

1. INTRODUCTION

This specification covers the application of Mini Board-to-Board Screw Down Jumper. This jumper is used to electrically connect two (in--line) printed circuit (pc) boards used with LED strip lighting modules. Electrical contact is made with the screwing down of the jumper on the pc board using a No. 3 screw. No soldering is required. The jumper is available in a 2-position housing and has a pitch of 7.80 mm. The housing has aligning features which will maintain a pc board spacing of 0.5 mm min. and help orient the part correctly on the pc board. When corresponding with Tyco Electronics Personnel, use the terminology provided in this specification to help facilitate your inquiry for information. Basic terms and features of components are provided in Figure 1.

Mini Screw Down Jumper B-B Connector



Figure 1

2. REFERENCE MATERIAL

2.1. Revision Summary

First release.

2.2. Customer Assistance

Reference Product Base Part Numbers 2134347-1 and Product Code L012 are representative of the Miniature Hermaphroditic Connector. Use of these numbers will identify the product line and expedite your inquiries through a service network established to help you obtain product and tooling information. Such information can be obtained through a local Tyco Electronics Representative.

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* :Trademark

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2.3. Drawings

Customer Drawings for specific products are available from the responsible Tyco Electronics Engineering

Department via the service network. The information contained in the Customer Drawings takes priority if there

is a conflict with this specification or with any other technical documentation supplied by Tyco Electronics.

2.4. Specifications

Design Specification 108-106064 provides expected product performance and test information.

3. REQUIREMENTS

3.1. Safety

Do not stack product shipping containers so high that the containers buckle or deform.

3.2. Limitations

The connectors are designed to operate in a temperature range of –40 $^\circ\,$ C to 105 $^\circ\,$ C

3.3. Material

The natural color housing is made of thermal plastic, UL94 V-0 rated. The contacts are tin-plated phosphor bronze.

3.4. Storage

A. Ultraviolet Light

Prolonged exposure to ultraviolet light may deteriorate the chemical composition used in the connector material.

B. Shelf Life

The connector should be used on a first in, first out basis to avoid storage contamination that could adversely affect electrical continuity.

C. Chemical Exposure

Do not store connectors near any chemicals listed below.

Alkalies	Ammonia	Citrates	Phosphates Citrates	Sulfur Compounds
Amines	Carbonates	Nitrites	Sulfur Nitrites	Tartrates

3.5. PC Board Material and Thickness (see Figure 2)

- 1. Board material may be glass epoxy (FR-4, G-10), or metal clad pc boards.
- 2. The mini. jumper may be installed on pc boards which are at least 1.35 mm thick and have a minimum width of 17.00 mm in order to meet DENANHO (Japan).

Typical PC Board Layout





3.6. Component Placement

When placed on the pc board, features in the housing should align with the semi--circular cutouts on the pc boards. This will ensure the contacts are aligned with the pc board solder pads, provided the pc board layout and pc board spacing is per Figure 2.(*Jumpers should be handled only by the housing to avoid deformation, contamination, or damage to the contacts.*)

Insert the No. 3 screw and tighten to a *maximum torque of 0.63 N.m* to the customer designated heatsink or base supporting structure. See Figure 3. (*It's better to hold the housing when tighten the screw*)





4. QUALIFICATIONS

The Mini Board to Board Screw Down Jumper is ETL Recognized to Underwriters Laboratories Inc. (UL) standard 1977 and CSA International standard 22.2 182.3 M1987 and DENANHO (Japan).

5. TOOLING

Except for standard screwdriver, no tooling is required for the installation of the Mini Screw--Down Jumper.

6. VISUAL AID

Figure 4 shows a typical application of a Mini Board--to--Board Screw--Down Jumper. This illustration should be used by production personnel to ensure a correctly applied product. Applications which DO NOT appear correct should be inspected using the information in the preceding pages of this specification.



Figure 4