EP II Contact for Low Profile Power 2P Connector

1. Introduction

This specification covers the requirements for crimping of EP II Contact for Low Profile Power 2P Connector.

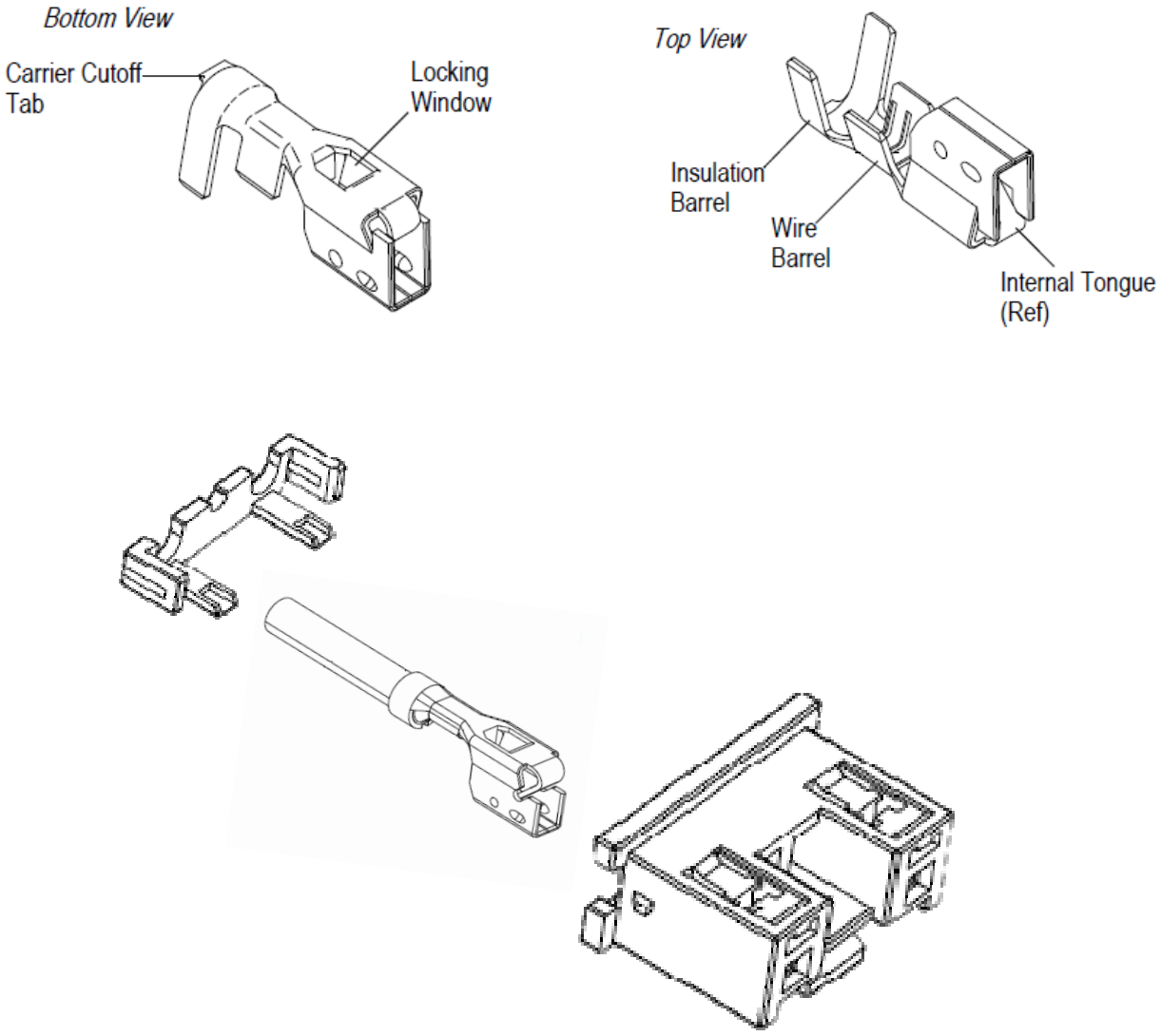

Fig.1

2. Applicable Contact Part Numbers

Product Description	Part No.	Wire Size mm^2 (AWG)	Insulation Diameter (mm)
Receptacle Contact	1744144-*	0.3~0.8 (AWG #22~#18)	Ø 1.7~ Ø 2.9
Receptacle Contact	1744201-*	0.5~1.25 (AWG #20~#16)	

Fig.2

3. Reference Material

3.1 Drawings

Customer Drawings for specific products are available from the service network. The information contained in customer Drawings takes priority if there is a conflict with this specification or with any technical documentation supplied by TE Connectivity.

3.2 Specifications

Design Objective 108–61208 provides expected product performance requirements and test information.

4. Crimping Requirements

NO.	Check Item	Specified Requirements		NO.	Check Item	Specified Requirements
①	Wire Stripping Length	AWG22~AWG18	2.69~3.30	⑥	Side to Side Bend	2° Max
		AWG20~AWG16	2.46~2.84			
②	Cut-Off Tab Length	0.5mm Max		⑦	Twisting/ Rolling	No
③	Rear Bellmouth Length	0.1~0.7mm		⑧	Cutoff Tab Flash (Fig.6)	0.13mm Max
④	Bend – Up	3° Max		⑨	Wire-End Length (Fig.6)	0.1～1.2mm.
⑤	Bend – Down	4° Max		⑩	Wire Barrel Flash (Fig.6)	0.13mm Max

Fig.3

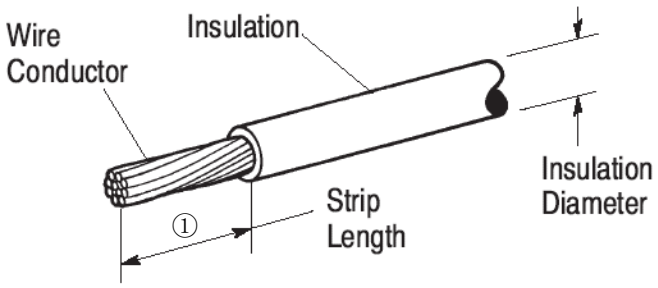
Wire Conductor
Insulation
Insulation Diameter
Strip Length
①

Fig.4

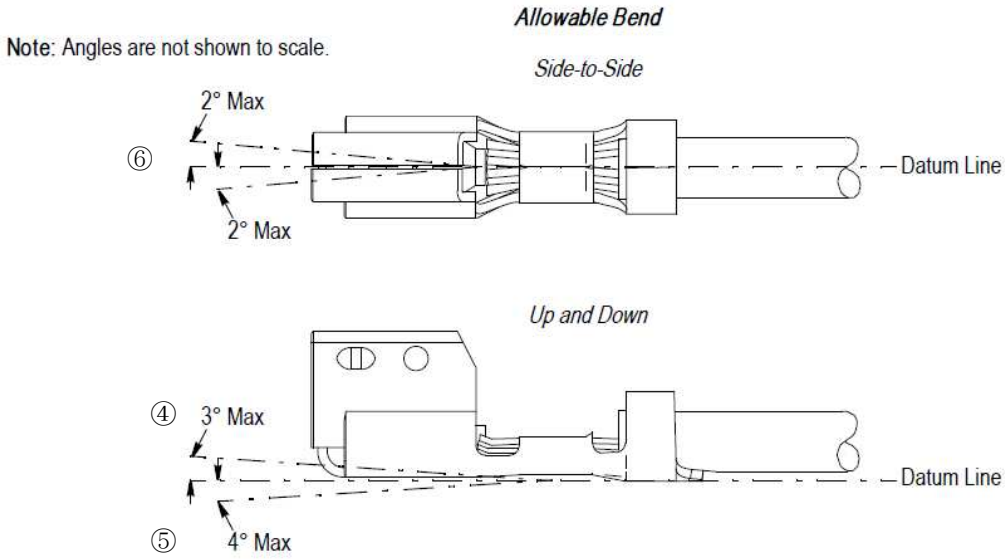
Allowable Bend
Note: Angles are not shown to scale.
Side-to-Side
2° Max
⑥
2° Max
Datum Line
Up and Down
④ 3° Max
Datum Line
⑤ 4° Max

Fig.5

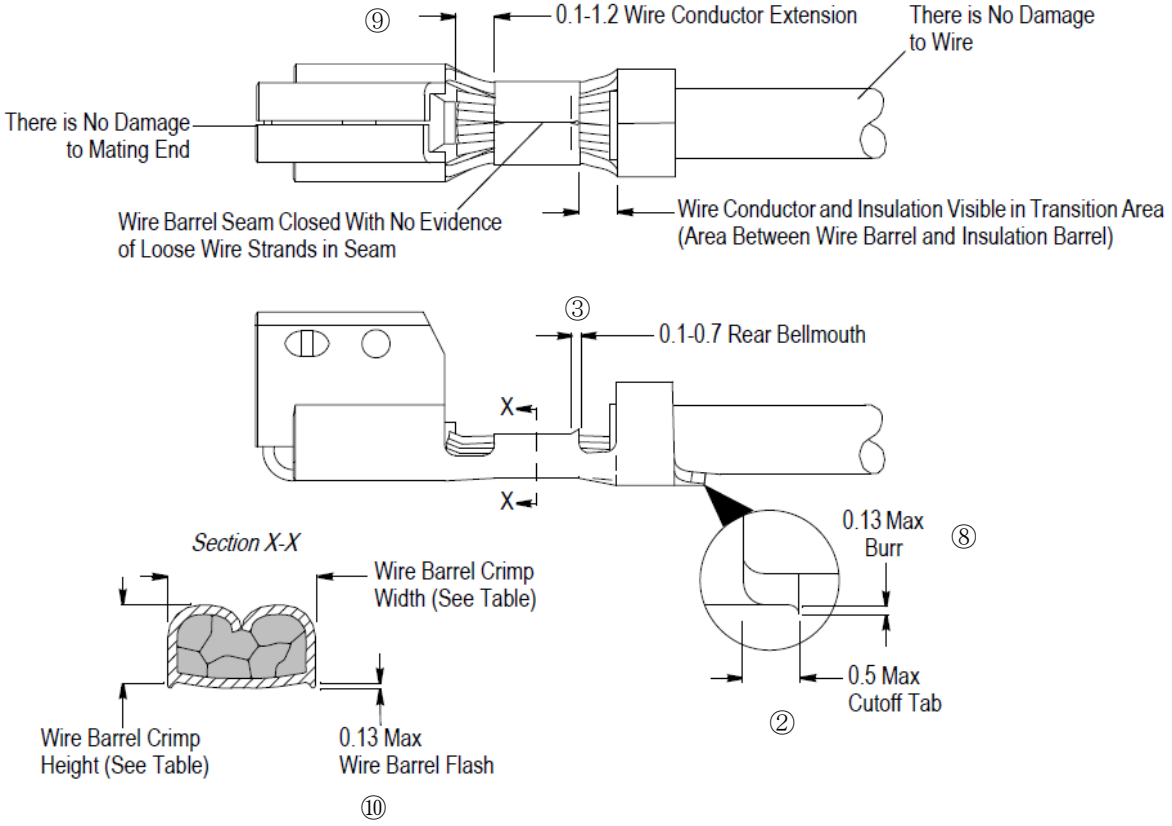
⑨
0.1-1.2 Wire Conductor Extension
There is No Damage to Wire
There is No Damage to Mating End
Wire Barrel Seam Closed With No Evidence of Loose Wire Strands in Seam
Wire Conductor and Insulation Visible in Transition Area (Area Between Wire Barrel and Insulation Barrel)
③
0.1-0.7 Rear Bellmouth
X
X
0.13 Max Burr
⑧
Section X-X
Wire Barrel Crimp Width (See Table)
Wire Barrel Crimp Height (See Table)
0.13 Max Wire Barrel Flash
0.5 Max Cutoff Tab
②
⑩

Fig.6

5. Crimping Data

5.1 Applicator

Contact P/N (Strip)	Applicator P/N (Spare Kit P/N)	Wire size		Insulation Stripping Length (mm)	Wire Barrel Crimp		Insulation Barrel Crimp	Finished Insulation Diameter (mm)	Tensile strength N(kgf) Min.
		No. of Conductor	mm² (AWG#) single conductor		Width (mm)	Crimp Height ±0.05(mm)	Width (mm)		
1744144-2	2151113-1 (7-2151113-7)	1	0.3 (#22)	2.69~3.30	1.78"F"	1.00	2.60 "F"	Ø1.7~ Ø2.9	44.5 (4.5)
			0.5 (#20)			1.10			62.3(3.2)
			0.8 (#18)			1.15			89 (9.1)
1744201-1	2151772-1 (7-2151772-7)	1	0.5 (#20)	2.46~2.84	1.78"F"	1.12	2.60 "F"		62.3 (6.3)
			0.8 (#18)			1.27			89 (9.1)
			1.25(#16)			1.47			100 (10.2)

6. Requirements

6.1 Safety

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

6.2 Storage

A. Ultraviolet Light

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

B. Shelf Life

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

C. Reeled Products

Store coil wound reels horizontally and traverse wound reels vertically.

D. Chemical Exposure

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

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

7. Revision History

Rev.	REVISION RECORD	DATE
A	Initial release	21AUG2014

8. Specification Approval

Prepared by,

BH CHO

Product Engineer

Checked By,

Senior Product Engineer

Approved by,

BW KANG

Product Engineering Manager