

ENGINEERING	PRODUCT SPECIFICATION	SPEC.NO.: SPCI132A
DEPT.	For CI09 Series Connector System	PAGE: 1/4

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
SS-00254	Test methods for electronic components ,LEAD-FREE soldering Part design standards

3. APPLICABLE SERIES NO: CI09 Series

4. SHAPE, CONSTRUCTION AND DIMENSIONS

See attached drawings

5. MATERIALS

See attached drawings

6. ACCOMMODATED P.C.BOARD

6.1 Thickness: 1.6 mm (.063")
6.2 P.C. Board Layout: See attached drawings



APPROVE BY: Eisley

CHECKED By: Clark

TESTER BY: Hank

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7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Rated current and voltage		3A 100V AC/DC (r.m.s.)(AWG#22)
7.2	Contact resistance	Dry circuit of DC 20 mV max. , 100 mA max.	Less than 10 mΩ
7.3	Dielectric strength	When applied AC 800 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	Wire size	Specified wire size	Accepts AWG#22~#26
8.2	Terminal crimp Tensile strength	When crimped AWG#22 size wire When crimped AWG#24 size wire When crimped AWG#26 size wire	More than 5.0 Kgf More than 3.0 Kgf More than 2.0 Kgf
8.3	Contact retaining force in insulator	Retention speed 25± 3 mm per minute from housing	More than 1.0 Kgf
8.4	Durability	Connector shall be subjected to 30 cycles of insertion and withdrawal	Contact resistance: Less than twice of initial
8.5	Pin retention force	Push pin from insulator base at speed 25± 3 mm per minute	More than 1.0 Kgf
8.6	Locking force	While withdrawing plug & receptacle without terminal at speed 25±3 mm per minute	2P: More than 2 Kgf 3~10P More than 3 Kgf

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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. Contact resistance: Less than 20 mΩ
9.3	Solder ability	Lead-Free Process: Soldering time: 3 ± 0.5 second Soldering pot: 245 ± 5°C	Minimum: 90% of immersed area
9.4	Resistance to soldering heat	Lead-Free Process Soldering time: 5 ± 0.5 second Soldering pot: 260 ± 5°C	No damage
9.5	Heat aging	85 ± 2°C , 96 hours	No damage Contact resistance: Less than 20 mΩ
9.6	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 20 mΩ Dielectric strength: To pass para 7-3 Insulation resistance: More than 1000 MΩ
9.7	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.	Appearance: No damage Contact resistance: Less than 20 mΩ Dielectric strength: To pass para 7-3 Insulation resistance: More than 1000 MΩ
9.8	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 20 mΩ

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

11.Mating and Unmating Force:

PIN No.	Mating(kgf max.)	Unmating(kfg min.)	30th Unmating(kfg min.)
2	1.50	0.05	0.05
3	1.80	0.10	0.10
4	2.00	0.15	0.15
5	2.30	0.20	0.20
6	2.50	0.25	0.25
7	2.80	0.30	0.30
8	3.00	0.35	0.35
9	3.30	0.40	0.40
10	3.50	0.45	0.45