ENGINEERING DEPT.

PRODUCT SPECIFICATION DVI CONNECTOR

SPEC. NO.: SPCU004B

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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:

Digital Visual Interface Revision 1.0 DDWG Standard

Test Procedures and Conditions are referenced.

ANSI/EIA-364 UL 94

Test for flammability of plastic materials for parts in devices

and appliance

3. APPLICABLE SERIES No.: CU07 Seriess

4. SHAPE, CONSTRUCTION AND DIMENSIONS See attached drawings

5. MATERIALS

See attached drawings

6. ACCOMMODATED P.C.BOARD

1.6 mm (.063")



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



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7. ELECTRICAL PERFORMANCE:

| | ITEM | TEST CONDITION | REQUIREMENT |
|-----|---------------------------|---|----------------------------------|
| 7.1 | Rated current and voltage | | 3.0A 40V AC (r.m.s.) |
| 7.2 | Contact resistance | ANSI/EIA 364-23 Bulk resistance measured between plug solder tail and receptacle solder tails | 20 mΩ max. |
| 7.3 | Dielectric strength | When applied AC 500 V 1 minute between adjacent terminal | No change |
| 7.4 | Insulation resistance | When applied DC 500 V between adjacent terminal or ground | More than $1000 \text{ M}\Omega$ |

8. MECHANICAL PERFORMANCE:

| | ITEM | TEST CONDITION | REQUIREMENT |
|-----|------------------------------|--|--|
| 8.1 | Receptacle Contact retention | Retention speed 25± 3 mm per minute from housing | More than 0.45 Kgf |
| 8.2 | Receptacle Key retention | Retention speed 25± 3 mm per minute from housing | More than 0.90 Kgf |
| 8.3 | Plug Contact retention | Retention speed 25± 3 mm per minute from housing | 4.5 Kgf min. |
| 8.4 | Plug Key retention | Retention speed 25± 3 mm per minute from housing | 4.5 Kgf min. |
| 8.5 | Mating Force | Speed 25± 3 mm per minute | 4.5 Kgf max. |
| 8.6 | Unmating Force | Speed 25± 3 mm per minute | 1.0 Kgf min. |
| 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 Soldering pot: 230 ± 5°C | Minimum: 90% of immersed area |



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| 9.4 | Resistance to soldering heat | Soldering time: 5 ± 0.5 second Soldering pot: 240 ± 5°C | No damage |
|-----|------------------------------|---|--|
| 9.5 | Heat aging | 105 ± 2°C , 250 hours | Contact resistance: Less than twice of initial |
| 9.6 | Humidity | ANSI/EIA 364-31, Condition A and B Method 3, omit 7A and 7B | Contact resistance: Less than twice of initial |

10. AMBIENT TEMPERATURE RANGE: -20 to + 85°C