

ENGINEERING DEPT.	PRODUCT SPECIFICATION	SPEC.NO.: SPCP073A
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1. SCOPE:

This specification contains the test requirement of subject connectors when tested under the condition and procedure with terminals crimped on the specified maximum size wire

2. APPLICABLE STANDARDS:

MIL - STD - 202	Methods for test of connectors for electronic equipment
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.: CP14 Series

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 : David APPROVED : Eisley VERIFIED : Clark .



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7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Rated current and voltage		1.0A 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 1500 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	Pin retention force in Board mount Header	Push Pin for insulator base at speed 25± 3 mm per minute	More than 0.8 kgf
8.2	FR4 Mating force	Speed 25± 3 mm per minute (With 0.80mm FR4)	Less than 2.5 kgf.
8.3	FR4 Unmating force	Speed 25± 3 mm per minute (With 0.80mm FR4)	(0.05× no. of Contacts) kgf min.
8.4	Durability	Connector shall be subjected to 20 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	Heat aging	85± 2°C, 96 hours	No damage
9.4	Humidity	60± 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



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9.5	Temperature cycling	One cycle consists of : (1) -55^{+0}_{-3} °C , 30 min. (2) Room temp. 10-15 min. (3) 85^{+3}_{-0} °C , 30 min. (4) Room temp. 10-15 min. Total cycles : 5 cycles	Appearance: No damage Contact resistance: Less than twice of initial Dielectric strength: To pass para 7-3
9.6	Salt spray	Temperature: 35 ± 3 °C Solution: $5 \pm 1\%$ Spray time: 48 ± 4 hours Measurement must be taken after water rinse	Appearance: No damage Contact resistance: Less than twice of initial Dielectric strength: To pass para 7-3
9.7	Solder ability	Lead-Free Process: Soldering time: 3 ± 0.5 second Soldering pot: 245 ± 5 °C	Minimum: 90% of immersed area
9.8	Resistance to soldering heat	Lead-Free Process for SMT Type: Refer Reflow temperature profile(11.1)	No damage

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

11. Recommended IR Reflow Temperature Profile:

11.1 Using Lead-Free Solder Paste

