ENGINEERING DEPT.

#### PRODUCT SPECIFICATION

SPEC.NO.: SPCH012C

REVISIONS | ECNT120128

For 1.27 mm (.050") Pin Header of System CH03

**PAGE: 1/4** 

#### 1. SCOPE:

This specification contains the test requirement of subject pin headers 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

JIS - C - 5402 Methods for test of connectors for electronic equipment

UL 94 Test for flammability of plastic materials for parts in devices and appliance
J-STD-020 Resistance to soldering Temperature for through hole Mounted Devices
SS-00254 Test methods for electronic components, LEAD-FREE soldering Part

design standards

3. APPLICABLE SERIES NO.: CH03 SERIES

4. SHAPE, CONSTRUCTION AND DIMENSIONS

See attached drawings

5. MATERIALS

See attached drawings

6. MATERIALS

(P.C. Board on which the Pin Header are installed), 0.8 mm (.031") ~ 1.6 mm (.063")



REVIEWED: Eisley APPROVED: Sun VERIFIED: Eric .



ENGINEE	RING DEPT.	PRODUCT SPECIFICATION	SPEC.NO.:	SPCH012C
REVISIONS	ECNT120128	For 1.27 mm (.050") Pin Header of System CH03	PAGE:	2/4

## 7. ELECTRICAL PERFORMANCE:

	ITEM	TEST CONDITION	
7.1	Rated current and voltage		1A 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 600 V 1minute between adjacent terminal	No change
7.4	Insulation resistance	When applied DC 500 V between adjacent terminal or ground	More than $1000 \text{ M}\Omega$

#### 8. MECHANICAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
8.1	Pin retention force	Push pin from insulator base at speed	More than 300 gram
		25± 3 mm per minute	

# 9. ENVIRONMENTAL PERFORMANCE:

	ITEM	TEST CONDITION	REQUIREMENT
9.1	Solder ability	Soldering time: 3 ± 0.5 second Soldering pot: 245 ± 5 °C	Minimum: 90% of immersed area
9.2	Resistance to soldering heat	DIP Type Soldering time: 5 ± 0.5 second Soldering pot: 260 ± 5 ° C SMT Type Soldering time: 20 second Max. Soldering pot: 250~260 ° C	No damage
9.3	Heat aging	105± 2°C, 96 hours	No damage
9.4	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
9.5	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



ENGINEERING DEPT.	PRODUCT SPECIFICATION	SPEC.NO.:	SPCH012C
REVISIONS ECNT12012	For 1.27 mm (.050") Pin Header of System CH03	PAGE:	3/4

	ITEM	TEST CONDITION	REQUIREMENT
9.6	Salt spray	Temperature: 35 ± 3 ° C	Appearance: No damage
		Solution: 5 ± 1%	Contact resistance:
		Spray time: 48 ± 4 hours	Less than twice of initial
		(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)	

### 10. AMBIENT TEMPERATURE RANGE:

-40 to +  $105\,^{\circ}\text{C}$  ; +  $215\,^{\circ}\text{C}$  intermittent (Vapor Phase Solder Reflow) for SMT type

ENGINEERING DEPT.

## PRODUCT SPECIFICATION

SPEC.NO.: SPCH012C

REVISIONS | ECNT120128

For 1.27 mm (.050") Pin Header of System CH03

**PAGE: 4/4** 

## 11. Recommended IR Reflow Temperature Profile:

