

ENGINEERING DEPT.

PRODUCT SPECIFICATION For CP32 Series Connector System SPEC.NO.: SPCP006G

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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

- 3. APPLICABLE SERIES NO.: CP32 Series
- 4. SHAPE, CONSTRUCTION AND DIMENSIONS See attached drawings
- 5. MATERIALS

See attached drawings



REVIEWED : <u>Alex</u> APPROVED : <u>David</u> VERIFIED : <u>Rita</u>.



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6. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
6.1	Rated current and voltage		6A 250V AC (r.m.s.)
6.2	Contact resistance	Dry circuit of DC 20 mV max., 100 mA max.	Less than 20 m Ω
6.3	Dielectric strength	When applied AC 1500 V 1 minute between adjacent terminal	No change
6.4	Insulation resistance	When applied DC 500 V between adjacent terminal or ground	More than 1000 M Ω

7. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Wire size	Specified wire size	Accepts AWG#16~#22
7.2	Terminal crimp Tensile	When crimped AWG#16 size wire	More than 11.0 Kgf
stren	strength	When crimped AWG#18 size wire	More than 9.0 Kgf
		When crimped AWG#20 size wire	More than 7.0 Kgf
		When crimped AWG#22 size wire	More than 5.0 Kgf
7.3	Terminal insertion force	Insertion speed 25± 3 mm per minute into housing	Less than 1.5 Kgf
7.4	Contact retaining force in insulator	Retention speed 25± 3 mm per minute from housing	More than 4.0 Kgf
7.5	Single contact insertion force	Measure force to insertion using plug terminal at speed 25± 3 mm per minute	2.5 Kgf max.
7.6	Single contact withdrawal force	Measure force to withdrawal using plug terminal at speed 25± 3 mm per minute	400 gram min.
7.7	Durability	Connector shall be subjected to 100 cycles of insertion and withdrawal	Contact resistance: Less than twice of initial

8. ENVIRONMENTAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
8.1	Temperature rise	Then carried the rated current	30°C max.
8.2	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.
8.3	Heat aging	85 ± 2°C , 96 hours	No damage



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	ITEM	TEST CONDITION	REQUIREMENT
8.4	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 6-3
8.5	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.	Appearance: No damage Contact resistance: Less than twice of initial
8.6	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

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