

ENGINEERING DEPT.		PRODUCT SPECIFICATION For Solder Cup D-Sub Connector of system	SPEC.NO.: SPCD005H
REVISIONS	ECNT117201		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
MIL - STD - 1344	Test methods for electrical connectors
SS-00254	Test methods for electronic components , LEAD-FREE soldering Part design standards

3. APPLICABLE SERIES NO.: **CD51 Series**

Plug P/N : CD51*P*1**

(**= 00, A0, B0, C0, 00-E, A0-E, B0-E, C0-E, 0G, C1, CD)

Receptacle P/N : CD51*S*1**

(**= 00, A0, B0, C0, 00-E, A0-E, B0-E, C0-E, 0A, 0G, A1, AA, B1, B2, BA, C1, CA, GA)

4. SHAPE, CONSTRUCTION AND DIMENSIONS

See attached drawings

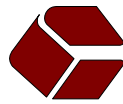
5. MATERIALS

See attached drawings

6. SOLDER CUP ACCEPTS CABLE: AWG #20 Max.



REVIEWED : Eisley APPROVED : Eisley VERIFIED : Karen .



ENGINEERING DEPT.		PRODUCT SPECIFICATION For Solder Cup D-Sub Connector of system	SPEC.NO.: SPCD005H
REVISIONS	ECNT117201		PAGE: 2/3

7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Rated current and voltage		3A 250V AC (r.m.s.)
7.2	Contact resistance	Dry circuit of DC 20 mV max. , 100 mA max.	Less than 20 mΩ
7.3	Dielectric strength	When applied AC 1000 V 1 minute between adjacent terminal	No change
7.4	Insulation resistance	When applied DC 500 V between adjacent terminal or ground	More than 5000 MΩ

8. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
8.1	Contact retaining force in insulator	Retention speed 25± 3 mm per minute from housing	More than 1.5 Kgf
8.2	Single contact insertion force	Measure force to insertion using Ø 1.04 mm test pin at speed 25± 3 mm per minute	340 gram max.
8.3	Single contact withdrawal force	Measure force to withdrawal using Ø 0.99 mm test pin at speed 25± 3 mm per minute	28 gram min.
8.4	Durability	Connector shall be subjected to 100 cycles of insertion and withdrawal	Contact resistance: Less than twice of initial

9. ENVIRONMENTAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
9.1	Temperature rise	Then carried the rated current	30°C max.
9.2	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.
9.3	Solder ability	Tin-Lead Process: Soldering time: 5 ± 0.5 second Soldering pot: 230 ± 5°C Lead-Free Process: Soldering time: 3 ± 0.5 second Soldering pot: 245 ± 5°C	Minimum: 90% of immersed area



ENGINEERING DEPT.		PRODUCT SPECIFICATION For Solder Cup D-Sub Connector of system	SPEC.NO.: SPCD005H
REVISIONS	ECNT117201		PAGE: 3/3

	ITEM	TEST CONDITION	REQUIREMENT
9.4	Hand Soldering	Use a soldering iron that has a sufficient head capacity and high stability of temperature. The tip of the iron should be shaped so as not to touch the part body directly. Temperature : 380±10°C 3Sec.	No damage
9.5	Heat aging	105 ± 2°C , 96 hours	No damage
9.6	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 7-3
9.7	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
9.8	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

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

11. MATING FORCE AND UNMATING FORCE:

Unit: Kgf

No. of Circuits	Mating Force (Initial max.)	Unmaking Force (Initial max.)
9	4.6	3.5
15	8.1	6.4
25	10.5	7.7
37	14.1	9.9
50	18.5	12.8