

## ABNORMAL TEST RESULT

OF MODEL MGFW8048□□

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 : 2/21 ~ 18/21)

( Abnormal Test Result: 19/21 ~ 21/21)

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 (V) |
|-----------|-------|-------------------|--------------------|
| C101      | Open  | Normal operation. |                    |
|           | Short | See 19 Page.      |                    |
| C102      | Open  | Normal operation. |                    |
|           | Short | See 19 Page.      |                    |
| C103      | Open  | Normal operation. |                    |
|           | Short | See 19 Page.      |                    |
| C104      | Open  | Normal operation. |                    |
|           | Short | See 19 Page.      |                    |
| C105      | Open  | Normal operation. |                    |
|           | Short | See 19 Page.      |                    |
| C111      | Open  | Normal operation. |                    |
|           | Short | See 19 Page.      |                    |
| C112      | Open  | Normal operation. |                    |
|           | Short | See 19 Page.      |                    |
| C113      | Open  | Normal operation. |                    |
|           | Short | See 19 Page.      |                    |
| C114      | Open  | Normal operation. |                    |
|           | Short | See 19 Page.      |                    |
| C115      | Open  | Normal operation. |                    |
|           | Short | See 19 Page.      |                    |
| C116      | Open  | Normal operation. |                    |
|           | Short | See 19 Page.      |                    |
| C117      | Open  | Normal operation. |                    |
|           | Short | See 19 Page.      |                    |

F M E A

| Component | Mode  | Comment                                 | Output Voltage (V)               |
|-----------|-------|---|----------------------------------|
| C118      | Open  | Normal operation.                       |                                  |
|           | Short | See 19 Page.                            |                                  |
| C119      | Open  | Normal operation.                       |                                  |
|           | Short | See 19 Page.                            |                                  |
| C120      | Open  | Normal operation.                       |                                  |
|           | Short | See 19 Page.                            |                                  |
| C141      | Open  | Normal operation.                       |                                  |
|           | Short | Normal operation.                       |                                  |
| C142      | Open  | Normal operation.                       |                                  |
|           | Short | Normal operation.                       |                                  |
| C143      | Open  | Normal operation.                       |                                  |
|           | Short | No Hazard.                              | AVR1:0 AVR2:0                    |
| C151      | Open  | Normal operation.                       |                                  |
|           | Short | No Hazard.                              | AVR1:0 AVR2:0                    |
| C201      | Open  | Normal operation.                       |                                  |
|           | Short | Normal operation.                       |                                  |
| C211      | Open  | Normal operation.                       |                                  |
|           | Short | No Hazard.                              | AVR1:0 AVR2:0                    |
| C212      | Open  | Normal operation.                       |                                  |
|           | Short | No Hazard.                              | AVR1:0 AVR2:0                    |
| C231      | Open  | Normal operation.                       |                                  |
|           | Short | No Hazard.                              | AVR1:0 AVR2:0                    |
| C241      | Open  | Output voltage decreased.<br>No hazard. | AVR1:decreased<br>AVR2:decreased |
|           | Short | No Hazard.                              | AVR1:0 AVR2:0                    |

F M E A

| Component | Mode  | Comment                                 | Output Voltage (V)               |
|-----------|-------|---|----------------------------------|
| C242      | Open  | Normal operation.                       |                                  |
|           | Short | No Hazard.                              | AVR1:0 AVR2:0                    |
| C244      | Open  | Normal operation.                       |                                  |
|           | Short | No Hazard.                              | AVR1:0 AVR2:0                    |
| C251      | Open  | Output voltage decreased.<br>No hazard. | AVR1:decreased<br>AVR2:decreased |
|           | Short | No Hazard.                              | AVR1:0 AVR2:0                    |
| C252      | Open  | Normal operation.                       |                                  |
|           | Short | No Hazard.                              | AVR1:0 AVR2:0                    |
| C253      | Open  | Output voltage decreased.<br>No hazard. | AVR1:decreased<br>AVR2:decreased |
|           | Short | No Hazard.                              | AVR1:0 AVR2:0                    |
| C261      | Open  | Normal operation.                       |                                  |
|           | Short | No Hazard.                              | AVR1:0 AVR2:0                    |
| C271      | Open  | Output voltage decreased.<br>No hazard. | AVR1:decreased<br>AVR2:decreased |
|           | Short | No Hazard.                              | AVR1:0 AVR2:0                    |
| C281      | Open  | Output voltage decreased.<br>No hazard. | AVR1:decreased<br>AVR2:decreased |
|           | Short | Normal operation.                       |                                  |
| C291      | Open  | No Hazard.                              | AVR1:0 AVR2:0                    |
|           | Short | Normal operation.                       |                                  |
| C292      | Open  | Normal operation.                       |                                  |
|           | Short | Normal operation.                       |                                  |
| C501      | Open  | Normal operation.                       |                                  |
|           | Short | See 19 Page.                            |                                  |
| C502      | Open  | Normal operation.                       |                                  |
|           | Short | See 19 Page.                            |                                  |

## F M E A

| Component | Mode  | Comment                          | Output Voltage (V) |
|-----------|-------|----------------------------------|--------------------|
| C503      | Open  | Normal operation.                |                    |
|           | Short | See 19 Page.                     |                    |
| C504      | Open  | Normal operation.                |                    |
|           | Short | See 19 Page.                     |                    |
| C505      | Open  | Normal operation.                |                    |
|           | Short | See 19 Page.                     |                    |
| C511      | Open  | Normal operation.                |                    |
|           | Short | See 19 Page.                     |                    |
| C512      | Open  | Normal operation.                |                    |
|           | Short | See 19 Page.                     |                    |
| C521      | Open  | Normal operation.                |                    |
|           | Short | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
| C522      | Open  | Normal operation.                |                    |
|           | Short | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
| C531      | Open  | Normal operation.                |                    |
|           | Short | See 19 Page.                     |                    |
| C532      | Open  | Normal operation.                |                    |
|           | Short | See 19 Page.                     |                    |
| C533      | Open  | Normal operation.                |                    |
|           | Short | See 20 Page.                     |                    |
| C534      | Open  | Normal operation.                |                    |
|           | Short | See 20 Page.                     |                    |
| C535      | Open  | Normal operation.                |                    |
|           | Short | See 20 Page.                     |                    |

F M E A

| Component | Mode  | Comment                                 | Output Voltage (V)               |
|-----------|-------|---|----------------------------------|
| C541      | Open  | Normal operation.                       |                                  |
|           | Short | See 20 Page.                            |                                  |
| C542      | Open  | Normal operation.                       |                                  |
|           | Short | See 20 Page.                            |                                  |
| C601      | Open  | Normal operation.                       |                                  |
|           | Short | No Hazard.                              | AVR1:0 AVR2:0                    |
| C611      | Open  | Normal operation.                       |                                  |
|           | Short | No Hazard.                              | AVR1:0 AVR2:0                    |
| C711      | Open  | Output voltage decreased.<br>No hazard. | AVR1:decreased<br>AVR2:decreased |
|           | Short | Output voltage decreased.<br>No hazard. | AVR1:decreased<br>AVR2:decreased |
| C712      | Open  | Output voltage decreased.<br>No hazard. | AVR1:decreased<br>AVR2:decreased |
|           | Short | Output voltage decreased.<br>No hazard. | AVR1:decreased<br>AVR2:decreased |
| C713      | Open  | Normal operation.                       |                                  |
|           | Short | Output voltage decreased.<br>No hazard. | AVR1:decreased<br>AVR2:decreased |
| C717      | Open  | Output voltage decreased.<br>No hazard. | AVR1:decreased<br>AVR2:decreased |
|           | Short | Output voltage decreased.<br>No hazard. | AVR1:decreased<br>AVR2:decreased |
| C718      | Open  | Normal operation.                       |                                  |
|           | Short | No Hazard.                              | AVR1:0 AVR2:0                    |
| C801      | Open  | Normal operation.                       |                                  |
|           | Short | External Fuse opened, No hazard.        | AVR1:0 AVR2:0                    |
| C802      | Open  | Normal operation.                       |                                  |
|           | Short | External Fuse opened, No hazard.        | AVR1:0 AVR2:0                    |
| C901      | Open  | Normal operation.                       |                                  |
|           | Short | Normal operation.                       |                                  |

## F M E A

| Component | Mode  | Comment                                 | Output Voltage (V)               |
|-----------|-------|---|----------------------------------|
| D101      | Open  | Normal operation.                       |                                  |
|           | Short | Normal operation.                       |                                  |
| D111      | Open  | Normal operation.                       |                                  |
|           | Short | Normal operation.                       |                                  |
| D141      | Open  | Normal operation.                       |                                  |
|           | Short | Normal operation.                       |                                  |
| D201      | Open  | Normal operation.                       |                                  |
|           | Short | No Hazard.                              | AVR1:0 AVR2:0                    |
| D252      | Open  | Normal operation.                       |                                  |
|           | Short | No Hazard.                              | AVR1:0 AVR2:0                    |
| D262      | Open  | Normal operation.                       |                                  |
|           | Short | No Hazard.                              | AVR1:0 AVR2:0                    |
| D271      | Open  | No Hazard.                              | AVR1:0 AVR2:0                    |
|           | Short | Output voltage decreased.<br>No hazard. | AVR1:decreased<br>AVR2:decreased |
| D281      | Open  | Normal operation.                       |                                  |
|           | Short | Normal operation.                       |                                  |
| D291      | Open  | Normal operation.                       |                                  |
|           | Short | Normal operation.                       |                                  |
| D501      | Open  | Normal operation.                       |                                  |
|           | Short | Normal operation.                       |                                  |
| D511      | Open  | Normal operation.                       |                                  |
|           | Short | Normal operation.                       |                                  |
| D711      | Open  | Normal operation.                       |                                  |
|           | Short | Output voltage decreased.<br>No hazard. | AVR1:decreased<br>AVR2:decreased |

F M E A

| Component | Mode  |     | Comment                                 | Output Voltage (V)               |
|-----------|-------|-----|---|----------------------------------|
| D712      | Open  |     | Normal operation.                       |                                  |
|           | Short |     | Output voltage decreased.<br>No hazard. | AVR1:decreased<br>AVR2:decreased |
| IC201     | Open  | 1   | Normal operation.                       |                                  |
|           |       | 2   | Normal operation.                       |                                  |
|           |       | 3   | No Hazard.                              | AVR1:0 AVR2:0                    |
|           |       | 4   | Normal operation.                       |                                  |
|           |       | 5   | Output voltage decreased.<br>No hazard. | AVR1:decreased<br>AVR2:decreased |
|           |       | 6   | No Hazard.                              | AVR1:0 AVR2:0                    |
|           |       | 7   | Normal operation.                       |                                  |
|           |       | 8   | Normal operation.                       |                                  |
|           |       | 9   | Normal operation.                       |                                  |
|           |       | 10  | No Hazard.                              | AVR1:0 AVR2:0                    |
|           |       | 11  | Normal operation.                       |                                  |
|           |       | 12  | No Hazard.                              | AVR1:0 AVR2:0                    |
|           |       | 13  | No Hazard.                              | AVR1:0 AVR2:0                    |
|           |       | 14  | No Hazard.                              | AVR1:0 AVR2:0                    |
|           |       | 15  | No Hazard.                              | AVR1:0 AVR2:0                    |
|           |       | 16  | Normal operation.                       |                                  |
|           |       | 17  | No Hazard.                              | AVR1:0 AVR2:0                    |
|           |       | 18  | No Hazard.                              | AVR1:0 AVR2:0                    |
|           |       | 19  | No Hazard.                              | AVR1:0 AVR2:0                    |
|           |       | 20  | Normal operation.                       |                                  |
|           | Short | 1-2 | Normal operation.                       |                                  |
|           |       | 2-3 | Normal operation.                       |                                  |



F M E A

| Component | Mode  |       | Comment                          | Output Voltage (V) |
|-----------|-------|-------|----------------------------------|--------------------|
| IC201     | Short | 3-4   | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 4-5   | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 6-7   | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 7-8   | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 8-9   | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 9-10  | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 11-12 | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 12-13 | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 13-14 | Normal operation.                |                    |
|           |       | 14-15 | Normal operation.                |                    |
|           |       | 16-17 | Normal operation.                |                    |
|           |       | 17-18 | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
|           |       | 18-19 | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 19-20 | No Hazard.                       | AVR1:0 AVR2:0      |
| IC202     | Open  | 1     | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 2     | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 3     | Normal operation.                |                    |
|           |       | 4     | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 5     | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 6     | Normal operation.                |                    |
|           | Short | 1-2   | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 2-3   | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 4-5   | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 5-6   | No Hazard.                       | AVR1:0 AVR2:0      |



F M E A

| Component | Mode  |     | Comment                          | Output Voltage (V) |
|-----------|-------|-----|----------------------------------|--------------------|
| IC203     | Open  | 1   | Normal operation.                |                    |
|           |       | 2   | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 3   | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
|           |       | 4   | Normal operation.                |                    |
|           |       | 5   | Normal operation.                |                    |
|           |       | 6   | Normal operation.                |                    |
|           |       | 7   | Normal operation.                |                    |
|           |       | 8   | Normal operation.                |                    |
|           | Short | 1-2 | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 2-3 | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 3-4 | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 5-6 | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 6-7 | Normal operation.                |                    |
|           |       | 7-8 | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
| IC601     | Open  | 1   | See 20 Page.                     |                    |
|           |       | 2   | See 20 Page.                     |                    |
|           |       | 3   | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
|           |       | 4   | See 20 Page.                     |                    |
|           |       | 5   | See 20 Page.                     |                    |
|           |       | 6   | See 20 Page.                     |                    |
|           |       | 7   | See 20 Page.                     |                    |
|           |       | 8   | See 20 Page.                     |                    |
|           | Short | 1-2 | See 20 Page.                     |                    |
|           |       | 2-3 | See 20 Page.                     |                    |

F M E A

| Component | Mode  |     | Comment                              | Output Voltage (V) |
|-----------|-------|-----|--------------------------------------|--------------------|
| IC601     | Short | 3-4 | See 20 Page.                         |                    |
|           |       | 5-6 | External Fuse opened, No hazard.     | AVR1:0 AVR2:0      |
|           |       | 6-7 | External Fuse opened, No hazard.     | AVR1:0 AVR2:0      |
|           |       | 7-8 | No Hazard.                           | AVR1:0 AVR2:0      |
| IC611     | Open  | 1   | See 20 Page.                         |                    |
|           |       | 2   | See 20 Page.                         |                    |
|           |       | 3   | External Fuse opened, No hazard.     | AVR1:0 AVR2:0      |
|           |       | 4   | See 20 Page.                         |                    |
|           |       | 5   | See 20 Page.                         |                    |
|           |       | 6   | See 20 Page.                         |                    |
|           |       | 7   | See 20 Page.                         |                    |
|           |       | 8   | See 20 Page.                         |                    |
|           | Short | 1-2 | See 20 Page.                         |                    |
|           |       | 2-3 | See 20 Page.                         |                    |
|           |       | 3-4 | See 21 Page.                         |                    |
|           |       | 5-6 | External Fuse opened, No hazard.     | AVR1:0 AVR2:0      |
|           |       | 6-7 | External Fuse opened, No hazard.     | AVR1:0 AVR2:0      |
|           |       | 7-8 | No Hazard.                           | AVR1:0 AVR2:0      |
| IC701     | Open  | 1   | Output voltage increased. No hazard. | AVR1:0 AVR2:0      |
|           |       | 2   | Normal operation.                    |                    |
|           |       | 3   | Output voltage increased. No hazard. | AVR1:0 AVR2:0      |
|           |       | 4   | Normal operation.                    |                    |
|           |       | 5   | Normal operation.                    |                    |
|           |       | 6   | Output voltage increased. No hazard. | AVR1:0 AVR2:0      |

F M E A

| Component | Mode  |      | Comment                                 | Output Voltage (V) |
|-----------|-------|------|---|--------------------|
| IC701     | Short | 1-2  | Normal operation.                       |                    |
|           |       | 2-3  | Normal operation.                       |                    |
|           |       | 4-5  | Normal operation.                       |                    |
|           |       | 5-6  | Normal operation.                       |                    |
| L101      | Open  |      | No Hazard.                              | AVR1:0 AVR2:0      |
|           | Short |      | Normal operation.                       |                    |
| L291      | Open  |      | No Hazard.                              | AVR1:0 AVR2:0      |
|           | Short |      | No Hazard.                              | AVR1:0 AVR2:0      |
| L501      | Open  |      | No Hazard.                              | AVR1:0 AVR2:0      |
|           | Short |      | Normal operation.                       |                    |
| L511      | Open  |      | No Hazard.                              | AVR1:0 AVR2:0      |
|           | Short |      | Normal operation.                       |                    |
| L601      | Open  |      | Normal operation.                       |                    |
|           | Short |      | No Hazard.                              | AVR1:0 AVR2:0      |
| L611      | Open  |      | Normal operation.                       |                    |
|           | Short |      | No Hazard.                              | AVR1:0 AVR2:0      |
| PC201     | Open  | A, K | Output voltage increased.<br>No hazard. | AVR1:0 AVR2:0      |
|           |       | C, E | Output voltage increased.<br>No hazard. | AVR1:0 AVR2:0      |
|           | Short | A-K  | Output voltage increased.<br>No hazard. | AVR1:0 AVR2:0      |
|           |       | C-E  | Output voltage increased.<br>No hazard. | AVR1:0 AVR2:0      |
| PC291     | Open  | A, K | Normal operation.                       |                    |
|           |       | C, E | Normal operation.                       |                    |
|           | Short | A-K  | Normal operation.                       |                    |
|           |       | C-E  | Output voltage increased.<br>No hazard. | AVR1:0 AVR2:0      |



F M E A

| Component | Mode | Comment           | Output Voltage (V) |
|-----------|------|-------------------|--------------------|
| R101      | Open | No Hazard.        | AVR1:0 AVR2:0      |
| R102      | Open | No Hazard.        | AVR1:0 AVR2:0      |
| R103      | Open | Normal operation. |                    |
| R111      | Open | No Hazard.        | AVR1:0 AVR2:0      |
| R141      | Open | Normal operation. |                    |
| R142      | Open | Normal operation. |                    |
| R143      | Open | Normal operation. |                    |
| R201      | Open | No Hazard.        | AVR1:0 AVR2:0      |
| R202      | Open | Normal operation. |                    |
| R203      | Open | Normal operation. |                    |
| R204      | Open | Normal operation. |                    |
| R211      | Open | No Hazard.        | AVR1:0 AVR2:0      |
| R212      | Open | No Hazard.        | AVR1:0 AVR2:0      |
| R213      | Open | Normal operation. |                    |
| R214      | Open | No Hazard.        | AVR1:0 AVR2:0      |
| R221      | Open | Normal operation. |                    |
| R222      | Open | Normal operation. |                    |
| R223      | Open | Normal operation. |                    |
| R224      | Open | Normal operation. |                    |
| R225      | Open | Normal operation. |                    |
| R231      | Open | Normal operation. |                    |
| R232      | Open | Normal operation. |                    |
| R241      | Open | No Hazard.        | AVR1:0 AVR2:0      |
| R242      | Open | No Hazard.        | AVR1:0 AVR2:0      |

## F M E A

| Component | Mode | Comment                                 | Output Voltage (V)               |
|-----------|------|---|----------------------------------|
| R244      | Open | Output voltage decreased.<br>No hazard. | AVR1:decreased<br>AVR2:decreased |
| R251      | Open | Normal operation.                       |                                  |
| R252      | Open | Normal operation.                       |                                  |
| R253      | Open | Normal operation.                       |                                  |
| R254      | Open | Normal operation.                       |                                  |
| R255      | Open | No Hazard.                              | AVR1:0    AVR2:0                 |
| R256      | Open | No Hazard.                              | AVR1:0    AVR2:0                 |
| R258      | Open | No Hazard.                              | AVR1:0    AVR2:0                 |
| R261      | Open | No Hazard.                              | AVR1:0    AVR2:0                 |
| R262      | Open | No Hazard.                              | AVR1:0    AVR2:0                 |
| R271      | Open | External Fuse opened, No hazard.        | AVR1:0    AVR2:0                 |
| R272      | Open | External Fuse opened, No hazard.        | AVR1:0    AVR2:0                 |
| R273      | Open | External Fuse opened, No hazard.        | AVR1:0    AVR2:0                 |
| R274      | Open | Normal operation.                       |                                  |
| R275      | Open | Normal operation.                       |                                  |
| R276      | Open | Normal operation.                       |                                  |
| R277      | Open | Normal operation.                       |                                  |
| R281      | Open | Normal operation.                       |                                  |
| R282      | Open | Normal operation.                       |                                  |
| R283      | Open | Normal operation.                       |                                  |
| R291      | Open | Normal operation.                       |                                  |
| R292      | Open | Normal operation.                       |                                  |
| R293      | Open | No Hazard.                              | AVR1:0    AVR2:0                 |
| R296      | Open | Normal operation.                       |                                  |

## F M E A

| Component | Mode | Comment                                 | Output Voltage (V)               |
|-----------|------|---|----------------------------------|
| R501      | Open | No Hazard.                              | AVR1:0 AVR2:0                    |
| R502      | Open | No Hazard.                              | AVR1:0 AVR2:0                    |
| R505      | Open | Normal operation.                       |                                  |
| R511      | Open | No Hazard.                              | AVR1:0 AVR2:0                    |
| R512      | Open | No Hazard.                              | AVR1:0 AVR2:0                    |
| R515      | Open | Normal operation.                       |                                  |
| R601      | Open | No Hazard.                              | AVR1:0 AVR2:0                    |
| R603      | Open | No Hazard.                              | AVR1:0 AVR2:0                    |
| R606      | Open | External Fuse opened, No hazard.        | AVR1:0 AVR2:0                    |
| R607      | Open | No Hazard.                              | AVR1:0 AVR2:0                    |
| R609      | Open | No Hazard.                              | AVR1:0 AVR2:0                    |
| R611      | Open | No Hazard.                              | AVR1:0 AVR2:0                    |
| R613      | Open | No Hazard.                              | AVR1:0 AVR2:0                    |
| R616      | Open | External Fuse opened, No hazard.        | AVR1:0 AVR2:0                    |
| R617      | Open | No Hazard.                              | AVR1:0 AVR2:0                    |
| R619      | Open | No Hazard.                              | AVR1:0 AVR2:0                    |
| R701      | Open | Output voltage increased.<br>No hazard. | AVR1:0 AVR2:0                    |
| R702      | Open | Output voltage increased.<br>No hazard. | AVR1:0 AVR2:0                    |
| R704      | Open | Output voltage increased.<br>No hazard. | AVR1:0 AVR2:0                    |
| R711      | Open | Normal operation.                       |                                  |
| R712      | Open | Normal operation.                       |                                  |
| R713      | Open | Output voltage increased.<br>No hazard. | AVR1:0 AVR2:0                    |
| R714      | Open | Output voltage decreased.<br>No hazard. | AVR1:decreased<br>AVR2:decreased |
| R715      | Open | Output voltage increased.<br>No hazard. | AVR1:0 AVR2:0                    |

F M E A

| Component | Mode  |     | Comment                                 | Output Voltage (V)               |
|-----------|-------|-----|---|----------------------------------|
| R716      | Open  |     | Output voltage decreased.<br>No hazard. | AVR1:decreased<br>AVR2:decreased |
| R717      | Open  |     | Output voltage decreased.<br>No hazard. | AVR1:decreased<br>AVR2:decreased |
| R731      | Open  |     | Normal operation.                       |                                  |
| R733      | Open  |     | Normal operation.                       |                                  |
| SS251     | Open  |     | Normal operation.                       |                                  |
|           | Short |     | Normal operation.                       |                                  |
| SS601     | Open  |     | No Hazard.                              | AVR1:0 AVR2:0                    |
|           | Short |     | No Hazard.                              | AVR1:0 AVR2:0                    |
| SS611     | Open  |     | No Hazard.                              | AVR1:0 AVR2:0                    |
|           | Short |     | No Hazard.                              | AVR1:0 AVR2:0                    |
| TH231     | Open  |     | Normal operation.                       |                                  |
|           | Short |     | No Hazard.                              | AVR1:0 AVR2:0                    |
| TR101     | Open  | D   | See 21 Page.                            |                                  |
|           |       | S   | See 21 Page.                            |                                  |
|           |       | G   | See 21 Page.                            |                                  |
|           | Short | D-S | See 21 Page.                            |                                  |
|           |       | S-G | See 21 Page.                            |                                  |
|           |       | G-D | See 21 Page.                            |                                  |
| TR141     | Open  | D   | Normal operation.                       |                                  |
|           |       | S   | Normal operation.                       |                                  |
|           |       | G   | Normal operation.                       |                                  |
|           | Short | D-S | Normal operation.                       |                                  |
|           |       | S-G | Normal operation.                       |                                  |
|           |       | G-D | Normal operation.                       |                                  |



F M E A

| Component | Mode  |     | Comment                          | Output Voltage (V) |
|-----------|-------|-----|----------------------------------|--------------------|
| TR221     | Open  | C   | Normal operation.                |                    |
|           |       | E   | Normal operation.                |                    |
|           |       | B   | Normal operation.                |                    |
|           | Short | C-E | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
|           |       | E-B | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | B-C | No Hazard.                       | AVR1:0 AVR2:0      |
| TR222     | Open  | C   | Normal operation.                |                    |
|           |       | E   | Normal operation.                |                    |
|           |       | B   | Normal operation.                |                    |
|           | Short | C-E | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
|           |       | E-B | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | B-C | No Hazard.                       | AVR1:0 AVR2:0      |
| TR501     | Open  | D   | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | S   | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | G   | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
|           | Short | D-S | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
|           |       | S-G | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | G-D | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
| TR511     | Open  | D   | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | S   | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | G   | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
|           | Short | D-S | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
|           |       | S-G | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | G-D | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |



F M E A

| Component | Mode  | Comment                                 | Output Voltage (V)               |
|-----------|-------|---|----------------------------------|
| ZD221     | Open  | No Hazard.                              | AVR1:0 AVR2:0                    |
|           | Short | Normal operation.                       |                                  |
| ZD271     | Open  | Normal operation.                       |                                  |
|           | Short | Output voltage decreased.<br>No hazard. | AVR1:decreased<br>AVR2:decreased |
| ZD281     | Open  | Normal operation.                       |                                  |
|           | Short | No Hazard.                              | AVR1:0 AVR2:0                    |
| ZD711     | Open  | Output voltage increased.<br>No hazard. | AVR1:0 AVR2:0                    |
|           | Short | Normal operation.                       |                                  |
| ZD731     | Open  | Normal operation.                       |                                  |
|           | Short | No Hazard.                              | AVR1:0 AVR2:0                    |
| ZD732     | Open  | Normal operation.                       |                                  |
|           | Short | No Hazard.                              | AVR1:0 AVR2:0                    |
| ZD733     | Open  | Normal operation.                       |                                  |
|           | Short | No Hazard.                              | AVR1:0 AVR2:0                    |

## ABNORMAL TEST RESULT

| Component | Mode  | Comment                          | Output Voltage (V) |
|-----------|-------|----------------------------------|--------------------|
| C101      | Short | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
| C102      | Short | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
| C103      | Short | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
| C104      | Short | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
| C105      | Short | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
| C111      | Short | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
| C112      | Short | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
| C113      | Short | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
| C114      | Short | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
| C115      | Short | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
| C116      | Short | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
| C117      | Short | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
| C118      | Short | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
| C119      | Short | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
| C120      | Short | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
| C501      | Short | No Hazard.                       | AVR1:0 AVR2:0      |
| C502      | Short | No Hazard.                       | AVR1:0 AVR2:0      |
| C503      | Short | No Hazard.                       | AVR1:0 AVR2:0      |
| C504      | Short | No Hazard.                       | AVR1:0 AVR2:0      |
| C505      | Short | No Hazard.                       | AVR1:0 AVR2:0      |
| C511      | Short | No Hazard.                       | AVR1:0 AVR2:0      |
| C512      | Short | No Hazard.                       | AVR1:0 AVR2:0      |
| C531      | Short | No Hazard.                       | AVR1:0 AVR2:0      |
| C532      | Short | No Hazard.                       | AVR1:0 AVR2:0      |

ABNORMAL TEST RESULT

| Component | Mode  |     | Comment                          | Output Voltage (V) |
|-----------|-------|-----|----------------------------------|--------------------|
| C533      | Short |     | No Hazard.                       | AVR1:0 AVR2:0      |
| C534      | Short |     | No Hazard.                       | AVR1:0 AVR2:0      |
| C535      | Short |     | No Hazard.                       | AVR1:0 AVR2:0      |
| C541      | Short |     | No Hazard.                       | AVR1:0 AVR2:0      |
| C542      | Short |     | No Hazard.                       | AVR1:0 AVR2:0      |
| IC601     | Open  | 1   | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
|           |       | 2   | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
|           |       | 4   | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 5   | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
|           |       | 6   | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 7   | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 8   | No Hazard.                       | AVR1:0 AVR2:0      |
|           | Short | 1-2 | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 2-3 | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 3-4 | No Hazard.                       | AVR1:0 AVR2:0      |
| IC611     | Open  | 1   | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
|           |       | 2   | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
|           |       | 4   | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 5   | External Fuse opened, No hazard. | AVR1:0 AVR2:0      |
|           |       | 6   | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 7   | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 8   | No Hazard.                       | AVR1:0 AVR2:0      |
|           | Short | 1-2 | No Hazard.                       | AVR1:0 AVR2:0      |
|           |       | 2-3 | No Hazard.                       | AVR1:0 AVR2:0      |



ABNORMAL TEST RESULT

| Component | Mode  |     | Comment                          | Output Voltage (V) |
|-----------|-------|-----|----------------------------------|--------------------|
| IC611     | Short | 3-4 | No Hazard.                       | AVR1:0    AVR2:0   |
| TR101     | Open  | D   | No Hazard.                       | AVR1:0    AVR2:0   |
|           |       | S   | No Hazard.                       | AVR1:0    AVR2:0   |
|           |       | G   | External Fuse opened, No hazard. | AVR1:0    AVR2:0   |
|           | Short | D-S | External Fuse opened, No hazard. | AVR1:0    AVR2:0   |
|           |       | S-G | No Hazard.                       | AVR1:0    AVR2:0   |
|           |       | G-D | External Fuse opened, No hazard. | AVR1:0    AVR2:0   |