

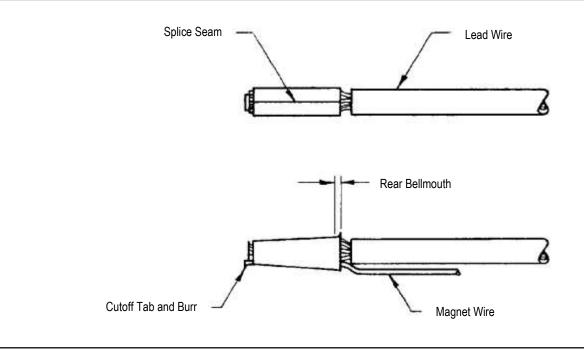
# i NOTE

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  $\pm 0.13$  [ $\pm .005$ ] and angles have a tolerance of  $\pm 2^{\circ}$ . Figures and illustrations are for identification only and are not drawn to scale.

## 1. INRODUCTION

This specification covers the requirements for application of AMPLIVAR\* miniature pigtail splice. These requirements are applicable to automatic machine crimping tools. For specific CMA (circular mil area) ranges relative to the products covered in this specification, see Figure 1.

Basic terms and features of this product are provided in Figure 1.





## 2. REFERENCE MATERIAL

## 2.1. Revision Summary

Revisions to this application specification include:

- Added specifications for P/N 63431.
- Updated document format.

#### 2.2. Customer Assistance

Reference Product Base Part Number 62341, 63431 and Product Code 1040 are representative of AMPLIVAR\* miniature pigtail splice. Use of these numbers will identify the product line and help you to obtain product and tooling information when visiting www.te.com or calling the number at the bottom of page 1.



## 2.3. Drawings

Customer drawings for product part numbers are available from www.te.com. Information contained in the customer drawing takes priority.

62341	Miniature AMPLIVAR*	Splice

63431 AMPLIVAR\* Splice Miniature

## 3. REQUIREMENTS

#### 3.1. Safety

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

#### 3.2. 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

#### 3.3. Wire Selection and Preparation

#### A. Magnet Wire

No preparation of magnet wire is required.

#### **B. Lead Wire**

Each wire must be stripped to the dimensions given in Figure 2. The lead wire CMA must be within the range specified in Figure 4.



#### CAUTION

Care must be taken not to nick, scrape, or cut any part of the wire during the stripping operation.

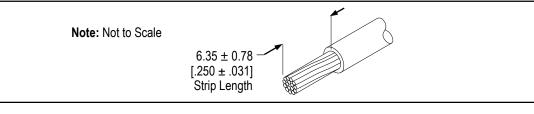


Figure 2



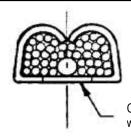
Part Number	Wire CMA Range
62341	480 – 1700
63431	200 – 850

Figure 3

## 3.4. Crimp

## A. Cutoff Tab and Burr

The cutoff tab is the remaining portion of the carrier strip after the contact is cut from the strip, and the burr is the result from the cutoff tab shearing. The cutoff tab shall not exceed 0.25 [.010] and shall be centered within the limits shown in Figure 4. The burr cutoff shall not exceed 0.2 [.008].



Cutoff tab centered with centerline of splice within 0.38 [.015] TIR.



## **B. Wire Barrel Crimp**

The crimp applied to the wire barrel portion of the contact is the most compressed area and is most critical in ensuring optimum electrical and mechanical performance of the crimped contact. The crimp must be centered on the closed wire barrel. The crimp must result in an "F" crimp where the wire barrel forms a closed seam with no evidence of loose wire strands or wire strands visible in the seam. The crimp height and width must be within the limits as specified in Figure 5. Crimp heights shall be measured at the location shown in Figure 6 with a tolerance of  $\pm 0.05$  [ $\pm .002$ ] unless otherwise specified.

Part Number	Crimp Height	Crimp Width	Crimp Type
62341	See Customer Drawing	1.77 [.070]	F
63431	See Customer Drawing	1.40 [.055]	F



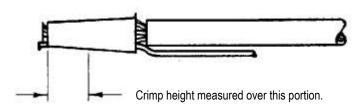


Figure 6

#### C. Bellmouths

The rear bellmouth shall not exceed 0.5 [.02].



## **D. Crimp Seam**

Splice seam shall be completely closed and there shall be no evidence of loose wire strands or wire strands visible in the seam.

### E. Conductor Location

Magnet wire and stranded lead wire must extend through the crimped splice. Conductors shall be visible between the lead wire insulation and the rear of the splice. Magnet wire(s) shall lie in the bottom of the splice.

# 3.5. Tensile Strength

Crimp tensile strength shall be 70% of the wire tensile strength.