

Validation Report

Product Category	Status	Test Description
Fuse clip	Production	Product Validation

Part Number	Device under Test	Report Number
01250003H		170688

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### 1 Introduction

Alternating manufacturing site development for clip 01250003H.

### 2 Standards

All test according to:

UL 4248-1  
IEC 60127-6

### 3 Test Items

#### 3.1 Contact Resistance

The contact resistance shall be measured five times between the terminals after the fuse clip has been equipped with the minimum gage.

- Insertion of the gage in the fuseclip.
- Measurement of contact resistance between terminals.
- Remove of the gage of the fuseclip.

The average of the values of the contact resistance shall not exceed 5 m $\Omega$ . The value of an individual measurement shall not exceed 10 m $\Omega$ .

#### 3.2 Endurance Test

For the endurance test, shall be used a dummy with appropriate resistance for the specified dissipation loss of the fuseclip. The rated current is determined on the basis of the smallest dummy. The test shall be carried out at room temperature (23°C) over 168 hours.

##### 3.2.1 Contact resistance before 168hrs endurance test

The average of the values of the contact resistance shall not exceed 5 m $\Omega$ . the value of an individual measurement shall not exceed 10 m $\Omega$ .

##### 3.2.2 Contact Resistance after Endurance Test

The average of values of the contact resistance shall not exceed 10 m $\Omega$ . The value of any individual measurement shall not exceed 15 m $\Omega$ .

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### 3.3 Exchangeability

The maximum gage shall be inserted in and withdrawn from the fuseclip, if any, 10 times. There shall not be visible damage loosening of parts. In the most unfavourable position, the minimum gage shall not fall from the fuseclip.

### 3.4 Salt Fog Test

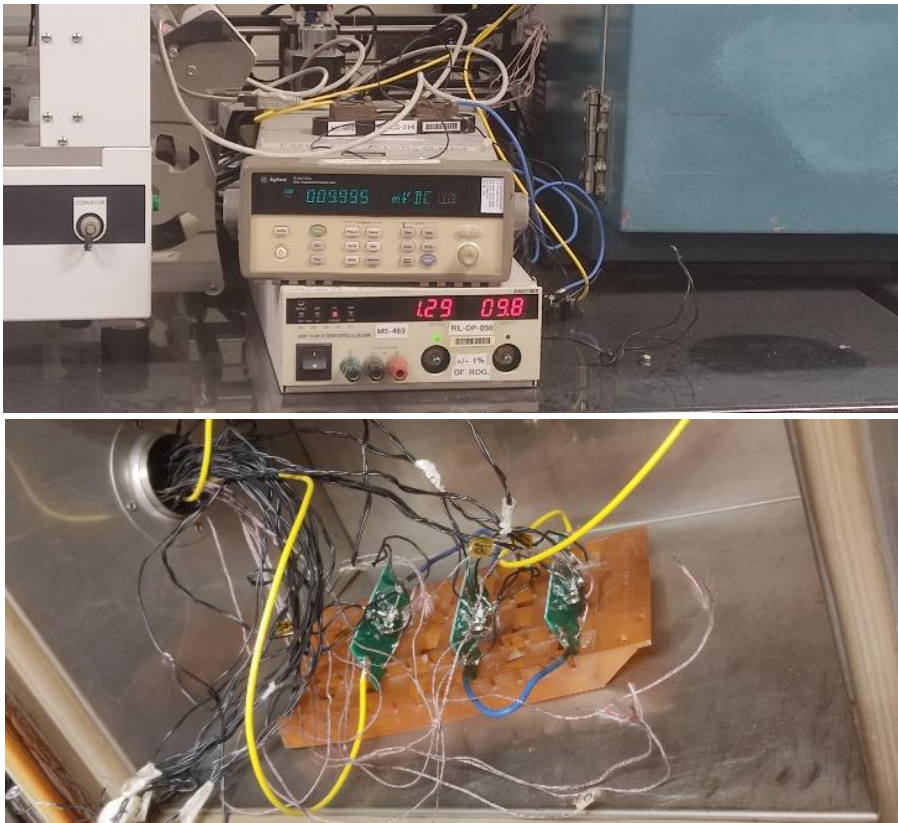
5% NaCl+48hrs, MIL Std 202G, Method 101E, Test condition A

### 3.5 Solderability Test

Perform 8 hours  $\pm$  15 minutes steam age, solder bath temperature:  $245^{\circ}\text{C} \pm 5^{\circ}\text{C}$ . dwell time in the solder bath:  $5+0/-0.5$  seconds, MIL-STD-202, Method 208

## 4 Results

### 4.1 Test Set Up



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4.2.1 Contact Resistance before 168 hrs. Endurance Test.

	1	2	3	Result
Average Value (<5mΩ)	0.133	0.233	0.267	Pass
Max. Value (<10mΩ)	0.200	0.300	0.300	Pass


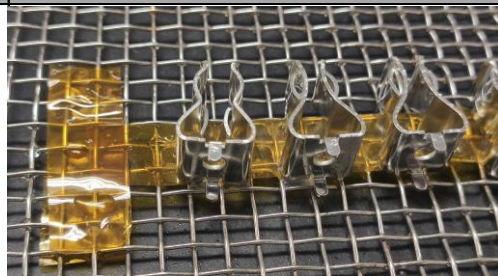
4.2.2 Contact Resistance after 168 hrs. Endurance Test.

	1	2	3	Result
Average Value (<10mΩ)	0.170	0.200	0.267	Pass
Max. Value (<15mΩ)	0.210	0.300	0.300	Pass



4.3 Exchangeability

	1	2	3
Passed	V	V	V

4.4 Salt Fog Test

Clip No.	Images Before Test	5% NaCl+48hrs, Salt Fog	Images After Test
1		<p>PASS</p>	
2			
3			
4			
5			
6			

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4.5 Solderability Test

Clip No.	Steam-age 8hrs	Images Before Test	Solderability	Images After Test	Remarks
1	<Completed>		<Completed>		Pass
2					
3					
4					
5					
6					

5 Conclusion

Based on product validation performed according to UL 4248-1 & IEC 60127-6, product has passed all the test.

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