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变更履历：

版本号	变更内容	日期	制订	核准
A3	新版发行	2010/8/28	于小芳	Leo_he
A4	增加 34#电流及变更履历	2021/9/13	于小芳	Leo_he

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1. SCOPE:

.1.1. CONTENTS

This specification covers the performance, tests and quality requirements for the 0.6 mm pitch wire To board connector series

1.2. QUALIFICATION

When tests are performed on the subject product line, the procedures specified in

CRS **WB0613/WB0614**series specifications shall be used. All inspections shall be performed using the applicable inspection plan and product drawing.

2. APPLICABLE DOCUMENTS:

The following CRS documents form a part of this specification to the extent specified herein. Unless otherwise specified, the latest edition of the document applies.

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.

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

NO	DIMENSIONS	MATERIAL	PLATING&COLOR
1	Housing （WB0613/WB0614）	LCP	BLACK
2	Terminal （WB0613/WB0614）	Phosphor bronze	G/F
3	Cover （WB0614）	Phosphor bronze	TIN

3.3. RATINGS

A. Current Rating: 0.2A DC (Per Pin) AWG #36
0.3A DC (Per Pin) AWG #34

B. Voltage Rating: 30V DC

C. Temperature Range: -40℃ ~ +85℃

D. Applicable Wire: AWG #34 AWG#36

E. Insulation O.D.: § 0.29±0.02mm(AWG#36); § 0.32±0.02mm(AWG#34)

3.4. PERFORMANCE REQUEIREMENT AND TEST DESCRIPTION

The product shall be designed to meet the electrical, mechanical and environmental performance requirements specified in figure

4. TEST REQUIREMENTS AND PROCEDURES SUMMARY

TEST DESCRIPTION		REQUIREMENTS	PROCEDURES
1	Examination of product	Meet requirements of product drawing	Visual, dimensional and functional Per applicable quality inspection plan
Electrical Requirement			
2	Contact Resistance (Low Level)	40mΩ Max Initial 50mΩ Max. After environmental	Mated connector, 20 mV Max. Open circuit at 10 mA Max. Wire length:30mm EIA 364-23
3	Insulation Resistance	100 MΩ Min	Unmated connectors , apply 100V DC between adjacent terminals. EIA 364-21 connectors, apply 100 V DC between adjacent terminals

4	Dielectric withstanding Voltage	No discharge，flashover or breakdown. Current leakage: 2mA Max.	200V AC 1 minute. Test between adjacent circuits and contact. EIA 364-20
	MECHANICAL REQUIREMENT		
5	Vibration	No discontinuities 1 microsecond or long duration.	The electrical load condition shall be 100 mA maximum for a contacts. Subject to a simple harmonic motion having amplitude of 0.76mm (1.52mm maximum total excursion) in frequency between the limits of 10 and 55 Hz. The entire frequency range, from 10 to 55 Hz and return to 10 Hz, shall be traversed in approximately 1 minute. This motion shall be applied for 2 hours in each of three mutually perpendicular directions. (EIA-364-28 Condition I)

6	Physical shock	Appearance :No damage ; No discontinuities 1 microsecond or long duration.	Subject mated connectors to 50 G's (peak value) half-sine shock pulses of 11 milliseconds duration. Three shocks in each direction shall be applied along the three mutually perpendicular axes of the test specimen (18 shocks). The electrical load condition shall be 100mA maximum for all contacts. (EIA-364-27, test condition A)
7	Durability	30 Cycle	Mateing and unmateing samples for 30 cycles at a speed Of 25±3mm/minute (EIA-364-13)
8	Insertion And Removal Force	See table	Measure the force required to mate and unmate the connector. Speed: 25±3mm/minute.Test Method: EIA-364-13,

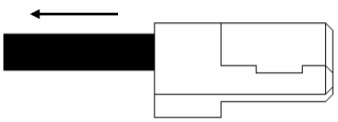
REQUIREMENTS

Number of CKT	At initial		At 30th
	I.F. (max.)kgf	R.F. (min.)kgf	R.F. (min.)kgf
4	1.4	0.35	0.25

9	Contact pin Retention Force	60g min.	A base contact shall be mounted in a wafer and pulled in alignment at a constant speed of 25 mm per minute. The Load to pull the contact out of the wafer shall be measured.

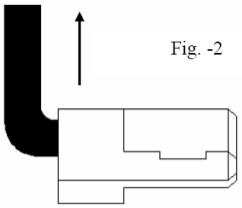
10	Wire Retention Force	Parallel direction: AWG#34 : 0.25kgf min. Perpendicular direction: AWG#34 : 0.10 kgf	Pulling load shall be applied between a correctly terminated contact and the wire at the constant speed of 25mm per minute. The load to pull the wire out of the contact or break the wire shall be measured. (1~5mm/sec.)

Fig. -1



Parallel Direction

Fig. -2



Perpendicular Direction

Note:

If need retention force more, You must use the UV glue.

	ENVIRONMENTAL		
11	Temperature Rise	30℃ Max. Change allowed	Mate connector: measure the temperature rise at rated current until temperature stable. The ambient condition is still air at 25℃ (EIA-364-70 METHOD 1,CONDITION 1)
12	Thermal shock	Appearance: No damage Contact Resistance: 40mΩ Max Initial 50mΩ Max Final	Subject mated samples to 5 cycles 1 cycles: -55℃ 30minutes 85℃ 30minutes (EIA-364-32, test condition I)

13	Salt Spray (Only For Gold Plating)	No evident corrosion. Contact Resistance: 40mΩ Max Initial 50mΩ Max Final Insulation Resistance:100MΩ Min	Subject mated samples. 35℃±2℃, 5+1% Salt condition, 8 hours EIA 364-26
14	Humidity	Contact Resistance: 40mΩ Max Initial 50mΩ Max Final Insulation Resistance:100MΩ Min	Mated connectors shall be subjected to the following condition. Temperature: 40℃ Relative humidity: 90~95% Duration: 96hours (EIA-364-31,Condition A, Method II) II)
15	Cold Resistance	Contact Resistance: 40mΩ Max Initial 50mΩ Max Final Insulation Resistance: 100MΩ Min.	Mated connector. -40℃±2℃, 96 Hours. After test, recondition under standard atmospheric condition for 2 hours.JIS C0020
16	Temperature Life	Contact Resistance: 40mΩ Max Initial 50mΩ Max Final	Subject mated samples to temperature life at 85℃ for 96 hours.EIA 364-17B Condition A

Figure 1（End）

NOTE：Shall meet visual requirements, show no physical damage, and meet requirement of additional tests as specified in the test sequence in Figures 2

3.6. PRODUCT QUALIFICATION AND REQUALIFICATION TEST

Test of Examination	Test Group										
	A	B	C	D	E	F	G	H	I	J	K
	Test Sequence										
1、Examination of Product	1,9	1,5	1,7	1,3	1,3	1,5	1,5	1,3	1,5	1,7	1,5
2、Contact Resistance(Low Level)	2,6	2,4	2,6			2,4	2,4		2,4	2,5	2,4
3、Insulation Resistance	3,7									3,6	
4、Dielectric withstanding Voltage	4,8										
5、Vibration		3									
6、Physical shock						3					
7、Durability			4								
8、Insertion And Removal Force			3,5								
9、Contact Retention Force				2							
10、Wire Retention Force.					2						
11、Temperature Rise							3				
12、Thermal shock								2			
13、Salt Spray									3		
14、Humidity	5										
15、Cold Resistance										4	
16、Temperature Life											3

Figure 2

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

（b）Discontinuities shall not take place in this test group, during tests.

5. INFRARED REFLOW CONDITION