瀚荃股份有限公司
CviLux Corporation

ENGINEERING DEPT.		PRODUCT SPECIFICATION	SPEC.NO.: SPCI1151
REVISIONS		For CIL3 Connectors	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
MIL - STD - 1344	Test methods for electrical connectors
J-STD-020	Resistance to soldering Temperature for through hole Mounted Devices
SS-00254	Test methods for electronic components ,LEAD-FREE soldering Part design standards

3. APPLICABLE SERIES NO.: CIL3 Series

4. SHAPE, CONSTRUCTION AND DIMENSIONS
See attached drawings

5. MATERIALS
See attached drawings

6. ACCOMMODATED P.C.BOARD
6.1 P.C. Board Layout: See attached drawings

CVILUX CORP.
2013.08.30
ISSUED

REVIEWED : David APPROVED : David VERIFIED : Clark .

7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Rated current and voltage		1.0A 150V AC (r.m.s)
7.2	Contact resistance	Dry circuit of DC 20 mV max. , 10 mA max.	Less than 20 mΩ
7.3	Dielectric strength	When applied AC 1000 V (rms) 1 minute between adjacent terminal	No change
7.4	Insulation resistance	When applied DC 500 V between adjacent terminal or ground	More than 100 MΩ

8. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT	
8.1	Mating and Unmating Force Test	Mating and Unmatung connectors at the speed rate of 25± 3 mm per minute	At Intial	I.F(MAX): 2 kgf
				W.F(Min): 0.2 kgf
			At 30th	W.F(Min): 0.2kgf
8.2	Pin retention force	Push Pin for insulator base at speed 25± 3 mm per minute	More than 0.3 kgf	
8.3	Fitting Nail/Housing Retention Force	Push Pin for insulator base at speed 25± 3 mm per minute	More than 0.2 kgf	
8.4	Durability	Connector shall be subjected to 30 cycles of insertion and withdrawal	Contact resistance: Less than twice of initial	

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	Heat aging	85± 2°C, 96 hours	Appearance: No damage Contact resistance: Less than twice of initial
9.4	Humidity	40± 2°C, 90-95% RH, 96 hours measurement must be taken within 5 hour after tested	Appearance: No damage Contact resistance: Less than twice of initial Dielectric strength: To pass para 7-3
9.5	Temperature cycling	One cycle consists of : (1) -55 $^{+0}_{-3}$ °C , 30 min. (2) Room temp. 5 min. (3) 85 $^{+3}_{-0}$ °C , 30 min. (4) Room temp. 5 min. Total cycles : 5 cycles	Appearance: No damage Contact resistance: Less than twice of initial
9.6	Salt spray	Temperature: 35+1/-2°C Solution: 5% Spray time: 48 hours Measurement must be taken after water rinse	Appearance: No damage Contact resistance: Less than twice of initial
9.7	Solder ability	Lead-Free Process: Soldering time: 3 ± 0.5 second Soldering pot: 245 ± 5°C	Appearance: No damage Minimum: 95% of immersed area
9.8	Resistance to soldering heat	Lead-Free Process for SMT Type: Refer Reflow temperature profile	No damage

10. AMBIENT TEMPERATURE RANGE: -40 to + 105°C
11. Storage Temperature Range: -10 to + 50°C

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