



### TOS-F2181AcB-B-HF

## **SMD Display LED**

| Part Number       | (        | Chip         | Face  | Segment |  |
|-------------------|----------|--------------|-------|---------|--|
|                   | Material | Source Color | Color | Color   |  |
| TOS-F2181AcB-B-HF | InGaN    | Hi-blue      | Black | White   |  |

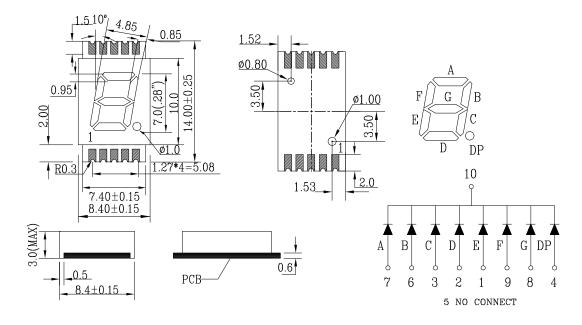
#### **Features**

- (0.28") 7.00mm digit height
- · Common cathode
- I.C. compatible
- Low power consumption
- · RoHS compliant

### **Applications**

- · Audio equipment
- · Instrument panels
- · Digital read out display

# **Package Dimensions & Internal Circuit Diagram**



#### Notes:

- 1. All dimensions are in millimeters, tolerance: ±0.25; Angle: ±0.1° unless otherwise noted.
- 2. Specifications are subject to change without notice.

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# Absolute Maximum Rating @ Ta=25°C

| Parameter  | Maximum Rating   | Unit  |  |
|--|------------------|-------|--|
| Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width) Per Dice | 80               | mA    |  |
| Power Dissipation Per Dice   | 105              | mW    |  |
| Continuous Forward Current Per Dice                                | 20               | mA    |  |
| Recommend Operating Current Per Dice                               | 12               | mA    |  |
| Reverse Voltage Per Dice   | 5                | V     |  |
| Operating Temperature Range  | -25°C to +85°C   |       |  |
| Storage Temperature Range -30°C to +8                              |                  | +85°C |  |
| Lead-Free Solder Temperature                                       | 250°C for 10 Sec |       |  |

# Electrical / Optical Characteristic @ Ta=25°C

| Parameter                        | Symbol            | Min. | Тур. | Max.  | Unit | Test Condition       | Grade |
|----------------------------------|-------------------|------|------|-------|------|----------------------|-------|
| Dominant Wavelength              | $\lambda_{\sf d}$ |      | 465  |       | nm   | I <sub>F</sub> =20mA |       |
| Spectral Line Half-Width         | Δλ                |      | 26   |       | nm   | I <sub>F</sub> =20mA |       |
| Forward Voltage                  | $V_{F}$           |      | 2.8  | 3.0   | V    | I <sub>F</sub> =20mA |       |
| Reverse Current                  | I <sub>R</sub>    |      |      | 10    | μA   | V <sub>R</sub> =5V   |       |
| Luminous Intensity Matching Rate | lv-m              |      |      | 2.0:1 |      | I <sub>F</sub> =20mA |       |

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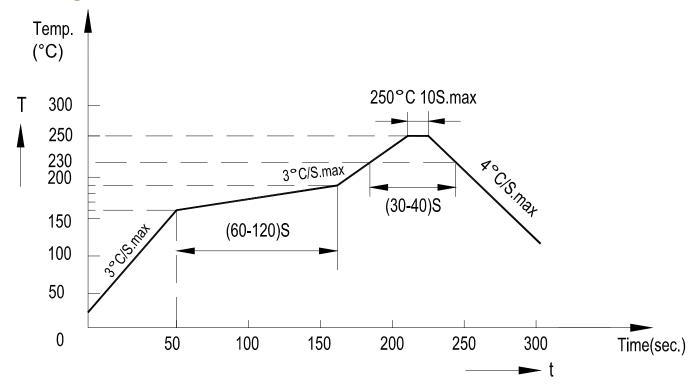
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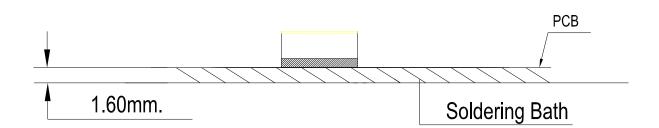


## **Soldering Profile**



Number of reflow process shall be 2 times or less

- 1. Manual soldering temperature: Max 320°C for 3 Sec
- 2. Can be second manual soldering, but must be cooling before second manual soldering, In order to guarantee the soldered area is to be smoothly covered with soldering, can delay the soldering time, but not to exceed 20s every pad, because if that, the pad will be damaged.



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# **Package Description**

