

ENGINEERING	PRODUCT SPECIFICATION	SPEC.NO.: SPCB011D
DEPT.	For CBRC Series 0.5mm Board to Board Connector	PAGE: 1/4

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
SS-00254	Test methods for electronic components ,LEAD-FREE soldering Part design standards

3. APPLICABLE SERIES No. : CBRC Series

4. SHAPE, CONSTRUCTION AND DIMENSIONS

See attached drawings

5. MATERIALS

See attached drawings

6. ACCOMMODATED P.C.BOARD

6.1 Thickness: 0.8 mm (.031") ~ 1.6 mm (.063")

6.2 P.C. Board Layout: See attached drawings



REVIEWED : David APPROVED : Eisley VERIFIED : Eager .

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7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Rated current and voltage		0.5A/Per Pin 60V AC/DC (r.m.s.)
7.2	Contact resistance	Dry circuit of DC 20 mV max. 100 mA max.	Less than 90 mΩ
7.3	Dielectric strength	When applied AC 150 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 (Initial)

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 100 gram
8.2	Mating force	Speed 25± 3 mm per minute	0.1 Kg x No. of contacts (Initial) Max.
8.3	Unmating force	Speed 25± 3 mm per minute	0.006 Kg No. of contacts (Initial) Min.
8.4	Durability	Connector shall be subjected to 50 cycles of insertion and withdrawal	Contact resistance: Less than 90 mΩ

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.
9.2	Solder ability	Lead-Free Process: Soldering time: 3 ± 0.5 second Soldering pot: 245 ± 5°C	Minimum: 90% of immersed area

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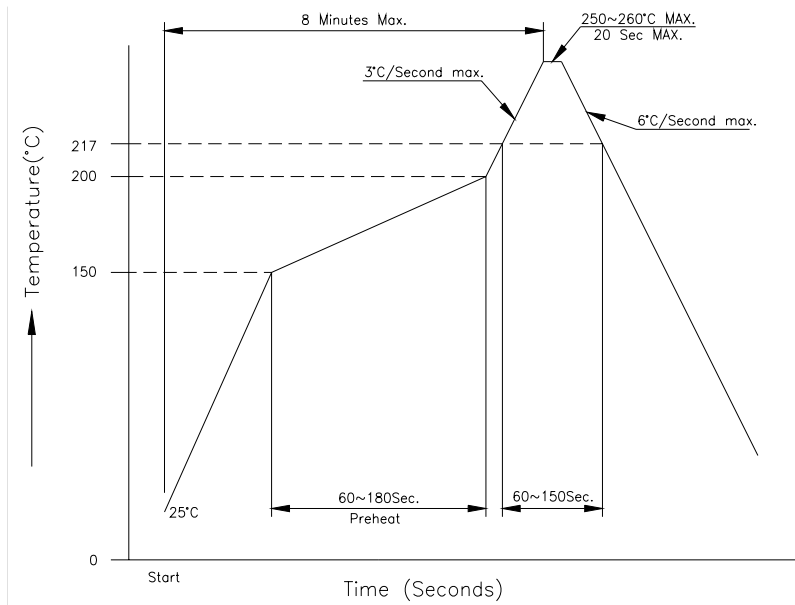
	ITEM	TEST CONDITION	REQUIREMENT
9.3	Resistance to soldering heat	Lead-Free Process: Soldering time: 20 second Max. Soldering pot: 250~260°C Refer Reflow temperature profile(11.1)	No damage
9.4	Heat aging	85± 2°C, 96 hours	No damage
9.5	Humidity	40±2°C, 90-95% RH, 96 hours measurement must be taken within 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 ₋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
9.7	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 ~ +85°C

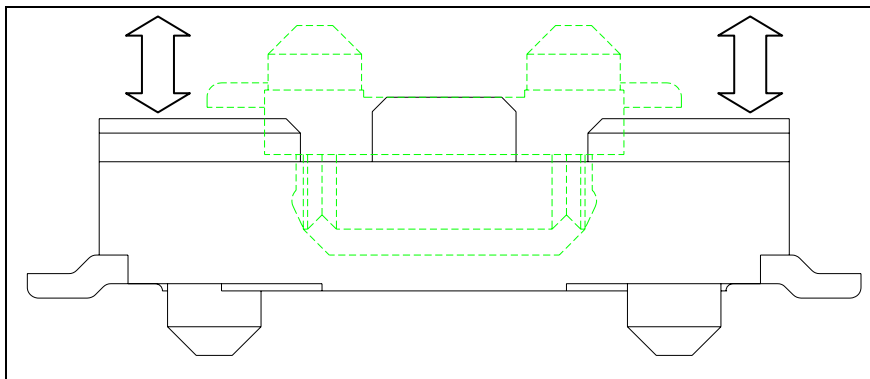
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11. Recommended IR Reflow Temperature Profile:

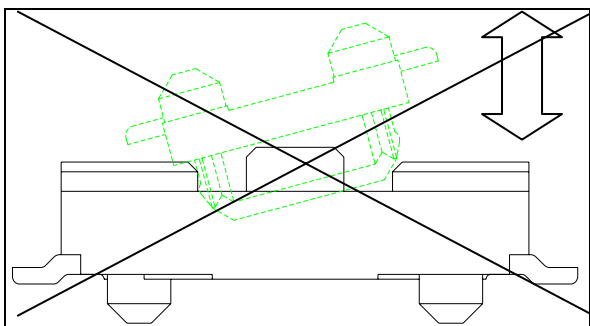
11.1 Using Lead-Free Solder Paste



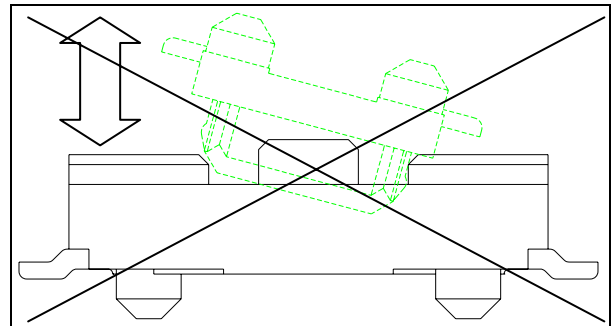
12. Mating and Un-mating Operation Aspect:



Accuracy



Wrong



Wrong