NOTE
All numerical values are in metric units [with U.S. customary units in brackets]. Dimensions are in millimeters [and inches]. Unless otherwise specified, dimensions have a tolerance of ±0.13 [±.005] and angles have a tolerance of ±2°. Figures and illustrations are for identification only and are not drawn to scale.

1. INTRODUCTION

This specification covers the requirements for application of the ELCON Mini three position cable-to-board connector system. The cable connector is designed to be used with Standard power timer contacts.

When corresponding with personnel, use the terminology provided in this specification to facilitate inquiries for information. Basic terms and features of this product are provided in Figure 1.

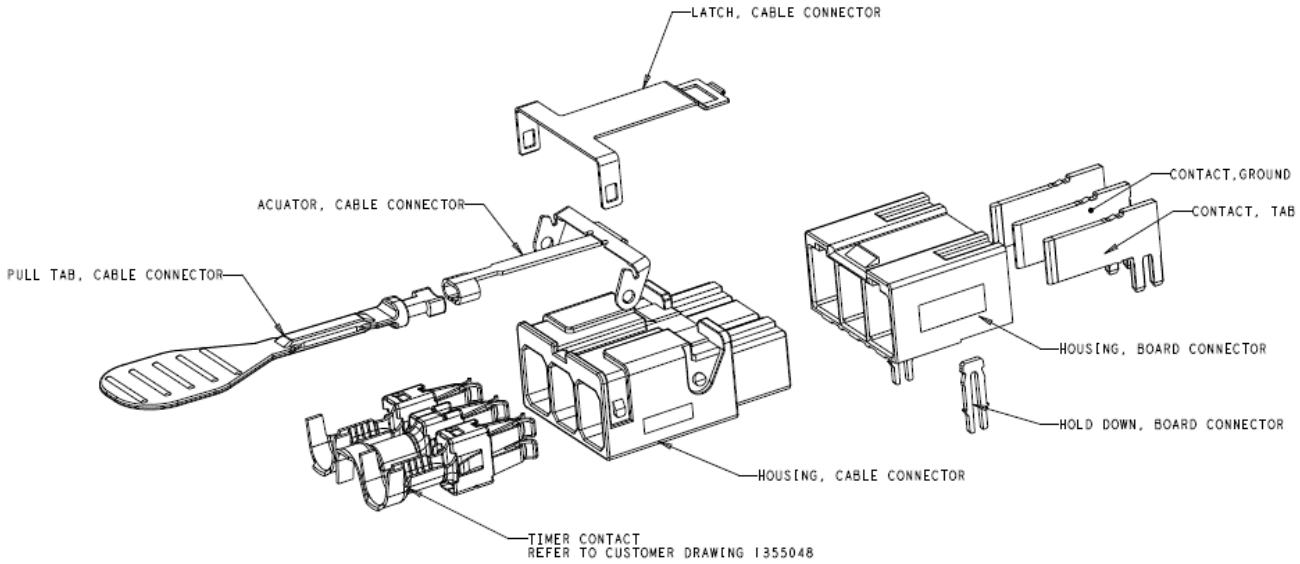

Figure 1, illustration of single board connetor 2204529-x and cable connector 2204534-x

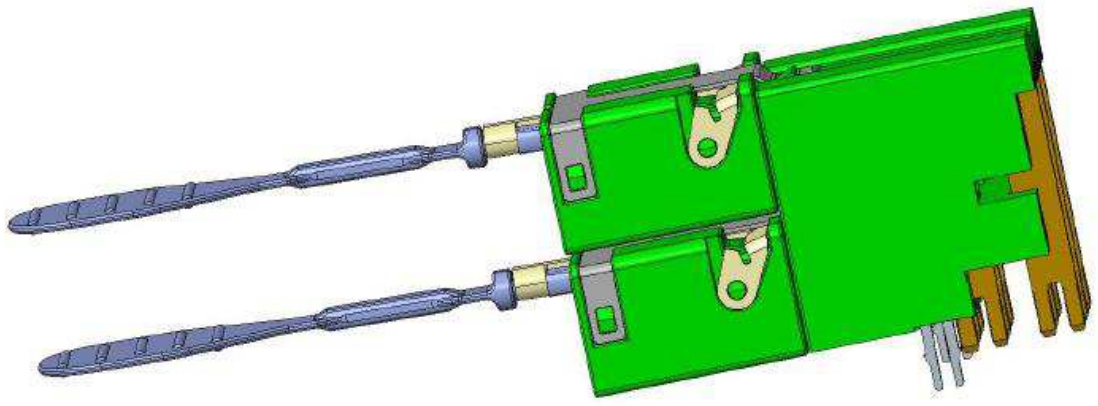

Figure 2, illustration of stack board connector 2204535-x and 2 cable connector 2204534-x

(x means that different part number will be assigned for different plating or contact type)

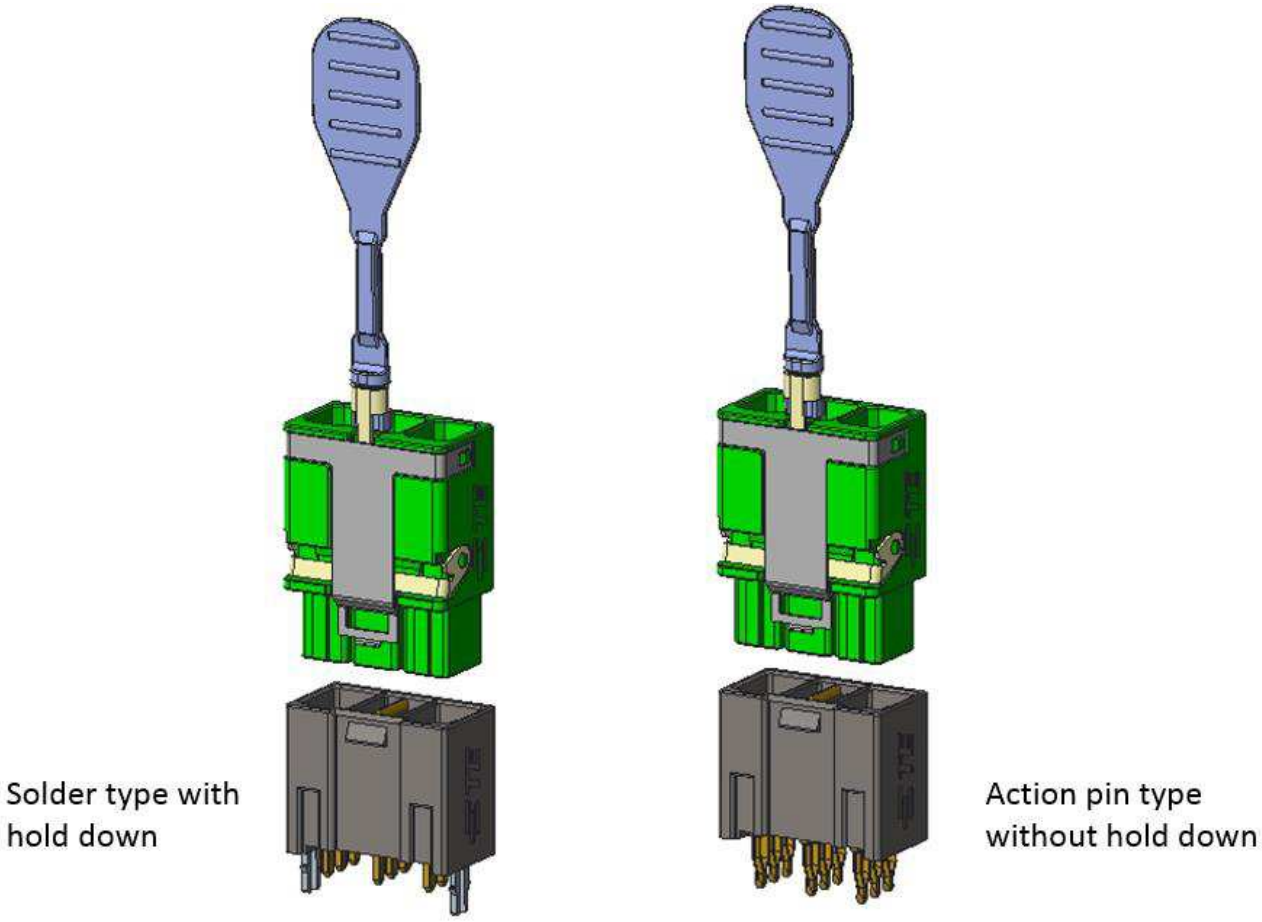

Figure 3, illustration of vertical board connector 2204585-x and cable connector 2204534-x

(x means that different part number will be assigned for different plating or contact type)

2. REFERENCE MATERIAL

2.1. Revision Summary

Initial release of application specification

2.2. Customer Assistance

Reference Product Base Part Number 2204534-1 and Product Code J570 are representative of standard timer cable to board connector. Use of these numbers will identify the product line and help you to obtain product and tooling information. Such information can be obtained through a local Representative, by visiting our website at www.te.com, or by calling PRODUCT INFORMATION or the TOOLING ASSISTANCE CENTER at the numbers at the bottom of page 1.

2.3. Drawings

Customer Drawings for product part numbers are available from the service network. If there is a conflict between the information contained in the Customer Drawings and this specification or with any other technical documentation supplied, the information contained in the Customer Drawings takes priority.

2.4. Specifications

For the product specification of the 3 pos. cable to board power connector system with/without grounding contacts, see:
Product Specification: 108-128027.

Timer contacts Specifications:
Product Specification: 108-18025
Application Specification: 114-18037

For configuration details see customer drawings:

C -2204529 right angle board connector, C-2204585 vertical board connector, C - 2204534 cable connector and C-2204535 stacked board connector.

2.5. Assembly

Ground contact can be loaded in any position when required as well as for the touch proof contacts. Hold downs board connector, see fig 1, would be soldered to the PCB to achieve the max requested hold down forces of the board connector if needed.

3. REQUIREMENTS

3.1. Storage

A. Ultraviolet Light

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

B. Shelf Life

The product should remain in the shipping containers until ready for use to prevent deformation to components. The product should be used on a first in, first out basis to avoid storage contamination that could adversely affect performance.

C. Chemical Exposure

Do not store product near any chemical listed below as they may cause stress corrosion cracking in the material.

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

D. PC Board

The recommended PCB thickness for complaint pin application is 1.45mm Min.

4. QUALIFICATION

Connectors are recognized by Underwriters Laboratories Inc. (UL) in File E28476.

5. TOOLING

See application spec. 114-18037 Timer Contacts.

6. MATING OF CABLE AND BOARD CONNECTOR

Improper method of mating the cable and board connector may lead to stubbing of contacts. So the method shown below is recommended for the good mating of the connectors.

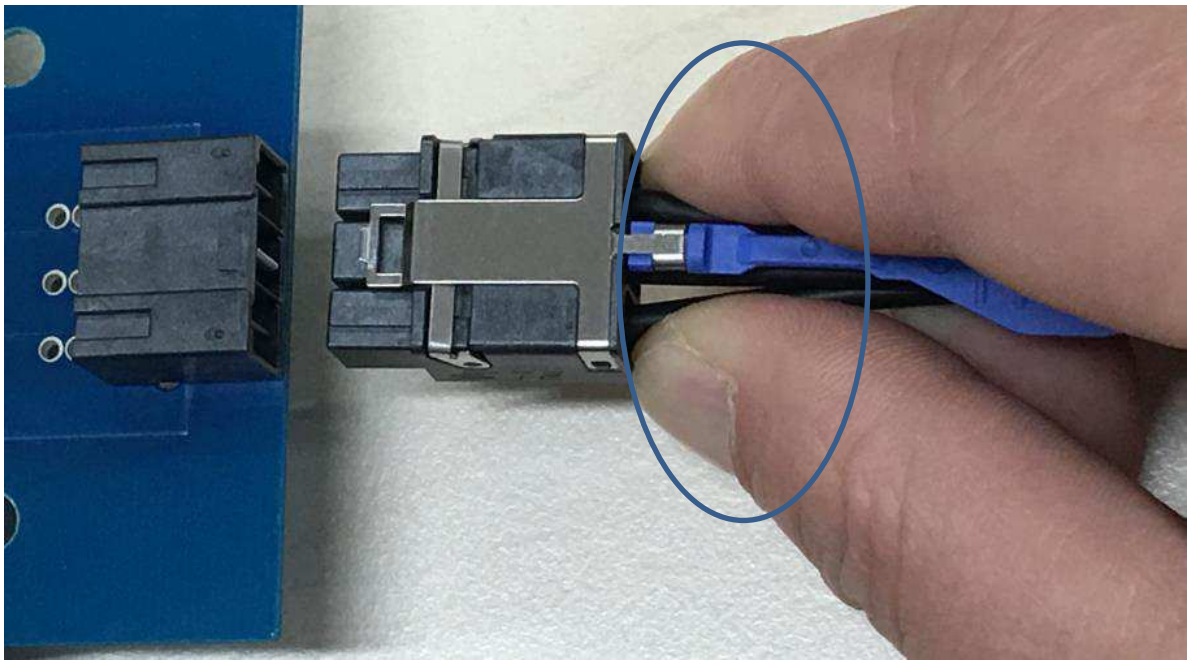

Figure 4 Correct mating procedure of 1X3 type

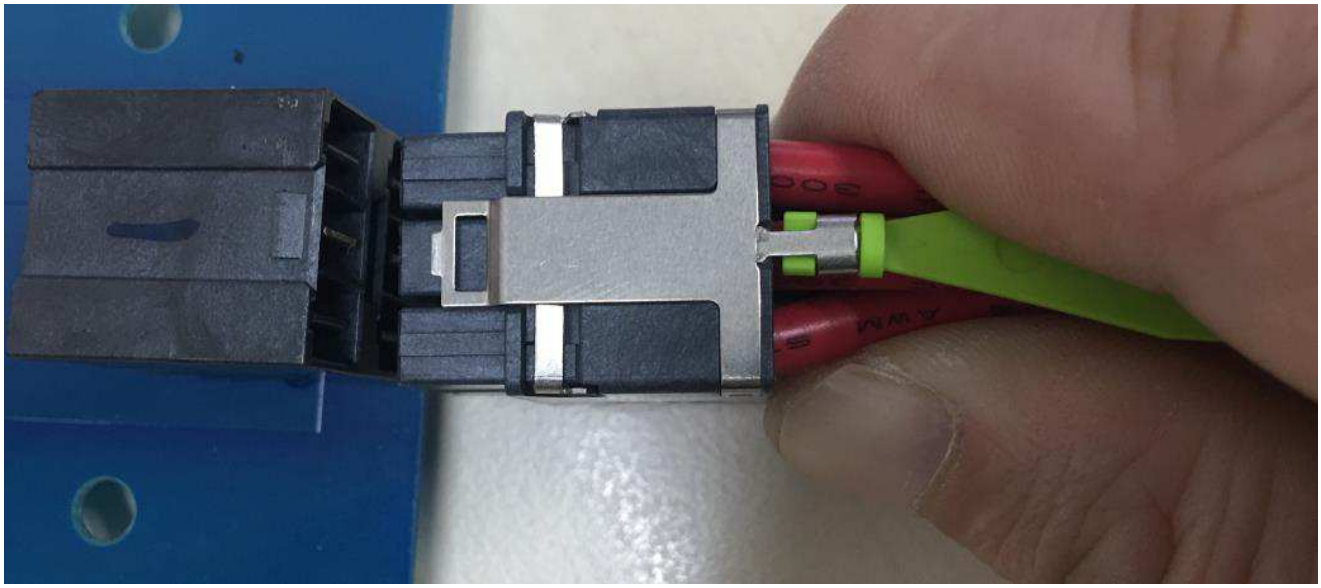

Figure 5 Correct mating procedure of 2X3 type

Hold the cable close to housing side by using thumb and index finger from sides and one or more of the rest fingers hold the cable of the other end to prevent it falling off due to the gravity. Then, the retention from the contacts are released and contacts inside the housing can “search” the mating part which results in a lower insertion force in figure 4 and 5.
So, we recommend holding the cables while inserting the cable connector into board connector for a good mating procedure.

7. UN-MATING OF CABLE AND BOARD CONNECTOR:

Improper method of un-mating the cable and board connector may lead to broken of the plastic latch of the board connector. So, the method shown below is recommended for the good un-mating of the connectors. The important thing is that after the latch is open, hold it and un-mate the cable connector by pulling the wire that grabbed by fingers as in parallel as possible.

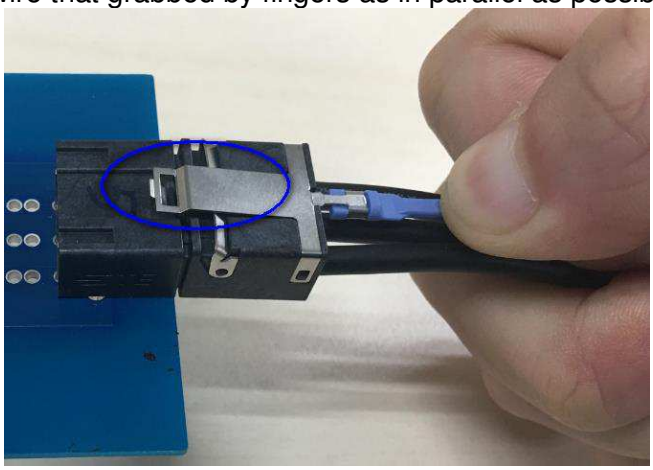

Figure 6 Open the latch by pulling the pull tab when un-mating procedure of 1X3

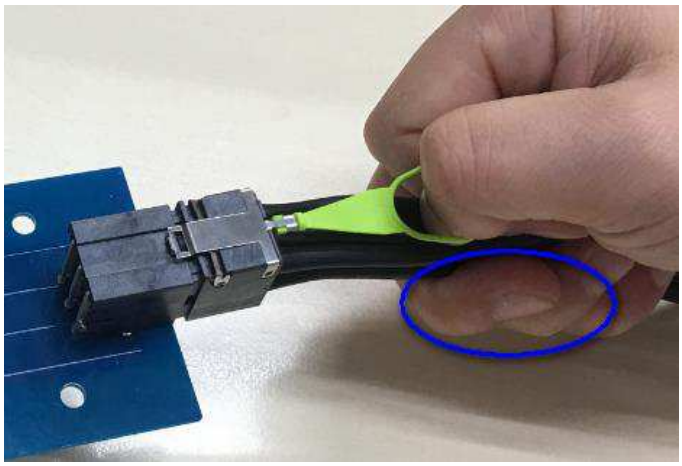

Figure 7 Pull the cable and hold the pull tab, then un-mate it for 2X3 type
(thumb to open the latch, then **other fingers to grab the wire when pulling**)

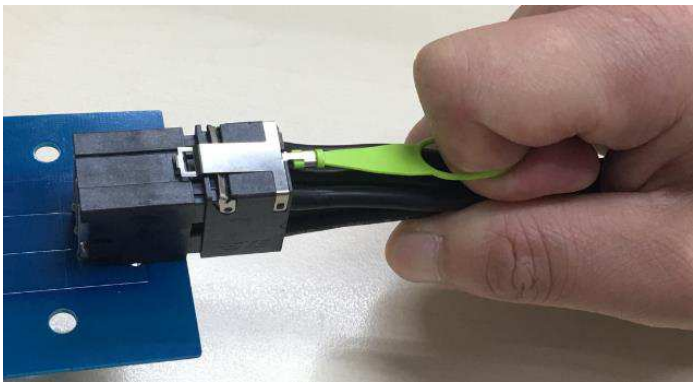

Figure 8 Pull the cable and hold the pull tab, then un-mate it for 2X3 type
(Index finger to open the latch, then **other fingers to grab the wire when pulling**)

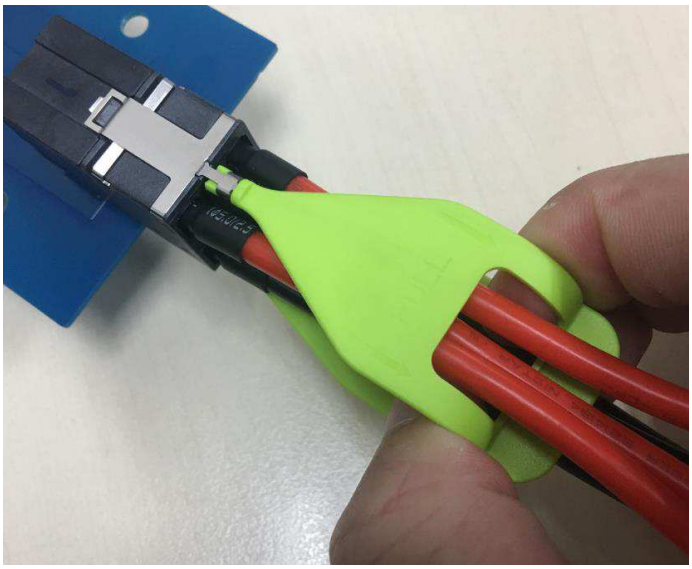

Figure 9 Pull the pull tab, then un-mate it this custom 2X3 type
(Thumb and index finger to hold the pull tab **when pulling**)