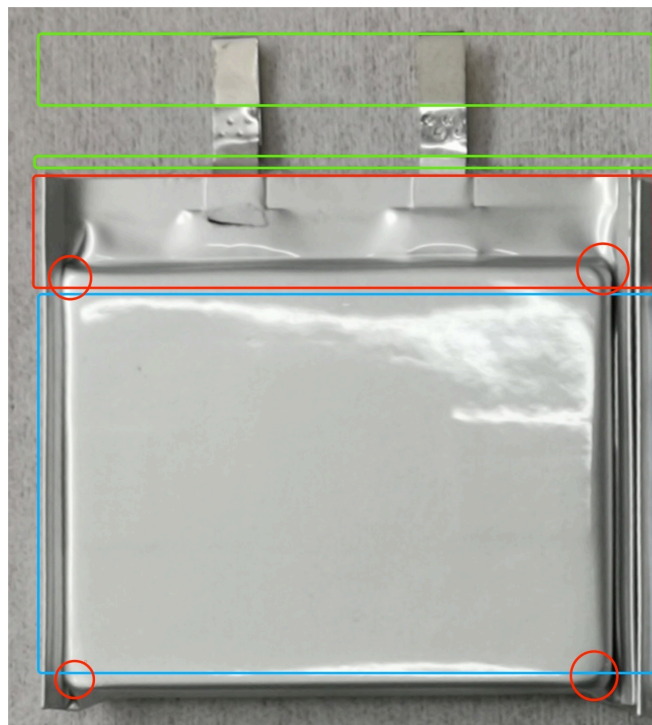


PowerRESPONDER® Precautions When Bending Tabs

This note applies to the following cell types: PR200F, PR340F, PR800F, PR1100F.

Customers may want to pre-form the cell tabs for their particular need to fit or solder the tab onto circuit boards. The use of jigs or fixtures is highly recommended in order to reproducibly pre-form cell tabs without stressing or breaking delicate internal components. This application note provides guidelines on mechanically pre-forming the tabs.

Note that the tab of the cell can be bend 180degrees three times. But the following points need careful attention before proceeding.



Refer to the above figure of a typical cell for the following points.

1. It is best to just bend the tabs once.
2. In the picture show above, the parts outlined with red square and circle are the most vulnerable part of the cell. So, these parts cannot be bent or pressed.

3. The area outlined by the blue square can have light compression on it with flat tooling with no sharp points or tools should be applied.
4. The areas of the tabs outlined by the green square can be bent. The tab area between the two green squares is the welded area of two overlapping metal plates and should not be bent as it is more susceptible to breakage.
5. The bottom region of the tab, highlighted in the green box, closest to the cell and below the welded area of the tab, is 2mm high (refer to detailed specification sheet for each product part number for this dimension).
6. When bending the tab, it is suggested that the bend radius be kept as large as possible. A narrow clamp along the lower edge of either green rectangle should be used. The clamp must not be a sharp right angle., but should have a curved surface that equals the radius of the bend that will be imparted to the formed tab. The clamp and curved surface must NOT be conductive. Carefully use a small non-conductive tool to smoothly bend the tab and form it over the curved surface portion of the clamp.

PRC Tech LL can help customers with specific queries, by providing

- mechanical samples for testing bending jigs made by customers
- working samples in order to validate bending of tabs without change in electrical performance
- feedback on the design of such jigs or fixtures if needed.
- feedback or suggestions on how to test samples electric function after pre-forming the tabs.
- Interactive project coordinated with customers to design jigs, test samples and give feedback on production flow

NOTE: Some of the above items may have a cost associated with them.

Contact sales@powerresponder.co with queries.