



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

1. INTRODUCTION

This specification covers the requirements for application of Solderless LED socket (Type LK) used with Philips Lumileds LUXEON K (illumination grade LED light source) array emitter in configurations of 4-, 8-, 12-, 16-, and 24-up in retrofit bulbs and downlights. This socket allows direct attachment of the emitter to a cooling device using a customer-supplied standard M3x6-mm (minimum) screw and provides poke-in termination to electrically connect to the emitter. All emitters require 2 sockets and 2 screws per application; the 24-up emitter requires an additional screw having the size and type recommended by Philips Lumileds Lighting Company. The socket is designed for 3-mm creep and clearance in non-isolated applications.



This application specification only covers requirements for the Solderless LED socket. Detailed description, recommended handling guidelines, thermal management, and cleaning requirements for the emitter, and preparation requirements for the cooling device must be obtained from Philips Lumileds Lighting Company.

The socket consists of a housing and a contact. The housing features two alignment posts to aid in positioning the socket on the cooling device, a screw hole that accepts a screw for mounting, and wire entrance hole. An embossed arrow on the housing indicates the direction for wire insertion. The positioning feature accepts the LED module, and the wire snap feature can be used to guide the wire for 180-degree wiring routing. The stranded wire insertion feature is used to help a stranded wire be inserted to the proper depth in the module.

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

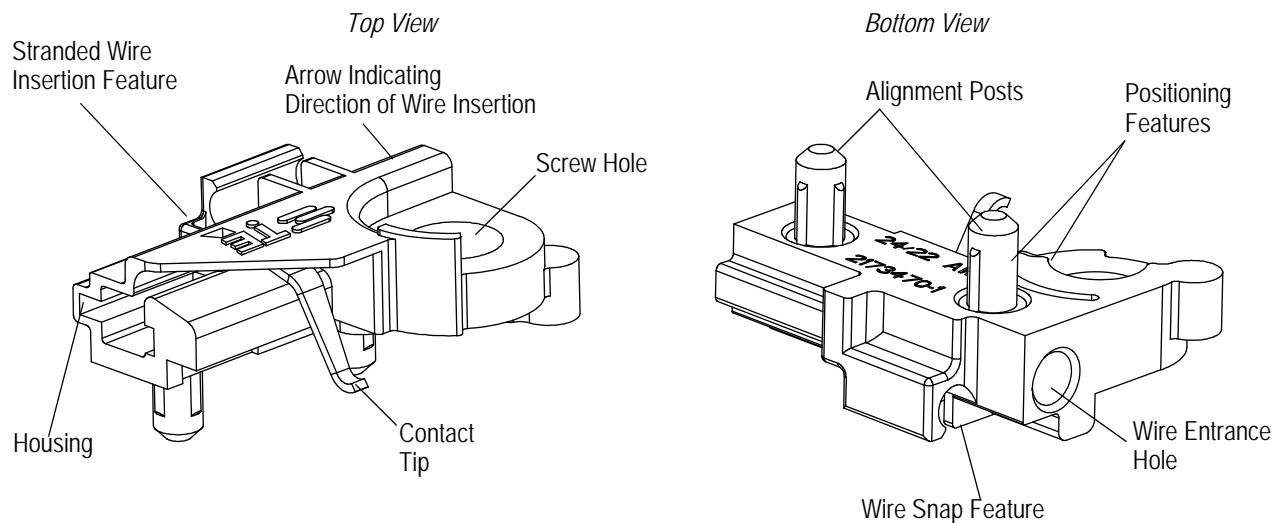


Figure 1

2. REFERENCE MATERIAL

2.1. Revision Summary

Initial release of application specification

Philips, Lumileds, and LUXEON are trademarks.

2.2. Customer Assistance

Reference Product Base Part Number 2173470 and Product Code L836 are representative of Solderless LED socket (Type LK). 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.

3. REQUIREMENTS

3.1. 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, call PRODUCT INFORMATION at the number at the bottom of page 1.

3.2. Specifications

Product Specification 108-133004 provides product performance and test information.

3.3. Instructional Material

Instruction Sheets (408-series) provide product assembly instructions or tooling setup and operation procedures. There are no instruction sheets available at the time of publication of this document that pertain to this product.

3.4. Safety

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

3.5. Storage

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

3.6. Wire Selection and Preparation

The socket accepts solid wire size 24 AWG and solid or stranded wire size 22 AWG. The wire must be stripped within the dimensions provided in Figure 2.

For stranded wire, it is recommended to twist the strands after stripping for ease when inserting the wire into the socket wire entrance hole.



Wire conductors must not be nicked, cut, or scrapped during or after the stripping operation.

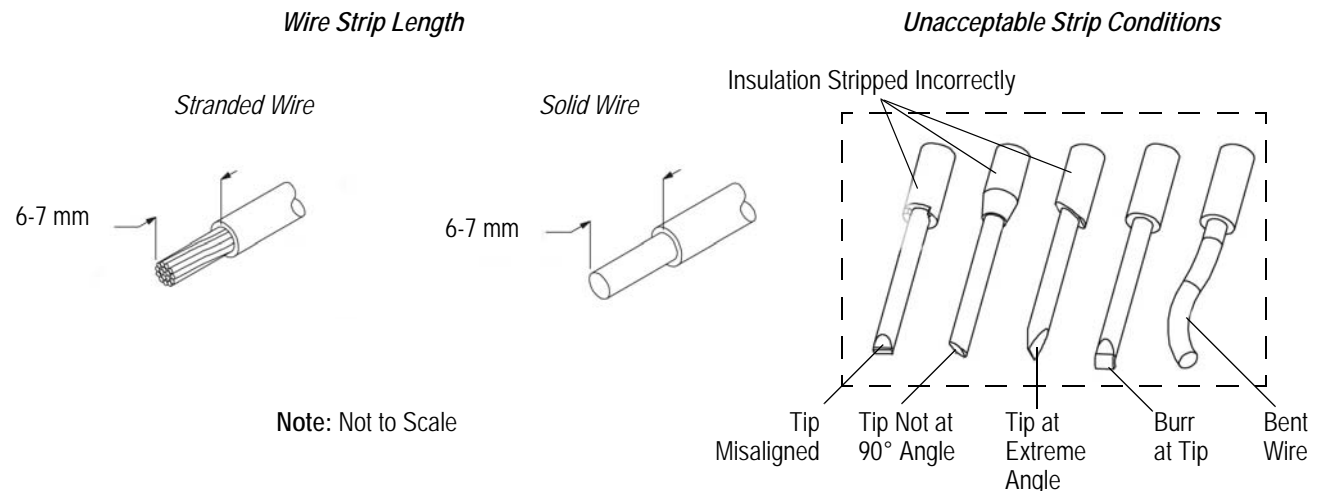


Figure 2

If using stranded wire, it is recommended to use the tip of a small screwdriver to gently push down the insertion feature of the socket when inserting the stranded wire to ensure proper insertion depth of the stranded wire. Refer to Figure 5, Detail A.

2. Each wire can be routed to the appropriate LED driver. For 180-degree wire routing, the wire can be pressed into the wire snap feature of the socket. See Figure 5, Detail B.

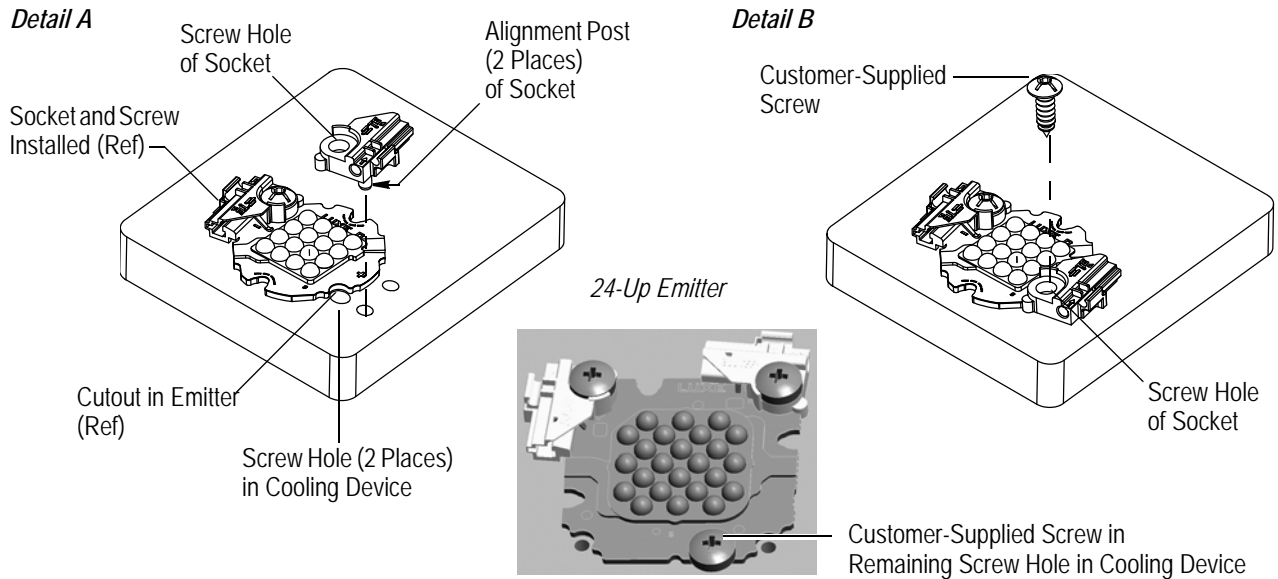


Figure 4

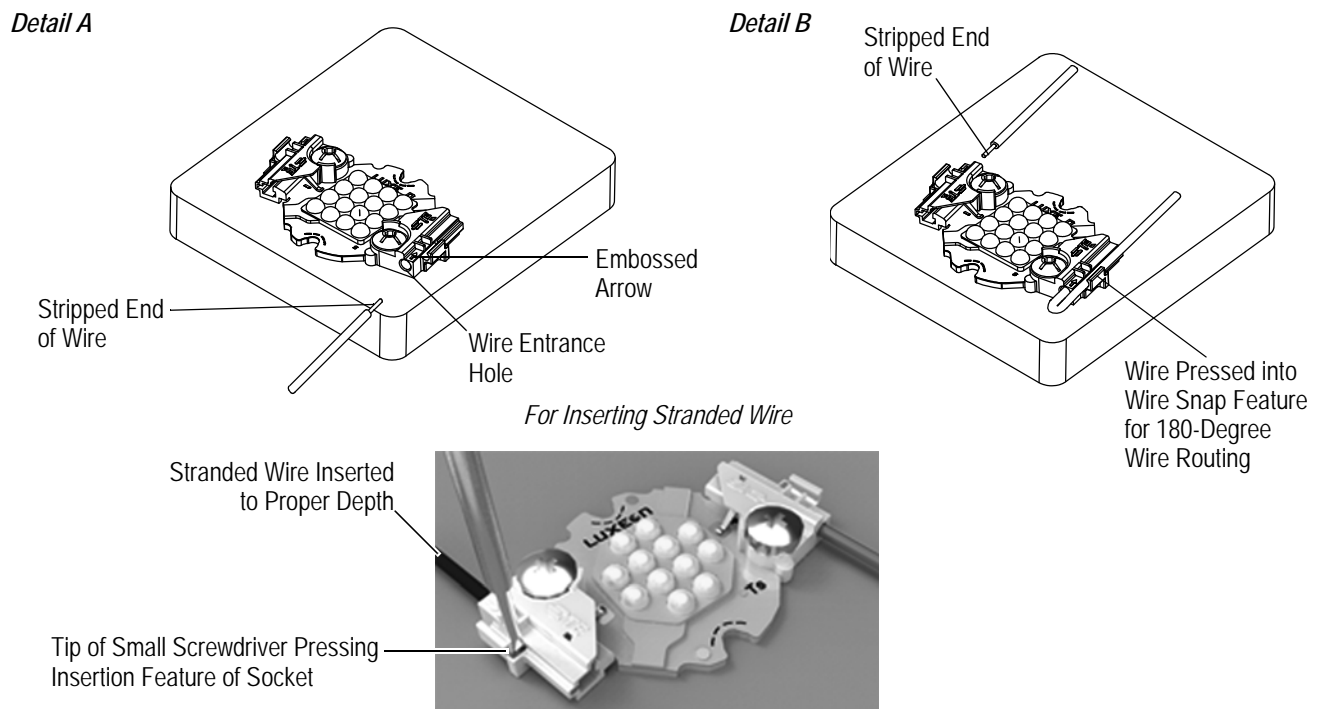


Figure 5

3.9. Replacement and Repair

Defective or damaged sockets must not be used. The maximum mating cycle for the terminated socket is 5 times without removing the wire from the socket.

4. QUALIFICATION

Solderless LED socket (Type LK) is Recognized by Underwriters Laboratories Inc. (UL) in File E28476. This complies to the combination of UL and CSA in standard CAN/CSA C22.2 No. 182.3-M1987 -- Special Use Attachment Plugs, Receptacles and Connectors.

5. TOOLING

Standard industry tooling is available for installing the sockets.

6. VISUAL AID

The illustration below shows a typical application of the Solderless LED socket (Type LK). 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 and in the instructional material shipped with the product or tooling.

NOTE: 24-EMITTER NOT SHOWN (ADDITIONAL SCREW REQUIRED)

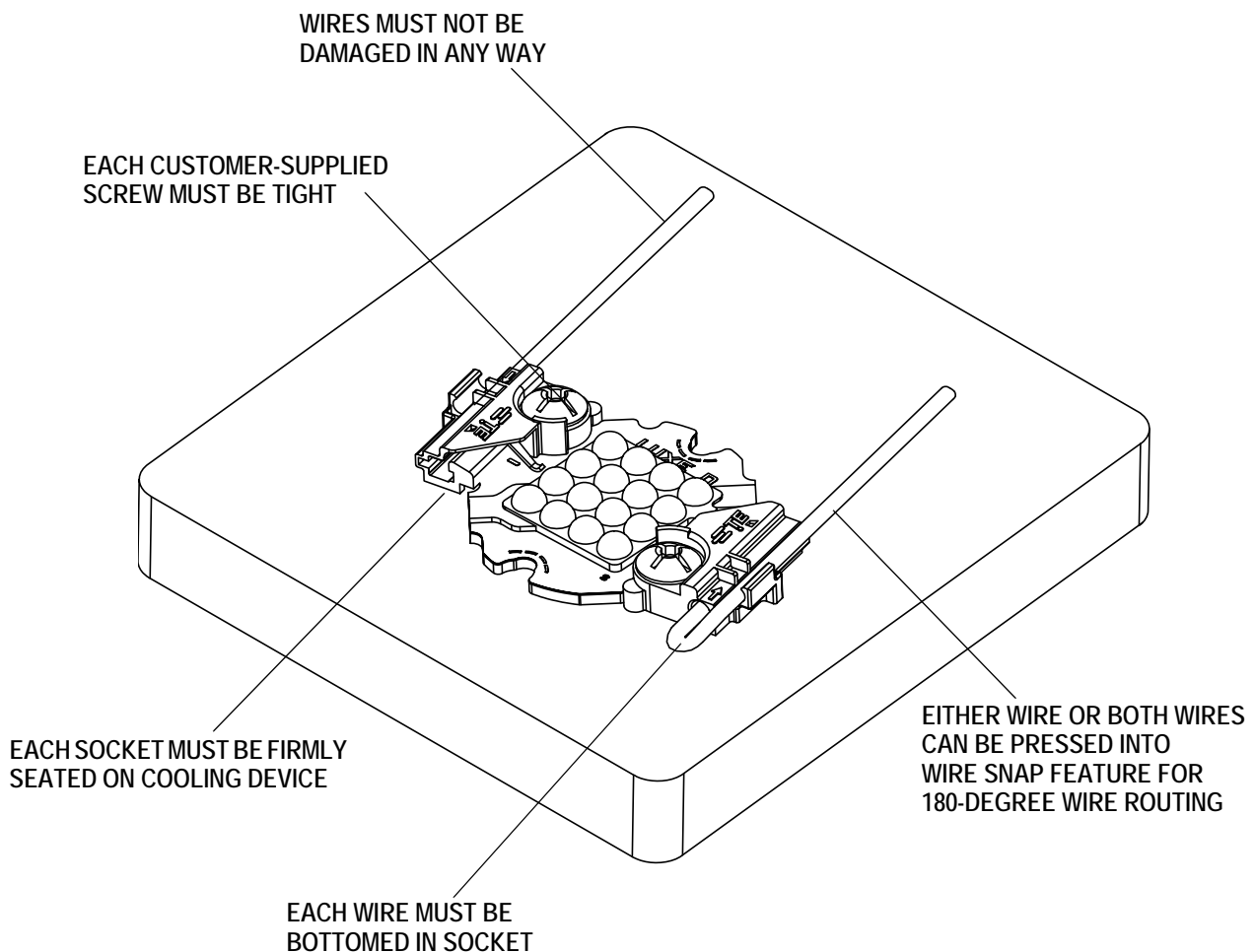


FIGURE 6. VISUAL AID