

## GH025A



### Feature

- Analog Dimming
- Current Feedback Circuit
- High Efficiency
- Low noise with voltage resonant circuit
- Regulated output current

### 1. APPLICATION

This is a DC to AC Inverter which is developed for driving 1 lamp type cold cathode Fluorescent Lamp(CCFL) panel backlight system

### 2. SUITABLE LOAD

LCD MODULE : 7~15" 1 LAMP TFT LCD

|                |                                  |  |
|----------------|----------------------------------|--|
| GREEN C&C TECH | INVERTER SPECIFICATION<br>GH025A |  |
|----------------|----------------------------------|--|

### 3. ELECTRICAL CHARACTERISTICS

#### 3-1. Absolute Maximum Ratings

| ITEM                  | SYMBOL    | SPEC      | UNIT | REMARKS |
|-----------------------|-----------|-----------|------|---------|
| INPUT VOLTAGE1        | Vin1      | 10.8~13.2 | V    |         |
| INPUT VOLTAGE2        | BL_ON/OFF | 4.9~5.1   | V    |         |
| INPUT VOLTAGE3        | BRT-ADJ   | 0~13.2    | V    |         |
| OPERATING TEMPERATURE | Top       | -20~70    | ℃    |         |
| STORAGE TEMPERATURE   | Tstg      | -30~80    | ℃    |         |
| RELATIVE HUMIDITY     | RH        | 80        | %    |         |

#### 3-2. Control Signal

| PIN NO. | SYMBOL    | STATUS | ACTION         | REMARKS   |
|---------|-----------|--------|----------------|-----------|
| CN1 #3  | BL_ON/OFF | HIGH   | LAMP(CCFL)-ON  | 2.4~5.25V |
|         |           | LOW    | LAMP(CCFL)-OFF | 0.8V MAX  |

#### 3-3. Output Characteristics

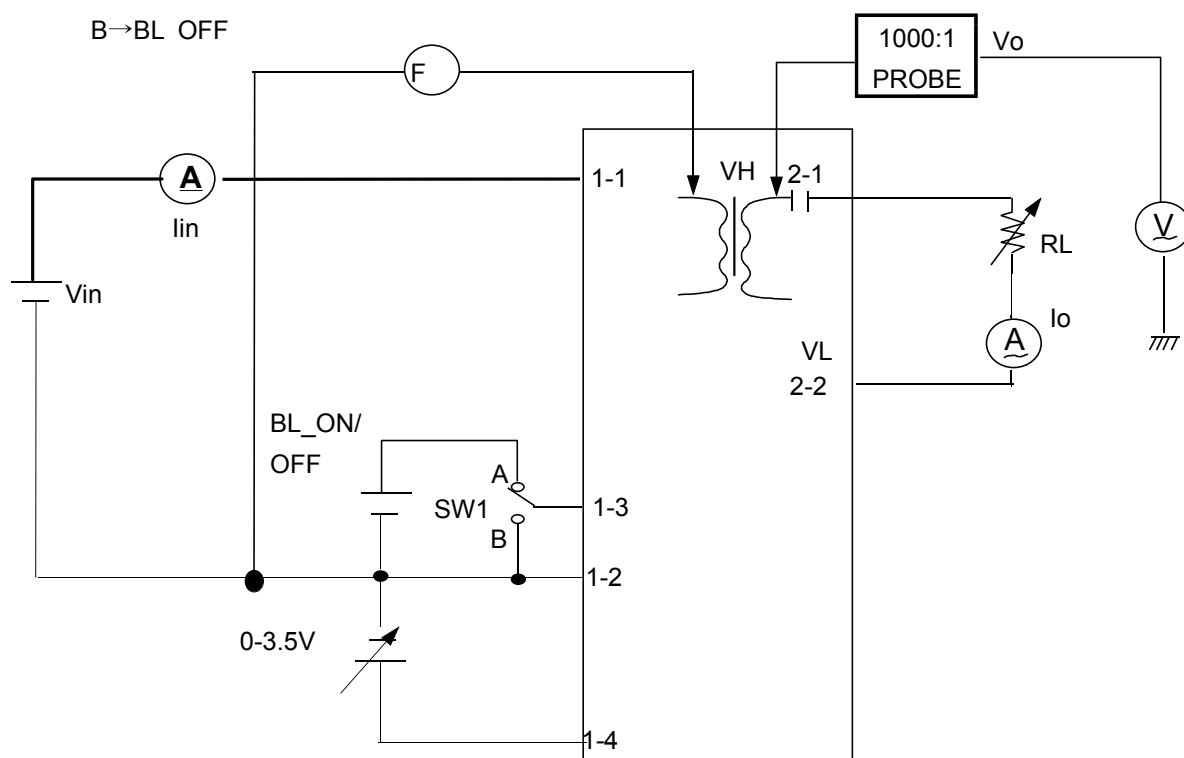
| ITEM                | SYMBOL  | CONDITION         |             |        | SPECIFICATION |     |     | UNIT  |
|---------------------|---------|-------------------|-------------|--------|---------------|-----|-----|-------|
|                     |         | Vin(V)<br>(DC-IN) | BRT-<br>ADJ | RL(kΩ) | MIN           | TYP | MAX |       |
| OUTPUT CURRENT      | Io(max) | 12                | 0V          | 80±0.5 | 5.4           | 6.1 | 6.8 | mArms |
|                     | Io(min) | 12                | 3.5V        | 80±0.5 | 2.3           | 3.0 | 3.7 |       |
| INPUT CURRENT       | Iin     | 12                | 0V          | 80±0.5 | 0.3           | 0.5 | 0.7 | ADC   |
| FREQUENCY           | F       | 12                | 0V          | 80±0.5 | 44            | 51  | 58  | KHz   |
| OPEN OUTPUT VOLTAGE | Vopen   | 12                | 0V          | ∞      | 1.2           | -   | 1.9 | kVrms |



|                |                                  |  |
|----------------|----------------------------------|--|
| GREEN C&C TECH | INVERTER SPECIFICATION<br>GH025A |  |
|----------------|----------------------------------|--|

### 3.4 Test Circuit

-SW1 : A→BL ON  
B→BL OFF



|                |                                  |  |
|----------------|----------------------------------|--|
| GREEN C&C TECH | INVERTER SPECIFICATION<br>GH025A |  |
|----------------|----------------------------------|--|

#### 4. INTERFACE

4.1 CN1 CONNECTOR :12505WR-05A00(P)(YEONHO) or equivalent

| PIN NO | SYMBOL     | REMARK                         |
|--------|------------|--------------------------------|
| 1      | DC-IN(Vin) | DC INPUT Power (12V)           |
| 2      | GND        | Ground                         |
| 3      | BL ON/OFF  | CCFL Drive SIGNAL(Active HIGH) |
| 4      | BRT_ADJ    | 0 ~ 3.5V                       |
| 5      | N.C        | No Connection                  |

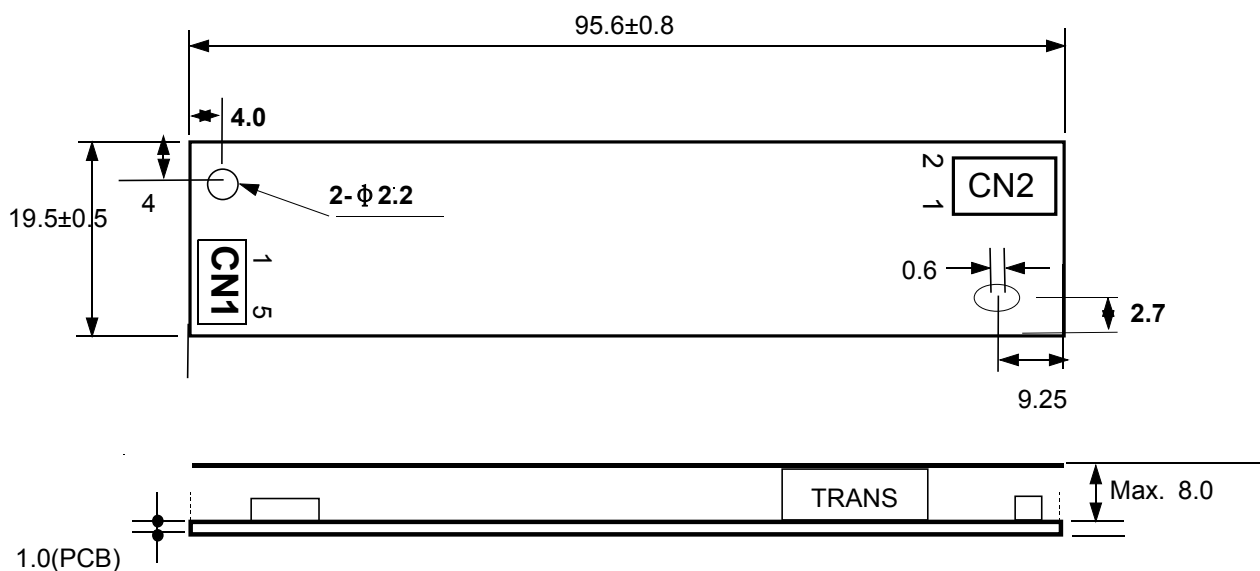
4.2 CN2 CONNECTOR : 35001WR-02A00(P)(YEONHO) or equivalent

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



|                |                                  |  |
|----------------|----------------------------------|--|
| GREEN C&C TECH | INVERTER SPECIFICATION<br>GH025A |  |
|----------------|----------------------------------|--|

## 5. APPEARANCE (UNIT : mm)



## 6. NOTATION OF LOT NUMBER

MARKING : BOTTOM OF PCB.



|        |                                                           |
|--------|-----------------------------------------------------------|
| GH025A | : USER MODEL CODE                                         |
| G      | : MANUFACTURER CODE (GREEN C&C TECH.)                     |
| 7      | : YEAR OF PRODUCT<br>2007 → 7 , 2008 → 8 , ... , 2011 → 1 |
| 04     | : WEEK OF PRODUCT 01,02,03,04,...52                       |
| 0001   | : SERIAL NUMBER 0001,0002.....9998,9999                   |
| AB     | : GCCT MODEL CODE (GCCT025AB)                             |

