom polarizer of the LCD will get damaged if the temperature exceeds +70°C~75°C.
- the LCD is covered for the wave soldering process.

For wave soldering, please find the subsequent pages:

  a.) solder direction
  b.) temperature profile
# Soldering Direction

<table>
<thead>
<tr>
<th>RIGHT</th>
<th>WRONG</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Soldering Direction" /></td>
<td><img src="image2.png" alt="Soldering Direction" /></td>
</tr>
</tbody>
</table>

**Drawing: Solder direction**

Solder direction for wave soldering.

---

ADKOM Elektronik GmbH – Postfach 1133 – Oberhäuser Str. 12 – 73098 Rechberghausen – Germany
www.adkom.de – info@adkom.de – Phone: +49–(0)7161–9589–0 – Fax: +49–(0)7161–9589–99
**Soldering profile for bottom side of PCB**

**Bottom side of PCB:**
- Max. temperature: 250°C
- Time above 140°C: 3 Sec.
- Time above 70°C: 2 Min.: 20 Sec.

Max. acceptable temperature at Top and bottom polarizor +70...75°C.
Covering arrangements for a Temperature protection are Strongly recommended.