CRS Precision electronic Co., LTD		Control NO	EI019
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Document Name	SPEC-WB125NH-XXXXX SPEC-WB125P-TX SPEC-WB125PH-HXXXX SPEC-WB125SAH-XXXXX SPEC-WB125SH-XXXXX SPEC-WB125TH-HXXXX	Date Revised	2021/10/15
		Revised Edition	A4

变更履历:

版本号	变更内容	日期	制订	核准
AO	新版发行	2019-08-28	Leo_he	Leo_he
A1	版本更新	2021-04-09	张丽丽	Leo_he
A3	版本更新，新增料号 WB125SAH-XXXXX	2021-09-24	于小芳	Leo_he
A4	统一更新编号	2021-10-15	于小芳	Leo_he

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Approval By	Check By	Originator By
SHEN ZHI JIN	**ZHAO DA PING**	**MAJIE**

1. SCOPE

This specification covers performance, tests and quality requirements for WTB 1.25 Pitch Connector.

2. APPLICABLE DOCUMENTS

The following 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.

EIA-364: ELECTRONICS INDUSTRIES ASSOCIATION REQUIREMENTS

3. REQUIREMENT

3.1 Design and Construction

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

3.1.2 All materials conform to R.O.H.S

3.2 Materials and Finish

WB125NH-XXXXX&WB125SH-XXXXX&WB125SAH-XXXXX			
NO	**DIMENSIONS**	**MATERIAL**	**PLATING&COLOR**
1	Housing	LCP	UL94V-0
2	Contact	BRASS	(Gold-plated or tin-plated
3	SHEEL	BRASS	Nickel plated
WB125PH-HXXXX& WB125P-TX			
NO	**DIMENSIONS**	**MATERIAL**	**PLATING&COLOR**
1	Housing	PA66	UL94V-0
3	Contact	copper alloy	Gold-plated or tin-plated

4. RATINGS AND APPLICABLE WIRE

4.2.1) Current Voltage: DC 30 V

4.2.2) Current Rating: 4.5A/Per pin（AWG24#）

3.5A/Per pin（AWG26#）

3.0A/Per pin（AWG28#）

4.2.3) Operation environment:

Temperature Rating: -40℃ to +85℃

Relative humidity : 95% Max.

5. PERFORMANCE

5.1 APPEARANCE REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	Examination of Product	Visual inspection EIA-364-18	Meets requirements of product drawing. No physical damage.

5.2 ELECTRICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
2	Contact Resistance (Low Level)	Terminal:measure by dry circuit, 20 mV max ,10mA. EIA-364-06	25 m Ω Max.
3	Dielectric Withstanding Resistance	AC 250 V for 1 minute. Test between adjacent contacts of unmated connectors. (EIA-364-20)	No creeping discharge flashes or flashes occur. Leakage < 2mA
4	Insulation Resistance	connectors: apply a voltage of500 VDC between adjacent' terminals and between terminals to ground. EIA-364-21	100MΩ MIN.

5.3 MECHANICAL REQUIREMENTS\

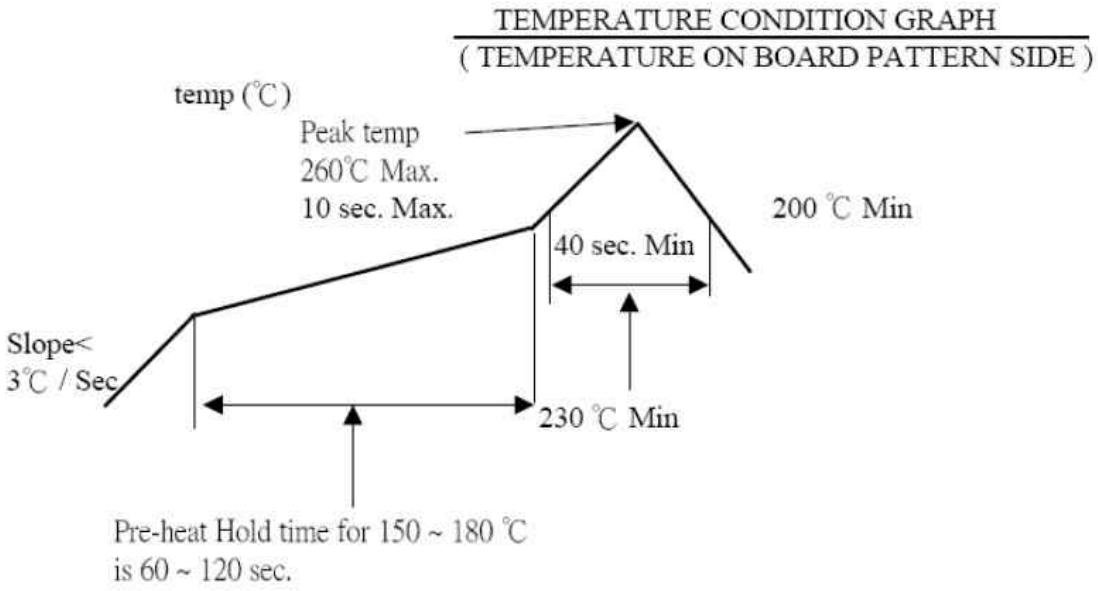
ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
6	Terminal Housing Retention Force (Board Side)	Apply axial pull out force at the speed rate of 25.4 ± 3 mm/minute. On the crimping assembled in the housing. (EIA-364-29)	0.3 kgf Min/PIN
7	Crimping Housing Retention Force (Cable Side)	Apply axial pull out force at the speed rate of 25.4 ± 3 mm/minute. On the crimping assembled in the housing. (EIA-364-29)	0.4kgf Min
8	Mating / Unmating Forces	Operation Speed:	See Item 7

		25.4 ± 3 mm/minute.. Measure the force required to mate/Unmate connector. (EIA-364-13)	
9	Durability	Mate The sample connectors should be mounted in the tester and fully mated and unmated the number of 30 cycles specified at the rate of 25±3 mm/min. (EIA-364-09)	Appearance：No Damage Contact Resistance：25mΩ Max.
10	Vibration	Mate connectors and subject to the following vibration conditions for period of 2 hours in each of 3 mutually perpendicular axes passing DC 1mA during the test.Amplitude:1.5mm P-P frequency:10~55~10 Hz in 1 minute (EIA-364-28 Condition I)	Appearance：No Damage No discontinuities 1 microsecond Or longer duration. Discontinuity :1 μ sec Max. Contact Resistance：25mΩ Max.
11	Shock (Mechanical)	Mate The sample connectors shall and subject to the following shock condition.3 times of shocks shall be applied for each 6 directions along 3 mutually perpendicular axes, passing DC 1mA current during the test.(Total of 18 shocks) Peak value490m/s2 {50G} (EIA-364-27, test condition A)	Appearance：No Damage Discontinuity :1 μ sec Max. Contact Resistance:25mΩ Max.
Environmental Performance			
12	Temperature Rise	Mate connector: measure the Temperature Rise at rated current until temperature stable. The ambient condition is still air at 25℃	Contact Resistance:25mΩ Max.

		EIA 364-70 Method B	
13	Heat Resistance	Mate The sample connectors shall expose to +85 ± 2 ℃ for 96 hours. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room condition for 1to2 hours, after which the specified measurements shall be performed.	Appearance：No Damage 30℃ max change allowed
14	Cold Resistance	Mate The sample connectors shall expose to -40±2℃ for 96 hours. Upon completion of the exposure period, the test specimens shall be onditioned at ambient room condition for 1to2 hours, after which the specified measurements shall be performed.	Appearance：No Damage
15	Humidity	Mated Connector 40℃+/-2℃, 90~95% RH,96hours (EIA-364-31, Condition A Method ll)	Appearance：No Damage Dielectric Strength:No Breakdown. Contact Resistance:25mΩ Max.
16	Thermal Shock	Mate module and subject to follow condition for 5 cycles. 1 cycles: •-40 ℃, 30 minutes •+85 ℃, 30 minutes (EIA-364-32, test condition I)	Appearance：No Damage Contact Resistance： 25mΩ Max.
17	Salt Spray	Subject mated/unmated connectors to 5% salt-solution concentration, 35℃+/-2℃ 24 hours (EIA-364-26)	Shall meet visual requirement, show no physical damage.
18	Solder ability (Board side)	And then into solder bath,	Solder able area shall

		Temperature at 235±5℃,for 4-5sec (EIA-364-52)	have minimum of 95% solder coverage.
19	Resistance to Soldering Heat (Board side)	•Pre Heat：80℃~130℃,40~60sec. •Heat：230℃ Min.,3-6sec. •Peak Temp.：260℃Max,3-6sec. •crest： 2 times (EIA-364-56)	Shall meet visual requirement, show no physical damage.

五.REFLOW TEMPERATURE PROFILE



六. PRODUCT QUALIFICATION AND TEST SEQUENCE

Test of Examination	Test Group											
	A	B	C	D	E	F	G	H	I	J	K	L
	Test Sequence											
1、Visual and dimensional	1,6	1,5	1,7	1,5	1,5	1,5	1,5	1,3	1,5	1,5	1,3	1,3
2、Contact Resistance	2	2,4	2,6	2,4	2,4	2,4	2,4		2,4	2,4		
3、Insulation Resistance	3											
4、Dielectric Withstanding	4											
5、Terminal Housing Retention Force								2				
6、Mating / Unmating Forces			3,4									
7、Durability			5									
8、Vibration		3										
9、Shock Mechanical				3								
10、Temperature Rise					3							
11、Heat Resistance						3						
12、Cold Resistance							3					
13、Humidity	5											
14、Thermal Shock									3			
15、Salt Spray										3		
16、Solder ability											2	
17、Resistance to Soldering Heat												2
Sample Size	5	5	5	5	5	5	5	5	5	5	5	5

七.MATING / UNMATING FORCE

Number of	At initial		At 30th
circuit	I.F. (max.)kgf	R.F. (min.)kgf	R.F. (min.)kgf
2	1.5	0.2	0.15
3			
4			
5	2.0	0.25	0.2
6			
7			
8	3.0	0.3	0.25
9			
10			