

ENGINEERING SPEC.NO.: SPCP059B PRODUCT SPECIFICATION **For CPLE Connector** DEPT. **PAGE:** 1/3

1. SCOPE:

This specification contains the test requirement

2. APPLICABLE STANDARDS:

MIL - STD - 202 MIL - STD - 1344 I-STD-020 Methods for test of connectors for electronic equipment

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.: CPLE Series

(P/N: CPLEA*C1000)

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: Alex APPROVED: David VERIFIED: Clark.



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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 Ω
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 in Board mount Header	Push Pin for insulator base at speed 25± 3 mm per minute	More than 1.0 Kgf
8.2	Open Cover force	Speed 25± 3 mm per minute (With ϕ 3.40mm or ϕ 4.00mm CCFL)	0.3 Kgf ~ 3.0 Kgf
8.3	Close Cover force	Speed 25± 3 mm per minute (With ϕ 3.40mm or ϕ 4.00mm CCFL)	Less than 2.0 Kgf
8.4	Durability	CCFL shall be subjected to 30 cycles of insertion and withdrawal	Contact resistance: Less than twice of initial
8.5	Socket Mating force	Socket insertions reflector at speed 25± 3 mm per minute	Less than 2.0 Kgf
8.6	Socket Unmating force	Socket withdrawal reflector at speed 25± 3 mm per minute	More than 3.0 Kgf
8.7	P.C.B retention force	The retention force will be over 100 grams when the thickness of mating side is 1.4mm and the weight of it will be 100 grams.	More than 0.1 Kgf

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



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9.4	Humidity	40± 2°C, 90-95% RH, 240 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 $500 \text{ M}\Omega$
9.5	Temperature cycling	One cycle consists of: (1) -55 +0 °C, 30 min. (2) Room temp. 10-15 min. (3) 85 -0 °C, 30 min. (4) Room temp. 10-15 min. Total cycles: 5 cycles	Appearance: No damage Contact resistance: Less than twice of initial
9.6	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: -25 to + 85°C