

ENGINEERING DEPT.		PRODUCT SPECIFICATION	SPEC.NO.:	SPCB038A
REVISIONS		For CB76 Connectors	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

L STD 020 Registered to coldering Temperature for

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.: CB76 Series

4. SHAPE, CONSTRUCTION AND DIMENSIONS

See attached drawings

5. MATERIALS

See attached drawings

6. ACCOMMODATED P.C.BOARD

 $0.8 \text{ mm} (.031'') \sim 1.6 \text{ mm} (.063'')$



REVIEWED : <u>David</u> APPROVED : <u>Eisley</u> VERIFIED : <u>Clark</u> .



ENGINEERING DEPT.		PRODUCT SPECIFICATION	SPEC.NO.:	SPCB038A
REVISIONS		For CB76 Connectors	PAGE:	2/4

7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	
7.1	Rated current and voltage		1A 250V AC (r.m.s.)
7.2	Contact resistance	Dry circuit of DC 20 mV max. 100mA max.	Less than $20 \text{ m}\Omega$
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 400 gram
8.2	Single contact insertion force	Measure force to insertion using 0.50 mm square pin at speed 25± 3 mm per minute	600 gram max.
8.3	Single contact withdrawal force	Measure force to withdrawal using 0.50 mm square pin at speed 25± 3 mm per minute	20 gram min.
8.4	Durability	Connector shall be subjected to 50 cycles of insertion and withdrawal	Contact resistance: Less than twice of initial

9. ENVIRONMENTAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
9.1	Temperature rise	Then carried the rated current	30°C max.
9.2	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.
9.3	Solderability	Lead-Free Process: Soldering time: 3 ± 0.5 second Soldering pot: 245 ± 5°C	Minimum: 95% of immersed area



ENGINEERING DEPT.		PRODUCT SPECIFICATION	SPEC.NO.:	SPCB038A
REVISIONS		For CB76 Connectors	PAGE:	3/4

	ITEM	TEST CONDITION	REQUIREMENT
9.4	Resistance to soldering	SMT Type Lead-Free Process:	No damage
	heat	Soldering time: 20 second Max.	
		Soldering pot: 250~260°C	
		Refer Reflow temperature profile(11.1)	
9.5	Heat aging	105± 2°C, 96 hours	No damage
9.6	Humidity	40±2°C, 90-95% RH, 96 hours	Appearance: No damage
		measurement must be taken within 30 min.	Contact resistance:
		after tested	Less than twice of initial
			Dielectric strength:
			To pass para 7-3
9.7	Temperature cycling	One cycle consists of:	Appearance: No damage
		(1) -55^{+0}_{-3} °C, 30 min.	Contact resistance:
		(2)Room temp. 10-15 min.	Less than twice of initial
		(3) 85^{+3}_{-0} °C, 30 min.	Dielectric strength:
		(4)Room temp. 10-15 min.	To pass para 7-3
		Total cycle: 5 cycle	
9.8	Salt spray	Temperature: 35± 3°C	Appearance: No damage
		Solution: 5± 1%	Contact resistance:
		Spray time: 48± 4 hours	Less than twice of initial
		Measurement must be taken after water	Dielectric strength:
		rinse	To pass para 7-3

10. AMBIENT TEMPERATURE RANGE: -40 to + 105°C



ENGINEERING DEPT.		PRODUCT SPECIFICATION	SPEC.NO.:	SPCB038A
REVISIONS		For CB76 Connectors	PAGE:	4/4

11. Recommended IR Reflow Temperature Profile:

11.1 Using Lead-Free Solder Paste

