

# Application Specification

114-5223

## AMP Mini Common Termination(CT) Connector 1.5mm Pitch (MT Type)

1. Scope:

This specification covers the requirements for termination of 1.5mm Pitch Mini CT (Common Terminated) Connector, performed by automatic machine (DECAM) and manual tool (MINI PRESS).

2. Applicable Documents:

Nomenclature	Product Part Number
Receptacle Housing Assembly	□-353293-□

3. Nomenclature of Product and Terminated Conditions.

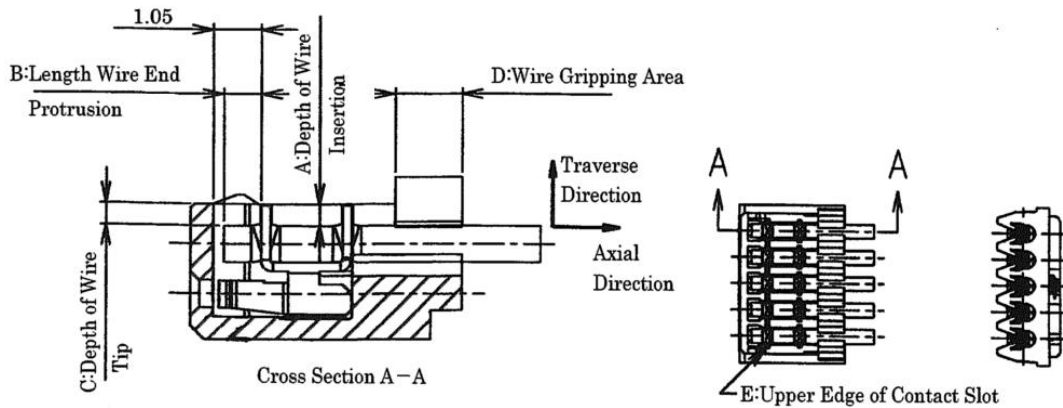

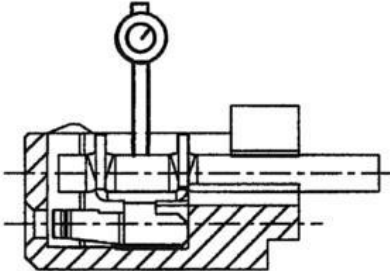
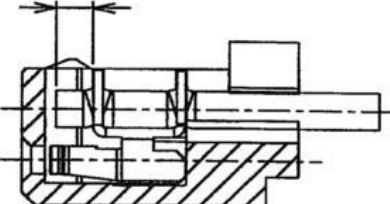
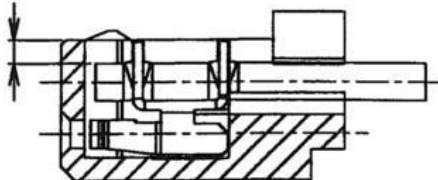


Fig.1

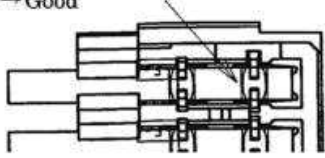

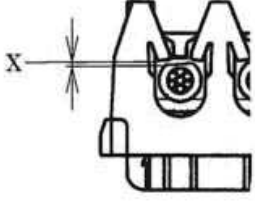
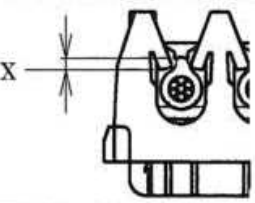
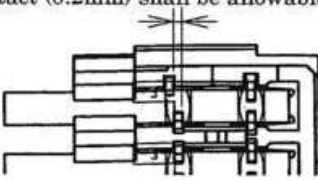
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F1	REVISED	T.Q	09MAR 12	DR	H.Hoshino	 <b>TE Connectivity</b>	NO	114-5223	REV F1	LOC ES	
	F			REVISED	CHK						T.Yamada
	D20051225211348_409532			APP	S.Kubouchi						
LTR	REVISION RECORD	DR	DATE	PAGE 1 of 6		TITLE AMP Mini Common Termination(CT) Connector 1.5mm Pitch (MT Type)					

4. Requirement and Standard Criteria for Acceptance

No.	Check Items	Requirement	Standard Criteria for Acceptance
1	Depth of Wire Insertion	Wire insertion depth shall be controlled within $0.6^{\pm 0.1}$ mm, when measured from the top edge of housing to the tool mark on the inserted wire, regardless of the wire size and insulation diameter.	<p>Measure the depth by using a height gage.</p> 
2	Wire-end Protrusion Length	Wire-end protrusion length shall be controlled within the dimension of 0.5mm minimum, when measured from the contact slot surface to the top of wire. Excessive protrusion of the wire end shall be rejected.	<p>Wire Protrusion Length 0.5mm min.</p> 
3	Wire-end Insertion Depth	So long as the insulation of wire end is inserted lower than upper surface of housing, wire end insertion depth is acceptable.	<p>Wire tip shall be recessed under top surface of housing.</p> 

To be continued

No.	Check Items	Requirement	Standard Criteria for Acceptance
4	Exposure of Wire Conductor	<p>Any inserted wire being damaged with broken insulation, resulting visible conductor shall be rejected.</p> <p>Wire conductor exposed on the top is acceptable.</p>	<p>Termination appearing normal without sign of damage is acceptable. → Good</p>  <p>Conductor is visible → No good</p> 
5	Wire Retention over the Cavity	Termination wire shall be perfectly inserted into the wire support hole of the housing shown in Fig.1. Elongation of wire insulation is acceptable if it dose not adversely affect the required function.	<p>Wire shall be located below X. → Good</p>  <p>One side of crumple is located below X.</p> 
6	Position Uniformity of Upper Edges of Contact Slot	After termination, the upper edges of inserted contact slot shall be of inline uniformity.	<p>Any deviation not exceeding the thickness of contact (0.2mm) shall be allowable.</p> 

To be continued



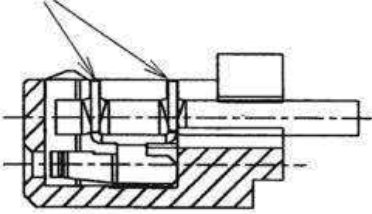
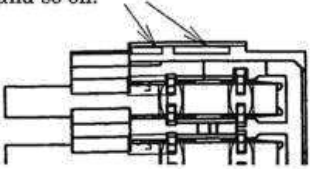
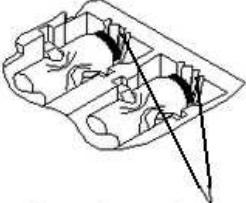
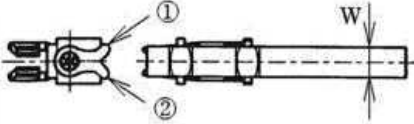
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No.	Check Items	Requirement	Standard Criteria for Acceptance
7	Damage of Contact and Housing	After termination, any evidence of tool mark damage at the housing and contact slot area is not acceptable.	<p data-bbox="815 416 1260 521">&lt;Contact&gt; Scratch mark is allowable. Scraping is allowable on condition that the plating is not fully removed.</p>  <p data-bbox="815 860 1260 965">&lt;Housing&gt; Tool mark is allowable. However, it shall be free from crack, bulge and so on.</p>   <p data-bbox="906 1375 1158 1424">Allowed scratch mark by wire conductor</p>
8	Deviation of Wire Axis Alignment	Inserted wire shall be aligned evenly with the centerline of contact axis. After termination, the four corners of the contact shall appear in symmetrical uniformity	<p data-bbox="815 1480 1193 1507"><u>Normal terminated condition in slot.</u></p> <p data-bbox="815 1585 1260 1666">Tool mark shall be located at the center of wire. The insulation of wire shall be equal symmetrically in place ① and ②.</p> 

To be continued



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No.	Check Items	Requirement	Standard Criteria for Acceptance
9	Others	a) Any contact once terminated, shall not be reused	/
		b) The random termination making is acceptable.	

End

5. Wire Retention Force  
(The specification values are based on the actual measured readings.)

The requirements for the tensile strength, when the pull-off load is applied in the directions, traverse and along the contact axis (refer Fig.1), are shown in Table.2.

Table.2 [Unit:N(kg)]

Wire Size	Axial Direction	Traverse Direction
AWG #28	14.7N (1.5kg) MIN	11.8N (1.2kg) MIN.
AWG #26	19.6N (2.0kg) MIN	

6. Applicable Wire
- A. Applicable Wire Size  
AWG #28, #26 (0.08~0.14mm<sup>2</sup>)
- B. Applicable Insulation Diameter
- 1) Harness Condition (Refer Fig.2)
- |    | A-Side  | B-Side  | Insulation Diameter |
|----|---------|---------|---------------------|
| 1) | Mini CT | Mini CT | ∅0.8 ~ 0.95mm       |
| 2) | Mini CT | CT      | ∅0.83 ~ 0.95mm      |



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2) Conformity of harness condition and DECAM. (Refer Table.3)

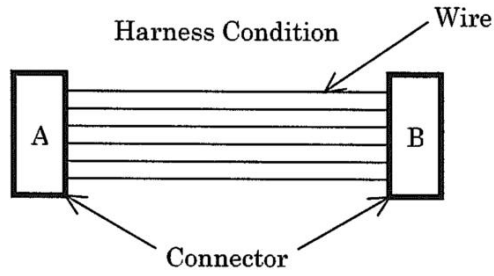


Fig. 2

Table.3

		DECAM		
A-Side	B-Side	Auto	Semi-Auto	D-NJ
Mini CT	Mini CT	○	○	○
Mini CT	CT	○	○	○

(Note) Please refer to machine specifications about selection of a machine.

Table.4 Example of Applicable wire

Wire Size (Nominal)	Strand / Diameter	Calculated Cross Sectional Area (mm <sup>2</sup> )	Insulation Diameter (mm)	Applicable Wire
AWG #26	7/0.16	0.14	0.86~0.95	UL-10272
				UL-3610
AWG #28	7/0.127	0.09	0.85~0.95	UL-1061
				UL-3443

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