

## ABNORMAL TEST RESULT

## OF MODEL LGA100A

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 : 2/13 ~ 12/13)

( Abnormal Test Result: 13/13 ~ 13/13)

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 |             | F101 opened, No hazard.                 | AVR1:0             |
| C102      | Open  |             | Normal operation.                       |                    |
|           | Short |             | F101 opened, No hazard.                 | AVR1:0             |
| C110      | Open  |             | Normal operation.                       |                    |
|           | Short |             | No hazard.                              | AVR1:0             |
| C111      | Open  |             | Normal operation.                       |                    |
|           | Short |             | No hazard.                              | AVR1:0             |
| C112      | Open  |             | Normal operation.                       |                    |
|           | Short |             | No hazard.                              | AVR1:0             |
| C201      | Open  |             | No hazard.                              | AVR1:0             |
|           | Short |             | Normal operation.                       |                    |
| C203      | Open  |             | No hazard.                              | AVR1:0             |
|           | Short |             | No hazard.                              | AVR1:0             |
| C204      | Open  |             | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
|           | Short |             | Normal operation.                       |                    |
| C205      | Open  | only-3R3, 5 | Normal operation.                       |                    |
|           | Short | only-3R3, 5 | Normal operation.                       |                    |
| C206      | Open  |             | Normal operation.                       |                    |
|           | Short |             | Normal operation.                       |                    |
| C207      | Open  |             | Normal operation.                       |                    |
|           | Short |             | No hazard.                              | AVR1:0             |
| C208      | Open  |             | Normal operation.                       |                    |
|           | Short |             | Normal operation.                       |                    |

## F M E A

| Component | Mode  |               | Comment                                 | Output Voltage (V) |
|-----------|-------|---------------|---|--------------------|
| C209      | Open  |               | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
|           | Short |               | Normal operation.                       |                    |
| C211      | Open  |               | Normal operation.                       |                    |
|           | Short |               | See 12 page.                            |                    |
| C212      | Open  |               | Normal operation.                       |                    |
|           | Short |               | See 12 page.                            |                    |
| C216      | Open  |               | Normal operation.                       |                    |
|           | Short |               | No hazard.                              | AVR1:0             |
| C501      | Open  |               | Normal operation.                       |                    |
|           | Short |               | See 12 page.                            |                    |
| C502      | Open  |               | Normal operation.                       |                    |
|           | Short |               | See 12 page.                            |                    |
| C503      | Open  |               | Normal operation.                       |                    |
|           | Short |               | See 12 page.                            |                    |
| C504      | Open  |               | Normal operation.                       |                    |
|           | Short |               | See 12 page.                            |                    |
| C506      | Open  |               | Normal operation.                       |                    |
|           | Short |               | No hazard.                              | AVR1:0             |
| C507      | Open  |               | Normal operation.                       |                    |
|           | Short |               | No hazard.                              | AVR1:0             |
| C508      | Open  | except-24, 48 | Normal operation.                       |                    |
|           | Short | except-24, 48 | No hazard.                              | AVR1:0             |
| C601      | Open  |               | Normal operation.                       |                    |
|           | Short |               | Output voltage decreased.<br>No hazard. | AVR1:decreased     |

## F M E A

| Component | Mode  |               | Comment                                 | Output Voltage (V) |
|-----------|-------|---------------|---|--------------------|
| C602      | Open  | except-3R3, 5 | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
|           | Short | except-3R3, 5 | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
| C603      | Open  | only-3R3, 5   | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
|           | Short | only-3R3, 5   | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
| D101      | Open  |               | No hazard.                              | AVR1:0             |
|           | Short |               | Normal operation.                       |                    |
| D201      | Open  |               | Normal operation.                       |                    |
|           | Short |               | Normal operation.                       |                    |
| D204      | Open  |               | No hazard.                              | AVR1:0             |
|           | Short |               | No hazard.                              | AVR1:0             |
| D205      | Open  |               | Normal operation.                       |                    |
|           | Short |               | Normal operation.                       |                    |
| D210      | Open  |               | Normal operation.                       |                    |
|           | Short |               | Normal operation.                       |                    |
| IC201     | Open  | 1             | No hazard.                              | AVR1:0             |
|           |       | 2             | No hazard.                              | AVR1:0             |
|           |       | 3             | No hazard.                              | AVR1:0             |
|           |       | 4             | Normal operation.                       |                    |
|           |       | 5             | Normal operation.                       |                    |
|           |       | 6             | Normal operation.                       |                    |
|           |       | 7             | Normal operation.                       |                    |
|           |       | 8             | Normal operation.                       |                    |
|           |       | 9             | Normal operation.                       |                    |
|           |       | 10            | Normal operation.                       |                    |

## F M E A

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

## F M E A

| Component | Mode  |               | Comment                                 | Output Voltage (V) |
|-----------|-------|---------------|---|--------------------|
| IC201     | Short | 16-17         | Normal operation.                       |                    |
|           |       | 17-18         | Normal operation.                       |                    |
|           |       | 18-19         | Normal operation.                       |                    |
|           |       | 19-20         | No hazard.                              | AVR1:0             |
| IC601     | Open  | K             | No hazard.                              | AVR1:0             |
|           |       | A             | No hazard.                              | AVR1:0             |
|           |       | R             | No hazard.                              | AVR1:0             |
|           | Short | A-K           | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
|           |       | K-R           | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
|           |       | R-A           | No hazard.                              | AVR1:0             |
| J201      | Open  |               | No hazard.                              | AVR1:0             |
| J202      | Open  | except-3R3, 5 | Normal operation.                       |                    |
| J204      | Open  |               | No hazard.                              | AVR1:0             |
| J205      | Open  |               | See 12 page.                            | AVR1:0             |
| J206      | Open  |               | See 12 page.                            | AVR1:0             |
| L101      | Open  |               | No hazard.                              | AVR1:0             |
|           | Short |               | Normal operation.                       |                    |
| L102      | Open  |               | No hazard.                              | AVR1:0             |
|           | Short |               | Normal operation.                       |                    |
| L507      | Open  |               | No hazard.                              | AVR1:0             |
|           | Short |               | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
| PC201     | Open  | A, K          | Normal operation.                       |                    |
|           |       | C, E          | Normal operation.                       |                    |
|           | Short | A-K           | Normal operation.                       |                    |

## F M E A

| Component | Mode  |                           | Comment                 | Output Voltage (V) |
|-----------|-------|---------------------------|-------------------------|--------------------|
| PC201     | Short | C-E                       | No hazard.              | AVR1:0             |
| PC202     | Open  | A, K                      | No hazard.              | AVR1:0             |
|           |       | C, E                      | No hazard.              | AVR1:0             |
|           | Short | A-K                       | No hazard.              | AVR1:0             |
|           |       | C-E                       | No hazard.              | AVR1:0             |
| SCR101    | Open  | T1                        | No hazard.              | AVR1:0             |
|           |       | T2                        | No hazard.              | AVR1:0             |
|           |       | G                         | No hazard.              | AVR1:0             |
|           | Short | T1-T2                     | Normal operation.       |                    |
|           |       | T1-G                      | No hazard.              | AVR1:0             |
|           |       | T2-G                      | No hazard.              | AVR1:0             |
| SS101     | Open  |                           | No hazard.              | AVR1:0             |
|           | Short |                           | F101 opened, No hazard. | AVR1:0             |
| SS501     | Open  | Cathode                   | See 12 page.            |                    |
|           |       | Alternative               | See 12 page.            |                    |
|           | Short |                           | No hazard.              | AVR1:0             |
| SS502     | Open  | Cathode except-24, 48     | See 12 page.            |                    |
|           |       | Alternative except-24, 48 | See 12 page.            |                    |
|           | Short | except-24, 48             | No hazard.              | AVR1:0             |
| T101      | Open  | 1                         | No hazard.              | AVR1:0             |
|           |       | 2                         | No hazard.              | AVR1:0             |
|           |       | 4                         | No hazard.              | AVR1:0             |
|           |       | 5                         | No hazard.              | AVR1:0             |
|           |       | 6                         | No hazard.              | AVR1:0             |

## F M E A

| Component | Mode  |                         | Comment                                 | Output Voltage (V) |
|-----------|-------|-------------------------|---|--------------------|
| T101      | Open  | 7or8or9.<br>except-48   | See 12 page.                            |                    |
|           |       | 10or11or12<br>except-48 | See 12 page.                            |                    |
|           |       | 7or8<br>only-48         | See 12 page.                            |                    |
|           |       | 9or10<br>only-48        | See 12 page.                            |                    |
|           |       | 11or12<br>only-48       | See 12 page.                            |                    |
|           | Short | 1-2                     | No hazard.                              | AVR1:0             |
|           |       | 4-5                     | No hazard.                              | AVR1:0             |
|           |       | 5-6                     | No hazard.                              | AVR1:0             |
|           |       | 7or8or9-<br>10or11or12  | No hazard.                              | AVR1:0             |
|           |       | 7or8-9or10<br>only-48   | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
|           |       | 9or10-11or12<br>only-48 | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
| TR201     | Open  | D                       | See 12 page.                            |                    |
|           |       | S                       | See 12 page.                            |                    |
|           |       | G                       | See 12 page.                            |                    |
|           | Short | D-S                     | See 12 page.                            |                    |
|           |       | S-G                     | See 12 page.                            |                    |
|           |       | G-D                     | See 12 page.                            |                    |
| VR601     | Open  | brush<br>only-3R3, 5    | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
|           |       | only-3R3, 5             | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
|           | Short | only-3R3, 5             | No hazard.                              | AVR1:0             |
| ZD201     | Open  |                         | Normal operation.                       |                    |
|           | Short |                         | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
| ZD601     | Open  |                         | Normal operation.                       |                    |
|           | Short |                         | No hazard.                              | AVR1:0             |

## F M E A

| Component | Mode  |         | Comment                                 | Output Voltage (V) |
|-----------|-------|---------|---|--------------------|
| ZD602     | Open  | only-48 | Normal operation.                       |                    |
|           | Short | only-48 | No hazard.                              | AVR1:0             |
| ZD603     | Open  | only-48 | No hazard.                              |                    |
|           | Short | only-48 | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
| R101      | Open  |         | Normal operation.                       |                    |
| R102      | Open  |         | Normal operation.                       |                    |
| R103      | Open  |         | Normal operation.                       |                    |
| R104      | Open  |         | Normal operation.                       |                    |
| R106      | Open  |         | Normal operation.                       |                    |
| R107      | Open  |         | Normal operation.                       |                    |
| R108      | Open  |         | Normal operation.                       |                    |
| R109      | Open  |         | Normal operation.                       |                    |
| R110      | Open  |         | Normal operation.                       |                    |
| R111      | Open  |         | No hazard.                              | AVR1:0             |
| R112      | Open  |         | No hazard.                              | AVR1:0             |
| R113      | Open  |         | No hazard.                              | AVR1:0             |
| R114      | Open  |         | No hazard.                              | AVR1:0             |
| R120      | Open  |         | Normal operation.                       |                    |
| R121      | Open  |         | Normal operation.                       |                    |
| R122      | Open  |         | Normal operation.                       |                    |
| R123      | Open  |         | Normal operation.                       |                    |
| R201      | Open  |         | Normal operation.                       |                    |
| R202      | Open  |         | No hazard.                              | AVR1:0             |
| R203      | Open  |         | Output voltage decreased.<br>No hazard. | AVR1:decreased     |

## F M E A

| Component | Mode | Comment                                 | Output Voltage (V) |
|-----------|------|---|--------------------|
| R204      | Open | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
| R205      | Open | Normal operation.                       |                    |
| R206      | Open | Normal operation.                       |                    |
| R207      | Open | Normal operation.                       |                    |
| R208      | Open | Normal operation.                       |                    |
| R209      | Open | Normal operation.                       |                    |
| R210      | Open | Normal operation.                       |                    |
| R211      | Open | Normal operation.                       |                    |
| R212      | Open | Normal operation.                       |                    |
| R213      | Open | Normal operation.                       |                    |
| R215      | Open | Normal operation.                       |                    |
| R216      | Open | Normal operation.                       |                    |
| R217      | Open | Normal operation.                       |                    |
| R218      | Open | Normal operation.                       |                    |
| R219      | Open | Normal operation.                       |                    |
| R221      | Open | No hazard.                              | AVR1:0             |
| R222      | Open | No hazard.                              | AVR1:0             |
| R223      | Open | No hazard.                              | AVR1:0             |
| R231      | Open | Normal operation.                       |                    |
| R232      | Open | Normal operation.                       |                    |
| R233      | Open | Normal operation.                       |                    |
| R234      | Open | Normal operation.                       |                    |
| R235      | Open | Normal operation.                       |                    |
| R236      | Open | Normal operation.                       |                    |

## F M E A

| Component | Mode |               | Comment           | Output Voltage (V) |
|-----------|------|---------------|-------------------|--------------------|
| R240      | Open |               | Normal operation. |                    |
| R507      | Open |               | Normal operation. |                    |
| R508      | Open |               | Normal operation. |                    |
| R509      | Open |               | Normal operation. |                    |
| R510      | Open |               | Normal operation. |                    |
| R511      | Open |               | Normal operation. |                    |
| R512      | Open |               | Normal operation. |                    |
| R513      | Open |               | Normal operation. |                    |
| R514      | Open |               | Normal operation. |                    |
| R521      | Open |               | Normal operation. |                    |
| R522      | Open |               | Normal operation. |                    |
| R523      | Open |               | Normal operation. |                    |
| R524      | Open |               | Normal operation. |                    |
| R525      | Open |               | Normal operation. |                    |
| R526      | Open |               | Normal operation. |                    |
| R527      | Open |               | Normal operation. |                    |
| R528      | Open |               | Normal operation. |                    |
| R529      | Open |               | Normal operation. |                    |
| R530      | Open |               | Normal operation. |                    |
| R531      | Open | except-12, 15 | Normal operation. |                    |
| R532      | Open | only-24, 48   | Normal operation. |                    |
| R601      | Open |               | Normal operation. |                    |
| R603      | Open |               | Normal operation. |                    |
| R604      | Open |               | Normal operation. |                    |

## F M E A

| Component | Mode |               | Comment                                 | Output Voltage (V) |
|-----------|------|---------------|---|--------------------|
| R605      | Open |               | Normal operation.                       |                    |
| R606      | Open |               | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
| R607      | Open |               | No hazard.                              | AVR1:0             |
| R608      | Open |               | No hazard.                              | AVR1:0             |
| R609      | Open |               | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
| R610      | Open | except-3R3, 5 | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
| R611      | Open |               | Normal operation.                       |                    |

## ABNORMAL TEST RESULT

| Component | Mode  |                           | Comment                                 | Output Voltage (V) |
|-----------|-------|---------------------------|---|--------------------|
| C211      | Short |                           | Normal operation.                       |                    |
| C212      | Short |                           | Normal operation.                       |                    |
| C501      | Short |                           | Normal operation.                       |                    |
| C502      | Short |                           | Normal operation.                       |                    |
| C503      | Short |                           | Normal operation.                       |                    |
| C504      | Short |                           | Normal operation.                       |                    |
| J205      | Open  |                           | No hazard.                              | AVR1:0             |
| J206      | Open  |                           | No hazard.                              | AVR1:0             |
| SS501     | Open  | Cathode                   | Normal operation.                       |                    |
|           |       | Alternative               | Normal operation.                       |                    |
| SS502     | Open  | Cathode except-24, 48     | Normal operation.                       |                    |
|           |       | Alternative except-24, 48 | Normal operation.                       |                    |
| T101      | Open  | 7or8or9 except-48         | Normal operation.                       |                    |
|           |       | 10or11or12 except-48      | Normal operation.                       |                    |
|           |       | 7or8 only-48              | Output voltage decreased.<br>No hazard. | AVR1:0             |
|           |       | 9or10 only-48             | Normal operation.                       |                    |
|           |       | 11or12 only-48            | Output voltage decreased.<br>No hazard. | AVR1:0             |
|           |       |                           |   |                    |
| TR201     | Open  | D                         | No hazard.                              | AVR1:0             |
|           |       | S                         | No hazard.                              | AVR1:0             |
|           |       | G                         | No hazard.                              | AVR1:0             |
|           | Short | D-S                       | No hazard.                              | AVR1:0             |
|           |       | S-G                       | No hazard.                              | AVR1:0             |
|           |       | G-D                       | No hazard.                              | AVR1:0             |