

Rev. C3

CRIMPED TAB CONTACT, P.C.B. INTERFACE

1. SCOPE

1.1 Content

This specification covers the guidelines for the application of the contacts P/N 284798-1, P/N 293322-1 & P/N 1955441.

The instructions are primarily intended for automatic or semiautomatic application tooling, but can also be used, as reference, for manual crimping tools.

For specific wire and insulation ranges relative to the products covered in this specification, see Figure 4.

1.2 Reference Specification

For applicable performance requirements, see Tyco AMP Specification (or equivalent customer specification).

2. NOMENCLATURE



Figure 1

C3	Update crimping information for 22AWG UL1015 wire in P/N 1955441-1	J.P. 06AUG2015		F.L.	06AUG2015
C2	Adding crimping information for 22AWG UL1015 wire in P/N 1955441-1	J.P.	01APR2015	R.L.	01APR2015
C1	Adding crimping information for 0.35 and 0.5mm ² wire in P/N 1955441-1	C.J	C.J 22 DEC 2010		22 DEC 2010
С	Added P/N 1955441-1	C.J	12 NOV 2009 RRP		26 FEB 2010
В	Added P/N 293322-1	H.Y.	04 OCT 2007 G. Turco		04 OCT 2007
Α	Released	D. Chiarelli	27 SEP 2004	G. Turco	27 SEP 2004
rev letter	rev. record	DR	Date	CHK	Date
DR.	DATE	APVD			DATE
D. Chiarelli	27SEP2004	4 G. Turco			27SEP2004
This specifica	tion is a controlled document. This information is confidential and is disclosed to you on condition that no further disclosure is made by you to other than TE personnel without written authorization from TE INDIA.				Page 1 of 4
* Trademark	of AMP Incorporated				LOC I



3. CRIMP AND DIMENSIONAL REQUIREMENTS

3.1 Wire Preparation

A. Strip wire length

Insulation shall be stripped as indicated in Figure 4.

B. Workmanship

Reasonable care shall be taken not to nick, scrape or cut any strands during the stripping operation.

3.2 Carrier Cut-off Tab and Burr

A. Cut-off Tab

Cut-off Tab shall not exceed 0,25 mm.

B. <u>Burr</u>

Burr on cut-off shall not exceed 0,10 mm.

3.3 Wire Barrel Crimp

A. <u>Crimp dimension and Type</u> Crimp height, width and type shall be as shown in Figure 4.

B. Wire Barrel Seam

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

C. Bell mouth

- 1. Rear bell mouth length shall be 0, $38 \div 0.63$ mm.
- 2. Front bell mouth length shall be 0, $13 \div 0.38$ mm.
- D. Conductor location
 - 1. End of the wire shall be flush with the front end of the barrel or extend 0,76mm maximum after crimping.
 - 2. Both insulation and conductor shall be visible between the insulation barrel and wire barrel. Care shall be taken not to allow insulation to be crimped in the wire barrel.

3.4 Insulation Barrel Crimp

- A. <u>Crimp dimension and Type</u> Crimp width and type shall be as shown in Figure 4.
- B. Workmanship

Reasonable care shall be taken not to cut or break the insulation during the crimping operation.

3.5 Cracks

There shall be no cracks between wire barrel/insulation barrel and transition wire barrel/contact portion after crimping operation (as indicated in Figure 1).

Page 2 of 4

114-20115



3.6 Alignment

- A. Straightness
 - 1. The contact, including the cut-off tab and burr shall not be bent above or below the datum line more than the amount in Figure 2.



Figure 2

2. The side to side bending of the contact shall not exceed the limits specified in Figure 3.



Figure 3

B. Assembly

The following list of Do's and Don'ts are to be followed when assembling contacts into housing cavities.

- 1. Do's
 - a) Do insert contacts fully.
 - b) Do check for proper insertion by pulling back lightly.
 - c) Do ensure proper handling of contacts to eliminate deformation.

2. Don'ts

- a) Don't insert contact into housing at an angle.
- b) Don't rock connectors while mating.
- c) Don't tie harness closer than 38,1 mm to back of housing.
- d) Don't dress wires sharply to one side of housing.

C. Twist of Roll

There shall be no twist or roll in crimped position that will impair usage of the contact.

Page 3 of 4

114-20115



WIRES		INSULATION DIAMETER	STRIP WIRE LENGTH	WIRE BARREL CRIMP			INSULATION BARREL CRIMP		
P/N	SIZE [mm ²]	[mm] (only for ref.)	["] ±.015"	WIDT H ["]	HEIGHT ["] ±.002"	CRIMPER TYPE	WIDTH [mm] ±0,25mm	HEIGHT [mm]	CRIMPER TYPE
2 8 4 7 9 8	0,50 0,75 1,00 1,50	2,0÷2,3 2,2÷2,5 2,4÷2,7 2,7÷3,0	.205	.090	.045 .048 .052 .057	F	5,08 (.200"±.01")	3,1 MAX	Special
	0,5+0,5 0,75+0,75	2,0÷2,3+ 2,0÷2,3 2,2÷2,5+ 2,2÷2,5	.205	.090	.052 .057	F	5,08 (.200"±.01")	2,1÷2,5	F
2 9 3 2 2	1+0,5 0,35	2,4÷2,7÷ 2,0÷2,3	.205	.080	.057 .043	F	3,05	2.5	F
	0,50	1,4-2,5			.046				
	0,75				.050				
1 9 5 4 4 1	0.226	1,4-2,5	.205	.070	.043	F	3,05	2.42	F
	0.35			.072	.045		3.03	2.49	
	0.50			.072	.047		3.04	2.42	
	22AWG UL1015			.070	.042		3.175	2.95	



Typical insulation barrel cross section for double wire Applicable on P/N 284798



Typical insulation barrel cross section for single wire Applicable on P/N 284798

