

ENGINEERING DEPT.		PRODUCT SPECIFICATION For 2.54 mm (.100") Board to Board Connectors of System CB72	SPEC.NO.: SPCB052C
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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.: **CB72***M1**-R0**
CB72*M1**-T0**

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 : Sun VERIFIED : Jessie .

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7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Rated current and voltage		3A 250V AC (r.m.s.)
7.2	Contact resistance	Dry circuit of DC 20 mV max. 100 mA max.	Less than 20 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 5000 MΩ

8. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
8.1	Single contact insertion force	Measure force to insertion using 0.30 mm square pin at speed 25 ± 3 mm per minute	300 gram Max Per Contact.
8.2	Single contact withdrawal force	Measure force to withdrawal using 0.30 mm square pin at speed 25 ± 3 mm per minute	30 gram Max Per Contact.
8.3	Durability	Connector shall be subjected to 300 cycles of insertion and withdrawal	Appearance: No damage

9. ENVIRONMENTAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
9.1	Solder ability	Soldering time: 3 ± 0.5 sec Soldering pot: $240 \pm 5^\circ\text{C}$	Minimum: 95% of immersed area
9.2	Resistance to soldering heat	Soldering time: 7 ± 3 sec Soldering pot: $255 \pm 5^\circ\text{C}$ Refer Reflow temperature profile(11.1)	No damage
9.3	Cold Resistance	$-40^\circ\text{C} \pm 3^\circ\text{C}$, 96 hours	Appearance: No damage Contact resistance: $\Delta 20$ mΩ change
9.4	Heat Resistance	$105^\circ\text{C} \pm 3^\circ\text{C}$, 96 hours	Appearance: No damage Contact resistance: $\Delta 20$ mΩ change

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	ITEM	TEST CONDITION	REQUIREMENT
9.5	Temperature Cycling	5 cycles (1) -40 °C , 30 min. (2) Room temp. 10-15 min. (3) 105 °C , 30 min. (4) Room temp. 10-15 min.	Appearance: No damage Contact resistance: $\Delta 20 \text{ m}\Omega$ change
9.6	Salt Spray	Temperature: $35 \pm 3^\circ\text{C}$ Solution: $5 \pm 1\%$ Spray time: 48 ± 4 hours (Stamping before plated) Spray time: 24 ± 4 hours (Stamping after plated) Mate connectors and expose to the following salt mist conditions. Upon completion of the exposure period, salt deposits shall be removed by a gentle wash or dip in running water and dried naturally, after which the specified measurements shall be performed. The specimens shall be suspended from the top using waxed twine, string or nylon thread. The test only define the plating area, without plating area (as copper cross section) will not be defined. (EIA 364-26B / MIL-STD-202 Method 101)	Appearance: No damage Contact resistance: Less than twice of initial

10. OPERATING TEMPERATURE : -40°C to $+105^\circ\text{C}$

11. Recommended IR Reflow Temperature Profile:



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11.1 Using Lead-Free Solder Paste

