瀚荃股份有限公司
CviLux Corporation

CVILUX
2020.07.31
ISSUED

ENGINEERING DEPT.		PRODUCT SPECIFICATION	SPEC.NO.: SPCI132B
REVISIONS	ECNT120150	For CI09 Series Connector System	PAGE: 1/4

1. SCOPE:
This specification contains the test requirement of subject connectors when tested under the condition and procedure with terminals crimped on the specified maximum size wire

2. APPLICABLE STANDARDS:

MIL - STD - 202	Methods for test of connectors for electronic equipment
EIA - 364	Test methods for electrical connectors
SS-00254	Test methods for electronic components ,LEAD-FREE soldering Part design standards

3. APPLICABLE SERIES NO: CI09 Series

4. SHAPE, CONSTRUCTION AND DIMENSIONS
See attached drawings

5. MATERIALS
See attached drawings

6. ACCOMMODATED P.C.BOARD
6.1 Thickness: 1.6 mm (.063″)
6.2 P.C. Board Layout: See attached drawings

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REVIEWED : Eisley APPROVED : Sun VERIFIED : Michelle .

7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Rated current and voltage		3A 100V AC/DC (r.m.s.)(AWG#22)
7.2	Contact resistance	Dry circuit of DC 20 mV max. , 100 mA max.	Less than 10 mΩ
7.3	Dielectric strength	When applied AC 800 V 1 minute between adjacent terminal	No change
7.4	Insulation resistance	When applied DC 500 V between adjacent terminal or ground	More than 1000 MΩ

8. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
8.1	Wire size	Specified wire size	Accepts AWG#22~#26
8.2	Terminal crimp Tensile strength	When crimped AWG#22 size wire When crimped AWG#24 size wire When crimped AWG#26 size wire	More than 5.0 Kgf More than 3.0 Kgf More than 2.0 Kgf
8.3	Contact retaining force in insulator	Retention speed 25± 3 mm per minute from housing	More than 1.0 Kgf
8.4	Durability	Connector shall be subjected to **30** cycles of insertion and withdrawal	Contact resistance: Less than twice of initial
8.5	Pin retention force	Push pin from insulator base at speed 25± 3 mm per minute	More than 1.0 Kgf
8.6	Locking force	While withdrawing plug & receptacle without terminal at speed 25±3 mm per minute	2P: More than 2 Kgf 3~10P More than 3 Kgf

9. ENVIRONMENTAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
9.1	Temperature rise	Then carried the rated current	30°C max.
9.2	Vibration	1.5 mm 10-55-10 HZ / minute each 2 hours for X , Y and Z directions	Appearance: No damage Discontinuity: 1 micro second max. Contact resistance: Less than 20 mΩ
9.3	Solder ability	**Lead-Free Process:** Soldering time: 3 ± 0.5 second Soldering pot: 245 ± 5°C	Minimum: 90% of immersed area
9.4	Resistance to soldering heat	**Lead-Free Process** Soldering time: 5 ± 0.5 second Soldering pot: 260 ± 5°C	No damage
9.5	Heat aging	85 ± 2°C , 96 hours	No damage Contact resistance: Less than 20 mΩ
9.6	Humidity	40 ± 2°C , 90-95% RH , 96 hours measurement must be taken within 30 min. after tested	Appearance: No damage Contact resistance: Less than 20 mΩ Dielectric strength: To pass para 7-3 Insulation resistance: More than 1000 MΩ
9.7	Temperature cycling	One cycle consists of : (1)-55 $^{+0}_{-3}$ °C , 30 min. (2)Room temp. 10-15 min. (3) 85 $^{+3}_{-0}$ °C , 30 min. (4)Room temp. 10-15 min.	Appearance: No damage Contact resistance: Less than 20 mΩ Dielectric strength: To pass para 7-3 Insulation resistance: More than 1000 MΩ

	ITEM	TEST CONDITION	REQUIREMENT
9.8	Salt spray	Temperature: 35 ± 3 °C Solution: 5 ± 1% Spray time: 48 ± 4 hours (Stamping before plated) Spray time: 24 ± 4 hours (Stamping after plated) Mate connectors and expose to the following salt mist conditions. Upon completion of the exposure period, salt deposits shall be removed by a gentle wash or dip in running water and dried naturally, after which the specified measurements shall be performed. The specimens shall be suspended from the top using waxed twine, string or nylon thread. The test only define the plating area, without plating area (as copper cross section) will not be defined. (EIA 364-26B / MIL-STD-202 Method 101)	Appearance: No damage Contact resistance: Less than 20 mΩ

10. AMBIENT TEMPERATURE RANGE: -25 to + 85 °C

11.Mating and Unmating Force:

PIN No.	Mating(kgf max.)	Unmating(kfg min.)	30th Unmating(kfg min.)
2	1.50	0.05	0.05
3	1.80	0.10	0.10
4	2.00	0.15	0.15
5	2.30	0.20	0.20
6	2.50	0.25	0.25
7	2.80	0.30	0.30
8	3.00	0.35	0.35
9	3.30	0.40	0.40
10	3.50	0.45	0.45