

ENGINEERING	PRODUCT SPECIFICATION	SPEC.NO.:	SPCD014C
DEPT.	For Board Mount Combination Coaxial D-Sub Connector	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

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. ACCOMMODATED P.C.BOARD

1.2mm $(.047") \sim 2.0$ mm(.079")



REVIEWED: <u>Alex</u> APPROVED: <u>David</u> VERIFIED: <u>Rita</u>.



ENGINEERING	PRODUCT SPECIFICATION	SPEC.NO.:	SPCD014C
DEPT.	For Board Mount Combination Coaxial D-Sub Connector	PAGE:	2/3

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 $10 \text{ m}\Omega$
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 M Ω
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.
9.3	Solder ability	Soldering time: 5 ± 0.5 second	Minimum:
		Soldering pot: 230 ± 5°C	90% of immersed area



ENGINEERING	PRODUCT SPECIFICATION	SPEC.NO.:	SPCD014C
DEPT.	For Board Mount Combination Coaxial D-Sub Connector	PAGE:	3/3

	ITEM	TEST CONDITION	REQUIREMENT
9.4	Resistance to soldering	Soldering time: 5 ± 0.5 second	No damage
	heat	Soldering pot: 260 ± 5°C	
9.5	Heat aging	125 ± 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 °C, 30 min. (2)Room temp. 10-15 min. (3) 85 +3 °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: -55 to + 125°C