Wire To Board Serial, Pitch 1.25mm

1. INTRODUCTION

1.1. Purpose

Testing was performed on the **Wire To Board Serial** connector to determine its conformance to the requirements of Product Specification 108-57273 Rev C.

1.2. Scope

This report covers the electrical, mechanical, and environmental performance of **Wire To Board Serial** connector.

1.3. Conclusion

Wire To Board Serial connector meets the electrical, mechanical, and environmental performance requirements of Product Specification 108-57273 Rev C.

1.4. Product Description

Wire To Board Serial connector is designed for printed circuit board applications. The contacts are copper alloy, matte-tin over nickel on entire contact. The housing material is thermoplastic, UL 94V-0.

1.5. Test Samples

The test samples were randomly selected from normal current production lots, and the following part numbers were used for test:

Test Group	Quantity	Description
A, B, C, D, E, F, G, H, I, J	5 ea.	**Wire To Board Serial**

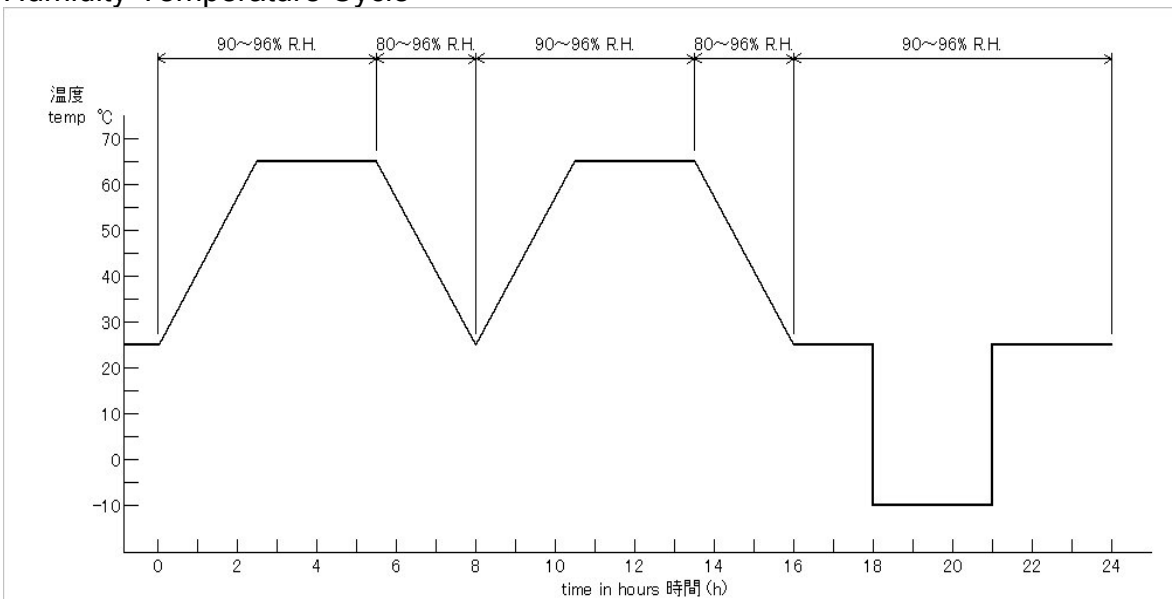
1.6. Qualification Test Sequence

Test Examination	Test Group									
	A	B	C	D	E	F	G	H	I	J
	Test Sequence (a)									
Examination of Product	1, 7	1, 9	1, 6	1, 5	1, 5	1, 5	1, 5	1, 3	1, 3	1, 3
Termination Resistance		2, 8	2, 5	2, 4	2, 4	2, 4	2, 4			
Insulation Resistance	2, 5									
Dielectric withstanding Voltage	3, 6									
Temperature Rising										2
Connector Mating Force		3, 7								
Connector Unmating Force		4, 6								
Durability		5								
Vibration			3							
Physical Shock			4							
Temperature Life				3						
Thermal Shock					3					
Humidity Temperature Cycling	4					3				
Salt Spray							3			
Solderability								2		
Resistance to Reflow Soldering Heat									2	

Figure 1.

NOTE: (a) The numbers indicate sequence in which tests were performed.

Humidity-Temperature Cycle



Temperature reduced 25℃ to －10℃ within 10 minutes. Humidity uncontrolled at a temperature less than 25℃

2. TEST RESULT

GP	TEST	SPEC.	DATA			
			Max.	Min.	Mean	σ
A	Insulation Resistance	1000 MΩ Min. (Initial)	Passed			
	Dielectric withstanding Voltage	1000 VAC 1 minute	Passed			
	Humidity Temperature Cycling	25-65°C, 95% R.H., 10 cycles	No Damaged			
	Insulation Resistance	100 MΩ Min. (Finial)	Passed			
	Dielectric withstanding Voltage	500 VAC 1Minute	Passed			
	Appearance	No Damaged	No Damaged			
B	Termination Resistance	20 mΩ Max.	4.5	3.7	4.0	0.5
	Connector Mating Force	1 kgf/pin Max.	0.64	0.44	0.55	0.06
	Connector Unmating Force	0.1 kgf/pin Min.	0.6	0.35	0.49	0.07
	Durability	25 cycles	No Damaged			
	Connector Mating Force	1 kgf/pin Max.	0.49	0.4	0.45	0.02
	Connector Unmating Force	0.1 kgf/pin Min.	0.44	0.34	0.39	0.03
	Termination Resistance	20 mΩ Max.	5.3	4.1	4.7	0.5
	Appearance	No Damaged	No Damaged			
C	Termination Resistance	20 mΩ Max.	4.2	3.7	4.0	0.5
	Vibration	10-55-10 Hz	Passed			
	Physical Shock	490 m/s2, 50G, 11mSec	Passed			
	Termination Resistance	20 mΩ Max.	8.4	5.5	6.8	0.6
	Appearance	No Damaged	No Damaged			
D	Termination Resistance	20 mΩ Max.	4.8	4.2	4.5	0.4
	Temperature Life	85℃ 250Hr	No Damaged			
	Termination Resistance	20 mΩ Max.	7.6	4.9	5.5	0.5
	Appearance	No Damaged	No Damaged			
E	Termination Resistance	20 mΩ Max.	4.6	3.8	4.3	0.4
	Thermal Shock	-55℃ (30 minutes) +85℃ (30 minutes) Make this a cycle, repeat 5 Cycle	No Damaged			
	Termination Resistance	20 mΩ Max.	6.8	4.6	5.4	0.5
	Appearance	No Damaged	No Damaged			

Figure 2 (cont.)

GP	TEST	SPEC.	DATA			
			Max.	Min.	Mean	σ
F	Termination Resistance	20 mΩMax.	4.2	3.7	3.8	0.4
	Humidity Temperature Cycling	25-65℃, 95%, 10cycle	No Damaged			
	Termination Resistance	20 mΩMax.	7.2	4.6	6.0	0.6
	Appearance	No Damaged	No Damaged			
G	Termination Resistance	20 mΩMax.	4.6	3.6	4.2	0.4
	Salt Spray	35℃, 5%Salt, 48hours	No Damaged			
	Termination Resistance	20 mΩMax.	7.3	5.4	6.6	0.6
	Appearance	No Damaged	No Damaged			
H	Solderbility	95% solder coverage min.	Passed			
	Appearance	No Damaged	No Damaged			
I	Resistance to Reflow Soldering Heat	150 ~ 180°C, 90±30sec 220°C Min., 30±10sec Peak Temp: 260+0/-5°C Duration: 3 cycles	Passed			
	Appearance	No Damaged	No Damaged			
J	Temperature Rising	30℃ Max/ 1A	Passed			
	Appearance	No Damaged	No Damaged			

Figure 2 (end)