

ENGINEERING DEPT.		PRODUCT SPECIFICATION For CF41 Series Connector System	SPEC.NO.: SPCF062A
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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	Methods for test of connectors for electronic equipment
MIL - STD - 1344	Test methods for electrical connectors
J-STD-020	Resistance to soldering Temperature for through hole Mounted Devices
SS-00254	Test methods for electronic components ,LEAD-FREE soldering Part design standards

3. APPLICABLE SERIES NO.: CF41 Series

4. SHAPE, CONSTRUCTION AND DIMENSIONS

See attached drawings

5. MATERIALS

See attached drawings

6. ACCOMMODATED P.C.BOARD

6.1 Thickness: 0.5 mm (.020") ~ 2.0 mm (.079")

6.2 P.C. Board Layout: See attached drawings

7. ACCOMMODATED FPC/FFC THICKNESS

0.3 +0.04/-0.01 mm (.012+.002/-0")



REVIEWED : David APPROVED : Eisley VERIFIED : Karen .

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8. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
8.1	Rated current and voltage		0.5A max. 50V AC/DC max.
8.2	Contact resistance	Dry circuit of DC 20 mV max. , 10 mA max.	Less than 30 mΩ
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 MΩ

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 0.03 Kgf
9.2	FFC / FPC withdrawal force	Measure force to withdrawal using 0.30 mm thickness FPC / FFC at speed 25 ± 3 mm per minute	($0.03 \times$ no. of Contacts) Kgf min.
9.3	Durability	Connector shall be subjected to 30 cycles of insertion and withdrawal	No damage 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. Contact resistance: Less than twice of initial
10.3	Shock	490m/s ² (50G), 3 strokes in each X.Y.Z. axes.	Appearance: No damage Discontinuity : 1ms. max.

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	ITEM	TEST CONDITION	REQUIREMENT
10.4	Heat aging	85 ± 2°C , 96 hours	No damage Contact resistance: Less than twice of initial
10.5	Cold aging	-40 ± 2°C , 96 hours	No damage Contact resistance: Less than twice of initial
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 Insulation resistance : Less than 30MΩ
10.7	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
10.8	Salt spray	Temperature: 35 ± 2°C Solution: 5 ± 1% Spray time: 24 ± 4 hours Measurement must be taken after water rinse	Appearance: No damage Contact resistance: Less than twice of initial
10.9	SO2 Gas	24 hours exposure to 50 ± 5ppm. SO2 gas at 40 ± 2°C.	Contact resistance: Less than twice of initial
10.10	NH3 Gas	40 minutes exposure to NH3 gas evaporating from 28% Ammonia solution.	Appearance: No damage Contact resistance: Less than twice of initial
10.11	Solder ability	Soldering time: 2 ± 0.5 second Soldering pot: 245 ± 5°C	Minimum: 95% of immersed area
10.12	Resistance to Soldering heat	Soldering time: 10 ± 0.5 second Soldering pot: 260 ± 5°C	No damage

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

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12. Recommended IR Reflow Temperature Profile(Lead-Free):

