



Technical Specification

**BOOTED SMT LED**  
WL-L2017B70C-031  
Blue Lagoon

Preliminary

**Features**

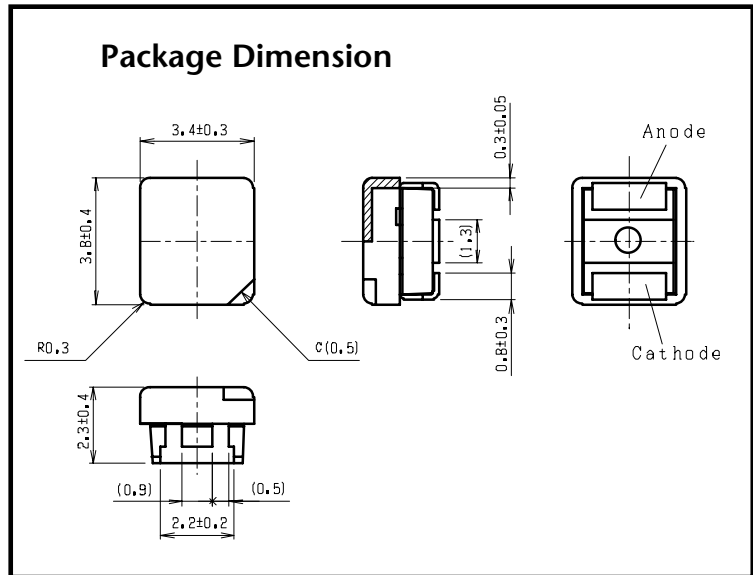
- White package.
- Optical indicator.
- Ideal for backlight and light pipe application.
- Inter reflector.
- Wide viewing angle.
- Compatible with automatic placement equipment.
- Suitable for vapor-phase reflow, infrared reflow and wave solder processes.
- Available on tape and reel (8mm tape).

**Description**

This LED/boot assembly provides precise color matching to specific x and y coordinates. Due to package design, this assembly has a wide viewing angle for optimized light coupling.

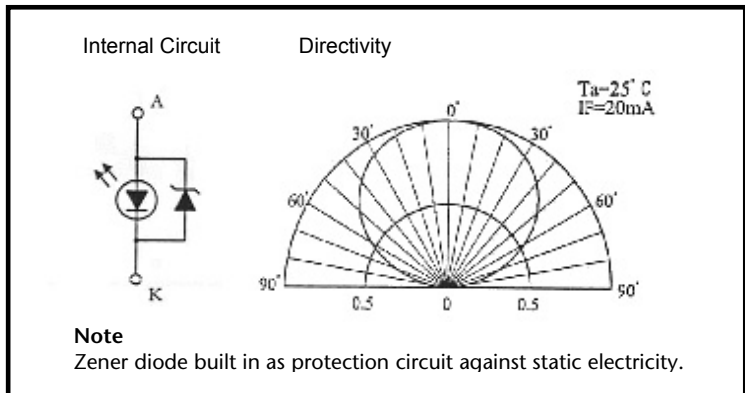
**Applications**

- Aerospace: backlight for panels, LCD's, switches and symbols.
- Automotive: backlight in dashboards and switches



**Notes**

- Tolerances are ± 0.1 mm unless otherwise stated.
- Unit = mm.



| Part Number      | Chip      |               | Boot Color | Revision |
|------------------|-----------|---------------|------------|----------|
|                  | Material  | Emitted Color |            |          |
| WL-L2017B70C-031 | InGaN/SiC | Custom        | Green      | 1.0      |



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#### Absolute Maximum Ratings at Ta = 25°C

| Symbol    | Parameter  | Rating     | Unit |
|-----------|--|------------|------|
| If        | Forward Current  | 30         | mA   |
| Topr      | Operating Temperature  | -40 ~ +85  | °C   |
| Tstg      | Storage Temperature  | -40 ~ +100 | °C   |
| Tsol      | Soldering Temperature (for 3 seconds)                        | 300        | °C   |
| Pd        | Power Dissipation  | 120        | mW   |
| If (Peak) | Peak Forward Current (10% Duty Cycle, 10ms Pulse Width Max.) | 100        | mA   |

#### Electronic Optical Characteristics

| Symbol | Parameter                      | Min. | Typ. | Max. | Unit | Condition |
|--------|--------------------------------|------|------|------|------|-----------|
| Iv     | Luminous Intensity (estimated) | 50   | 91   | 132  | mcd  | If=20mA   |
| 2θ½    | Viewing Angle                  | —    | 130  | —    | deg  | If=20mA   |
| Vf     | Forward Voltage                | —    | 3.6  | 4.0  | V    | If=20mA   |
| —      | *Chromaticity Coordinates      | x    | .160 | .180 | .200 | If=20mA   |
|        |                                | y    | .390 | .410 | .430 |           |

\* Per CIE 1931 Chromaticity Diagram.

#### Intensity Ranks

| Symbol | Parameter          | Rank | Min. | Typ. | Max. | Unit | Condition |
|--------|--------------------|------|------|------|------|------|-----------|
| Iv     | Luminous Intensity | S    | 50   | 76   | 103  | mcd  | If=20mA   |
|        |                    | T    | 63   | 97   | 132  |      |           |



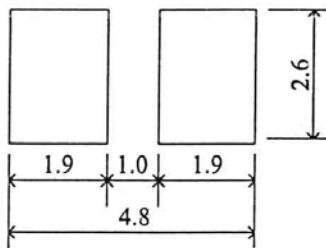
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**Soldering Conditions**

| Soldering   | Solder Dipping  | Reflow Soldering  |
|---|---|---|
| Soldering Iron:<br>20W Max<br>Temperature:<br>300°C Max.<br>Soldering Time:<br>3 Seconds Max. | Pre-Heat:<br>100°C Max.<br>Pre-Heat Time:<br>60 Seconds Max.<br>Solder Bath Temperature:<br>260°C Max.<br>Dipping Time:<br>5 Seconds Max. | Pre-Heat:<br>120~150°C<br>Pre-Heat Time:<br>2 Minutes Max.<br>Solder Bath Temperature:<br>240°C<br>Dipping Time:<br>5 Seconds Max.<br>Conditions:<br>Refer to Temperature Profile |

**Solder Pad Layout**



**Temperature Profile**

