# ES-1115N-LXAE

## **BI3101A**

### **Data Sheet**

# **BI3101A**

**Dual PWM CCFL Controller** 

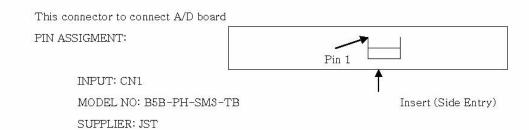
Version: 1.1

#### Notice

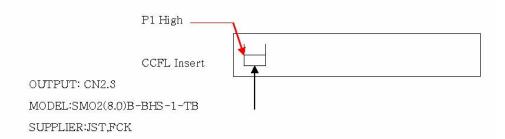
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| -   |                         |                           |  |
|-----|-------------------------|---------------------------|--|
| PIN | SYMBOL                  | REMARK                    |  |
| 1.  | VIN                     | 12v                       |  |
| 2   | GND                     |                           |  |
| 3   | Von                     | ON(5V)/OFF(0V)            |  |
| 4   | VBR(Brightness control) | 0V Brightest 4.7V Darkest |  |



| PIN | SYMBOL  | REMARK       |
|-----|---------|--------------|
| 1.  | V HIGHT | HIGH VOLTAGE |
| 2   | V LOW   | FB           |

Note: VH. and VL. must connect correctly, If you make a mistake to connect you will get Hurt and module will break.



### ELETRICAL CHARACTERI STICS

| ITEMS       | SYMBOL | MIN  | TYP  | MAX  | UNIT  | RE. MARK           |
|-------------|--------|------|------|------|-------|--------------------|
| Input DC V  | Vin    | 10.8 | 12   | 13.2 | V     |                    |
| Input DC C  | I in   | 850  | 1100 | 1300 | mA    |                    |
| Frequency F | F      | 40   | 50   | 80   | KHz   |                    |
| OUTPUT mA   | I out  | 7    | 8    | 8.5  | mA    | Brightness<br>max. |
| Open V      | Vopen  | 1000 | 1250 | 1500 | V Rms |                    |
| Output V    | V out  | 600  | 640  | 710  | V Rms |                    |

WEIGHT: Approximate 30Gms



# RELIABILITY TEST FOLLOWING TEST ITEMS ARE ASSURED

| Items                        | Conditions  | Judgment                     |
|------------------------------|---|------------------------------|
| Low temp. Storage            | -30℃ 500h   | Electric & appearance should |
| Low temp. operating          | 0°C 500h  | be in the spec.              |
| High temp. storage           | 85℃ 500h  | *See next table              |
| High temp. *** operating *** | 58℃ 1000h   |                              |
| Temp. cycles                 | -30℃80℃ 30min Each 100 cycles                         |                              |
| Humidity operating.          | 50℃ 90-95%RH 500h                                     |                              |
| Vibration                    | X. Y. Z. 30min. Each                                  |                              |
| Mechanical shock             | 100G 6ms Half Sinusoid wave x. y. z. 3 Times Per Each |                              |

High temperature operating function inspection:

### Test oneTime/10 Hours each

| Item                  | Temperature | Conclusion | Dynamic testing           |
|-----------------------|-------------|------------|---------------------------|
| ON&OFF                | 50℃         | ОК         | 1200 Times continue       |
| Noise                 | 50℃         | ОК         | Vin low noise also        |
| P.W.M.                | 50℃         | ОК         | Include brightness adjust |
| I in                  | 50℃         | ОК         |                           |
| Frequency             | 50℃         | ОК         |                           |
| Sinusoid<br>wave      | 50℃         | ОК         | AC in & out               |
| Brightness<br>control | 50℃         | ОК         | Without flash             |



## Test Circuit

