

TO : S@K (Sam-A Korea) Co., Ltd

DATE : 2002.06.30

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## DOCUMENTATION FOR APPROVAL

PRODUCT : CCFL BACKLIGHT INVERTER

MODEL NAME : GH053A(LG151A5V)

GCCT NAME : GCCT053AB

| APPROVAL                                                                            | CHECKED                                                                             | WRITTEN                                                                              |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|  |  |  |

PLEASE RETURN ONE DOCUMENT AFTER APPROVED SIGN.

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|----------------|------------------------------------------------|--------------------------|
| GREEN C&C TECH | <b>INVERTER SPECIFICATION</b><br><b>GH053A</b> | R&D<br>DATE : 2002.06.30 |
|----------------|------------------------------------------------|--------------------------|

## 1. APPLICATION

This Document Specified The Detailed Product Requirements of Inverter  
GH053A

## 2. SUITABLE LOAD

LCD MODULE : LG15.1" 4LAMP TFT LCD

| ITEM                     | SYMBOL | SPEC      | UNIT | REMARKS |
|--------------------------|--------|-----------|------|---------|
| INPUT VOLTAGE1           | Vin1   | 10.8~12.5 | V    |         |
| INPUT VOLTAGE2           | Vin2   | 2.4~5.25  | V    |         |
| OPERATING<br>TEMPERATURE | Top    | 0 50      | °C   |         |
| STORAGE<br>TEMPERATURE   | Tstg   | -30 80    | °C   |         |
| RELATIVE<br>HUMIDITY     | RH     | 90        | %    |         |

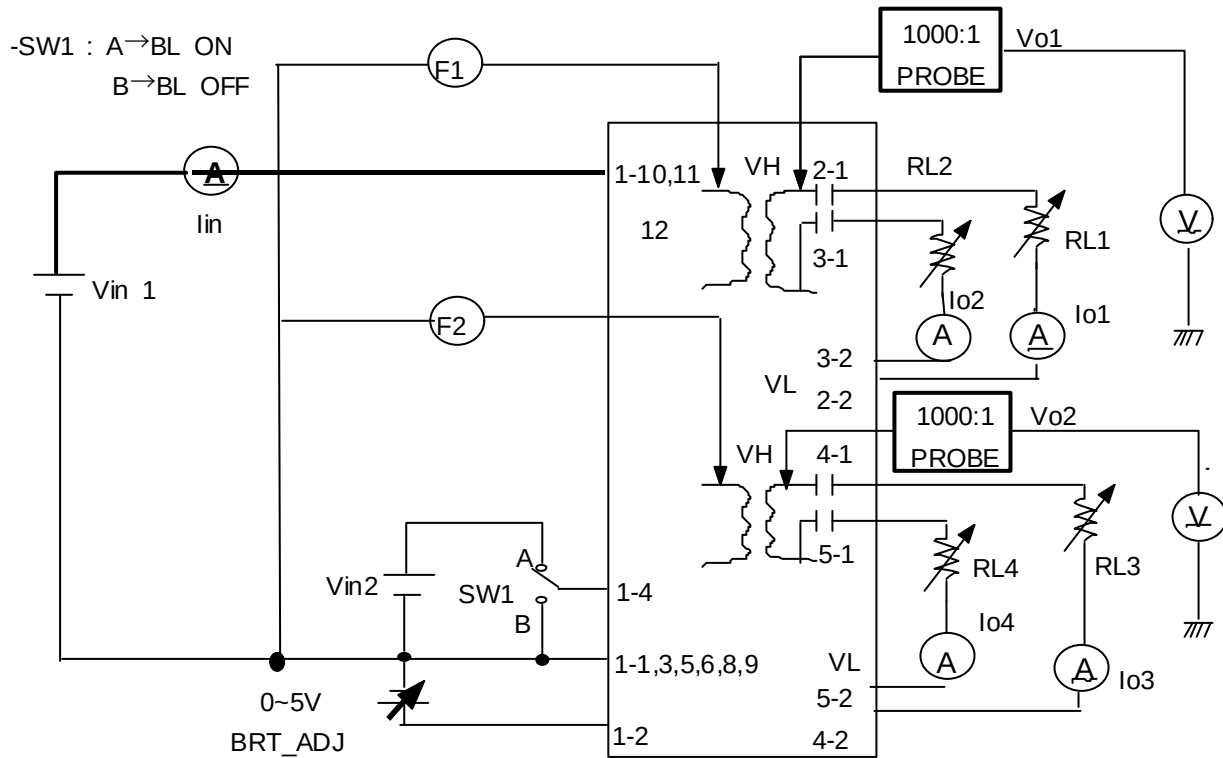
### 3-2. Control Signal

| PIN NO. | SYMBOL  | STATUS | ACTION         | REMARKS   |
|---------|---------|--------|----------------|-----------|
| CN1 #4  | BKLT_ON | HIGH   | LAMP(CCFL)-ON  | 2.4~5.25V |
|         |         | LOW    | LAMP(CCFL)-OFF | 0.8V MAX  |

|                |                        |  |                   |
|----------------|------------------------|--|-------------------|
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### 3-3. Output Characteristics

| ITEM              | SYMBOL     | CONDITION          |             |                                          | SPECIFICATION |     |     | UNIT              |
|-------------------|------------|--------------------|-------------|------------------------------------------|---------------|-----|-----|-------------------|
|                   |            | Vin1(V)<br>(DC-IN) | BRT-<br>ADJ | RL1,2(k $\Omega$ )<br>RL3,4(k $\Omega$ ) | MIN           | TYP | MAX |                   |
| OUTPUT<br>CURRENT | Io1,2(max) | 12                 | 0V          | 80 $\pm$ 0.5                             | 7.5           | 8.0 | 8.5 | mA <sub>rms</sub> |
|                   | Io1,2(min) | 12                 | 5V          | 80 $\pm$ 0.5                             | 3.0           | 3.5 | 4.0 |                   |
|                   | Io3,4(max) | 12                 | 0V          | 80 $\pm$ 0.5                             | 7.5           | 8.0 | 8.5 |                   |
|                   | Io3,4(min) | 12                 | 5V          | 80 $\pm$ 0.5                             | 3.0           | 3.5 | 4.0 |                   |
| INPUT<br>CURRENT  | Iin(1)     | 12                 | 0V          | 80 $\pm$ 0.5                             | 1.7           | 2.0 | 2.3 | ADC               |
| FREQUENCY         | F(1)       | 12                 | 0V          | 80 $\pm$ 0.5                             | 47            | 53  | 59  | KHz               |
| FREQUENCY         | F(2)       | 12                 | 0V          | 80 $\pm$ 0.5                             | 47            | 53  | 59  | KHz               |



|                |                                                |                          |
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#### 4. INTERFACE

##### 4.1 CN1 CONNECTOR : 53261-1290

| PIN NO      | SYMBOL     | REMARK                          |
|-------------|------------|---------------------------------|
| 2           | BRT_ADJ    | 0 ~ 5V                          |
| 1,3,5,6,8,9 | GND        | GND                             |
| 4           | BL ON/OFF  | CCFL Drive SIGNAL(Active HIGHT) |
| 7           | N.C        |                                 |
| 10,11,12    | DC-IN(Vin) | DC INPUT Power (12V)            |

##### 4.2 CN2 CONNECTOR : SM02B-BHSS-1-TB(JST)

| PIN NO. | SYMBOL | REMARK |
|---------|--------|--------|
| 1       | HOT    | HIGH   |
| 2       | COLD   | LOW    |

##### 4.3 CN3 CONNECTOR : SM02B-BHSS-1-TB(JST)

| PIN NO. | SYMBOL | REMARK |
|---------|--------|--------|
| 1       | HOT    | HIGH   |
| 2       | COLD   | LOW    |

##### 4.4 CN4 CONNECTOR : SM02B-BHSS-1-TB(JST)

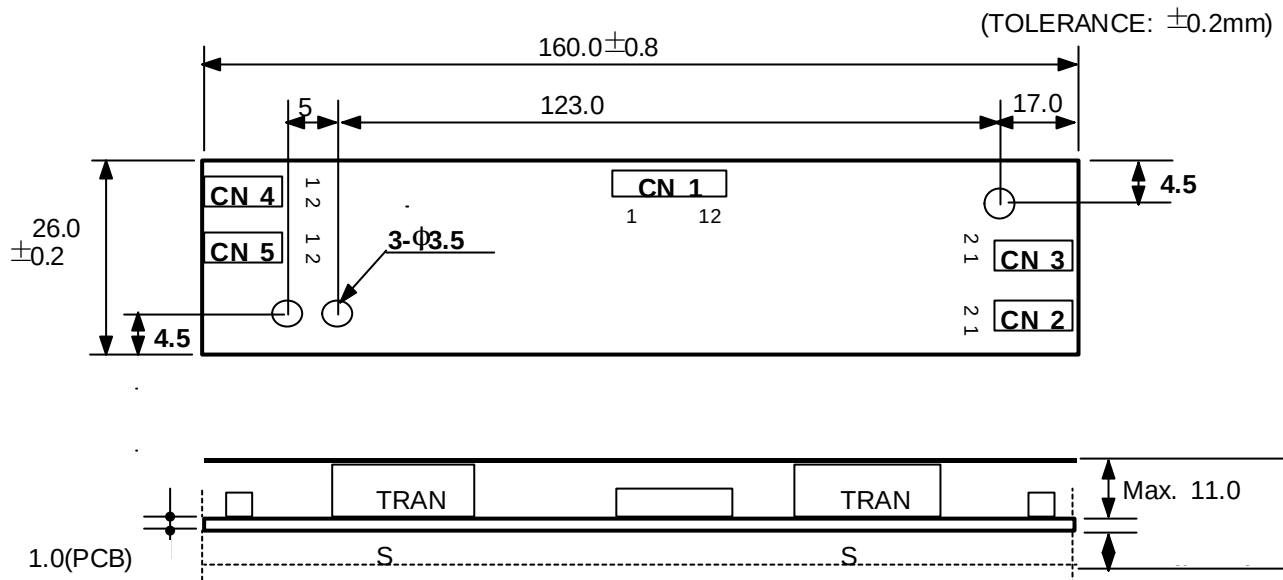
| PIN NO. | SYMBOL | REMARK |
|---------|--------|--------|
| 1       | HOT    | HIGH   |
| 2       | COLD   | LOW    |

##### 4.5 CN5 CONNECTOR : SM02B-BHSS-1-TB(JST)

| PIN NO. | SYMBOL | REMARK |
|---------|--------|--------|
| 1       | HOT    | HIGH   |
| 2       | COLD   | LOW    |

|                |                                                |                          |
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## 5. APPEARANCE (UNIT : mm)



## 6. NOTATION OF LOT NUMBER

MARKING : BOTTOM OF PCB.

|                   |
|-------------------|
| GH053A<br>YYWWMMM |
|-------------------|

GH053A : MODEL NAME

YY : YEAR OF PRODUCT '00,'01,...'98,'99

WW : WEEK OF PRODUCT 01,02,03,04,...52,53

MMMM : SERIAL NUMBER 0001,0002.....9998,9999