Application Specification

250 Series Faston Receptacle Contact

- NOTE ; All numerical values are in metric units. Dimensions are in millimeters and have a tolerance of ±0.2 unless otherwise specified. Angles have a tolerance of ± 3°.

1. INTRODUCTION

This contact was developed in order to use in the Relay. This specification covers the requirements for application of AMP **250 Series Faston Receptacle Contact** with the "F"-Crimp wire barrel feature.
There are three crimp Barrel designs to accommodate a wire size range of 0.3 through 3.0.
The contact is precision Formed, strip feed, for machine application.
The contact has been designed for commercially available pin and socket housings with lance to engage the contact.

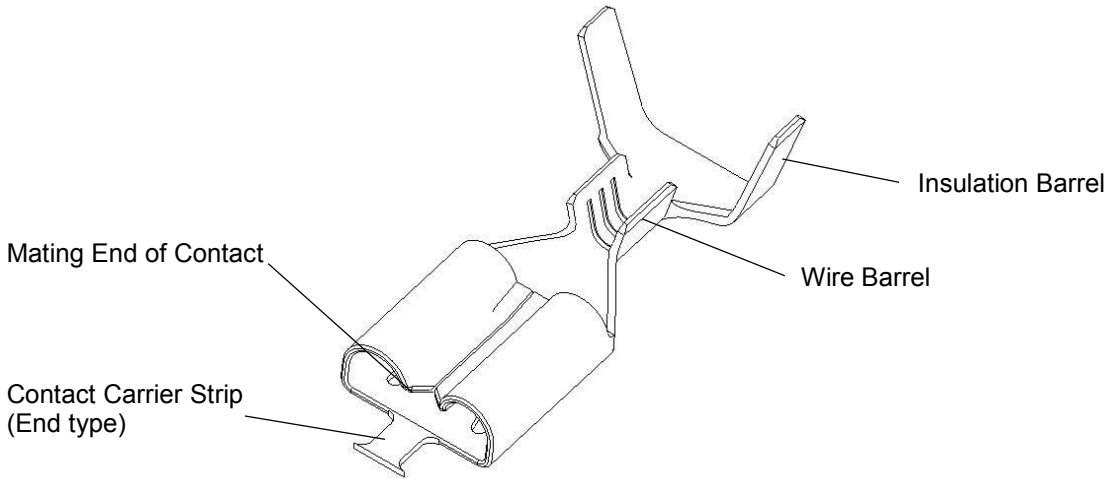

Figure 1

2. REFERENCE MATERIAL

2.1. Drawing

Customer Drawings for specific products are available from the responsible TE Connectivity 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 TE Connectivity.

3. REQUIREMENTS

3.1. Material

The contact is made of CuNiSi alloy and pre-plated with Tin.

3.2. Storage

The socket contact should remain in the shipping containers and on the reels until ready for use. The coiled reels should be stored horizontally to prevent deformation during storage that could keep proper feeding through the applicator.

3.3. Wire

A. Selection

The contact is designed for fused-stranded and stranded copper conductors ranging from 0.3 Through 3.0 metric wire sizes.

B. Preparation

Strip the wire to the provided wire strip length. Do not cut, nick, or scrape the wire during the stripping process. See table 1.

Contact Part Number	Wire Size(㎟)	Wire Strip Length (㎜)	Wire Crimp				Insulation Crimp	
			Width	Height	Form	Area index(%)	Width	Form
1897659	AVSF,AVXF,AEXF 0.3(0.3054)	4.3	1.4	1.13±0.03	F	75.29~84.87	7.0	F
	AVSS, AVX, AEX 0.3(0.3716)							
	AESSXF, AVSSF 0.3(0.382)							
	TXL 0.35(0.324)							
	FLR 0.35(0.4156)							
	FLX, FLY 0.5(0.5027)			1.23±0.03		77.08~83.90		
	TXL, AVSF, AEXF 0.5(0.5089)							
	AESSXF, FLR, AVSSF 0.5(0.5389)							
	AVSS, AEX, CAVS 0.5(0.563)							
1897660	FLX, FLY 0.75(0.754)	4.8	2.29	1.22±0.03	F	76.76~82.89	7.0	F
	AVSF, AVXF, AEXF 0.75(0.7634)							
	AESSXF 0.75(0.789)							
	FLR, FLK 0.75(0.8313)							
	TXL 0.8(0.760)							
	SAE-TS-XLPE 0.8(0.7757)							

	AVS 0.8(0.8042)							
	AVSS, AVSSF 0.85(0.8597)			1.26±0.03		77.79~83.09		
	AVSF, AVXF, AEXF 0.85(0.8652)							
	AVS, AEX, CAVS 0.85(0.8847)							
	FLY, FLX 1.0(1.0053)			1.32±0.03		76.24~83.70		
	AVS 1.0(1.045)							
	FLR, FLK 1.0(1.1084)							
	TXL 1.0(1.13)							
	AVSS 1.25(1.255)			1.39±0.03		77.56~82.40		
	AVSF, AVXF, AEXF 1.25(1.272)							
	AESSXF 1.25(1.282)							
	AVSSF, AEX, CAVS 1.25(1.286)							
1897661	TXL 2.0(1.85)	5.3	3.30	1.52±0.03	F	76.03~83.83	7.0	F
	FLY, AVSS, AVSSF, AVSSX, AESSXF 2.0(1.9644)							
	FLW 2.0(1.987)							
	AVS, AEX, AVX 2.0(2.091)							
	AVS 2.5(2.573)			1.67±0.03		78.42~81.98		
	FLW 3.0(3.134)			1.82±0.03		77.42~82.71		
	AEXF, AVS 3.0(3.297)							
2300892	AVSS 0.85*0.85 SQ	5.3	2.54	1.48±0.05	F	74.2~80.4	7.0	F

Table 1

3.4 Crimped Contact Criteria

A. Crimp Height

The crimp applied to the wire barrel portion of the contact is the most compressed area and is most critical in assuring optimum electrical and mechanical performance of the crimped contact.

B. Bellmouths

The front and rear bellmouths are caused by the extrusion of metal during crimping and must be within the range specified in Figure 2.

C. Cutofff Tab and Burr

The cutoff tab and burr resulting from the contact being cut from the carrier strip must be within limits shown to allow the contact to be fully inserted and seated in the housing.

See Figure 2.

D. Wire Barrel Flash

The wire barrel flash at the bottom of the wire barrel results from applied crimp pressure and must be within the dimension provided in Figure 2.

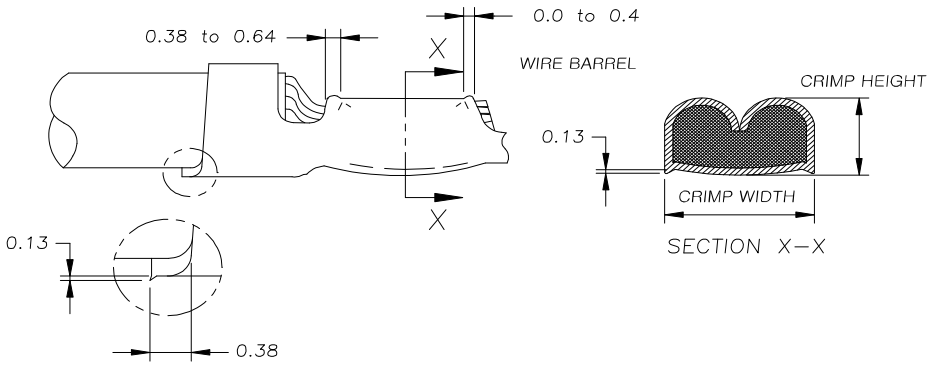

Figure 2

E. Insulation Barrel Crimp

The insulation barrel shall grip the insulation firmly without cutting into it. Care must be taken to prevent cutting, nicking, or scraping of the insulation.

F. Crimp Tensile Strength

Crimped contacts should hold firmly to the wire and have a pull-test tensile value meeting that specified in the chart in Figure2.

G. Wire Location

After crimping the wire and insulation must be visible in the transition area between the wire and Insulation barrels. The wire end must be within the limit provided in Figure 3.

H. Wire Barrel Seam

The wire barrel seam shall be completely closed with no wire strands protruding from it. Figure 3.

I. Twist or Roll

The crimped wire and insulation barrels must be aligned with the uncrimped portion of the contact to within the limit shown in Figure 3

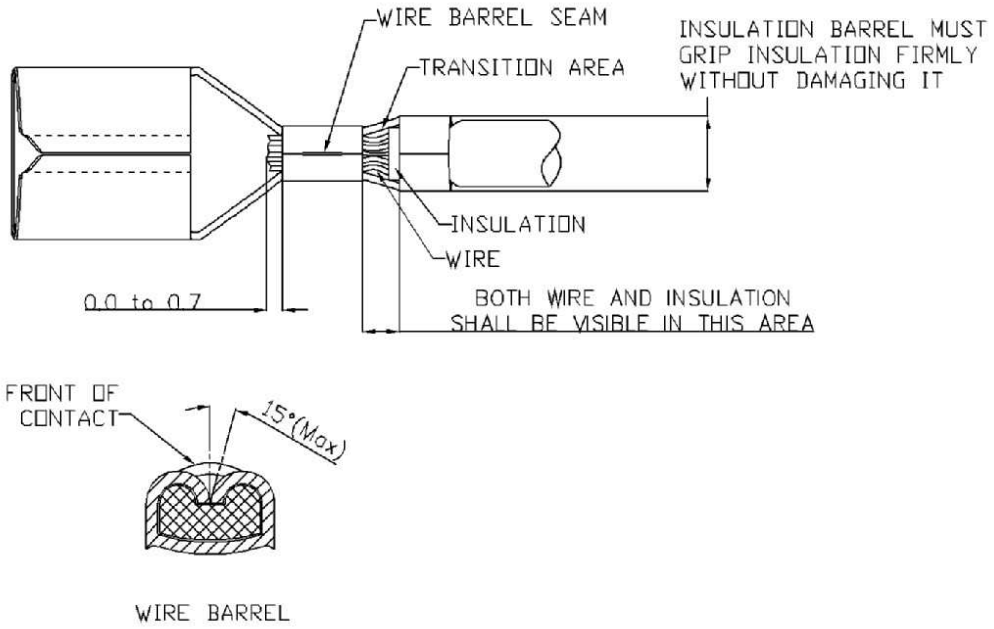

Figure 3

J. Straightness

The force applied during crimping may cause some bending between the crimped wire barrel and the uncrimped tab or receptacle portion of the contact.

1) Up and Down

The crimped contact, including cutoff tab and burr, shall not be bent above or below the datum line more than the amount shown in Figure 4.

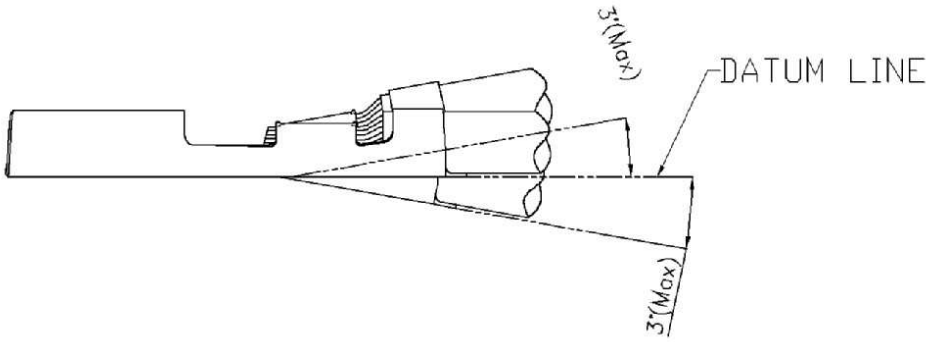

Figure 4

2) SIDE to SIDE

The side-to-side bending of the contact may not exceed the limits provided in Figure 5.

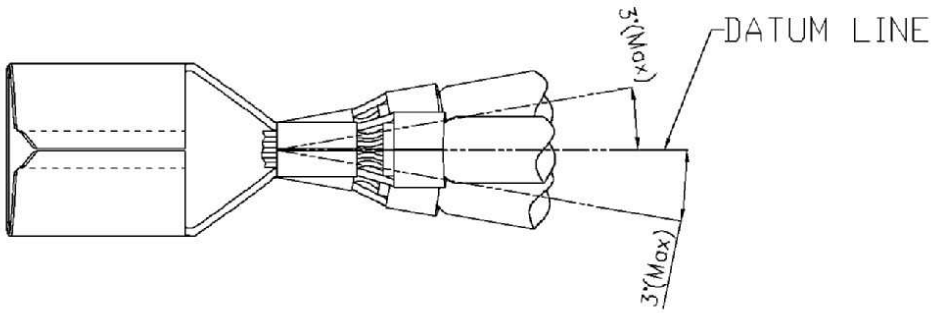

Figure 5

4. QUALIFICATION

The 250 FASTON Contacts have been designed to the requirements specified in AMP Spec. 108-61108.

5. VISUAL AID

The following illustrations are to be used by production personnel to ensure properly applied product. The views suggest requirements for good terminations. Applications that appear visually incorrect should be inspected using the information in the main body of this document.

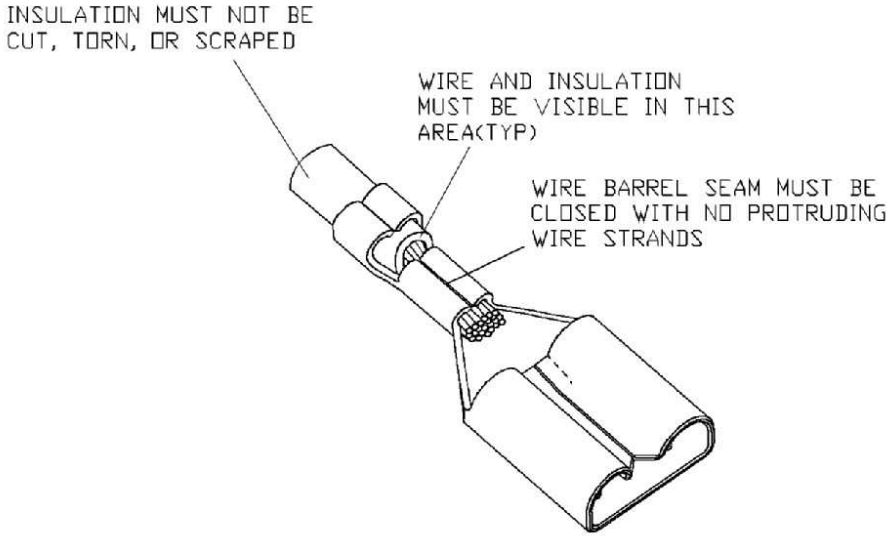

Figure 6

6. REVISION HISTORY

Revision	Changes	Date
A	-	2009.01.09
A1	Page 3/Table 1 2300892	2016.09.07