

ENGINEERING DEPT.		PRODUCT SPECIFICATION	SPEC.NO.:	SPCB007E
REVISIONS	ECN10052	For CBC1 Series Connector	PAGE:	1/5

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

MIL - STD - 1344 Test methods for electrical connectors

J-STD-020 Resistance to soldering Temperature for through hole Mounted Devices Test methods for electronic components ,LEAD-FREE soldering Part design SS-00254

standards

3. APPLICABLE SERIES No. : CBC1 Series

4. SHAPE, CONSTRUCTION AND DIMENSIONS

See attached drawings

5. MATERIALS

See attached drawings

6. ACCOMMODATED P.C.BOARD

6.1 Thickness: $0.8 \text{ mm} (.031'') \sim 1.6 \text{ mm} (.063'')$

6.2 P.C. Board Layout: See attached drawings



REVIEWED: David APPROVED: Eisley VERIFIED: Sandy .



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7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Rated current and voltage		1.5A 250V AC (r.m.s.)
7.2	Contact resistance	Dry circuit of DC 20 mV max. 100 mA max.	Less than $20 \text{ m}\Omega$
7.3	Dielectric strength	When applied AC 600 V 1 minute between adjacent terminal	No change
7.4	Insulation resistance	When applied DC 500 V between adjacent terminal or ground	More than $1000 \text{ M}\Omega$

8. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
8.1	Contact retaining force in insulator	Retention speed 25± 3 mm per minute form housing	More than 200 gram
8.2	Single contact insertion force	Measure force to insertion using Ø0.46 mm test pin at speed 25± 3 mm per minute	100 gram max.
8.3	Single contact withdrawal force	Measure force to withdrawal using Ø0.46 mm test pin at speed 25± 3 mm per minute	15 gram min.
8.4	Durability	Connector shall be subjected to 100 cycles of insertion and withdrawal	Contact resistance: Less than twice of initial

9. ENVIRONMENTAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
9.1	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.



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	ITEM	TEST CONDITION	REQUIREMENT
9.2	Solder ability	DIP Type Tin-Lead Process:	Minimum:
		Soldering time: 5 ± 0.5 second	90% of immersed area
		Soldering pot: 230 ± 5°C	
		DIP Type Lead-Free Process:	
		Soldering time: 3 ± 0.5 second	
		Soldering pot: 245 ± 5°C	
		SMT Type Tin-Lead Process:	
		Soldering time: 5 ± 0.5 second	
		Soldering pot: 230 ± 5°C	
		SMT Type Lead-Free Process:	
		Soldering time: 3 ± 0.5 second	
		Soldering pot: 245 ± 5°C	
9.3	Resistance to soldering	DIP Type Tin-Lead Process:	No damage
	heat	Soldering time: 5 ± 0.5 second	No damage
		Soldering pot: 240 ± 5°C	
		DIP Type Lead-Free Process	
		(JESD22-B106C):	
		Soldering time: 5 ± 0.5 second	
		Soldering pot: 260 ± 5°C	
		SMT Type Tin-Lead Process:	
		Refer Reflow temperature profile(11.1)	
		Soldering time: 10 second Max.	
		Soldering pot: 230 ± 5 °C	
		SMT Type Lead-Free Process:	
		Soldering time: 20 second Max.	
		Soldering pot: 250~260°C	
		Refer Reflow temperature profile(11.2)	
9.4	Heat aging	125± 2°C, 96 hours	No damage



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	ITEM	TEST CONDITION	REQUIREMENT
9.5	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
9.6	Temperature cycling	One cycle consists of: (1) -55 +0 °C, 30 min. (2)Room temp. 10-15 min. (3) 85 -0 °C, 30 min. (4)Room temp. 10-15 min.	Appearance: No damage Contact resistance: Less than twice of initial
9.7	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

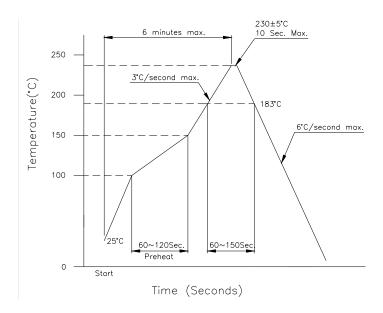
10. AMBIENT TEMPERATURE RANGE: -55 \sim +125 $^{\circ}$ C



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11. Recommended IR Reflow Temperature Profile:

11.1 Using Typical Solder Paste



11.2 Using Lead-Free Solder Paste

