

<b>ENGINEERING</b>  <b>DEPT.</b>	<b>PRODUCT SPECIFICATION</b>  <b>For CBC3 Series SMT Female Header</b>	<b>SPEC.NO.: SPCB008C</b>  <b>PAGE: 1/4</b>
--	--	---

1. SCOPE:

This specification contains the test requirement of subject pin headers 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
JIS - C - 5402	Methods for test of connectors for electronic equipment
UL 94	Test for flammability of plastic materials for parts in devices and appliance
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.: CBC3 SERIES

4. SHAPE, CONSTRUCTION AND DIMENSIONS

See attached drawings

5. MATERIALS

- 5.1 Insulation: Nylon 6T with 30% GF. UL 94V-0, Color Black
- 5.2 Contact: Phosphor Bronze

6. ACCOMMODATED P.C.BOARD

(P.C. Board on which the Pin Header are installed), 1.6 mm (.063")



REVIEWED : Alex APPROVED : David VERIFIED : Jim .

<b>ENGINEERING DEPT.</b>	<b>PRODUCT SPECIFICATION For CBC3 Series SMT Female Header</b>	<b>SPEC.NO.: SPCB008C</b>
		<b>PAGE: 2/4</b>

**7. ELECTRICAL PERFORMANCE:**

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Rated current and voltage		Current: 0.5A Per Contact Voltage: 200VAC;300DC (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 500 V 1minute 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	Contact retaining force in insulator	Push pin from insulator base at speed 25± 3 mm per minute	More than 0.5 Kgf
8.2	Single contact withdrawal force	Measure force to withdrawal using 0.3 mm square pin at speed 25± 3 mm per minute	More than 0.03 Kgf
8.3	Mating Force	Speed 25± 3 mm per minute	0.35kgf x (no. of Contacts) max.
8.4	Unmating Force	Speed 25± 3 mm per minute	0.05kgf x (no. of Contacts) min
8.5	Durability	Connector shall be subjected to 30 cycles of insertion and withdrawal	Contact resistance: Less than twice of initial

ENGINEERING DEPT.	PRODUCT SPECIFICATION For CBC3 Series SMT Female Header	SPEC.NO.: SPCB008C
		PAGE: 3/4

9. ENVIRONMENTAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
9.1	Solder ability	<b>Tin-Lead Process:</b> Soldering time: $5 \pm 0.5$ second Soldering pot: $230 \pm 5^{\circ}\text{C}$ <b>Lead-Free Process:</b> Soldering time: $3 \pm 0.5$ second Soldering pot: $245 \pm 5^{\circ}\text{C}$	Minimum: 90% of immersed area
9.2	Resistance to soldering heat	<b>SMT Type Tin-Lead Process:</b> Refer Reflow temperature profile(11.1) Soldering time: 10 second Max. Soldering pot: $230 \pm 5^{\circ}\text{C}$ <b>SMT Type Lead-Free Process:</b> Soldering time: 20 second Max. Soldering pot: $250\sim 260^{\circ}\text{C}$ Refer Reflow temperature profile(11.2)	No damage
9.3	Heat aging	<b><math>105 \pm 2^{\circ}\text{C}</math>, 96 hours</b>	No damage
9.4	Humidity	$40 \pm 2^{\circ}\text{C}$ , 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
9.5	Temperature cycling	One cycle consists of : (1)- $55 \pm 3^{\circ}\text{C}$ , 30 min. (2)Room <sub>3</sub> temp. 10-15 min. (3) $85 \pm 0^{\circ}\text{C}$ , 30 min. (4)Room temp. 10-15 min.	Appearance: No damage Contact resistance: Less than twice of initial
9.6	Salt spray	Temperature: $35 \pm 3^{\circ}\text{C}$ Solution: $5 \pm 1\%$ Spray time: $48 \pm 4$ hours Measurement must be taken after water rinse	Appearance: No damage Contact resistance: Less than twice of initial

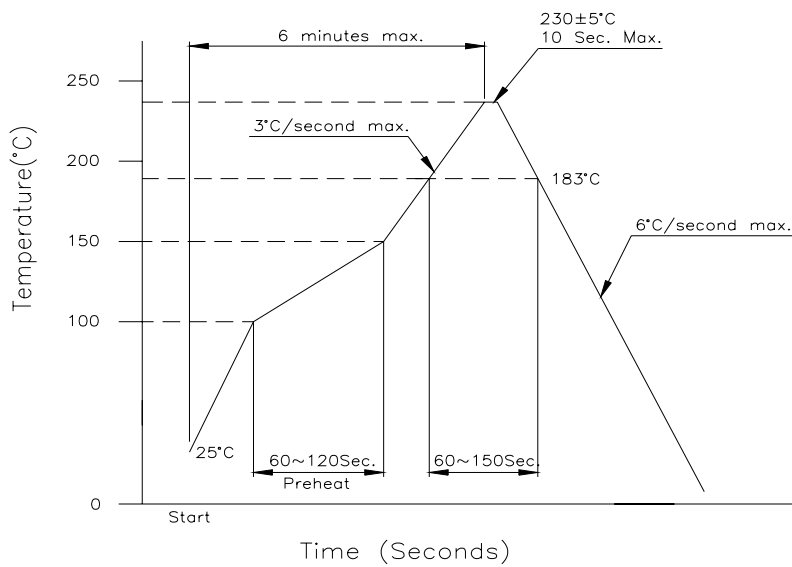
<b>ENGINEERING</b> <b>DEPT.</b>	<b>PRODUCT SPECIFICATION</b>	<b>SPEC.NO.: SPCB008C</b>
	<b>For CBC3 Series SMT Female Header</b>	<b>PAGE: 4/4</b>

10. AMBIENT TEMPERATURE RANGE:

-40 to +85°C; + 215°C intermittent (Vapor Phase Solder Reflow) for SMT typ

11. Recommended IR Reflow Temperature Profile:

11.1 Using Typical Solder Paste



11.2 Using Lead-Free Solder Paste

