

SPRING FINGER

1. Scope:

1.1 Contents

This specification covers the requirements for product performance test methods and quality assurance provisions of 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 TE Specifications:

- A. 108-115157: Test Specification, General Requirements for Test Methods
- B. 501-115174: Test Report for spring finger

2.2 Commercial Standards and Specifications:

- A. EIA-364 ELECTRONIC INDUSTRIES ALLIANCE

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
- Contact area: Gold plating
- Solder area: Tin plating

3.3 Ratings:

Operating temperature: $-30\text{ }^{\circ}\text{C}$ to $+85\text{ }^{\circ}\text{C}$

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.

3.5 Applicable

This specification applies to two times reflow later.

3.5 Test Requirements and Procedures Summary

Fig. 1			
Para.	Test Items	Requirements	Procedures
3.5.1	Examination of Product	Meets requirements of product drawing.	Visual inspection No physical damage
Electrical			
3.5.2	Contact Resistance (Low Level)	30mΩ Max. (Initial) 50mΩ Max. (Final)	spring height 5.1 mm solder the finger to a printed circuit board, with a test current of 100 mA maximum and 20 mV MAX open circuit EIA-364-68B.
Mechanical Requirements			
3.5.3	Normal Force	Normal force: 50 gf Min. Spring height: 5.1 mm (compressed height)	0.9mm press. Operation speed: 2mm/min. Measure the spring force
3.5.4	Durability	See note	Operation speed: 300cycles/hour Durability cycles:5000 cycles EIA-364-9C
Environmental Requirements			
3.5.5	Solderability	Wet Solder Coverage: 95 % Min.	Solder Temperature: 260 ± 5 °C Immersion Duration:5 ± 0.5 seconds

Note: shall meet visual requirement, show no physical damage, and meet requirement of additional tests as specified in the test sequence in figures 2.

3.6 Product Qualification Test Sequence

Fig. 2		
Test Examination	Test Group	
	A	B
Test Sequence (a)		
Examination of Product	1,7	1,3
Contact Resistance	2,5	
Normal Force	3,6	
Durability	4	
Solderability		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	Test Report
2339640-1	Spring Finger	501-115174

Appendix. 1

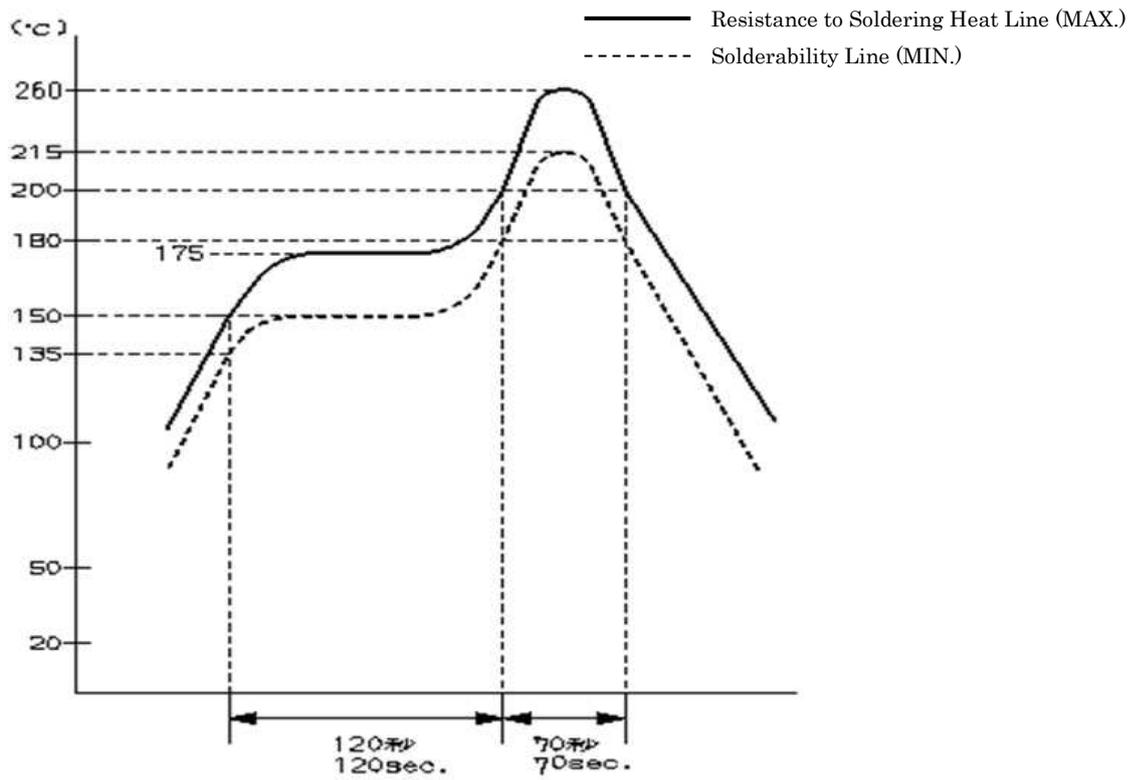


Fig. 3 Reflow Condition