瀚荃股份有限公司
CviLux Corporation

ENGINEERING DEPT.		PRODUCT SPECIFICATION	SPEC.NO.:	SPCI136B
REVISIONS	ECNT117188	For CI40 Series Connector System	PAGE:	1/5

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: CI40 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
2017.11.23
ISSUED

REVIEWED : Eisley APPROVED : Clark VERIFIED : Yushu .

7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Rated current and voltage		1.0A (AWG#26) 150V AC/DC (r.m.s.)
7.2	Contact resistance	Dry circuit of DC 20 mV max. , 10 mA.	30 mΩ MAX
7.3	Dielectric strength	When applied AC 500 V 1 minute between adjacent terminal or ground	No change
7.4	Insulation resistance	When applied DC 500 V between adjacent terminal or ground	100 MΩ MIN

8. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
8.1	Wire size	Specified wire size	Accepts AWG#26~#30
8.2	Terminal crimp Tensile strength	When crimped AWG#26 size wire When crimped AWG#28 size wire When crimped AWG#30 size wire	2.0 Kgf (20N) 1.0 Kgf (10N) 0.5 Kgf (5N)
8.3	Durability	Connector shall be subjected to 20 cycles of insertion and withdrawal	Contact resistance: 60 mΩ MAX
8.4	Pin retention force	Push pin from insulator base at speed 25± 3 mm per minute	0.4 Kgf (4N) MIN
8.5	Terminal retaining force in insulator	Retention speed 25± 3 mm per minute from Wire to Wire Housing	0.7 Kgf (7N) MIN

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: 60 mΩ MAX
9.3	Solder ability	Lead-Free Process: Soldering time: 2 ± 0.5 second Soldering pot: 245 ± 5°C	Minimum: 95% of immersed area

9. ENVIRONMENTAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
9.4	Resistance to soldering heat	Lead-Free Process for SMT Type: Refer Reflow temperature profile(12.1)	No damage
9.5	Heat aging	85 ± 2°C , 96 hours	No damage Contact resistance: 60 mΩ MAX
9.6	Cold aging	-40 ± 2°C , 96 hours	No damage Contact resistance: 60 mΩ MAX
9.7	Humidity	40 ± 2°C , 90-95% RH , 96 hours measurement must be taken within 30 min. after tested	Appearance: No damage Contact resistance: 60 mΩ MAX Dielectric strength: No change Insulation resistance: 30 MΩ MIN
9.8	Temperature cycling	Five cycle consists of : (1)-25 ± 3 °C , 30 min. (2)Room temp. 10-15 min. (3) 85 ± 2 °C , 30 min. (4)Room temp. 10-15 min.	Appearance: No damage Contact resistance: 60 mΩ MAX
9.9	Salt spray	Temperature: 35 ± 2°C Solution: 5 ± 1% Spray time: 24 ± 4 hours Measurement must be taken after water rinse	Appearance: No damage Contact resistance: 60 mΩ MAX

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

11.Mating and Unmating Force:

PIN No.	Mating(kgf max.)		Unmating(kgf min.)	
	1st	10th	1st	10th
2	1.23	1.14	0.25	0.20
3	1.46	1.33	0.34	0.29
4	1.70	1.52	0.49	0.39
5	1.83	1.72	0.60	0.44
6	2.07	1.92	0.70	0.60
7	2.29	2.08	0.79	0.65
8	2.51	2.22	0.89	0.70
9	2.74	2.32	0.99	0.75
10	2.97	2.46	1.10	0.80
11	3.22	2.62	1.20	0.85
12	3.45	2.84	1.29	0.89
13	3.68	3.06	1.39	0.94
14	3.91	3.41	1.49	0.99
15	4.12	3.58	1.60	1.05

12. Recommended IR Reflow Temperature Profile:
12.1 Using Lead-Free Solder Paste