

ENGINEER	ING DEPT.	PRODUCT SPECIFICATION	SPEC.NO.:	SPCI003G
REVISIONS	ECNT113145	For CI03 Series Connector System	PAGE:	1/3

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:

Methods for test of connectors for electronic equipment

MIL - STD - 202 MIL - STD - 1344 Test methods for electrical connectors

3. APPLICABLE SERIES NO.: CI03 Series

4. SHAPE, CONSTRUCTION AND DIMENSIONS

See attached drawings

5. MATERIALS

See attached drawings

6. ACCOMMODATED P.C.BOARD

6.1 Thickness: $0.8 \text{ mm} (.031'') \sim 1.6 \text{ mm} (.063'')$ 6.2 P.C. Board Layout: See attached drawings



REVIEWED: <u>Eisley</u> APPROVED: <u>Sun</u> VERIFIED: <u>Enya</u>.



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7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Rated current and voltage		2A 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 500 V 1 minute between adjacent terminal	No change
7.4	Insulation resistance	When applied DC 500 V between adjacent terminal or ground	More than $1000 \text{M}\Omega$

8. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
8.1	Wire size	Specified wire size	Accepts AWG#26~#30
8.2	Terminal crimp Tensile	When crimped AWG#26 size wire	More than 1.8 Kgf
	strength	When crimped AWG#28 size wire	More than 1.1 Kgf
		When crimped AWG#30 size wire	More than 0.6 Kgf
8.3	Terminal insertion force	Insertion speed 25± 3 mm per minute into	Less than 600 gram
		housing	
8.4	Contact retaining force in	Retention speed 25± 3 mm per minute from	More than 1.2 Kgf
	insulator	housing	
8.5	Single contact insertion	Measure force to insertion using 0.50 mm	500 gram max.
	force	square pin at speed 25± 3 mm per minute	
8.6	Single contact	Measure force to withdrawal using 0.50 mm	100 gram min.
	withdrawal force	square pin at speed 25± 3 mm per minute	
8.7	Durability	Connector shall be subjected to 100 cycles of	Contact resistance:
	-	insertion and withdrawal	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	Solder ability	Soldering time: 5 ± 0.5 second Soldering pot: 230 ± 5°C	Minimum: 90% of immersed area
9.4	Resistance to soldering heat	Soldering time: 5 ± 0.5 second Soldering pot: 260 ± 5°C	No damage
9.5	Heat aging	85 ± 2°C , 96 hours	No damage



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	ITEM	TEST CONDITION	REQUIREMENT
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 twice of initial Dielectric strength: To pass para 7-3
9.7	Temperature cycling	One cycle consists of: (1)-55 - 3 °C, 30 min. (2)Room temp. 10-15 min. (3) 85 +3 °C, 30 min. (4)Room temp. 10-15 min.	Appearance: No damage Contact resistance: Less than twice of initial
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 twice of initial

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