

ENGINEERING DEPT.	PRODUCT SPECIFICATION	SPEC.NO.: SPCP072A
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### 1. SCOPE:

This specification contains the test requirement

#### 2. APPLICABLE STANDARDS:

MIL - STD - 202 Methods for test of connectors for electronic equipment

MIL - STD - 202

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.: CPLB Series

(P/N: CPLB0VA100\*-NH)

#### 4. SHAPE, CONSTRUCTION AND DIMENSIONS

See attached drawings

#### 5. MATERIALS

See attached drawings

#### 6. ACCOMMODATED P.C.BOARD

6.1 P.C. Board Layout: See attached drawings



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



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# 7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Rated current and voltage		1.0A max. 3000V AC/DC max.
7.2	Contact resistance	Dry circuit of DC 20mV max., 10mA max.	Less than 20 m $\Omega$
7.3	Dielectric strength	Applied AC 3000V 1minute	No change
7.4	Insulation resistance	Applied DC 500 V	More than $1000~\text{M}\Omega$

# 8. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
8.1	Pin retention force	Push Pin for insulator base at speed 25± 3 mm per minute	More than 500 gf
8.2	Open Cover force	Speed 25± 3 mm per minute	More than 300 gf
		(With $\psi$ 4.30mm CCFL)	
8.3	Close Cover force	Speed 25± 3 mm per minute	Less than 2000 gf
		(With $\phi$ 4.30mm CCFL)	



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8.4	CCFL retention force	Speed 25± 3 mm per minute	More than 500 gf
		(With $\phi$ 0.60mm Filament)	
8.5	Durability	CCFL shall be subjected to 10 cycles of insertion and withdrawal	Open Cover force:  More than 200 gf  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	Heat aging	85± 2°C, 250 hours	No damage
9.4	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 Insulation resistance: More than $1000 \text{ M}\Omega$
9.5	Temperature cycling	One cycle consists of:  (1) -55 +0	Appearance: No damage Contact resistance: Less than twice of initial



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9.6	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 rinse	
9.7	Solder ability	Lead-Free Process:	Minimum:
		Soldering time: 3 ± 0.5 second	90% of immersed area
		Soldering pot: 245 ± 5°C	
9.8	Resistance to	Lead-Free Process for SMT Type:	No damage
	soldering heat	Refer Reflow temperature profile(11.1)	

## 10. AMBIENT TEMPERATURE RANGE: -25 to +85°C

# 11. Recommended IR Reflow Temperature Profile:

# 11.1 Using Lead-Free Solder Paste

