瀚荃股份有限公司
CviLux Corporation

ENGINEERING	PRODUCT SPECIFICATION	SPEC.NO.: SPCI104A
DEPT.	For CI45 SMT H Type 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
   MIL - STD - 1344 Test methods for electrical connectors

3. APPLICABLE SERIES NO: CI45 SMT H Type Series

4. SHAPE, CONSTRUCTION AND DIMENSIONS
   See attached drawings

5. MATERIALS
   See attached drawings

6. ACCOMMODATED P.C.BOARD
   6.1 Thickness: 0.6 mm (.024″) ~ 1.2 mm (.047″),1.6mm(.063”)
   6.2 P.C. Board Layout: See attached drawings

CVILUX CORP
2012.07.12
ISSUED

REVIEWED : David APPROVED : Eisley VERIFIED : Hank .

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7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Rated current and voltage		1.0A AC (r.m.s.)/DC (AWG#28) 125V AC (r.m.s.)/DC
7.2	Contact resistance	Dry circuit of DC 20 mV max. , 100 mA max.(JIS C5402 5.4)	Less than 20 mΩ
7.3	Dielectric strength	When applied AC 500 V 1 minute between adjacent terminal(JIS C5402 5.2/MIL-STD 202 method 302 Cond. B)	No change
7.4	Insulation resistance	When applied DC 500 V between adjacent terminal or ground (JIS C5402 5.2/MIL-STD 202 method 301)	More than 100 MΩ

8. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
8.1	Wire size	Specified wire size	Accepts AWG#28~#32
8.2	Terminal crimp Tensile strength	When crimped AWG#28 size wire When crimped AWG#30 size wire When crimped AWG#32 size wire	More than 1.3 Kgf More than 0.8 Kgf More than 0.6 Kgf
8.3	Terminal retaining force in insulator	Retention speed 25± 3 mm per minute from housing	More than 0.60 Kgf
8.4	Mating & Un-mating force	Insert and withdraw connector at speed of 25 ± 3 mm per minute	Mating: Less than 7.0 Kgf Un-mating More than 0.7 Kgf At 30 th More than 0.7 Kgf
8.5	Durability	Connector shall be subjected to 30 cycles of insertion and withdrawal (repeatedly by the rate of 10 cycles per minute)	Contact resistance: Less than twice of initial
8.6	Pin retention force	Push pin from insulator base at speed 25± 3 mm per minute	More than 0.30 Kgf
8.7	Locking force	While withdrawing plug & receptacle without terminal at speed 25±3 mm per minute	More than 2 Kgf

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9. ENVIRONMENTAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
9.1	Temperature rise	Then carried the rated current (UL 498)	30°C max.
9.2	Vibration	1.5 mm 10-55-10 HZ / minute each 2 hours for X , Y and Z directions (MIL-STD-202,method 201A)	Appearance: No damage Discontinuity: 1 micro second max.
9.3	Solder ability	Lead-Free Process for SMT Type: Soldering time: 3 ± 0.5 second Soldering pot: 245 ± 5°C	Minimum: 90% of immersed area
9.4	Resistance to soldering heat	Refer Reflow temperature profile	No damage
9.5	Heat aging	85 ± 2°C , 96 hours(JIS C0021/MIL-STD-202,method 108A,condition A)	No damage Contact resistance: Less than twice of initial
9.6	Humidity	60 ± 2°C , 90-95% RH , 96 hours measurement must be taken within 30 min. after tested (JIS C0020/MIL-STD-202, method 103 B, condition B)	Appearance: No damage Contact resistance: Less than twice of initial Dielectric strength: To pass Para 7-3
9.7	Temperature cycling	Five cycle consists of :(JIS C0025) (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
9.8	Salt spray	Temperature: 35 ± 2°C Solution: 5 ± 1% Spray time: 48 ± 4 hours Measurement must be taken after water rinse(JIS C5028/MIL-STD-202, method 101 D, condition B)	Appearance: No damage Contact resistance: Less than twice of initial

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

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11. Recommended IR Reflow Temperature Profile:
11.1 Using Lead-Free Solder Paste