APPLICATION SPECIFICATION

114-51010

# AMP MINI COMMON TERMINATION (CT) CONNECTOR, 1.5MM PITCH (CRIMP TYPE)

## 1. SCOPE

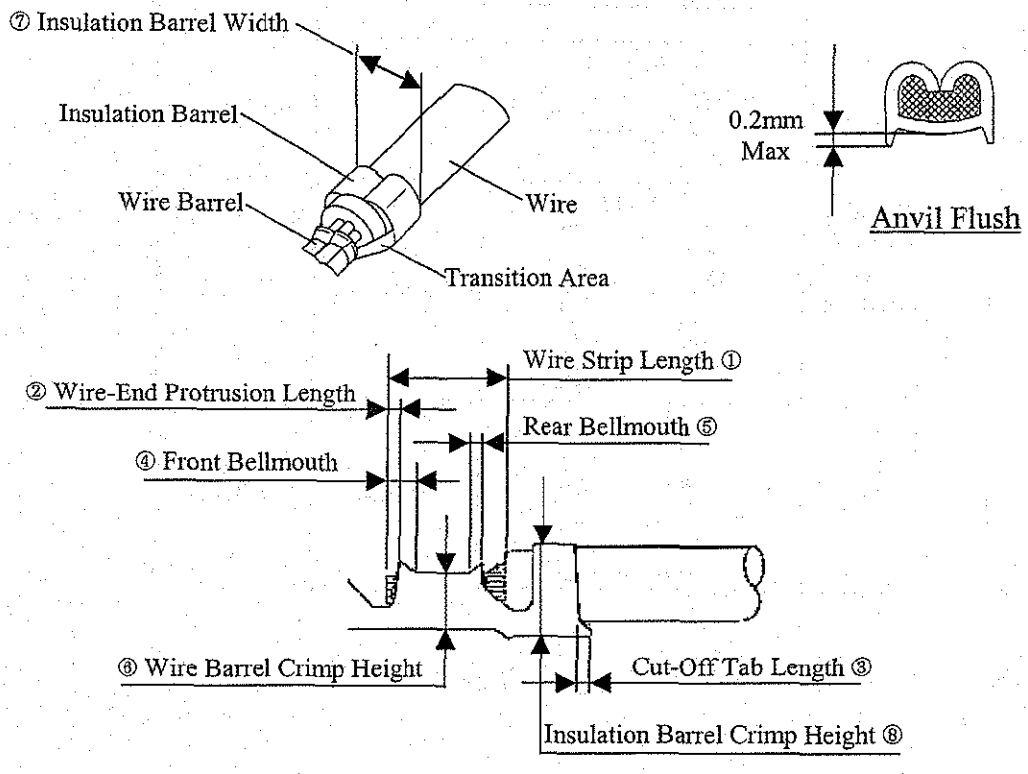
This specification covers the requirements for crimping of 1.5mm pitch Mini CT (Common Terminated) Connector (Crimp Type) for applicator and manually operated hand tool.

## 2. APPLICABLE PRODUCTS

This instruction sheet is applicable to products shown below:

| Contact Form | Product Part No. | Crimping Tool | Wire Size | Insulation Diameter |
|---|---|---|---|---|
| Strip Terminal | 84727-1 | Applicator | $0.09mm^2 \sim 0.23mm^2$ (AWG #28 ~ #24) | ∅0.85mm ~ ∅1.05mm |
| Loose Piece (L/P) | 84807-1 | Hand Tool | | |

## 3. NOMENCLATURE




| REV | REVISION RECORD | PRE | DATE | PAGE: |
|---|---|---|---|---|
| | | | | P H Ng PRE: |
| B | Revised (FP00-0335-01) | P.H.Ng | 27/8/2001 | See Back Page |
| A | Revised (FP00-0270-01) | P.H.Ng | 17/7/2001 | APP: |
| O | Released (FP00-0217-01) | P H Ng | 19/6/2001 | 1 of 4 |

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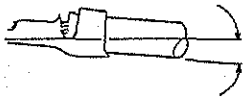
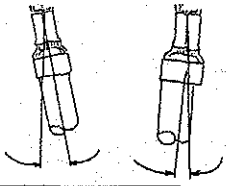
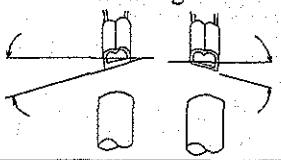
TITLE: **AMP Mini Common Termination (CT) Connector, 1.5mm Pitch Crimp Type**

NO: **114-51010** REV: **B**

## 4. CRIMPING REQUIREMENT

| No. | Check Items | | Crimping Requirements | | Remarks |
|---|---|---|---|---|---|
| | | | Applicator | Hand Tool | |
| 1 | Wire Strip Length | | 1.7±0.2 mm | | Refer to ① of Fig.1 |
| 2 | Wire-End Protrusion Length | | 0 ~ 0.5 mm | | Refer to ② of Fig.1 |
| 3 | Cut-Off Tab Length | | 0.4 mm Max. | | Refer to ③ of Fig.1 |
| 4 | Bellmouth | Front | Presence of Front Bellmouth is optional | | Refer to ④ of Fig.1 |
| | | Rear | 0.1 ~ 0.35 mm | | Refer to ⑤ of Fig.1 |
| 5 | Wire Barrel Crimp | | Refer Table1 | | Refer to ⑥ of Fig.1 |
| 6 | Insulation Barrel Width | | 1.20mm Max | | Refer to ⑦ of Fig.1 |
| 7 | Insulation Barrel Crimp Height | | Refer Table 1 | | Refer to ⑧ of Fig.1 |
| 8 | Allowable Deviation after Crimping | Bend-Up  | 3°Max. | 5°Max. | |
| 9 | | Bend-Down  | 3°Max. | 5°Max. | |
| 10 | | Twisting  | 3°Max. | 5°Max. | |
| 11 | | Rolling  | 5°Max. | 5°Max. | |

*Tool mark is allowable at crimped areas and transition areas only.*

## 5. CRIMPING DATA

**Table 1.**

| Contact Part No. | Applicator Part No. | Wire Size | | Insulation Strip Length (±0.2mm) | Wire Barrel | | | Insulation Barrel | | Finished Insulation Diameter |
|---|---|---|---|---|---|---|---|---|---|---|
| | | No. of Wires | Size (AWG) | | Crimp Width | Crimp Height (±0.03mm) | Disk Mark | Crimp Width | Crimp Height | |
| 84727-1 | 1463153-2 | 1 | 0.23mm² (#24) | 1.7mm | 1.0mm 'F' | 0.75mm | A | 1.07mm 'F' | 1.5mm Max. | Ø0.85mm ~ Ø1.05mm |
| | | 1 | 0.14mm² (#26) | | | 0.69mm | B | | | |
| | | 1 | 0.09mm² (#28) | | | 0.64mm | C | | | |

**Table 2.**

| Wire Size (AWG) | Crimp Tensile Strength N (kgf) Min. |
|---|---|
| 24 | 29.4 (3.0) |
| 26 | 19.6 (2.0) |
| 28 | 14.7 (1.5) |

**Note:**

a) Tool mark is allowable at crimped areas and transition areas only.

b) The dimensions of crimp width of wire barrel and insulation barrel are the dimensions of crimping tool.

## 6. EXAMPLES OF APPLICABLE WIRE

**Table 3.**

| Wire Size | Strand / Diameter | Calculated Cross Sectional Area (mm²) | Insulation Diameter (mm) | Application Wire |
|---|---|---|---|---|
| AWG #24 | 7/0.203 | 0.23 | Ø0.95 ~ Ø1.05 | UL-1728 |
| AWG #26 | 7/0.16 | 0.14 | Ø0.85 ~ Ø1.03 | UL-10272 |
| | | | | UL-1061 |
| | | | | UL-3610 |
| AWG #28 | 7/0.127 | 0.09 | Ø0.85 ~ Ø0.95 | UL-1061 |
| | | | | UL-3343 |

*All wires, including the above mentioned, need to be approved prior to usage.*

## 7. VALIDATION

Approvals:

27 AUG '07

Choo Wing Lian

Section Manager, Product Engineering Department

27 Aug '07

Leong See Fan

Division Manager, Product Engineering Department