DC T&C AMPSEAL 16 HDR 90 DEG
Application Specification

DC T&C AMPSEAL 16 HDR 90 DEG
应用规范

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CONTENT 目录

1. SCOPE 适用范围

This application specification describes the recommendation of the handling and assembling process for AMPSEAL 16-90 degree header.
本应用规范描述了AS16 90度板端连接器的操作和组装过程的建议。

2. APPLICABLE DOCUMENTS 适用文件

The following mentioned documents are part of this specification. If there is a conflict between the information contained in the documents and this specification or with any other technical documentation supplied, the last valid customer drawings takes preference.
以下提到的文件是本说明书的一部分。如果文档中包含的信息与本规范或提供的任何其他技术文档之间存在冲突，则以最新有效的客户图纸优先。

2.1 Customer drawings 客户图纸

For dimensions, materials and surface finishes etc. see the current customer drawings.
有关尺寸、材料和表面光洁度等，请参阅当前客户图纸。

2.2 Product Specification 产品规范

This application specification is valid for products specified in product specification 108-160582, which provides a description of the electrical and mechanical properties of the connector system. Also see the current relevant terminal systems product and application specifications.
本应用规范适用于产品规范108-160735中规定的产品，该规范提供了连接器系统的电气和机械性能说明。另请参阅当前相关的终端系统产品和应用规范。

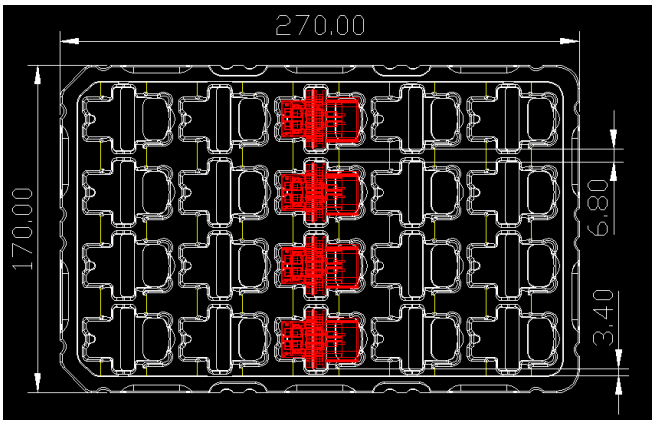
3. CONDITION OF DELIVERY AND PACKAGING 交货和包装状态

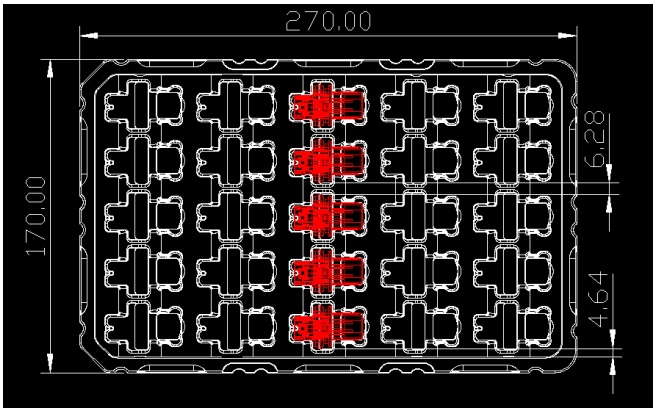
3.1 Components 部件

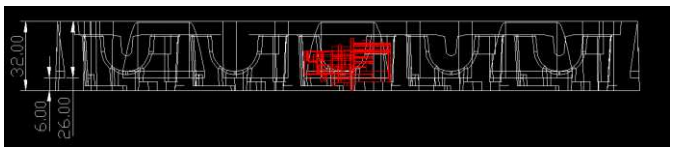
	Picture 图片	Description 描述	PN 部件号
1		AMPSEAL-16 90DEG 4P HEADER-ASSEMBLY	2394674-X
2		AMPSEAL-16 90DEG 1P HEADER-ASSEMBLY	2420047-X

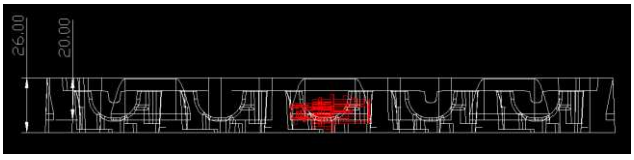
3.2 Packaging and Storage 包装和贮存

The products are packed in an ESD compliant tray as delivery condition. This will protect the parts against damage and dirt. The tray is a disposable product and does not have to be sent back. The products should be used on a "first in, first out" basis to avoid storage contamination, see latest valid customer drawings too.
产品包装在符合防静电标准的托盘中，作为交货条件。这将保护部件免受损坏和污垢。托盘是一次性产品，不需要送回。为避免存储污染，产品应以“先进先出”的原则使用，也请参见最新的有效客户图纸。



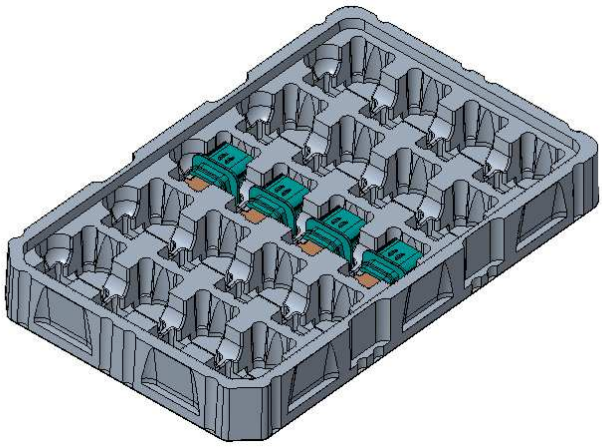


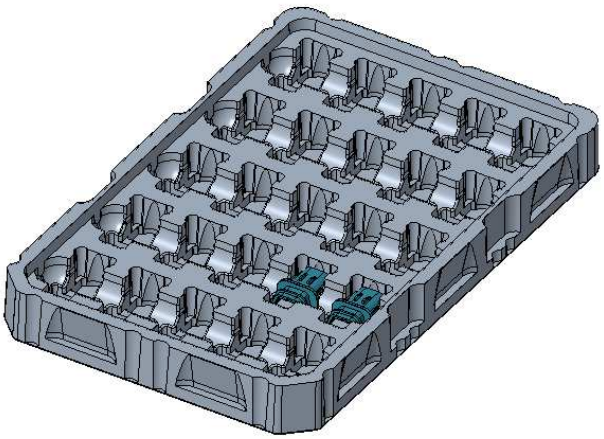




2394674-X——Tray Packaging

2420047-X——Tray Packaging





2394674-X——Tray Packaging diagrammatic sketch

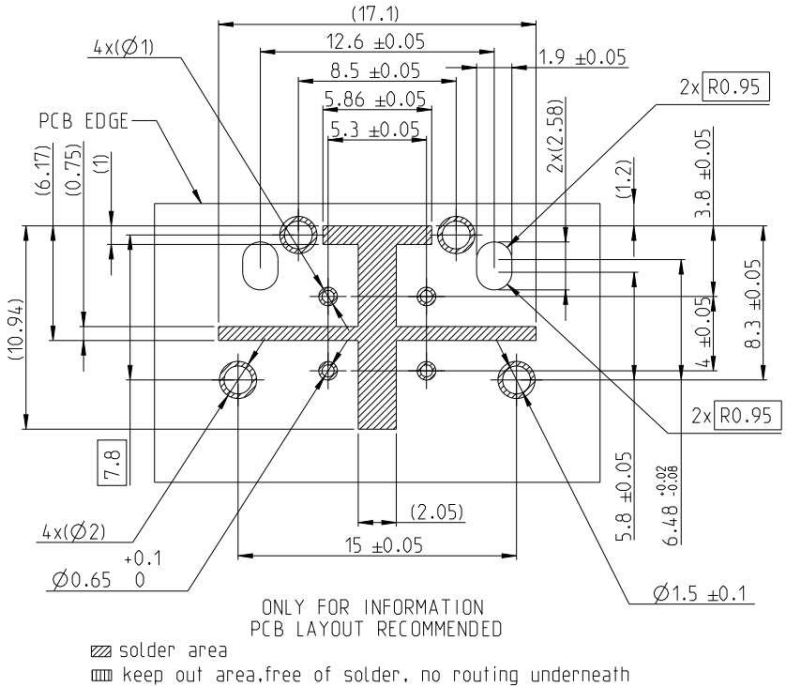
2420047-X——Tray Packaging diagrammatic sketch

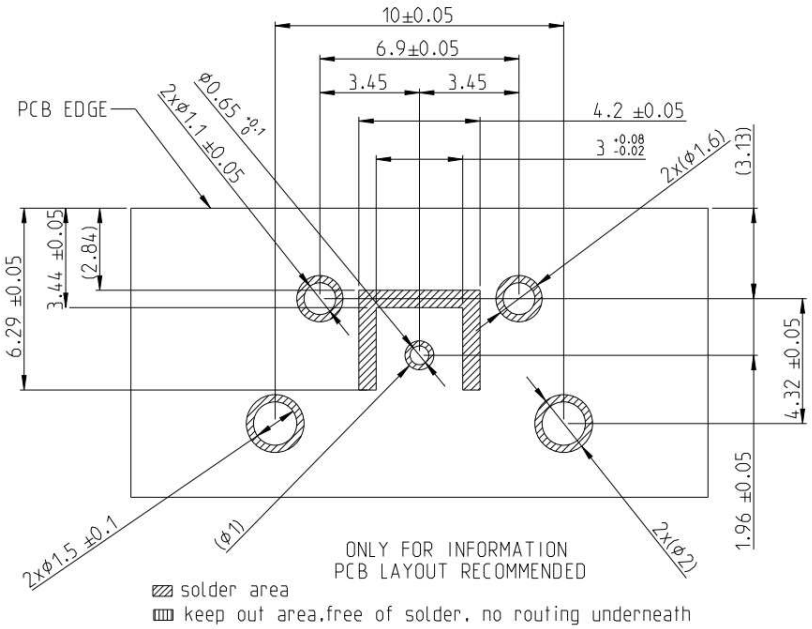
4. APPLICATION DESCRIPTION 应用说明

The 90 degree header version is made for soldering on printed circuit boards and designed to be sealed to customer enclosure by wet sealing.
90度插头版本适用于在印刷电路板上焊接，并设计为通过湿密封方式密封到客户外壳。

4.1 PCB-LAYOUT PCB 布局

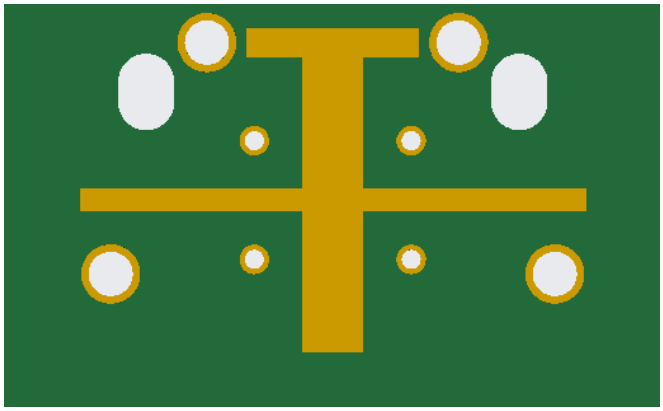
The recommended PCB-Layout is included in this specification. Hole sizes and tolerances are to be regarded as recommendation and must be adapted to own mounting and soldering conditions.
推荐的PCB布局包含在本规范中。孔的尺寸和公差视为建议，必须适应自身的安装和焊接条件。

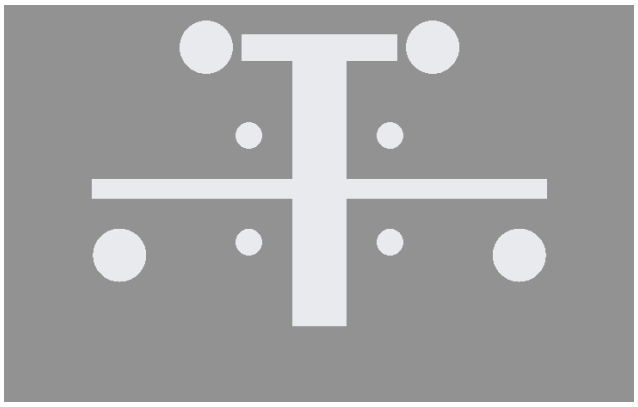




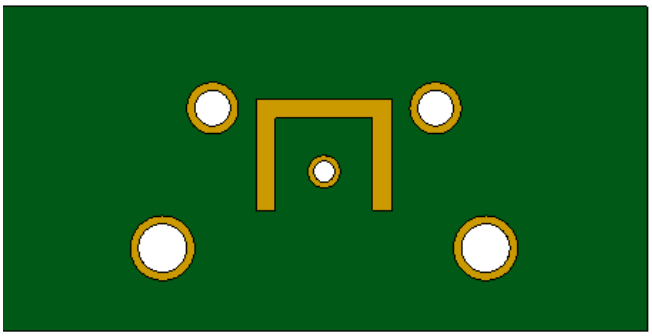
4.2 PCB FOOTPRINT 4 POS 90° PIN HEADER 4P 90° PCB 封装

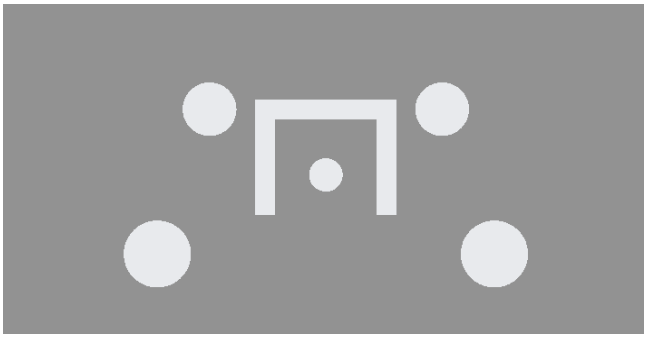
This footprint layout is suitable for reflow soldering processes.
这种封装布局适用于回流焊工艺。





The yellow is copper (solder) areas for 2394674-X
2394674-X黄色为铜(焊接)区域





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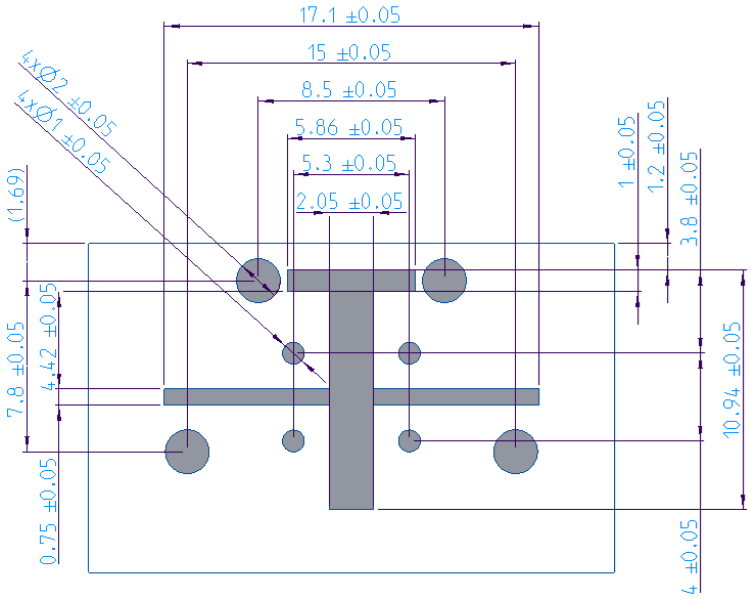
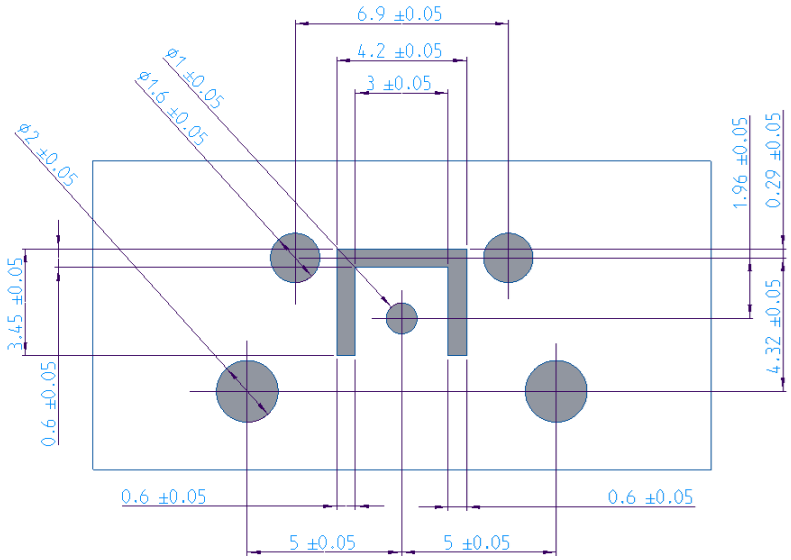


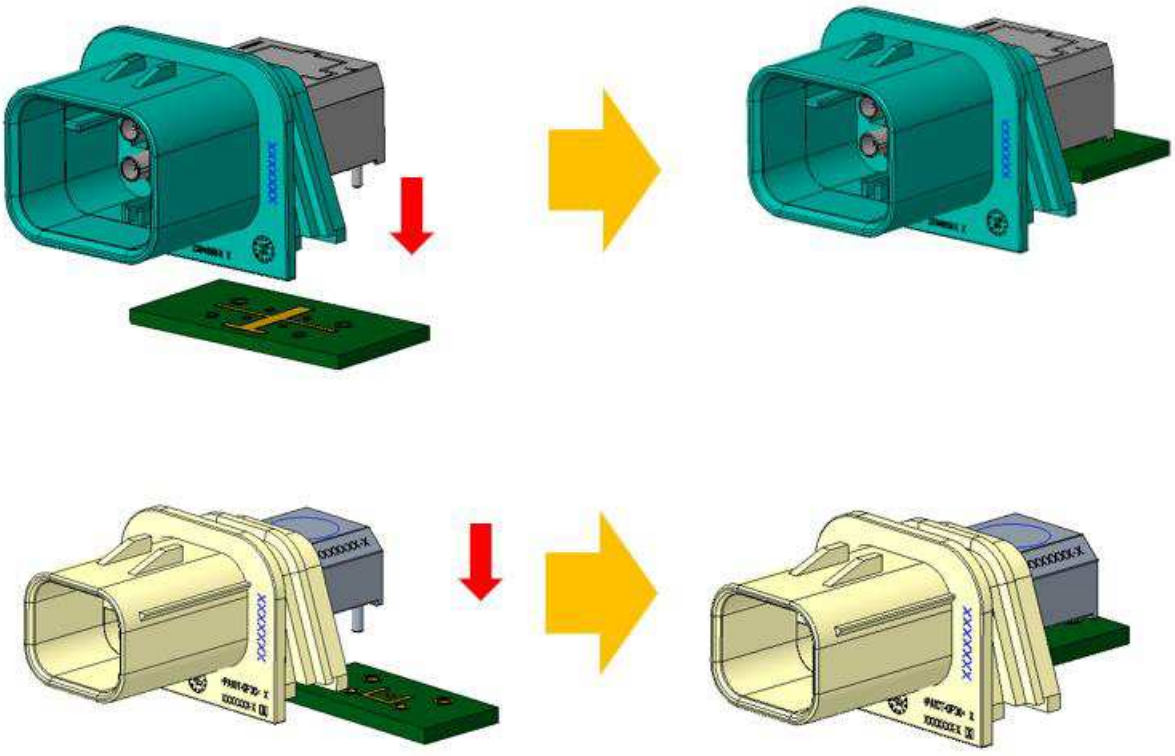
The Recommended steel mesh thickness of 0.15mm and solder paste layout for 2394674-X
2394674-X推荐钢网厚度0.15mm和锡膏布局



The Recommended steel mesh thickness of 0.15mm and solder paste layout for 2420047-X
2420047-X推荐钢网厚度0.15mm和锡膏布局

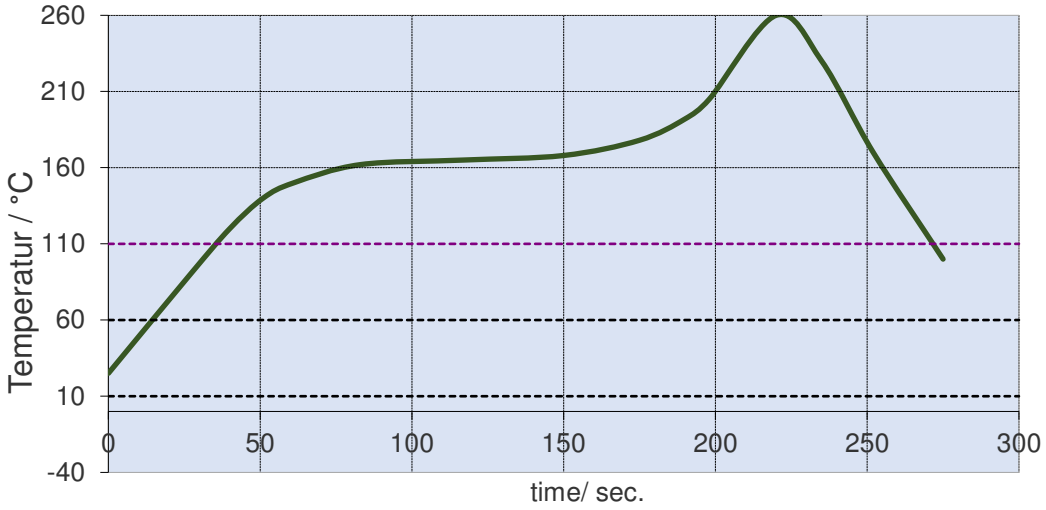
4.3 Assembly to the PCB 装配到 PCB

The header is positioned on the PCB through Posts on the PCB with.
插头通过PCB的插孔固定在PCB板上。



4.4 OLDERING PROCESS 焊接工艺

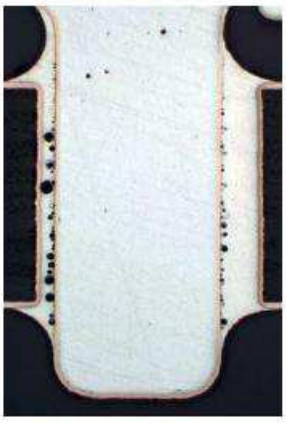
Due to large variations of existing processes, equipment and accessory and the different demands to the soldering process, it is not possible to define an ideal soldering proposal for all situations. This header is designed for reflow soldering application. A recommended soldering processes is possible only in reference to the respective soldering standard (JEDEC). Fig. 3 shows the recommended reflow soldering process according JEDEC J-STD-020D.
由于现有工艺、设备和配件的巨大变化以及对焊接工艺的不同要求，不可能为所有情况定义理想的焊接方案。此接头专为回流焊而设计。推荐的焊接工艺只能参考相应的焊接标准(JEDEC). Fig. 3显示了根据JEDEC J-STD-020D推荐的回流焊接工艺。



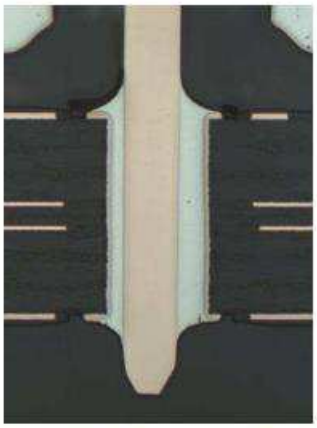
In the course of the qualification of the AMPSEAL-16 header, detailed soldering inspections were performed. All these tests and process parameters reflects a recommendation and must be adapted to the according reflow soldering process and its restrictions.
在AMPSEAL-16接头的鉴定过程中，进行了详细的焊接检查。所有这些测试和工艺参数都反映了一个建议，并且必须适应相应的回流焊接工艺及其限制。

4.5 Judgement of the soldering joint 焊接的判断

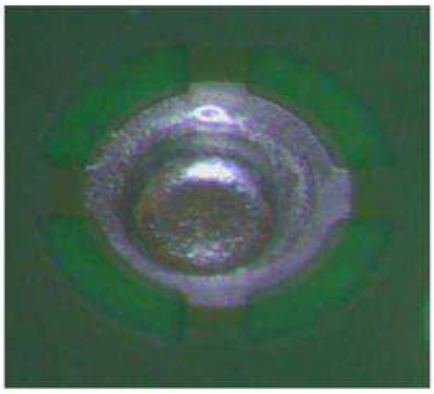
For an ideal soldering joint it is necessary to have at least a 75% solder passage. Judgement of the soldering joint will be done by optical inspection according to the acceptance criteria of IPC A610.
对于理想的焊接接头，必须具有至少75%的焊料通道。焊接接头的判断将根据IPC A610的验收标准通过光学检查进行。



Cross section picture soldered shielding pin



Cross section picture soldered signal pin



Soldered Shield Pin

Soldered Data Pin

4.6 Explanation of counterweight during reflow soldering process 回流焊焊接过程中配重说明

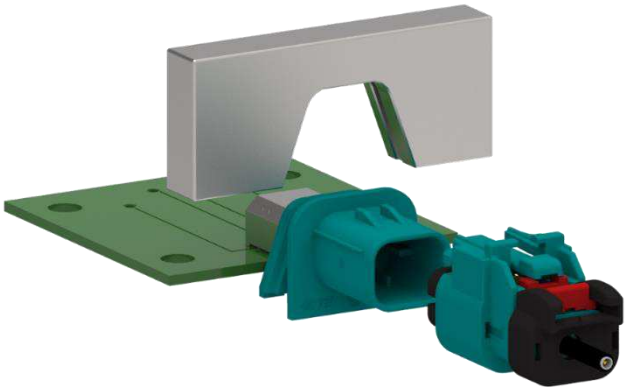
If the header tilts during reflow soldering, it is recommended to add a counterweight at the tail end of each connector (16g recommended), and customers can adjust the counterweight according to their actual situation.
连接器在回流焊过程中如果有发生倾斜，建议在每个连接器尾端增加配重（推荐16g），客户可根据实际情况自行调整配重。

5. HEADER AND PLUG MATING/UN-MATING INSTRUCTIONS 公母端对配/分离说明

Before mating & un-mating connector, the coding and polarization should be checked. The various coding positions can be taken from the corresponding customer drawing, or it can be read from the color of the connector.
在对接和断开连接器之前，应检查编码和极化。各种编码位置可以从相应的客户图纸中获取，也可以从连接器的颜色中读取。

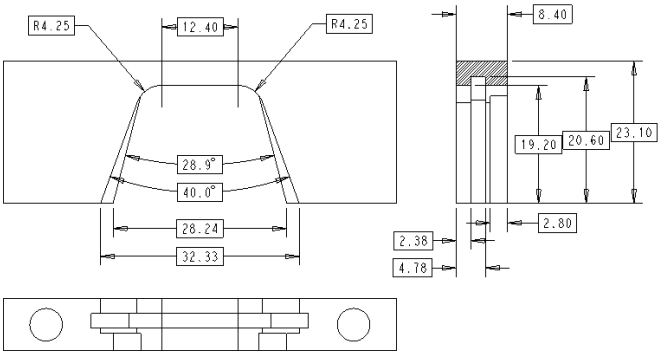
5.1 Header and plug mating 公母端配合

Assembly of pin header with device housing and mating with cable connector.
接头与设备外壳的组装以及与电缆连接器的配合。



6. HEADER AND PANEL ASSEMBLY INSTRUCTIONS 板端与面板装配介绍

6.1 PANEL DIMENSION RECOMMENDED 面板尺寸推荐



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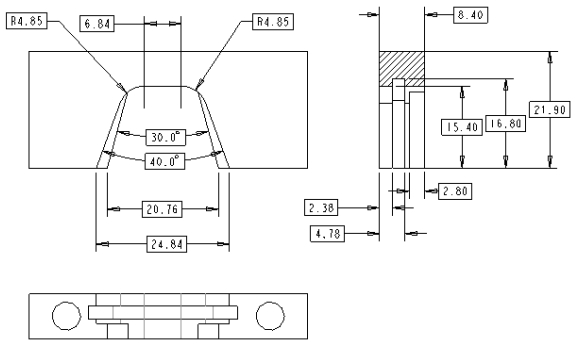

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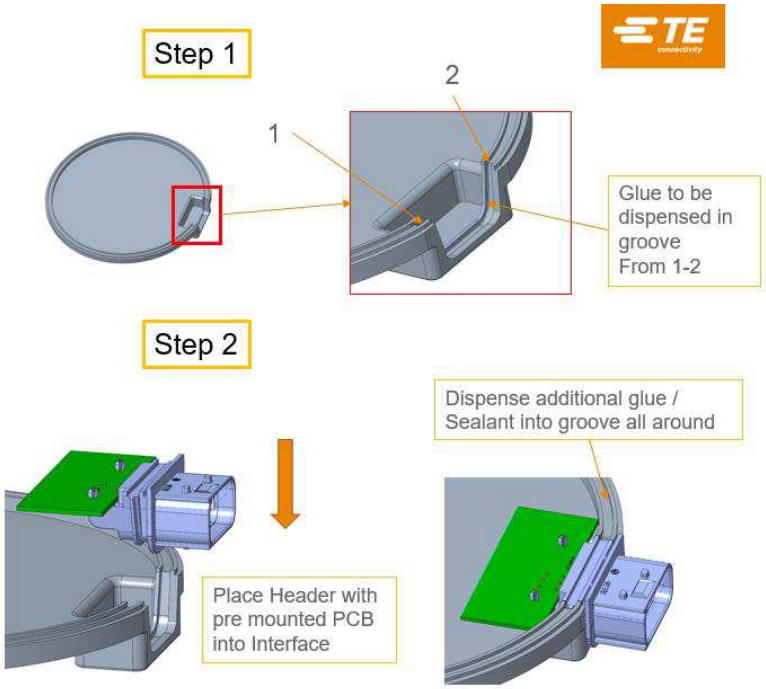
6.2 SEALANTS USED AND RECOMMENDED 密封区域的使用和推荐

In the dispensing area, apply sealant DC7091 (black) manually or automatically into the groove of the panel, and finally fix the product in the panel.
在密封区域，手动或自动将密封剂DC7091（黑色）涂抹到面板的凹槽中，最后将产品固定在面板中。



Note: The pictures are only for illustration and recommendation, and ultimately depend on the actual application of the customer.
注：图片仅供说明和推荐，最终取决于客户的实际应用。