瀚荃股份有限公司
CviLux Corporation

ENGINEERING DEPT.		PRODUCT SPECIFICATION	SPEC.NO.: SPCP099A
REVISIONS	ECNT120185	CPB2 Series Connectors	PAGE: 1/3

1. SCOPE:
   This specification contains the test requirement of subject connectors when tested under the condition and below standards base on CviLux test procedure

2. APPLICABLE STANDARDS:

MIL - STD - 202	Methods for test of connectors for electronic equipment
EIA – 364	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.: **CPB2 Series**

4. SHAPE, CONSTRUCTION AND DIMENSIONS

   See attached drawings

5. MATERIALS

   See attached drawings

6. ACCOMMODATED P.C.BOARD

   0.8 mm (.031″) ~ 1.6 mm (.063″)

REVIEWED : Eisley APPROVED : Clark VERIFIED : Clark .

7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Rated current and voltage		3A (AWG#22) 100V AC/DC (r.m.s.)
7.2	Contact resistance	Dry circuit of DC 20mV max. , 100mA max., Wire resistance shell be removed from the measured value.	Less than 10 mΩ
7.3	Dielectric strength	When applied AC 1000 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 Insulation O.D: 1.4~1.7mm
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	Terminal insertion force	Insertion speed 25± 3 mm per minute into housing	Less than 1.0 Kgf
8.4	Terminal retaining force in insulator	Retention speed 25±3 mm per minute from housing	More than 1.5 Kgf
8.5	Single contact insertion force	Speed 25± 3 mm per minute	Less than 0.8 Kgf
8.6	Single contact withdrawal force	Speed 25± 3 mm per minute	More than 0.1 Kgf
8.7	Durability	Connector shall be subjected to 30 cycles of insertion and withdrawal	Contact resistance: Less than twice of initial
8.8	Locking force	While with drawing plug & receptacle without terminal at speed 25± 3 mm per minute	More than 3.0 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.
9.3	Heat aging	85± 2°C, 96 hours	No damage
9.4	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
9.5	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. Total cycle: 5 cycle	Appearance: No damage Contact resistance: Less than twice of initial
9.6	Salt spray	Temperature: 35± 3°C Solution: 5± 1% Spray time: 48± 4 hours Measurement must be taken after water rinse	Appearance: No damage Contact resistance: Less than twice of initial Dielectric strength: To pass para 7-3
9.7	Water resistant	According to IEC 60529 IPX7 Submerge mated connector under water 1 meter minimum for 30 minutes minimum duration.	No Water penetration into mated connector

10. AMBIENT TEMPERATURE RANGE: -55 to + 85°C