CRS Precision electronic Co., LTD		Control NO	EI024
		Issued BY	ED
		Date Issued	2020/6/03
Document Name	SPEC-WB12512/12513H-XXXXX SPEC-WB12523/12525H-XXXXX	Date Revised	2021/10/13
		Revised Edition	A1

变更履历:

版本号	变更内容	日期	制订	核准
A0	新版发行	2020/06/03	MAJIE	Leo-he
A1	新增变更履历	2021/10/13	于小芳	Leo-he

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Approval By	Check By	Originator By
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1. Scope：

This specification covers the performance requirements of the 1.25/0.8 mm pitch WTB connector .

2. Applicable documents

EIA-364: ELECTRONICS INDUSTRIES ASSOCIATION

3. Requirements：

3.1 Design and Construction

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

3.1.2 All materials conform to ROHS and HALOGEN FREE.

3.2 Materials and Finish

3.2.1 Contact: copper alloy.

Finish: (a) Contact Area: Refer to the drawing.

(b) Under plate: Refer to the drawing.

(c) Solder area: Refer to the drawing

3.2.2 Housing: Thermoplastic or Thermoplastic High Temp., UL94V-0

3.2.3 Shell: SUS

Finish: Refer to the drawing.

3.3 Ratings

3.3.1 Working voltage less than 30 volts (per pin)

3.3.2 Voltage：30 Volts AC/DC (per pin)

3.3.3 Power Current： UL 10064 AWG # 24：4.00 Amperes (per pin) PIN 1/2/3/8/9/10

UL 10064 AWG # 26：3.50 Amperes (per pin) PIN 1/2/3/8/9/10

UL 10064AWG # 28：1.80 Amperes (per pin) PIN 1/2/3/8/9/10

UL 10064 AWG # 30：1.00 Amperes (per pin) PIN 1/2/3/8/9/10

3.3.4 Signal Current： UL 10064 AWG # 28：0.5 Amperes (per pin) PIN 4/5/6/7

UL 10064 AWG # 30：0.5 Amperes (per pin) PIN 4/5/6/7

3.3.5 Operating Temperature : -40℃ to +105℃

4. Test Requirements and Procedures Summary：

APPEARANCE REQUIREMENTS			
N0.	**Test Item**	**Test Procedure**	**Requirements**
1	Visual and dimensional inspections	Visual, dimensional and functional per applicable quality inspection plan. EIA 364-18	Meets requirements of product drawing. No physical damage.
ELECTRICAL PERFORMANCE			
N0.	**Test Item**	**Test Procedure**	**Requirements**
2	Contact Resistance	Mate connectors, measure by dry circuit, 20mV Max., 100mA Max. EIA 364 -23	Initial: POWER PINS: PIN 1/2/3/8/9/10 30mΩ MAX SIGNAL PINS: PIN 4/5/6/7 50mΩ MAX ΔR 20 mΩ Maximum
3	Insulation resistance	Test between adjacent contacts of unmated connector assemblies apply a voltage of 500V DC for 1 minute EIA 364-21	100 MΩ Minimum
4	Dielectric Withstanding Voltage	100V AC Min. at sea level for 1 minute. Test between adjacent contacts of unmated connectors. EIA-364-20	No discharge,flashover or breakdown.Current leakage: 1 mA max.
5	Temperature Rise	Mate connector: measure the Temperature Rise at rated current until temperature stable.	30℃ max change allowed

		The ambient condition is still air at 25℃ EIA 364-70 Method B	
6	Durability	The sample should be mounted in the tester and fully mated and unmated the number of cycles specified at the rate of 25.4 ± 3mm/min. EIA-364-09	30 cycles
7	Mating / Unmating Forces	Operation Speed： 25.4 ± 3 mm/minute.. Measure the force required to mate/Unmate connector. (EIA-364-13)	Mating Force: 2.0 kgf Max. Unmating Force: 0.5kgf Min.
8	Contact Retention Force(Board side)	Operation Speed： 25.4 ± 3 mm/minute.. Measure the contact retention force with tester	0.25Kgf Min.
9	Vibration	The electrical load condition shall be 100 mA maximum for all 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.	1 μs Max.

		(EIA-364-28 Condition I)	
10	Mechanical Shock	Accelerate Velocity：490m/s2 （50G） Waveform：Half-sine shock plus Duration：11msec No. of Drops：3 drops each to normal and reversed directions of X,Y and Z axes, totally 18 drops, passing DC 1mA current during the test. { EIA 364-27B }	1. No electrical discontinuity greater than 1μ sec shall occur 2. Shall meet visual requirements, show no physical damage 3. Shall meet requirements of additional tests as specified in TEST SEQUENCE in Section 9
11	Resistance to Reflow Soldering Heat (Board side)	Pre Heat：150℃~180℃, 60~120sec. Heat：230℃ Min., 40sec Min. Peak Temp.：260℃Max, 5sec Max. Reflow number cycle: 2 times (EIA-364-56)	Shall meet visual requirement, show no physical damage.
12	Thermal Shock	Mate module and subject to follow condition for 5 cycles. 1 cycles: -40 +0/-3 ℃, 30 minutes +85 +3/-0 ℃, 30 minutes (EIA-364-32, test condition I)	Shall meet visual requirement, show no physical damage.
13	Humidity	Mated Connector 40℃, 90~95% RH,96hours (EIA-364-31, Condition a,Method ll)	Shall meet visual requirement, show no physical damage.
14	Temperature life	Subject mated connectors to temperature life at 85℃ for 96 hours.	Shall meet visual requirement, show no

		(EIA-364-17, Test condition A)	physical damage.
15	Salt Spray (Only For Gold Plating)	Subject mated/unmated connectors to 5% salt-solution concentration, 35℃ (I) Gold flash for 8 hours (II) Gold plating 5 u" for 96 hours. (EIA-364-26)	Shall meet visual requirement, show no physical damage.
16	Solder ability (Board side)	And then into solder bath, Temperature at 245± 5℃,for 4-5sec (EIA-364-52)	Tin Plating: Solder able area shall have minimum of 95% solder coverage. Gold plating: Solder able area shall have minimum of 75% solder coverage
17	Hand Soldering Temperature Resistance (Board Side)	T≧350℃, 3 sec at least.	Appearance: No damage

5. CONNNECTOR TESTS AND SEQUENCES

Test or Examination		Test Group									
No.	Item	A	B	C	D	E	F	G	H	I	K
		Test Sequence									
1	Examination of Product			1、7	1、6	1、4		1、3			
2	Contact Resistance		1、5	2、10	2、9	2、5	1、4				
3	Insulation Resistance			3、9	3、8						
4	Dielectric Withstanding Voltage			4、8	4、7						
5	Temperature Rise	1									
6	Durability		3								
7	Mating / Unmating Forces		2、4								
8	Contact Retention Force(Board side)								1		
9	Vibration						2				
10	Mechanical Shock						3				
11	Resistance to Reflow Soldering Heat (Board side)							2			
12	Thermal Shock			5							

13	Humidity			6							
14	Temperature life				5						
15	Salt Spray (Only For Gold Plating)					3					
16	Solder ability (Board side)							1			
Number of Test Samples (Minimum)		2	4	4	4	4	2	2	2		

Note:

1. Samples shall be prepare in accordance with applicable manufacture's instructions and shall be selected at random from current production.
2. The numbers in the table indicate sequence in which tests are performed.
3. All the tests shall be performed in the sequence, indicated by the number in the columns.