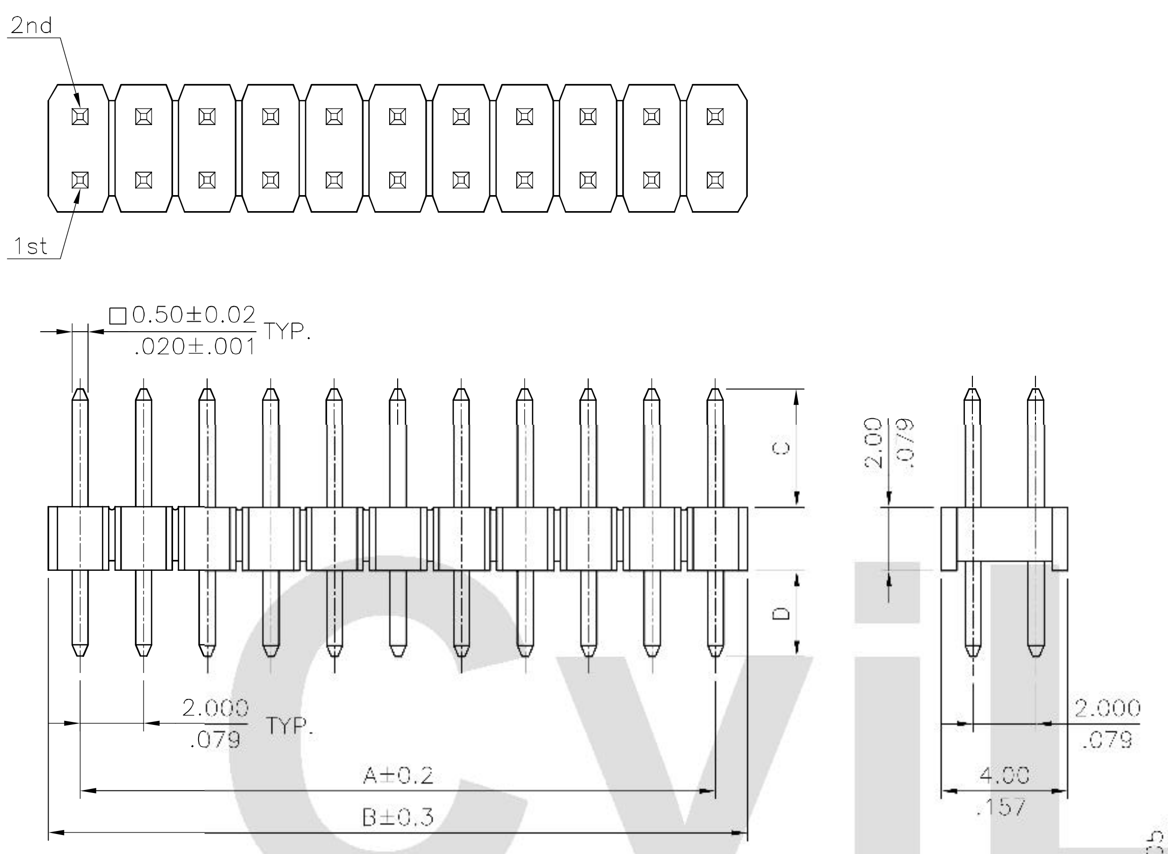
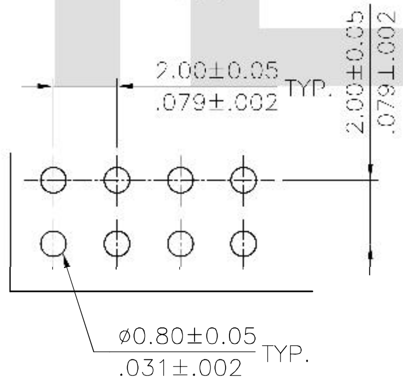



A = 2.00 * No. of Spaces
B = A + 2.0
* Available in 4 through 80 circu'ts




Recommended P.C. Board Layout

Material:
* Contact: Brass

## Ordering Code

CH71 ** * V * **
① ② ③ ④ ⑤ ⑥

① Series No.
② No. of Circu'ts
③ P cting Code:
1– 3.05 μm(120 μ") Min. in over 0.76 μm(30 μ") Nickel
2= Gold flash platec over 1.27 μm(50 μ") Nickel
3= 0.38 μm(15 μ") Gold plated over 1.27 μm(50 μ") Nickel
4– 0.76 μm(30 μ") Gold plated over 1.27 μm(50 μ") Nickel
④ V= Straight
⚠2 ⑤ Insulation: 1= PBT UL 94V–0, Color Black
A= Nylon 6T UL 94V–0, Color Black
⑥ Pin Length Cotior cord:
See Tao e PDF. File No. CH7101T

RoHS Compliant

CVILUX.CORP 2006.01.31 ISSUED

| SYM | NAME | DATE | REVISIONS |
|---|---|---|---|
| 4 | | | |
| 3 | Sun | 1/19/06' | ECN06019 |
| 2 | Casey | 5/28/04' | ECN04208 |
| 1 | SUN | 4/09/04' | ECN04144 |

| | | DATE |
|---|---|---|
| DRAWN BY: | Sun | 1/24 06' |
| ENGINEER: | Eisley | 1/26 06' |
| CHECKED BY: | David | 1/27 06' |
| APPROVED BY: | Alex | 1/27 06' |

UNIT: mm / inch

TOLERANCE UNLESS OTHERWISE SPECIFIED

| | |
|---|---|
| .X±0.30/.012 | X.°±1° |
| .XX±0.20/.008 | .X°± |
| .XXX±0.10/ .004 | .XX°± |

TITLE: 2.00MM(.079") STRAIGHT DUAL ROW BORAD MOUNT PIN HEADER

MATERIAL:

FINISH:

瀚荃股份有限公司
CviLux Corporation

| | | | |
|---|---|---|---|
| DRAWING NO. | CH7101SG | PART NO. | CH71***V*** |
| SCALE | 4 / 1 | SHEET | 1 OF 1 |

瀚荃股份有限公司
CviLux Corporation

| ENGINEERING DEPT. | PRODUCT SPECIFICATION For 2.00 mm (.079″) Pin Header of System CH71 | SPEC.NO.: SPCH020B 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 |
| MIL - STD - 1344 | 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 |

3. APPLICABLE SERIES NO.: **CH71 SERIES**

4. SHAPE, CONSTRUCTION AND DIMENSIONS
See attached drawings

5. MATERIALS
See attached drawings

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

CVILUX.CORP
2005.05.02
ISSUED

REVIEWED : Alex APPROVED : David VERIFIED : Sun .

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 1000 V 1minute 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 from insulator base at speed 25± 3 mm per minute | More than 0.8 Kgf |

9. ENVIRONMENTAL PERFORMANCE:

| | ITEM | TEST CONDITION | REQUIREMENT |
|---|---|---|---|
| 9.1 | Solder ability | Tin-Lead Process:<br>Soldering time: 5 ± 0.5 second<br>Soldering pot: 230 ± 5°C<br>Lead-Free Process:<br>Soldering time: 3 ± 0.5 second<br>Soldering pot: 245 ± 5°C | Minimum:<br>90% of immersed area |
| 9.2 | Resistance to soldering heat | Soldering time: 5 ± 0.5 second<br>Soldering pot: 260 ± 5°C<br>Tin-Lead Process for SMT Type:<br>Refer Reflow temperature profile(11.1)<br>Lead-Free Process for SMT Type:<br>Refer Reflow temperature profile(11.2) | 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<br>Contact resistance:<br>Less than twice of initial<br>Dielectric strength:<br>To pass para 7-3 |

| ENGINEERING DEPT. | PRODUCT SPECIFICATION<br>For 2.00 mm (.079″) Pin Header of System CH71 | SPEC.NO.: SPCH020B<br>PAGE: 3/4 |
|---|---|---|

| | ITEM | TEST CONDITION | REQUIREMENT |
|---|---|---|---|
| 9.5 | Temperature cycling | One cycle consists of :<br>(1)-55 $^{+0}_{-3}$ °C , 30 min.<br>(2)Room temp. 10-15 min.<br>(3) 85 $^{+3}_{-0}$ °C , 30 min.<br>(4)Room temp. 10-15 min. | Appearance: No damage<br>Contact resistance:<br>Less than twice of initial |
| 9.6 | Salt spray | Temperature: 35± 3°C<br>Solution: 5± 1%<br>Spray time: 48± 4 hours<br>Measurement must be taken after water rinse | Appearance: No damage<br>Contact resistance:<br>Less than twice of initial |

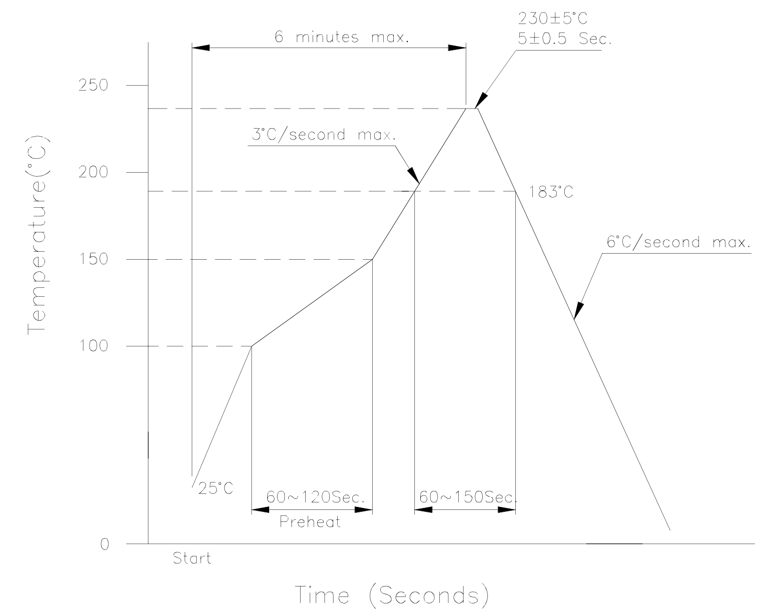
10. AMBIENT TEMPERATURE RANGE:

-40 to + 105°C ; + 215°C intermittent (Vapor Phase Solder Reflow) for SMT type

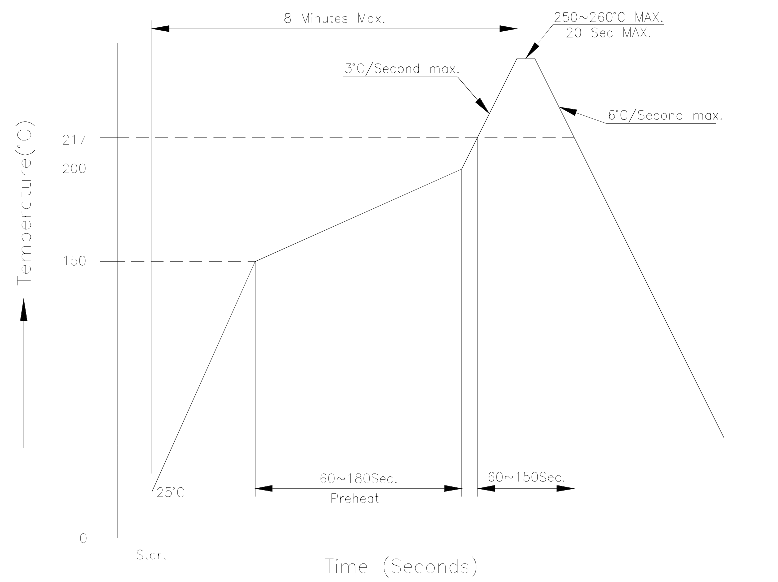
| ENGINEERING DEPT. | PRODUCT SPECIFICATION For 2.00 mm (.079″) Pin Header of System CH71 | SPEC.NO.: SPCH020B PAGE: 4/4 |
|---|---|---|

11. Recommended IR Reflow Temperature Profile:

11.1 Using Typical Solder Paste




11.2 Using Lead-Free Solder Paste



# General Plating

**TABLE- 1 (Tin-Plated)**

| Plating Code | Top Plating Thickness | Under Plating Thickness | Area | Match Type |
|---|---|---|---|---|
| 1 | 30μ” Tin Min. | Reflow Plated | Overall | Crimp clip terminal |
| | 80μ” Tin Min. | 30μ” Nickel Min. | Overall | Crimp clip terminal |
| | 100μ” Tin Min. | 30μ Nickel Min. | Overall | Solder tail terminal & Board in terminal |
| | 120μ” Tin Min. | 30μ Nickel Min. | Overall | Square or round pin |
| | 120μ” Tin | 50μ Nickel Min. | Overall | SMT type terminal |

**TABLE- 2 (Gold -Plated)**

| Plating Code | Top Plating Thickness | Under Plating Thickness | Area | Match Type |
|---|---|---|---|---|
| 2 | 0.8μ” Gold Min. | 50μ” Nickel Min. | Overall | Square or round pin |
| | 1.2μ” Gold Min. | | | Other type |
| 3 | 15μ” Gold Min. | 50μ” Nickel | Overall | All type |
| 4 | 30μ” Gold Min. | 50μ” Nickel | Overall | All type |
| 5 | 50μ” Gold Min. | 50μ” Nickel | Overall | All type |
| 7 | 3μ” Gold Min. | 50μ” Nickel | Overall | All type |
| 8 | 80μ” Gold Plated over | 50μ” Nickel | Overall | CP35 |
| 9 | 5μ” Gold Plated over | 50μ” Nickel | Overall | All type |
| A | Selective 1.2μ” Gold Flash | 50μ” Nickel | Contact Area | All type |
| B | Selective 15μ” Gold | 50μ” Nickel | Contact Area | All type |
| C | Selective 30μ” Gold | 50μ” Nickel | Contact Area | All type |

# General Plating

| | | | | |
|---|---|---|---|---|
| D | Selective 10 μ" Gold | 50 μ" Nickel | Contact Area | All type |
| E | Selective 50 μ" Gold | 50 μ" Nickel | Contact Area | All type |
| F | Selective 80 μ" Gold | 50 μ" Nickel | Contact Area | CP35 |
| G | Selective 5 μ" Gold | 50 μ" Nickel | Contact Area | CCF |
| I | Selective 15 μ" Gold | 1.2 μ" Gold Flash Plated over 50 μ" Nickel | Contact Area | All type |
| J | Selective 30 μ" Gold | 1.2 μ" Gold Flash Plated over 50 μ" Nickel | Contact Area | All type |
| K | Selective 5 μ" Gold | 80 μ" Nickel | Contact Area | All type |

SOLDERABILITY:

| TEST ITEM | TEST CONDITION | PROCESS | TEST REQUIREMENT |
|---|---|---|---|
| Solderability | Soldering time: 5±0.5 Second<br>Soldering pot: 230±5℃ | Sn - Pb Process | Minimum:<br>95% of immersed area |
| | Soldering time: 3±0.5 Second<br>Soldering pot: 245±5℃ | Lead Free Process | |