

Application Specification (TENTATIVE)

114-5127

Termination of SM Micro Connectors

1. Scope:

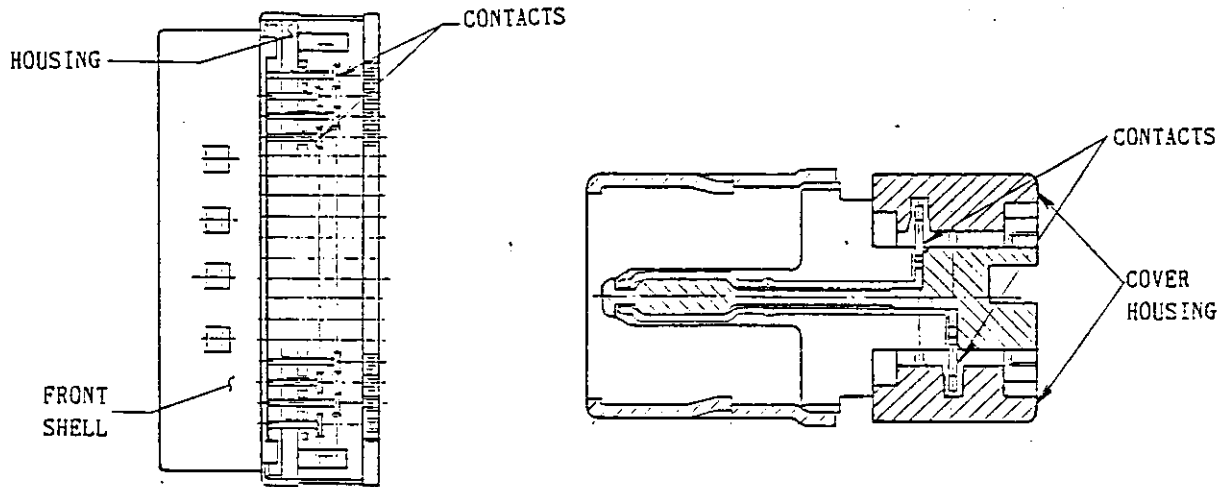
This specification covers the requirements for termination of SM Micro Connectors. The part numbers of the applicable products are shown in Fig. 8.

This specification is applicable to the termination of both hand tool and automatic terminating machine applications. The part numbers of the tooling are also shown in Fig.9.

The wires to be used for termination shall be conforming to the requirements specified in Para. 3.

2. Nomenclature of the Products:

2.1 Male Connector Kit:



MALE CONNECTOR  
BASE ASS'Y

Fig.1

8802 TOS

NUMBER 114-5127  
AMP SECURITY CLASSIFICATION  
Customer Release

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CHK	<i>S. Ishikawa</i>	22-FEB '89					
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LOC	J	A	NO	114-5127	REV	0	
0	Released	<i>W. S. I.</i>	SHEET		NAME Application Specification		
REVISION RECORD		CR	CHK	DATE	1 OF 5		
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3. Applicable Wires:

3.1 Composition of the Wires:

Items		Size	#30 AWG	#28 AWG
Conductor	Material	Tin-Plated Copper Soft Wire		
	Composition	7/0.1		
	Diameter(mm)	0.3		

The pitch of the conductor thread must be within 6.0 mm.

Fig.2

3.2 Specifications of the Cable:

Items		#30 AWG			#28 AWG			
Insulation	Material	Poly-vinyl Chloride-Insulated or equivalent						
	Thickness	--	0.15	--	0.10	0.13	--	
	Diameter	--	0.60	--	0.58	0.64	--	
Wire Type		Twisted-Pair Wire (Ref.)						
Braid Type		Braid-Composition						
Type of Strand		Taping applied for stranding						
Shielding		Thin-plated copper wires-braided 80% Shielding						
	Material	Poly-vinyl chloride						
	OD (mm)	20P	--	6.0	--	6.0	6.0	--
		26P	--	6.5	--	6.5	--	--
		36P	--	7.5	--	7.4	7.5	--
		50P	--	8.0	--	8.0	8.0	--
		68P	--	8.8	--	8.8	--	--
		96P	--	10.0	--	10.0	--	--


Fig.3

AMP recommended cables are shown in the Applicable Cable Listing to be prepared separately from this specification.

4. Reparation of Wires:

4.1 Jacketed Wire:

- (1) Jacketed wires shall be prepared by stripping the shield insulation to the length specified in Fig.7, prior to terminating operation.
- (2) During the stripping operation of the shield jacket insulation, proper care must be taken not to cut or nick the inside conductors.
- (3) Other preparation must be performed according to the drawings prepared separately from this specification.

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5. Requirements:

5.1 Wire-End Protrusion Length: (Refer to Para. 5.6.)

The terminated wire end must be protruding 0.5 mm min. from the contact end, and its feature shall be conforming to the condition, shown below.

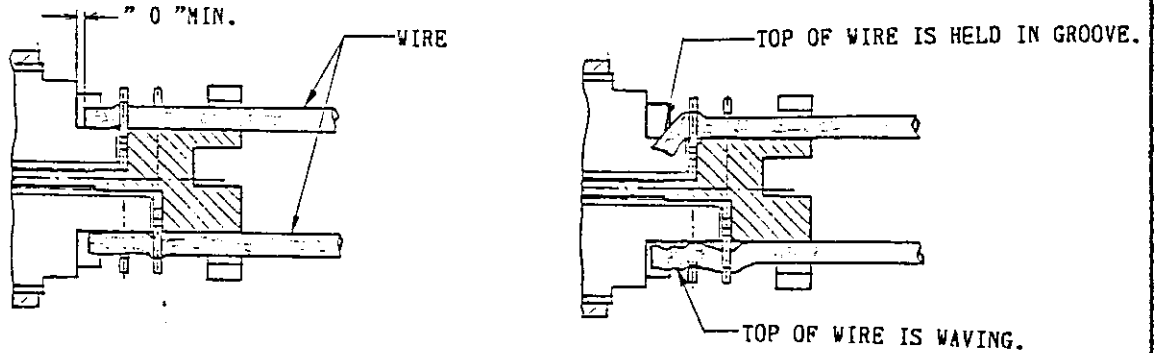


Fig.4

5.2 Squash and Damaging of Wire:

Squashing and damaging of the wires after terminating are tolerable within the range as specified in Para. 5.4.

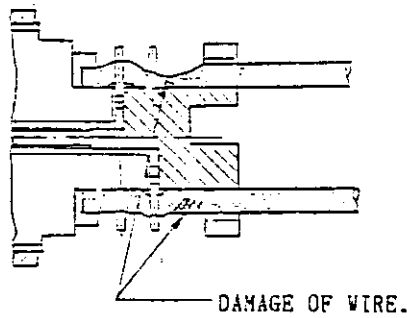


Fig.5

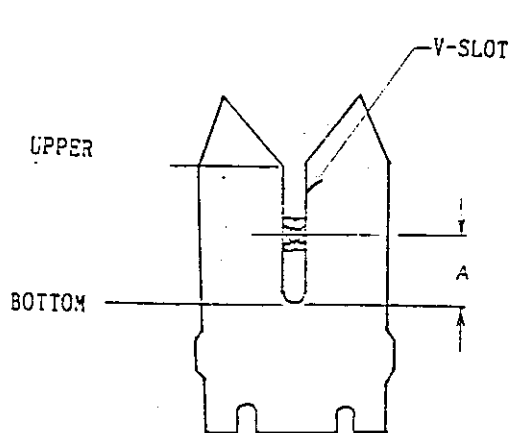
5.3 Deformation of Contact:

After termination the contacts shall be free from the deformation and/or flaw.

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5.4 Depth of Termination of Wire:

The terminated wires must be securely gripped in the contact slot to the depth as specified below.



Diameter of Insulation	"A" Dimension
0.5 ~ 0.7	0.85/0.35

Fig.6

5.5 Appearance of Housing after Termination:

Housing shall appear without abnormalities such as flaws and chipping that are detrimental to connector functions.

5.6 Appearance of Terminated Wires:

The terminated wires shall appear normal without any sign of the conditions shown below.

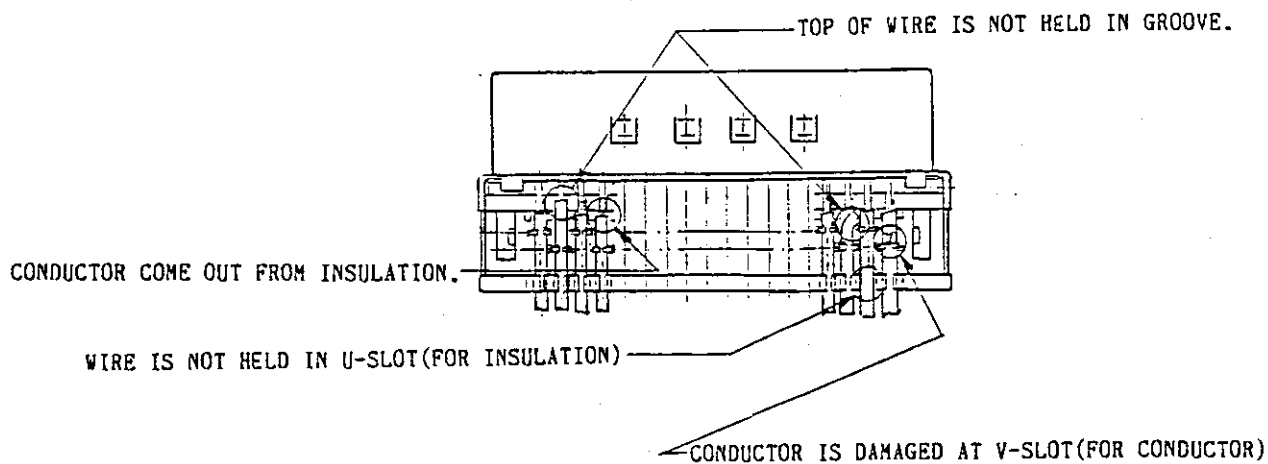


Fig.7


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Type	Kit Part No.	Connector Part No.	No. of Pos.	Diameter of Wire (mm)	Remarks
Male Connector	174731-1	174730-1	20	0.5 mm	
	174731-2	174730-2	26		
	174731-3	174730-3	36	0.7 mm	
	174731-4	174730-4	50		
	174731-5	174730-5	68		
		N/A	N/A	96	

Fig.8

Part No.	Nomenclature	Number of Termination/ Cycle	Applicable Length of Wires (mm)	Maximum Number of Positions
91122-1	Palm-Grip Tool Terminating each one position	1	70 mm min.	--
91123-1	Hand Press Assy	Half No. of Positions	70 mm min.	50
91149-1	Manual Mini-Press	Half No. of Positions	70 mm min.	100
91124-1	Air Terminator	All No. of Positions	70 $\pm$ 5 mm	100
91125-1	Semi-automatic Programmable Terminator	All No. of Positions	70 $\pm$ 5 mm	100

Fig.9

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