瀚荃股份有限公司
CviLux Corporation

ENGINEERING DEPT.		PRODUCT SPECIFICATION For CI61 Series of 7.5-5.0mm Pitch Wire to Board Connector	SPEC.NO.: SPCI015G
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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

3. APPLICABLE SERIES NO.: CI61 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

CVILUX CORP
2021.01.07
ISSUED

REVIEWED : Eisley APPROVED : Sun VERIFIED : Eric .

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7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Rated current and voltage		7A 250V AC (r.m.s.)
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 1500 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#18~#22
8.2	Terminal crimp Tensile strength	When crimped AWG#18 size wire When crimped AWG#20 size wire When crimped AWG#22 size wire	More than 9.0 Kgf More than 7.0 Kgf More than 5.0 Kgf
8.3	Terminal insertion force	Insertion speed 25± 3 mm per minute into housing	Less than 600 gram
8.4	Contact retaining force in insulator	Retention speed 25± 3 mm per minute from housing	More than 3.0 Kgf
8.5	Single contact insertion force	Measure force to insertion using 1.56 mm round pin at speed 25± 3 mm per minute	1.8 Kgf max.
8.6	Single contact withdrawal force	Measure force to withdrawal using 1.56 mm round pin at speed 25± 3 mm per minute	400 gram min.
8.7	Durability	Connector shall be subjected to 100 cycles of insertion and withdrawal	Contact resistance: Less than twice of initial
8.8	Pin retention force	Push pin from insulator base at speed 25± 3 mm per minute	More than 1.5 Kgf

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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.
9.3	Solder ability	**Tin-Lead Process:** Soldering time: 5 ± 0.5 second Soldering pot: 230 ± 5°C	Minimum: 90% of immersed area
9.4	Resistance to soldering heat	**Tin-Lead Process:** Soldering time: 5 ± 0.5 second Soldering pot: 240 ± 5°C	No damage
9.5	Heat aging	85 ± 2°C , 96 hours	No damage
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 twice of initial Dielectric strength: To pass para 7-3
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 twice of initial

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	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 twice of initial

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

11. MATING FORCE AND UNMATING FORCE:

Unit: Kgf

No. of Circuits	Mating Force (Initial max.)	Unmating Force (Initial min.)
2	5.6	0.8
3	7.5	1.0
4	8.5	1.1
5	9.2	1.3
6	10.5	1.6