

ENGINEERING

DEPT.

PRODUCT SPECIFICATION For 1.00 mm (.039") Board to Board Connectors of System CB72

SPEC.NO.: SPCB052A

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.: 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 : <u>Eisley</u> APPROVED : <u>Eisley</u> VERIFIED : <u>Sandy</u>.



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PAGE: 2/3

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 m Ω
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 M Ω

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	Minimum:
		Soldering pot: 240 ± 5°C	95% of immersed area
9.2	Resistance to soldering	Soldering time: 7 ± 3 sec	No damage
	heat	Soldering pot: 255 ± 5°C	
		Refer Reflow temperature profile(11.1)	
9.3	Cold Resistance	-40°C ± 3°C, 96 hours	Appearance: No damage
			Contact resistance:
			$\triangle 20 \text{ m}\Omega$ change
9.4	Heat Resistance	105°C ± 3°C, 96 hours	Appearance: No damage
			Contact resistance:
			$\triangle 20 \text{ m}\Omega$ change



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SPEC.NO.: SPCB052A

PAGE: 3/3

	ITEM	TEST CONDITION	REQUIREMENT
9.5	Temperature Cycling	5 cycles (1) -40 °C , 30 min.	Appearance: No damage Contact resistance:
		(2)Room temp. 10-15 min.	$ ightarrow$ 20 m Ω change
		(3) 105 °C, 30 min.	
		(4)Room temp. 10-15 min.	
9.6	Salt Spray	Temperature: 35± 2°C	Appearance: No damage
		Solution: 5± 1%	Contact resistance:
		Spray time: 6± 1 hours	$\triangle 20 \text{ m} \mathbf{\Omega}$ max out.
		Measurement must be taken after water rinse	

10. OPERATING TEMPERATURE : -40°C to + 105°C

11. Recommended IR Reflow Temperature Profile:

11.1 Using Lead-Free Solder Paste

