

## ABNORMAL TEST RESULT

## OF MODEL R10A

1. Did Cheese Cloth or Paper Glow?

No.

2. Did Ground Fuse Open?

No.

3. Dielectric breakdown?

No.

4. Other Results?

See the following pages .

( FMEA : 2/ 7 ~ 6/ 7)

( Abnormal Test Result: 7/ 7 ~ 7/ 7)

There was no emission of flame, molten metal, ignition of cheesecloth, dielectric breakdown, opening of the ground fuse, other indication of a shock or fire hazard.

F M E A

| Component | Mode  | Comment                                 | Output Voltage |
|-----------|-------|---|----------------|
| C11       | Open  | Normal operation.                       |                |
|           | Short | F11 opened, No hazard.                  | 0V             |
| C12       | Open  | See 7 Page.                             |                |
|           | Short | F11 opened, No hazard.                  | 0V             |
| C14       | Open  | Output voltage decreased.<br>No hazard. | Decreased      |
|           | Short | F11 opened, No hazard.                  | 0V             |
| C15       | Open  | See 7 Page.                             |                |
|           | Short | See 7 Page.                             |                |
| C16       | Open  | Normal operation.                       |                |
|           | Short | See 7 Page.                             |                |
| C51       | Open  | See 7 Page.                             |                |
|           | Short | See 7 Page.                             |                |
| C52       | Open  | See 7 Page.                             |                |
| C52       | Short | No Hazard.                              | 0V             |
| C53       | Open  | See 7 Page.                             |                |
|           | Short | No Hazard.                              | 0V             |
| C59       | Open  | See 7 Page.                             |                |
|           | Short | No Hazard.                              | 0V             |
| C61       | Open  | See 7 Page.                             |                |
|           | Short | Output voltage decreased.<br>No hazard. | Decreased      |
| D11       | Open  | No Hazard.                              | 0V             |
|           | Short | Output voltage decreased.<br>No hazard. | Decreased      |
| D12       | Open  | See 7 Page.                             |                |
|           | Short | See 7 Page.                             |                |

F M E A

| Component        | Mode  |      | Comment                                 | Output Voltage |
|------------------|-------|------|---|----------------|
| D51              | Open  |      | F11 opened, No hazard.                  | 0V             |
|                  | Short |      | F11 opened, No hazard.                  | 0V             |
| D52<br>Except 5V | Open  |      | Normal operation.                       |                |
|                  | Short |      | No Hazard.                              | 0V             |
| D53              | Open  |      | No Hazard.                              | 0V             |
|                  | Short |      | See 7 Page.                             |                |
| F11              | Open  |      | No Hazard.                              | 0V             |
| IC51             | Open  | K    | No Hazard.                              | 0V             |
|                  |       | A    | No Hazard.                              | 0V             |
|                  |       | R    | No Hazard.                              | 0V             |
|                  | Short | A-K  | Output voltage decreased.<br>No hazard. | Decreased      |
|                  |       | K-R  | Output voltage decreased.<br>No hazard. | Decreased      |
|                  |       | R-A  | No Hazard.                              | 0V             |
| L11              | Open  |      | No Hazard.                              | 0V             |
|                  | Short |      | Normal operation.                       |                |
| L51              | Open  |      | No Hazard.                              | 0V             |
|                  | Short |      | Normal operation.                       |                |
| LED51            | Open  |      | Normal operation.                       |                |
|                  | Short |      | Normal operation.                       |                |
| PC11             | Open  | A, K | No Hazard.                              | 0V             |
|                  |       | C, E | No Hazard.                              | 0V             |
|                  | Short | A-K  | No Hazard.                              | 0V             |
|                  |       | C-E  | Output voltage decreased.<br>No hazard. | Decreased      |
| SS11             | Open  |      | No Hazard.                              | 0V             |

F M E A

| Component | Mode  | Comment                | Output Voltage                          |           |
|-----------|-------|------------------------|---|-----------|
| SS11      | Short | F11 opened, No hazard. | 0V                                      |           |
| T11       | Open  | 4, 5                   | No Hazard.                              | 0V        |
|           |       | 6, 7, 8, 9             | F11 opened, No hazard.                  | 0V        |
|           |       | 1, 2                   | F11 opened, No hazard.                  | 0V        |
|           | Short | 4-5                    | F11 opened, No hazard.                  | 0V        |
|           |       | 6, 7-8, 9              | F11 opened, No hazard.                  | 0V        |
|           |       | 1-2                    | F11 opened, No hazard.                  | 0V        |
| TR11      | Open  | C                      | No Hazard.                              | 0V        |
|           |       | E                      | No Hazard.                              | 0V        |
|           |       | B                      | No Hazard.                              | 0V        |
|           | Short | C-E                    | No Hazard.                              | 0V        |
|           |       | E-B                    | F11 opened, No hazard.                  | 0V        |
|           |       | B-C                    | No Hazard.                              | 0V        |
| TR12      | Open  | C                      | See 7 Page.                             |           |
|           |       | E                      | See 7 Page.                             |           |
|           |       | B                      | See 7 Page.                             |           |
|           | Short | C-E                    | See 7 Page.                             |           |
|           |       | E-B                    | See 7 Page.                             |           |
|           |       | B-C                    | See 7 Page.                             |           |
| VR51      | Open  | bruch                  | Normal operation.                       |           |
|           |       |                        | Output voltage decreased.<br>No hazard. | Decreased |
|           | Short |                        | Normal operation.                       |           |
| ZD11      | Open  |                        | Normal operation.                       |           |
|           | Short |                        | Output voltage decreased.<br>No hazard. | Decreased |

F M E A

| Component       | Mode  | Comment           | Output Voltage |
|-----------------|-------|-------------------|----------------|
| ZD12            | Open  | Normal operation. |                |
|                 | Short | Normal operation. |                |
| ZD51            | Open  | Normal operation. |                |
|                 | Short | No Hazard.        | 0V             |
| R11             | Open  | Normal operation. |                |
| R12             | Open  | Normal operation. |                |
| R13             | Open  | Normal operation. |                |
| R14             | Open  | Normal operation. |                |
| R15<br>(5V 15V) | Open  | Normal operation. |                |
| R16             | Open  | Normal operation. |                |
| R17             | Open  | Normal operation. |                |
| R18             | Open  | Normal operation. |                |
| R19             | Open  | Normal operation. |                |
| R20             | Open  | Normal operation. |                |
| R21             | Open  | Normal operation. |                |
| R22             | Open  | Normal operation. |                |
| R26             | Open  | Normal operation. |                |
| R27             | Open  | Normal operation. |                |
| R28             | Open  | Normal operation. |                |
| R29             | Open  | Normal operation. |                |
| R30             | Open  | Normal operation. |                |
| R51             | Open  | No Hazard.        | 0V             |
| R52             | Open  | Normal operation. |                |
| R53             | Open  | No Hazard.        | 0V             |

F M E A

| Component | Mode |                | Comment                                 | Output Voltage |
|-----------|------|----------------|---|----------------|
| R54       | Open |                | No Hazard.                              | 0V             |
| R55       | Open |                | Output voltage decreased.<br>No hazard. | Decreased      |
| R56       | Open |                | Normal operation.                       |                |
| R57       | Open |                | See 7 Page.                             |                |
| R59       | Open |                | Normal operation.                       |                |
| R60       | Open |                | Normal operation.                       |                |
| R61       | Open | (5V, 12V, 24V) | Normal operation.                       |                |
| R62       | Open | (5V, 12V)      | Normal operation.                       |                |
| J11       | Open |                | No Hazard.                              | 0V             |
| J12       | Open |                | Normal operation.                       |                |
| J51       | Open |                | No Hazard.                              | 0V             |

ABNORMAL TEST RESULT

| Component | Mode  |     | Comment                                 | Output Voltage |
|-----------|-------|-----|---|----------------|
| C12       | Open  |     | Output voltage decreased.<br>No hazard. | Decreased      |
| C15       | Open  |     | Normal operation.                       |                |
|           | Short |     | Normal operation.                       |                |
| C16       | Short |     | Normal operation.                       |                |
| C51       | Open  |     | Output voltage decreased.<br>No hazard. | Decreased      |
|           | Short |     | No Hazard.                              | 0V             |
| C52       | Open  |     | Normal operation.                       |                |
| C53       | Open  |     | Normal operation.                       |                |
| C59       | Open  |     | Normal operation.                       |                |
| C61       | Open  |     | Output voltage decreased.<br>No hazard. | Decreased      |
| D12       | Open  |     | Normal operation.                       |                |
|           | Short |     | Normal operation.                       |                |
| D53       | Short |     | Output voltage decreased.<br>No hazard. | Decreased      |
| R57       | Open  |     | Output voltage decreased.<br>No hazard. | Decreased      |
| TR12      | Open  | C   | No Hazard.                              | 0V             |
|           |       | E   | No Hazard.                              | 0V             |
|           |       | B   | No Hazard.                              | 0V             |
|           | Short | C-E | F11 opened, No hazard.                  | 0V             |
|           |       | E-B | No Hazard.                              | 0V             |
|           |       | B-C | F11 opened, No hazard.                  | 0V             |