

0.50 RECEPTACLE CONTACT

Table of Contents

1. Scope..... 2

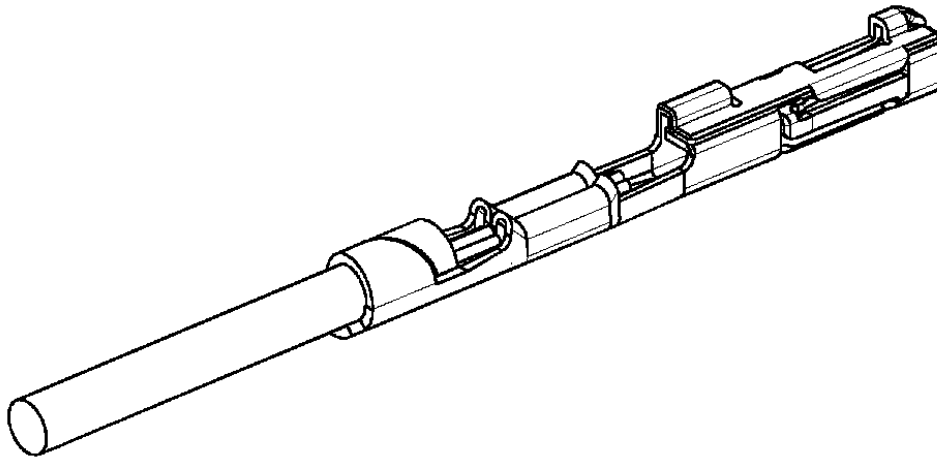
2. Applicable Contacts..... 2

3. Nomenclature 2

4. Crimping Condition 3

5. Crimp Data..... 4

6. Application Wire Data 5



| | | | | |
|------------|---|------------|------------|-------------|
| D1 | Delete loose terminals | H.H | R.K | 2023.9.26 |
| D | Added applicable wires | R.K | T.F | 2021.4.13 |
| C | Insulation barrel height added from bottom of BOX | T.H | T.K | 2017.2.13 |
| B2 | Added note | K.K | R.K | 2015.11.5 |
| LTR | REVISION RECORD | DWN | APP | DATE |

The performance of applicable product is guaranteed only when processed by proper application tooling and condition described in this specification and/or TE recognized ones. No product is guaranteed when processed with the other tool or condition.

1. Scope

This specification covers the requirements for crimping of 0.50 Series Receptacle Contact.

2. Applicable Contacts

| Part Number | Contact Form | Finish | Applicable Wires (mm ²) |
|-------------|------------------|----------------|-------------------------------------|
| | Wire Barrel Form | | |
| 1827855-1 | M | Pre-Tin | CHFUS / CIVUS 0.22 ~ 0.35 |
| 1827855-2 | L | | CHFUS / CIVUS 0.35 ~ 0.5 |
| 1827855-3 | C | | CPEX 0.22 |
| 1827855-4 | S | | CHFUS / CIVUS 0.13 ~ 0.22 |
| 1903703-1 | M | Selective Gold | CHFUS / CIVUS 0.22 ~ 0.35 |

3. Nomenclature

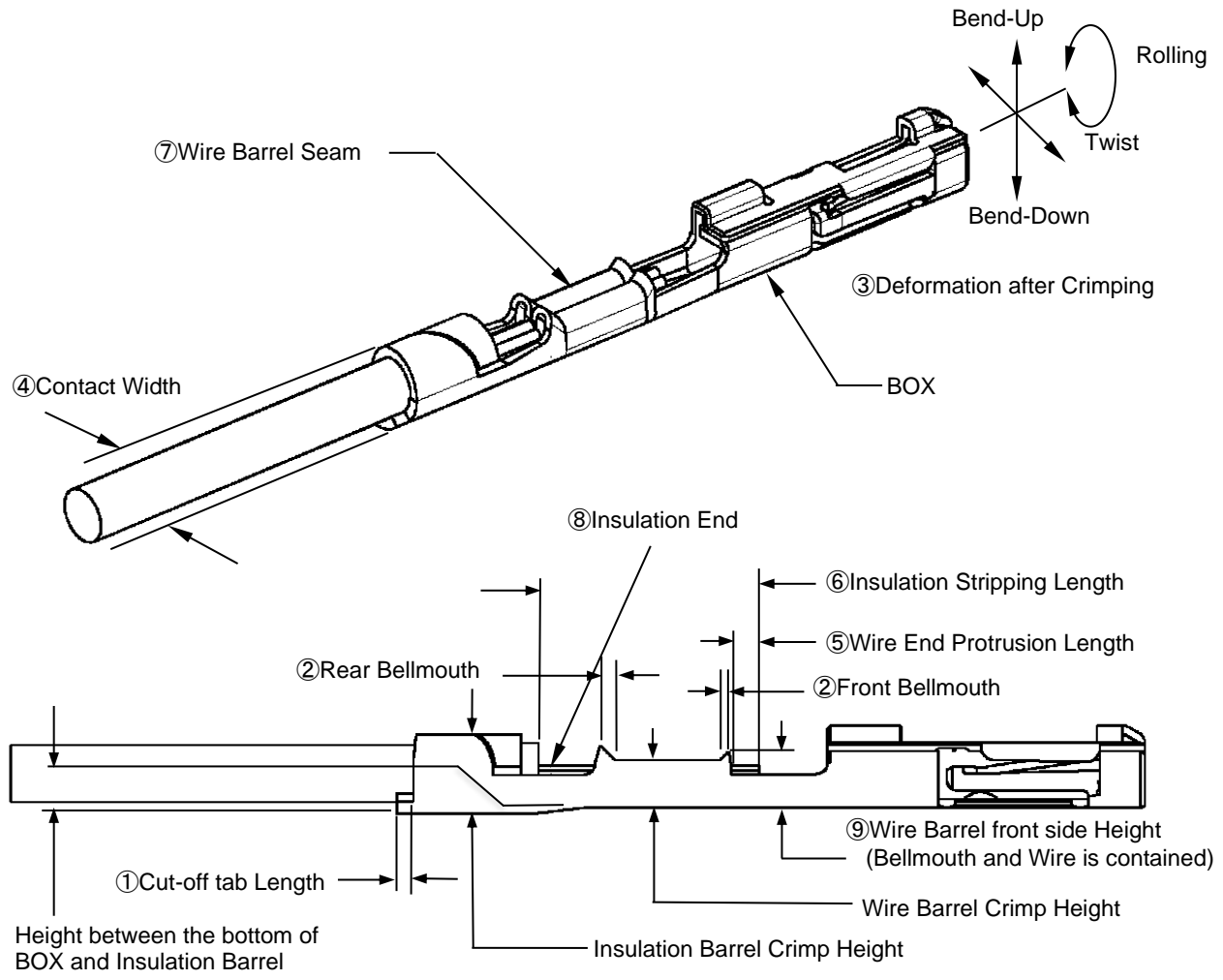


Fig. 1

4. Crimping Condition

4.1. Application Crimp

| Check Items | 1827855 | | -1 | -2 | -3 | -4 | Remarks |
|-------------|--|---------|--|-------------|--------------|--------------|---------|
| | 1903703 | | -1 | — | — | — | |
| 1 | Cut-off Tab Length | | 0 ~ 0.4 mm | | | | Fig.1-① |
| 2 | Bellmouth | Front | 0.1 ~ 0.3 mm | 0.2 mm Max. | 0.1 ~ 0.3 mm | 0.1 ~ 0.3 mm | Fig.1-② |
| | | Rear | 0.1 ~ 0.45 mm | | | | |
| 3 | Deformation after Crimping | Bend | ±3° Max. | | | | Fig.1-③ |
| | | Twist | ±3° Max. | | | | |
| | | Rolling | ±5° Max. | | | | |
| 4 | Contact Width after Crimping | | 1.2 mm Max. | 1.5 mm Max. | | 1.2 mm Max. | Fig.1-④ |
| 5 | Wire End Protrusion Length | | 0 ~ 0.5 mm | | | | Fig.1-⑤ |
| 6 | Insulation Stripping Length | | 3.0 ~ 3.5 mm | | | | Fig.1-⑥ |
| 7 | Wire Barrel Seam | | Seam must be closed (No strand looses out of the seam) | | | | Fig.1-⑦ |
| 8 | Insulation End | | Insulation End must be between Wire Barrel and Insulation Barrel | | | | Fig.1-⑧ |
| 9 | Wire Barrel front side Height (Bellmouth and Wire is contained) | | 1.0 mm Max. | | | | Fig.1-⑨ |

4.2. Hand Tool

| Check Items | 1827855 | -1 | Remarks |
|-------------|--|---------|---|
| 1 | Cut-off Tab Length | | 0 ~ 0.4 mm Fig.1-① |
| 2 | Bellmouth | Front | 0.2 mm Max. Fig.1-② |
| | | Rear | 0.1 ~ 0.35 mm |
| 3 | Deformation after Crimping | Bend | ±3° Max. Fig.1-③ |
| | | Twist | ±3° Max. |
| | | Rolling | ±5° Max. |
| 4 | Contact Width after Crimping | | 1.2 mm Max. Fig.1-④ |
| 5 | Wire End Protrusion Length | | 0 ~ 0.5 mm Fig.1-⑤ |
| 6 | Insulation Stripping Length | | 3.0 ~ 3.5 mm Fig.1-⑥ |
| 7 | Wire Barrel Seam | | Seam must be closed (No strand looses out of the seam) Fig.1-⑦ |
| 8 | Insulation End | | Insulation End must be between Wire Barrel and Insulation Barrel Fig.1-⑧ |
| 9 | Wire Barrel front side Height (Bellmouth and Wire is contained) | | 1.0 mm Max. Fig.1-⑨ |



NOTE

- (1) There is possibility of the dimension is different caused of the ability of operator.
Make sure the contact must be inserted smoothly into the Plug housing.

5. Crimp Data

5.1. Application Crimp

| Contact Part Number | Wire Size (Nominal) | Applicator Part Number | Wire Barrel Crimp | | | Insulation Barrel Crimp ⁽⁵⁾ | | | Crimp Tensile Strength (N) |
|------------------------|---------------------|------------------------|---------------------------|----------------------------|-----------|--|----------------------------|--|----------------------------|
| | | | Width ⁽³⁾ (mm) | Height ⁽¹⁾ (mm) | Disk Ltr. | Width ⁽³⁾ (mm) | Height ⁽²⁾ (mm) | Height between the bottom of BOX and Insulation Barrel | |
| 1827855-1 1903703-1 | CHFUS / CIVUS 0.22 | 1762850-2 | 1.07"F" | 0.63 | - | 1.07"O" | 1.2 | 0.1±0.05 | 30 Min. |
| | CHFUS / CIVUS 0.35 | | 1.07"F" | 0.72 | - | 1.07"O" | 1.3 | | 50 Min. |
| 1827855-2 | CHFUS / CIVUS 0.35 | 1762851-2 | 1.16"F" | 0.71 | - | 1.4"O" | 1.3 | | 50 Min. |
| | CHFUS / CIVUS 0.5 | | 1.16"F" | 0.84 | - | 1.4"O" | 1.4 | | 90 Min. |
| 1827855-3 | CPEX 0.22 | 1762852-2 | 1.07"F" | 0.63 | - | 1.4"O" | 1.4 | | 30 Min. |
| 1827855-4 | CHFUS / CIVUS 0.13 | 1762853-2 | 1.0"F" | 0.57 | - | 1.07"O" | 1.05 | | 50 Min. ⁽⁴⁾ |
| | CHFUS / CIVUS 0.22 | | 1.0"F" | 0.64 | - | 1.07"O" | 1.05 | 30 Min. | |



NOTE

- (1) Wire Barrel Crimp Height to be within ± 0.05 mm.
- (2) Insulation Barrel Crimp Height to be within ± 0.1 mm.
- (3) Crimp Width dimensions are not the product width after crimping, but given by the width of crimper Slot for reference.
- (4) Crimp tensile strength of the wire grip of insulation barrel crimp.
- (5) The insulation barrel may cause deformation of the insulation coating or some biting, but penetration into the conductor is not allowed.
Also, if biting or scraping occurs continuously, adjust the feed of the applicator.

5.2. Hand Tool

| Contact Part Number | Wire Size (Nominal) | Hand Tool Part Number | Wire Barrel Crimp ⁽¹⁾ | | Insulation Barrel Crimp ⁽¹⁾ | | Crimp Tensile Strength (N) |
|---------------------|---------------------|-----------------------|----------------------------------|-------------|--|-------------|----------------------------|
| | | | Width ⁽²⁾ (mm) | Height (mm) | Width ⁽²⁾ (mm) | Height (mm) | |
| 1827855-1 | 0.22 | 1891224-1 | 1.07"F" | 0.58~0.68 | 1.07"O" | 1.1 ~ 1.3 | 30 Min. |
| | 0.35 | | 1.07"F" | 0.67~0.77 | 1.07"O" | 1.2 ~ 1.4 | 50 Min. |



NOTE

- (1) This tool is for maintenance. The different dimension may be caused according to the ability of operator. Expect for the purpose above, you should use the applicator.
- (2) Crimp Width dimensions are not the product width after crimping, but given by the width of crimper Slot for reference.

6. Application Wire Data

6.1. JASO Wire

| Wire Size (Nominal) | Number / Diameter (mm) of Conductor | Calculated Cross sectional Area (mm ²) | Insulation Diameter (mm) | |
|------------------------|--|---|--------------------------|------|
| | | | STD. | Max. |
| CHFUS / CIVUS 0.13 | 7 / Compressed | 0.1407 | 0.85 | 0.95 |
| CHFUS / CIVUS 0.22 | 7 / Compressed | 0.2199 | 0.95 | 1.05 |
| CHFUS / CIVUS 0.35 | 7 / Compressed | 0.3436 | 1.1 | 1.2 |
| CHFUS / CIVUS 0.5 | 7 / Compressed | 0.4948 | 1.25 | 1.4 |
| CPEX 0.22 | 7 / Compressed | 0.2199 | 1.45 | 1.5 |