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1. SCOPE:

This specification contains the test requirement of subject connectors when tested under the condition and Inserted on the specified size FPC and FFC

2. APPLICABLE STANDARDS:

MIL - STD - 202 MIL - STD - 1344 Methods for test of connectors for electronic equipment

Test methods for electrical connectors

- 3. APPLICABLE SERIES NO.: CF01 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
- 7. ACCOMMODATED FPC/FFC THICKNESS

 $0.3 \pm 0.05 \text{ mm} (.012 \pm .002")$



REVIEWED: <u>Alex</u> APPROVED:	<u>David</u>	VERIFIED :_	Rita .
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8. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
8.1	Rated current and voltage		1 A 200V AC (r.m.s.)
8.2	Contact resistance	Dry circuit of DC 20 mV max., 100 mA max.	Less than 20 m Ω
8.3	Dielectric strength	When applied AC 500 V 1 minute between adjacent terminal	No change
8.4	Insulation resistance	When applied DC 500 V between adjacent terminal or ground	More than 500 M Ω

9. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
9.1	Contact retaining force in insulator	Retention speed 25± 3 mm per minute from housing	More than 0.6 Kgf
9.2	FPC / FFC withdrawal force (Reference data)	Measure force to withdrawal using 0.30 mm thickness FPC/FFC at speed 25± 3 mm per minute	Over 10 Circuits: $(0.4 + 0.05 \times \text{ckt.})$ Kgf Min. Under 10 Circuits: $(0.15 + 0.05 \times \text{ckt.})$ Kgf Min.
9.3	Durability	Connector shall be subjected to 20 cycles of insertion and withdrawal	Contact resistance: Less than twice of initial

10. ENVIRONMENTAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
10.1	Temperature rise	Then carried the rated current	30°C Max.
10.2	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.
10.3	Solderability	Soldering time: 5 ± 0.5 second Soldering pot: 230 ± 5°C	Minimum: 90% of immersed area
10.4	Resistance to soldering heat	Soldering time: 5 ± 0.5 second Soldering pot: 260 ± 5°C	No damage
10.5	Heat aging	105 ± 2°C , 96 hours	No damage



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	ITEM	TEST CONDITION	REQUIREMENT
10.6	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 8-3
10.7	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
10.8	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

11. AMBIENT TEMPERATURE RANGE: -40 to +105°C