瀚荃股份有限公司
CviLux Corporation

ENGINEERING DEPT.	PRODUCT SPECIFICATION For CF21 Series Connector System	SPEC.NO.: SPCF015A PAGE: 1/3

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
JIS - C - 5402	Methods for test of connectors for electronic equipment
UL 94	Test for flammability of plastic materials for parts in devices and appliance

3. ORDERING CODE:

CF21	50	1	D	0	R	0
❶	❷	❸	❹	❺	❻	❼

❶ Series No.

❷ No. Of Circuits: See attached drawing

❸ Contact Plating:
1 = 3.05 μm (120μ″)min. Tin-lead over 1.27 μm (50μ″) Nickel

❹ Contact style:
D = Downside Contact
U = Upside Contact
V = Vertical type

❺ Insulator Color:
0 = Nature

❻ Packing Options:
R = Tape & Reel
T = Tube Packing

❼ Other options:
0 = Standard

4. SHAPE, CONSTRUCTION AND DIMENSIONS
See attached drawings

5. MATERIALS
See attached drawings

6. ACCOMMODATED P.C.BOARD
0.5 mm (.020″) ~ 2.0 mm (.079″)

7. ACCOMMODATED FPC/FFC THICKNESS
0.3 ± 0.05 mm (.012±.002″)

CVILUX CORP. ENGINEERING
JUL 05.2000
ISSUED

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8. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
8.1	Rated current and voltage		0.4A max. 50V AC/DC max.
8.2	Contact resistance	Dry circuit of DC 20 mV max. , 100 mA max.	Less than 30 mΩ (Initial)
8.3	Dielectric strength	When applied AC 250 V 1 minute between adjacent terminal	No change
8.4	Insulation resistance	When applied DC 500 V between adjacent terminal or ground	More than 100 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 0.2 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	(0.02 × no. of Contacts) 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	Solder ability	Soldering time: 5 ± 0.5 second Soldering pot: 230 ± 5°C	Minimum: 90% of immersed area
10.4	Resistance to soldering heat	Max. Infrared Reflow Soldering temperature & time: 230°C for 60 Sec. 260°C for 10 Sec.	No damage
10.5	Heat aging	85 ± 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}_{-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 ± 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: -25 to + 85°C