## **TOSHIBA**

# Blue and Green LED Lamps

TLBA Series, TLBC Series and TLEGC Series

## Blue and Green LED Lamps

Toshiba has added brand new blue LED lamps and green LED lamps to its LED product line-up. The spectrum of available colors has thereby been expanded beyond the range of red to pure green.

Toshiba offers a line-up of SMD lamps which can be incorporated into compact and slim-profile products. The range of potential applications for these new lamps is wide and includes use as indicators for compact portable devices and battery-driven devices for outdoor use, as well as use as backlighting for mobile phones, LCD displays and switching displays.

- Color of emitted light: blue  $\lambda d = 465 \text{ nm}/470 \text{ nm}$  (typ.) green  $\lambda d = 525 \text{ nm}$  (typ.)
- Various package sizes:

1.6 (L) 
$$\times$$
 0.8 (W)  $\times$  0.8 (H) mm  $\Rightarrow$  TL $\square$ 1007 Series 2.0 (L)  $\times$  1.25 (W)  $\times$  1.1 (H) mm  $\Rightarrow$  TL $\square$ 1002 Series 3.2 (L)  $\times$  2.8 (W)  $\times$  1.9 (H) mm  $\Rightarrow$  TL $\square$ 1100 Series

Applications: Backlighting for mobile phones, LCD displays and switching displays
 Indicators for compact devices and battery-driven devices

### Under development



### **Main Characteristics**

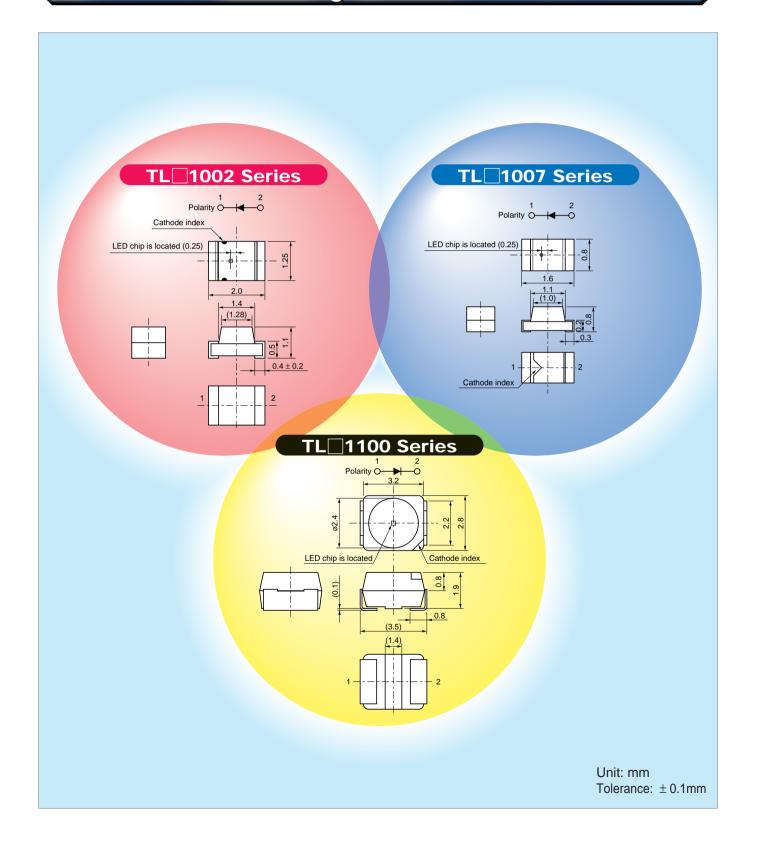
#### Maximum Ratings ( $Ta = 25^{\circ}C$ )

| Product Number   | Forward Current<br>IF (mA) | Reverse Voltage<br>VR (V) | Power Dissipation<br>PD (mW) | Operating Temperature Topr (°C) | Storage Temperature<br>T <sub>Stg</sub> (°C) |  |
|------------------|----------------------------|---------------------------|------------------------------|---------------------------------|--|--|
| TL 1002 Series   | 25                         | 4                         | 105                          | -30 ~ 85                        | -40 ~ 100                                    |  |
| TL ☐ 1007 Series | 25                         | 4                         | 105                          | -30 ~ 85                        | -40 ~ 100                                    |  |
| TL ☐1100 Series  | 30                         | 4                         | 126                          | -40 ~ 100                       | -40 ~ 100                                    |  |

#### Electrical and Optical Characteristics (Ta = 25°C)

| Electrical and Option Onaracteristics (14 - 25 0) |               |                             |           |                    |     |          |                         |          |  |  |  |  |
|---|---------------|-----------------------------|-----------|--------------------|-----|----------|-------------------------|----------|--|--|--|--|
|   | Dominant      | Lnminous Intensity IV (mcd) |           | DC Forward Voltage |     |          | Reverse Current         |          |  |  |  |  |
| Product Number                                    | Wavelength λd |                             |           | VF (V)             |     |          | <b>IR</b> (μ <b>A</b> ) |          |  |  |  |  |
|   | Typ. (nm)     | Тур.                        | @ IF (mA) | Тур.               | Max | @IF (mA) | Max                     | @ VR (V) |  |  |  |  |
| TLBA1002  |               | 5                           |           | 3.7                | 4.2 |          |                         |          |  |  |  |  |
| TLBA1007  | 465           | 5                           | 10        | 3.7                | 4.2 | 10       |                         |          |  |  |  |  |
| TLBA1100  |               | 7                           |           | 3.7                | 4.2 |          | 10                      | 4        |  |  |  |  |
| TLBC1002  | 470           | 20                          | 20        | 3.7                | 4.2 | 20       |                         |          |  |  |  |  |
| TLBC1007  |               | 20                          |           | 3.7                | 4.2 |          |                         |          |  |  |  |  |
| TLBC1100  |               | 35                          |           | 3.7                | 4.2 |          |                         |          |  |  |  |  |
| TLEGC1002   | 525           | 120                         | 20        | 3.3                | 4.2 | 20       |                         |          |  |  |  |  |
| TLEGC1007   |               | 120                         |           | 3.3                | 4.2 |          |                         |          |  |  |  |  |
| TLEGC1100   |               | 180                         |           | 3.3                | 4.2 |          |                         |          |  |  |  |  |

## Package Dimensions



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