

ENGINEERING DEPT.		PRODUCT SPECIFICATION For Flat Cable-IDC D-Sub Connector	SPEC.NO.: SPCD010C
REVISIONS	ECNT120078		PAGE: 1/3

1. SCOPE:

This specification contains the test requirement of subject connectors when tested under the condition and below standards base on CviLux test procedure

2. APPLICABLE STANDARDS:

MIL - STD - 202 Methods for test of connectors for electronic equipment
EIA - 364 Test methods for electrical connectors

3. APPLICABLE SERIES NO.: CD91 Series

4. SHAPE, CONSTRUCTION AND DIMENSIONS

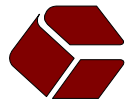
See attached drawings

5. MATERIALS

See attached drawings



REVIEWED : Eisley APPROVED : Sun VERIFIED : Michelle .



ENGINEERING DEPT.		PRODUCT SPECIFICATION For Flat Cable-IDC D-Sub Connector	SPEC.NO.: SPCD010C
REVISIONS	ECNT120078		PAGE: 2/3

6. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	
6.1	Rated current and voltage		1A 250V AC (r.m.s.)
6.2	Contact resistance	Dry circuit of DC 20 mV max. , 100 mA max.	Less than 25 mΩ
6.3	Dielectric strength	When applied AC 1000 V 1 minute between adjacent terminal	No change
6.4	Insulation resistance	When applied DC 500 V between adjacent terminal or ground	More than 5000 MΩ

7. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Applicable cable	Specified wire size	Solid: AWG#26~#30 Stranded: AWG#28
7.2	Single contact insertion force	Measure force to insertion using \varnothing 1.04 mm test pin at speed 25 ± 3 mm per minute	340 gram max.
7.3	Single contact withdrawal force	Measure force to withdrawal using \varnothing 0.99 mm test pin at speed 25 ± 3 mm per minute	28 gram min.
7.4	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	105 \pm 2°C , 96 hours	No damage
8.4	Humidity	40 \pm 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

ENGINEERING DEPT.		PRODUCT SPECIFICATION For Flat Cable-IDC D-Sub Connector	SPEC.NO.: SPCD010C
REVISIONS	ECNT120078		PAGE: 3/3

	ITEM	TEST CONDITION	REQUIREMENT
8.5	Temperature cycling	One cycle consists of : (1) $-55 \begin{smallmatrix} +0 \\ -3 \end{smallmatrix}^{\circ}\text{C}$, 30 min. (2) Room temp. 10-15 min. (3) $85 \begin{smallmatrix} +3 \\ -0 \end{smallmatrix}^{\circ}\text{C}$, 30 min. (4) Room temp. 10-15 min.	Appearance: No damage Contact resistance: Less than twice of initial
8.6	Salt spray	Temperature: $35 \pm 3^{\circ}\text{C}$ Solution: $5 \pm 1\%$ Spray time: 48 ± 4 hours (Stamping before plated) Spray time: 24 ± 4 hours (Stamping after plated) Mate connectors and expose to the following salt mist conditions. Upon completion of the exposure period, salt deposits shall be removed by a gentle wash or dip in running water and dried naturally, after which the specified measurements shall be performed. The specimens shall be suspended from the top using waxed twine, string or nylon thread. The test only define the plating area, without plating area (as copper cross section) will not be defined. (EIA 364-26B / MIL-STD-202 Method 101)	Appearance: No damage Contact resistance: Less than twice of initial

9. AMBIENT TEMPERATURE RANGE: -40 to $+105^{\circ}\text{C}$

10. MATING FORCE AND UNMATING FORCE:

Unit: Kgf

No. of Circuits	Mating Force (Initial max.)	Unmating Force (Initial max.)
9	4.6	3.5
15	8.1	6.4
25	10.5	7.7
37	14.1	9.9