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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:

Methods for test of connectors for electronic equipment

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

3. APPLICABLE SERIES NO.: CP02 Series

4. SHAPE, CONSTRUCTION AND DIMENSIONS See attached drawings

5. MATERIALS

See attached drawings

6. ACCOMMODATED PANEL THICKNESS

6.1 Thickness: 1.6 mm (.063") max.

6.2 P.C. Board Layout: See attached drawings



	REVIEWED : <u>Alex</u>	APPROVED : <u>David</u>	_ VERIFIED :	Sandy	у.
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7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	
7.1	Rated current and voltage		5A 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 $1000 \text{ M}\Omega$

8. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
8.1	Wire size	Specified wire size	Accepts AWG#18~#26
8.2	Terminal crimp Tensile	When crimped AWG#18 size wire	More than 9.0 Kgf
	strength	When crimped AWG#20 size wire	More than 7.0 Kgf
		When crimped AWG#22 size wire	More than 5.0 Kgf
		When crimped AWG#24 size wire	More than 3.0 Kgf
		When crimped AWG#26 size wire	More than 2.0 Kgf
8.3	Terminal insertion force	Insertion speed 25± 3 mm per minute into housing	Less than 1.8 Kgf
8.4	Contact retaining force in insulator	Retention speed 25± 3 mm per minute from housing	More than 4.0 Kgf
8.5	Single contact insertion force	Measure force to insertion using plug terminal at speed 25± 3 mm per minute	1.2 Kgf max.
8.6	Single contact withdrawal force	Measure force to withdrawal using plug terminal at speed 25± 3 mm per minute	300 gram min.
8.7	Durability	Connector shall be subjected to 100 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	Appearance: No damage
		2 hours for X, Y and Z directions	Discontinuity:
			1 micro second max.



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	ITEM	TEST CONDITION	REQUIREMENT
9.3	Heat aging	85 ± 2°C , 96 hours	No damage
9.4	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
9.5	Temperature cycling	One cycle consists of: (1)-55 +0 °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
9.6	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