

ENGINEERING DEPT. PRODUCT SPECIFICATION For Right Angle Dip D-Sub Connector of system CD61 SPEC.NO.: SPCD032C

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.: CD61 Series

4. SHAPE, CONSTRUCTION AND DIMENSIONS

See attached drawings

5. MATERIALS

See attached drawings

6. ACCOMMODATED P.C.BOARD

1.6 mm (.063")



REVIEWED : <u>ALEX</u> APPROVED : <u>Eisley</u> VERIFIED : <u>Bill</u>.



ENGINEERING DEPT.

PRODUCT SPECIFICATION For Right Angle Dip D-Sub Connector

of system CD61

SPEC.NO.: SPCD032C

PAGE: 2/3

7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	
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 m Ω
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 M Ω

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 2.5 Kgf
8.2	Single contact insertion force	Measure force to insertion using \emptyset 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 \emptyset 0.99 mm test pin at speed 25± 3 mm per minute		28 gram min.
8.4	Durability	Connector shall be subjected to 60 or 1000 cycles of insertion and withdrawal at speed 25± 3 mm per minute.	Gold flash : 600 cycles 15u"&30u" gold plated: 1000 cycles	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	Solderability	Tin-Lead Process:	Minimum:
		Soldering time: 5 ± 0.5 second	90% of immersed area
		Soldering pot: 230 ± 5°C	
		Lead-Free Process:	
		Soldering time: 3 ± 0.5 second	
		Soldering pot: 245 ± 5°C	



ENGINEERING DEPT.

PRODUCT SPECIFICATION For Right Angle Dip D-Sub Connector of system CD61

SPEC.NO.: SPCD032C

PAGE: 3/3

	ITEM	TEST CONDITION	REQUIREMENT
9.4	Resistance to soldering	Tin-Lead Process:	No damage
	heat	Soldering time: 5 ± 0.5 second	
		Soldering pot: 240 ± 5°C	
		Lead-Free Process	
		Soldering time: 5 ± 0.5 second Soldering pot: $260 \pm 5^{\circ}C$	
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) $-55 + 0 = \circ C$, 30 min. (2)Room temp. 10-15 min. (3) $85 + 3 = \circ C$, 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 ; + 215 °C intermittent (Vapor Phase Solder Reflow) for SMT type

11. MATING FORCE AND UNMATING FORCE:

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

Unit: Kgf