1.0 Scope:

1.1 Contents

This specification covers the requirements for product performance test methods and quality assurance provisions of High current spring finger.
Applicable product descriptions and part numbers are as shown in Appendix 1.

2. Applicable Documents:

The following documents form a part of this specification to the extent specified herein. In the event of conflict between the requirements of this specification and the product drawing, the product drawing shall take precedence. In the event of conflict between the requirements of this specification and the referenced documents, this specification shall take precedence.

2.1 AMP Specifications:

A. 109-5000: Test Specification, General
Requirements for Test Methods
B. 501-115083: Test Report

2.2 Commercial Standards and Specifications:

A. MIL-STD-202: Test Methods for Electronic and Electrical Component Parts.

3. Requirements

3.1 Design and Construction

Product shall be of the design, construction and physical dimensions specified on the applicable product drawing.

3.2 Materials:

Contact: Copper Alloy, Nickel under PL,
Gold PL finishes.

3.3 Ratings:

A. Temperature Rating; －40 °C to +85 °C

B. Voltage Rating; 20VDC

C. Current Rating; 4A

3.4 Performance Requirements and Test Descriptions:

The product shall be designed to meet the electrical, mechanical and environmental performance requirements specified in Fig. 1. All tests shall be performed in the room temperature, unless otherwise specified.

Test Pad Finsh: Au-finish

3.5 Applicable

This specification applies to two times reflow later.

3.6 Test Requirements and Procedures Summary

Fig. 1

Para.	Test Items	Requirements	Procedures
3.6.1	Examination of Product	Meets requirements of product drawing.	Visual inspection No physical damage
Electrical Requirements			
3.6.2	Termination Resistance (Low Level)	50mΩ Max. at 1.6mm Contact height	Subject matted contact s at set position to 20mV Max open circuit at 10mA.

Fig. 1 (CONT.)

Para.	Test Items	Requirements	Procedures
Mechanical Requirements			
3.6.3	Normal Force	Normal force at 1.6mm Spring height: 0.8N MIN	Stroke the spring top to 1.6 mm product height.
3.6.4	Durability	Normal force at 1.6mm Spring height: 0.8N MIN (Final)	No. of Cycles : 10 cycles. Stroke the spring top to 1.6mm product height.
3.6.5	Solderability	Wet Solder Coverage : 95 % Min.	Solder Temperature: 235 ± 5 °C Immersion Duration:5 ± 0.5 seconds AMP Spec. 109-5203
Environmental Requirements			
3.6.6	Temperature Life	Termination Resistance (Final): 50mΩ Max.	Mated connector at 1.6mm height, 85°C, 500Hrs. Termination Resistance：50mΩ Max.
3.6.7	Humidity	Termination Resistance (Final): 50mΩ Max.	Mated connector at 1.6mm height, 60°C, 95%R.H., 500Hrs. Termination Resistance：50mΩ Max.
3.6.8	Thermal Shock	Termination Resistance (Final): 50mΩ Max.	Mated connector at 1.6mm height, -55°C～85°/30min.,200cycles Termination Resistance：50mΩ Max. EIA 364-32
3.6.9	Temperature Rising	30℃ Max. under loaded rating current. No physical damage.	Measure temperature rising by current 4.2A. EIA 364-70 Method 2
3.6.10	Temperature-Humidity Cycling	Termination Resistance (Final): 50mΩ Max.	Mated connector at 1.6mm height, make 25～65℃, 95% R. H. 24 hours a cycle, repeat 10 cycles. Termination Resistance：50mΩ Max.
3.6.11	Resistance to Soldering Heat	No physical damege shall occur.	Reflow condition shown as Fig.3 Rank B shall apply to the lead free reflow condition.

Fig. 1 (End.)

4. Product Qualification Test Sequence

Fig. 2							
Test Examination	Test Group						
	1	2	3	4	5	6	7
	Test Sequence (a)						
Examination of Product	1,5	1,3	1,6	1,5	1,5	1,3	1,5
Normal Force	3,6		2,7				
Terminal Resistance			3,5	2,4	2,4		2,4
Durability (Repeated Mate/Unmating)	4						
Solderability		2					
Temperature Life			4				
Humidity				3			
Thermal Shock					3		
Temperature Rising						2	
Temperature-Humidity							3
Resistance to Soldering Heat	2						

(a)Numbers indicate sequence in which the tests are performed.

The applicable product descriptions and part numbers are as shown in Appendix. 1.

Product Part No.	Description
2286211-*	High current spring finger

Appendix 1

——　　Resistance to Soldering Heat Line(MAX.)

- - - - -　　Solderability Line(MIN.)

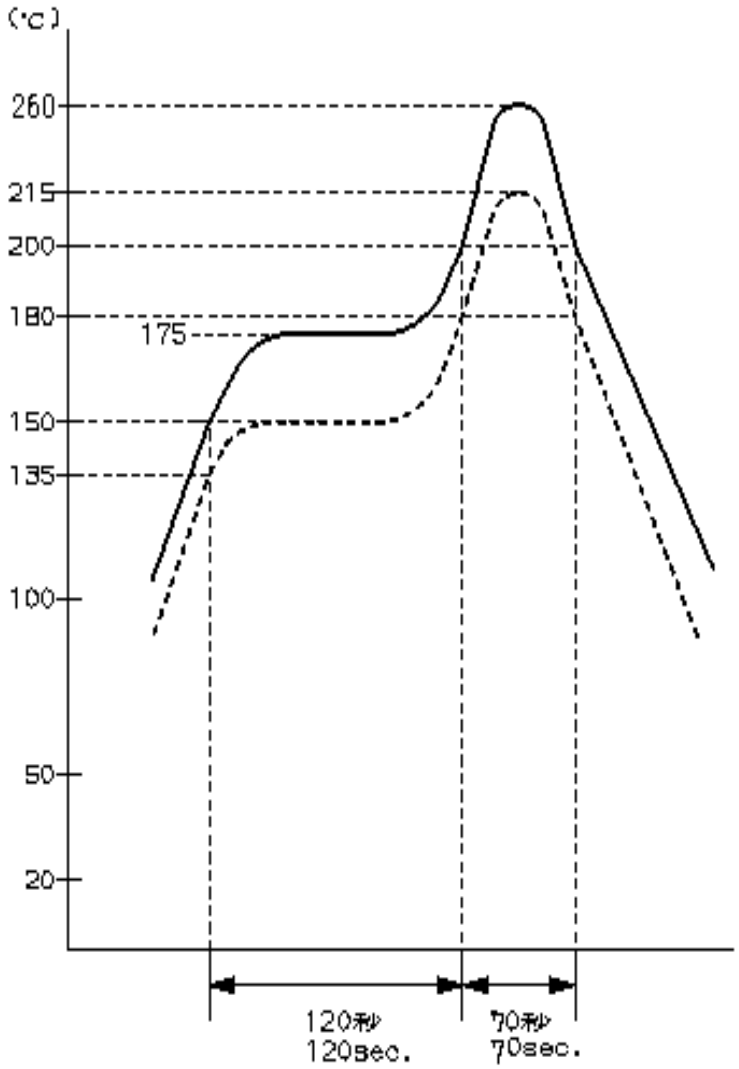

Fig. 3 Reflow Condition