



ENGINEERING DEPT.		PRODUCT SPECIFICATION 1.27mm Pitch Male & Female Connector	SPEC.NO.: SPCA016D
REVISIONS	ECNT125052		PAGE: 1/5

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.: CA33/CA34/CA35 Series

4. SHAPE, CONSTRUCTION AND DIMENSIONS

See attached drawings

5. MATERIALS

See attached drawings

6. ACCOMMODATED CABLE AND P.C. BOARD:

- 6.1 Thickness: 1.6mm(.063")
- 6.2 P.C. Board Layout: See attached drawings

REVIEWED : Eisley APPROVED : Eisley VERIFIED : Joey .



ENGINEERING DEPT.		PRODUCT SPECIFICATION 1.27mm Pitch Male & Female Connector	SPEC.NO.: SPCA016D
REVISIONS	ECNT125052		PAGE: 2/5

7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
7.1	Rated current and voltage	CA33 Series	1.2 A 250V AC/DC
		CA34 Series	1.2 A 250V AC/DC
		CA35 SMT Vertical Type	1.2 A 250V AC/DC
		CA35 DIP Vertical Type	1.2 A 250V AC/DC
		CA35 DIP Right angle Type	1.2 A 250V AC/DC
7.2	Contact resistance	Dry circuit of DC 20 mV max. , 100 mA max.	Less than 15 mΩ
7.3	Dielectric strength	When applied AC 750 V 1 minute between adjacent terminal	No change
7.4	Insulation resistance	When applied DC 500 V between adjacent terminal or ground	More than 1000 MΩ

8. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
8.1	Pin retention force	Push pin form insulator base at speed 25±3 mm per minute	0.5 Kgf. min./ per contact
8.2	Mating Force	Insertion force at speed 25±3 mm per minute	500 gram max./per contact
8.3	Un-Mating Force	Withdrawing force at speed 25±3 mm per minute	100 gram min./per contact
8.4	Cable Retention Force	Cable withdrawing force at speed 25±3 mm per minute	1.0 kgf min./ Per contact

9. ENVIRONMENTAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
9.1	Vibration	1.5 mm 10-55-10 HZ/minute each 2 hours for X,Y and Z directions	Appearance: No damage Discontinuity: 1micro second max.



ENGINEERING DEPT.		PRODUCT SPECIFICATION 1.27mm Pitch Male & Female Connector	SPEC.NO.: SPCA016D
REVISIONS	ECNT125052		PAGE: 3/5

	ITEM	TEST CONDITION	REQUIREMENT
9.2	Solder ability	<p>Tin-Lead Process: Soldering time: 5 ± 0.5 second Soldering pot: $230 \pm 5^{\circ}\text{C}$</p> <p>Lead-Free Process: Soldering time: 3 ± 0.5 second Soldering pot: $245 \pm 5^{\circ}\text{C}$</p> <p>The terminal of connector shall be put into the flux and dipped into solder bath</p>	Minimum: 95% of immersed area
9.3	Resistance to soldering heat	<p>Tin-Lead Process (DIP Type): Soldering time: 5 ± 0.5 second Soldering pot: $240 \pm 5^{\circ}\text{C}$ (For CA35**V**00-NH)</p>	No damage
		<p>Lead-Free Process (DIP Type): Soldering time: 5 ± 0.5 second Soldering pot: $260 \pm 5^{\circ}\text{C}$ (For CA35**H**00-NH/ CA35**V**0S-NH/ CA35**V**0N-NH/ CA35**V**0M-NH/ CA35**V**0B-NH)</p>	
		<p>Lead-Free Process (SMD Type) Soldering time: 20 second Max. Soldering pot: $250\sim 260^{\circ}\text{C}$ Refer recommended Reflow temperature profile (For CA35**M****-NH)</p>	
9.4	Hand Soldering Method	<p>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.</p> <p>Temperature : $380\pm 5^{\circ}\text{C}$ 3s</p>	No damage
9.5	Heat aging	$105 \pm 2^{\circ}\text{C}$, 96 hours	No damage
9.6	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



ENGINEERING DEPT.		PRODUCT SPECIFICATION 1.27mm Pitch Male & Female Connector	SPEC.NO.: SPCA016D
REVISIONS	ECNT125052		PAGE: 4/5

	ITEM	TEST CONDITION	REQUIREMENT
9.7	Temperature cycling	One cycle consists of : (1) -40_{-3}^{+0} °C , 30 min. (2) Room temp. 10-15 min. (3) 105_{-0}^{+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 (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 on function Contact resistance: Less than twice of initial

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



ENGINEERING DEPT.		PRODUCT SPECIFICATION 1.27mm Pitch Male & Female Connector	SPEC.NO.: SPCA016D
REVISIONS	ECNT125052		PAGE: 5/5

11. Recommended Reflow Temperature Profile:

11.1 Using Lead-Free Solder Paste

