PRODUCT DATA SHEET
Solder Tubes

Introduction

Solder tubes provide a precise, controlled amount of solder for heat shrink electrical joint termination within solder sleeves.

While solder tubes are similar in shape to standard washers, the tight wall-to-height ratios of 3 or more is a key distinguishing feature. Solder tubes can be customized to meet your heat shrink solder sleeve requirements and are ideal for a number of applications, including:

- Radio systems
- Wire harness
- EMI shield to ground termination
- Wire-to-wire splicing and more

Features

- Wall-to-height ratios of 3 or more
- Visual reflow verification
- Flux coatings can be applied in the range of 0.5–2% by weight
- Available in the most frequently used solder alloys, including:
  - SAC alloys - Sn62
  - SnAg - Sn10
  - Sn63
- Non-standard alloys are also available, depending on the alloy.

Standard Tube Dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Maximum</th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>OD</td>
<td>1.25” (31.75mm)</td>
<td>0.050” (1.27mm)</td>
</tr>
<tr>
<td>ID</td>
<td>1.15” (29.21mm)</td>
<td>0.040” (1.016mm)</td>
</tr>
<tr>
<td>Height</td>
<td>0.500” (12.7mm)</td>
<td>n/a</td>
</tr>
<tr>
<td>Wall</td>
<td>n/a</td>
<td>0.010” (0.254mm)</td>
</tr>
</tbody>
</table>

Flux Coating

Flux coating is available to facilitate the soldering process. Typically, flux coatings can be applied in the range of 0.5–2% by weight and are available in no-clean, RMA, and RA.

Visual Reflow Indicators

There are two options available for visual verification that the reflow temperature for the solder has been reached:

- Thermochromic indicator dye, which disappears when the proper temperature has been reached. This dye is added to the flux coating and does not interfere with reflow.
- External indicator ring, which is made of an alloy that melts at a higher temperature than the base tube. Once the outer ring is reflowed, it is an indication that the base tube has also reflowed.

Technical Support

Indium Corporation’s internationally experienced engineers provide in-depth technical assistance to our customers. Thoroughly knowledgeable in all facets of material science as it applies to the electronics and semiconductor sectors, Technical Support Engineers provide expert advice in solder properties, alloy compatibility and selection of solder preforms, wire, ribbon, and paste. Indium Corporation’s Technical Support Engineers provide rapid response to all technical inquiries.

Safety Data Sheet

The SDS for this product can be found online at http://www.indium.com/SDS

From One Engineer To Another

Contact our engineers today: askus@indium.com
Learn more: www.indium.com

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