



ENGINEERING DEPT.	PRODUCT SPECIFICATION For Solder Cup Combination Coaxial D-Sub Connector	SPEC.NO.: SPCD013C PAGE: 1 / 3
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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

3. APPLICABLE SERIES NO.: 5W1, 3W3, 7W2, 5W5, 8W8, 9W4, 11W1, 13W3, 13W6, 17W5, 17W2, 21W1, 21W4, 24W7, 25W3, 27W2, 36W4, 43W2, 3W3C, C3W3, C5W5, C7W2, C8W8, and CXLT Series

4. SHAPE, CONSTRUCTION AND DIMENSIONS

See attached drawings

5. MATERIALS

See attached drawings

6. SOLDER CUP TYPE COAXIAL CONTACT RECOMMENDED CABLES: RG 179B/U for 75Ω
RG 178B/U for 50Ω



REVIEWED : Alex APPROVED : David VERIFIED : Rita



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7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Rated current and voltage		3A 250V AC (r.m.s.)
7.2	Signal contact resistance	Dry circuit of DC 20 mV max. , 100 mA max.	Less than 10 mΩ
7.3	Dielectric strength (Sea Level)	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
7.5	Coaxial contact impedance		75Ω or 50Ω

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 4.5 Kgf
8.2	Signal contact insertion force	Measure force to insertion using Ø 1.04 mm test pin at speed 25± 3 mm per minute	340 gram max. Per contact
8.3	Signal contact withdrawal force	Measure force to withdrawal using Ø 0.99 mm test pin at speed 25± 3 mm per minute	28 gram min. Per contact
8.4	Coaxial contact insertion force	Measure force to insertion using plug terminal at speed 25± 3 mm per minute	2.0 Kgf max. Per contact
8.5	Coaxial contact withdrawal force	Measure force to withdrawal using plug terminal at speed 25± 3 mm per minute	0.5 Kgf min. Per contact
8.6	Mating and unmating force	Speed 25± 3 mm per minute	17.0 Kgf max.
8.7	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.



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	ITEM	TEST CONDITION	REQUIREMENT
9.3	Solder ability	Soldering time: 5 ± 0.5 second Soldering pot: $230 \pm 5^{\circ}\text{C}$	Minimum: 90% of immersed area
9.4	Heat aging	$125 \pm 2^{\circ}\text{C}$, 96 hours	No damage
9.5	Humidity	$40 \pm 2^{\circ}\text{C}$, 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
9.6	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
9.7	Salt spray	Temperature: $35 \pm 3^{\circ}\text{C}$ Solution: $5 \pm 1\%$ 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: -55 to $+125^{\circ}\text{C}$