



<b>ENGINEERING</b>	<b>PRODUCT SPECIFICATION</b>	<b>SPEC.NO.: SPCB027B</b>
<b>DEPT.</b>	<b>For 2.54 mm (.100") Board to Board Connectors of System CB83</b>	<b>PAGE: 1/4</b>

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

3. APPLICABLE SERIES NO.: **CB83 Series**

4. SHAPE, CONSTRUCTION AND DIMENSIONS

See attached drawings

5. MATERIALS

See attached drawings

6. ACCOMMODATED P.C. BOARD

1.6 mm (.063")



REVIEWED :   Alex   APPROVED :   David   VERIFIED :   Jim   .

ENGINEERING  DEPT.	PRODUCT SPECIFICATION  For 2.54 mm (.100") Board to Board Connectors of System CB83	SPEC.NO.: SPCB027B
		PAGE: 2/4

7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	
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 1000 MΩ

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 800 gram
8.2	Single contact insertion force	Measure force to insertion using 0.64 mm square pin at speed 25± 3 mm per minute	800 gram max.
8.3	Single contact withdrawal force	Measure force to withdrawal using 0.64 mm square pin at speed 25± 3 mm per minute	30 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.
9.2	Solderability	<b>Lead-Free Process:</b> Soldering time: 3 ± 0.5 second Soldering pot: 245 ± 5°C	Minimum: 90% of immersed area

ENGINEERING  DEPT.	PRODUCT SPECIFICATION  For 2.54 mm (.100") Board to Board Connectors of System CB83	SPEC.NO.: SPCB027B
		PAGE: 3/4

	ITEM	TEST CONDITION	REQUIREMENT
9.3	Resistance to soldering heat	<b>DIP Type Lead-Free Process</b> Soldering time: 5 ± 0.5 second Soldering pot: 260 ± 5°C <b>SMT Type Lead-Free Process:</b> Soldering time: 20 second Max. Soldering pot: 250~260°C Refer Reflow temperature profile(11.1)	No damage
9.4	Heat aging	105± 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 <sup>+0</sup> <sub>-3</sub> °C , 30 min. (2)Room temp. 10-15 min. (3) 85 <sup>+3</sup> <sub>-0</sub> °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: -40 to + 105°C



<b>ENGINEERING</b>  <b>DEPT.</b>	<b>PRODUCT SPECIFICATION</b> <b>For 2.54 mm (.100") Board to Board Connectors of System CB83</b>	<b>SPEC.NO.: SPCB027B</b>
		<b>PAGE: 4/4</b>

11. Recommended IR Reflow Temperature Profile:

11.1 Using Lead-Free Solder Paste

