

# **SPECIFICATION CONTENT LIST**

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**ATBEL TECHNOLOGY CORP.,**

5F. NO. 103, Ruihu St., Neihu District, TaipeiCity 114, Taiwan (R.O.C)

Tel : 88-2-8751-8083 Ext : 100 Fax : 886-2-8751-2032

e-mail : Johnson\_hsieh@atbel.com.tw

<http://www.atbel.com.tw>

## Model : AB-A301-V.56S: Single Lamp

### DC TO AC INVERTER SPECIFICATION

The DC to AC inverter is designed as a low noise, high frequency, high efficiency and as a low profile efficiency and light weight switching power supply.

#### 1. Features

- (1) Constant current output to control brightness.
- (2) Auto shut off during.
- (3) High Performance, High Efficiency.
- (4) Fixed output frequency does not effect by brightness adjustment

#### 2. Application

| LCD Type | LCD Part No   | Brand   | Remark |
|----------|---------------|---------|--------|
| 7"       | TX16D11VM2CAA | Hitachi |        |
|          | CLAA070VA01   | CPT     |        |
|          |               |         |        |

#### 3. Operating Conditions

| Item                  | Mark | Condition       | Min | Max | Unit | Remark |
|-----------------------|------|-----------------|-----|-----|------|--------|
| Operating Temperature | Top  | Ha=90% RH under | 0   | 85  | °C   |        |
| Storage Temperature   | Tstg | Ha=95% RH under | -10 | 80  | °C   |        |
| Operating Humidity    | Hop  | Ta=0~65°C       | 20  | 90  | % RH |        |
| Storage Humidity      | Hstg | Ta=20~80°C      | -   | 95  | % RH |        |

#### 4. Operating Characteristics

| Item                            | Symbol  | Condition                           | Min | Typ | Max  | Unit      | Remark |
|---------------------------------|---------|-------------------------------------|-----|-----|------|-----------|--------|
| Input Voltage                   | Vin     | GND=0V                              | 4.5 | 5.0 | 5.5  | V         |        |
| Input Current (Low Brightness)  | I in L  | Vin=TYP.±1% ON<br>VR=MIN (Iout=MIN) | 180 | 200 | 220  | mA        |        |
| Input Current (High Brightness) | I in H  | Vin=TYP.±1% ON<br>VR=MAX (Iout=MAX) | 800 | 850 | 1000 | mA        |        |
| Lamp Current (Low Brightness)   | I out L | Vin=TYP.±1% ON<br>VR=MIN (Iout=MIN) | 0.9 | 1.1 | 1.3  | mA<br>rms |        |
| Lamp Current (High Brightness)  | I out H | Vin=TYP.±1% ON<br>VR=MAX (Iout=MAX) | 5.8 | 6.0 | 6.4  | mA<br>rms |        |
| Working Frequency               |         |                                     | 46  | 50  | 54   | KHz       |        |
| Output Voltage (Vp)             |         | CCFT Current=6mA                    | -   | 590 | -    | V         |        |
| Output Voltage (RMS)            |         | CCFT Current=6mA                    | -   | 410 | -    | V         |        |
| Brightness Control              |         | Connection of Voltage               | 5   | -   | 0    | V         |        |
| Brightness Control: Cut Off     |         | Connection of Voltage               | 5.4 | 5.6 | 5.8  | V         |        |

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## **5. Connection pin assignment**

### **5-1. A (P1) Input Connector: 5 Pins , Pitch:2.0mm**

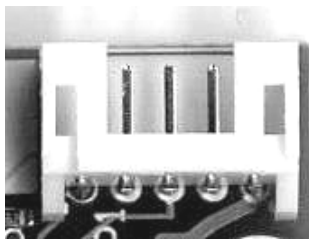
| PIN No | Symbol     | Description                     |
|--------|------------|---------------------------------|
| 1      | Vin        | DC+5V                           |
| 2      | GND        | Ground                          |
| 3      | Brightness | 0~5Vdc control, 0V:Max , 5V:Min |
| 4      | GND        | Ground                          |
| 5      | Enable     | ON/OFF control ON=+5V OFF=0V    |

### **5-2 P2 Output Connector**

| PIN No | Symbol | Description              |
|--------|--------|--------------------------|
| 1      | Output | Lamp High Voltage Output |
| 2      | Input  | Lamp Low Voltage Input   |

### **5-3 Connector Model No & Brand**

| Connector No. | Connector Parts No | Brand   |
|---------------|--------------------|---------|
| P1            | 2003P05 S0T 2.0mm  | Landwin |
| P2            | 3502P0210T-1 3.5mm | Landwin |



↑  
(Pin1)

2003P05 S0T (2.0mm)



↑  
(pin1)

3502P0210T-1(3.5mm)

## **6. MECHANICAL CHARACTERISTICS**

Dimension: 91.8mm \* 16mm \* 9.8mm

Weight: MAX. 10g

**PCB Dimension & Screw Hole Location :**

Screw hole = 3.0mm

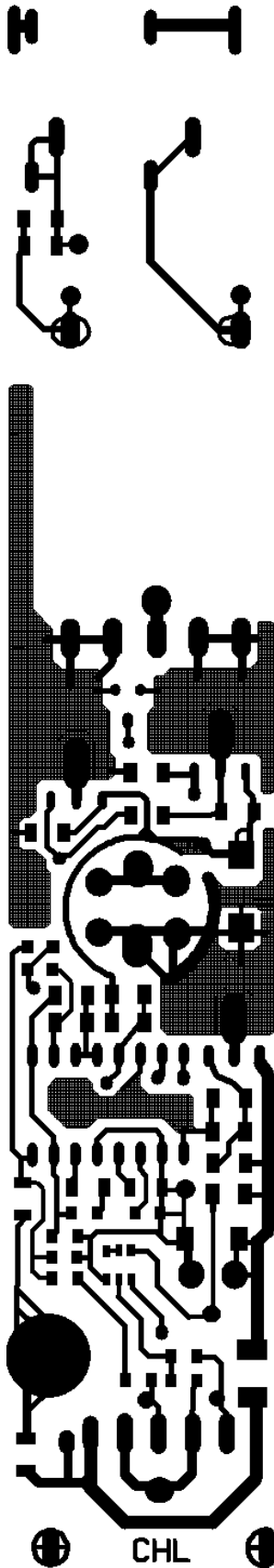


Fig. Top layer

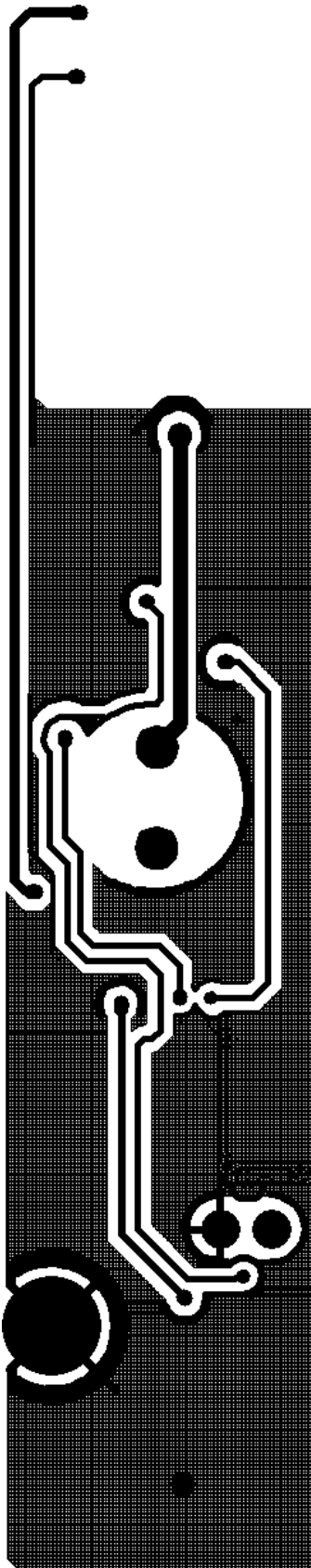


Fig. Bottom layer

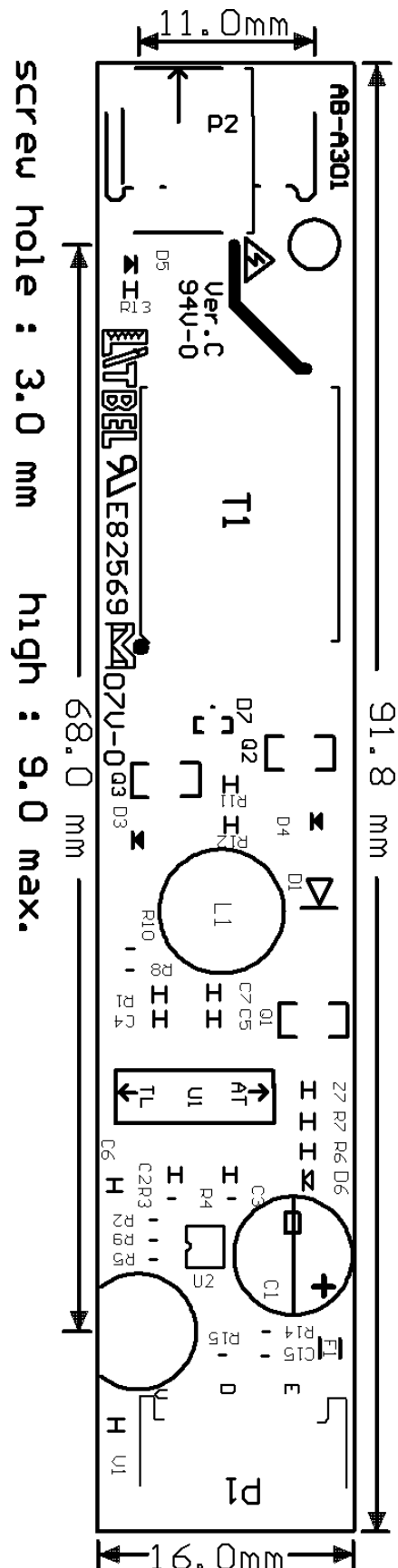


Fig. Printing