

ENGINEERING SPEC.NO.: SPCI006D PRODUCT SPECIFICATION DEPT. For CI23 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.: CI23 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



REVIEWED: Alex APPROVED: David VERIFIED: Rita.



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7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Rated current and voltage		3A 250V AC (r.m.s.)
7.2	Contact resistance	Dry circuit of DC 20 mV max., 100 mA max.	Less than $20 \text{ m}\Omega$
7.3	Dielectric strength	When applied AC 1000 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#22~#28
8.2	Terminal crimp Tensile	When crimped AWG#22 size wire	More than 5.0 Kgf
	strength	When crimped AWG#24 size wire	More than 3.0 Kgf
		When crimped AWG#26 size wire	More than 2.0 Kgf
		When crimped AWG#28 size wire	More than 1.3 Kgf
8.3	Terminal insertion force	Insertion speed 25± 3 mm per minute into housing	Less than 600 gram
8.4	Contact retaining force in insulator	Retention speed 25± 3 mm per minute from housing	More than 2.5 Kgf
8.5	Single contact insertion force	Measure force to insertion using 0.64 mm square pin at speed 25± 3 mm per minute	700 gram max.
8.6	Single contact withdrawal force	Measure force to withdrawal using 0.64 mm square pin at speed 25± 3 mm per minute	40 gram min.
8.7	Durability	Connector shall be subjected to 100 cycles of insertion and withdrawal	Contact resistance:
			Less than twice of initial
8.8	Pin retention force	Push pin from insulator base at speed 25± 3 mm per minute	More than 1.0 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.



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	ITEM	TEST CONDITION	REQUIREMENT
9.3	Solderability	Soldering time: 5 ± 0.5 second	Minimum:
		Soldering pot: 230 ± 5°C	90% of immersed area
9.4	Resistance to soldering heat	Soldering time: 5 ± 0.5 second	No damage
		Soldering pot: 260 ± 5°C	
9.5	Heat aging	85 ± 2°C , 96 hours	No damage
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 +0 °C, 30 min. (2)Room temp. 10-15 min.	Appearance: No damage Contact resistance: Less than twice of initial
		(3) 85 +3 °C, 30 min. (4)Room temp. 10-15 min.	
9.8	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	

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