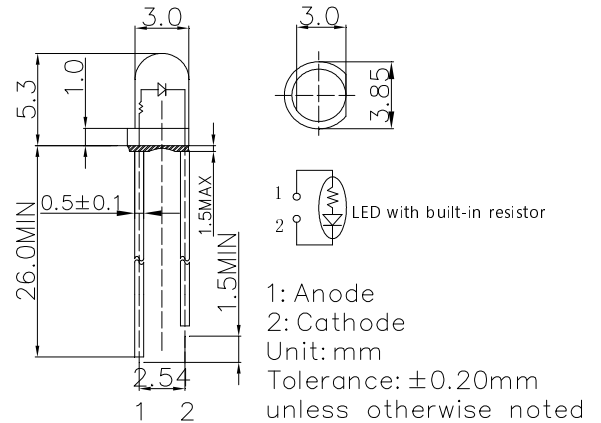


**■Description**

This LED builds with internal resistor to operate with wide operation voltage of DC3-15V.

**■Outline Dimension**



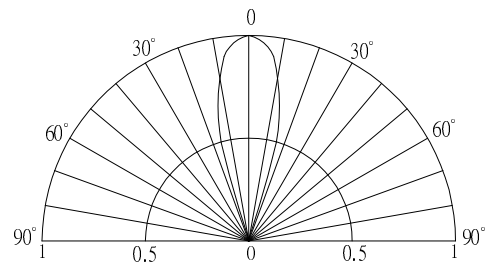
**■Features**

- Wide Input Voltage
- Cost Saving and Space Saving
- Color Transparent Type
- Single Color

**■Applications**

- Toys/Game/Audio
- TTL/Cmos Compatible
- Arduino/Pi Pico/Steam Kit
- Other Electronics Products

**■Directivity**

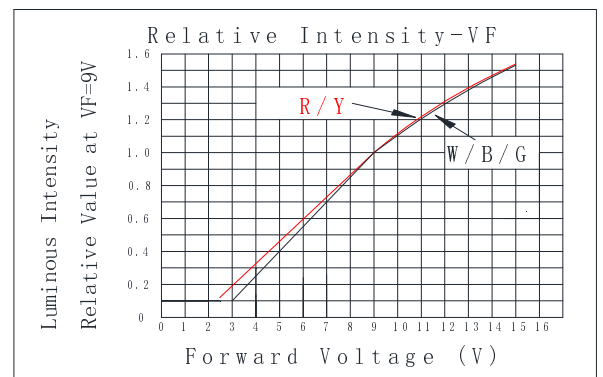


**■Absolute Maximum Rating**

(Ta=25°C)

| Item                       | Symbol         | Value      | Unit |
|----------------------------|----------------|------------|------|
| DC Forward Voltage         | V <sub>F</sub> | 15         | V    |
| Reverse Voltage            | V <sub>R</sub> | 12         | V    |
| Power Dissipation          | P <sub>D</sub> | 190        | mW   |
| Operating Temperature      | Topr           | -30 ~ +85  | °C   |
| Storage Temperature        | Tstg           | -40~ +100  | °C   |
| Lead Soldering Temperature | Tsol           | 260°C/5sec | -    |

**■Optical Characteristic Curves**



**■Electrical -Optical Characteristics**

(Ta=25°C)

| 3mm Multi-Voltage LED                   |                 |                    |                  |                   |              |              |
|---|-----------------|--------------------|------------------|-------------------|--------------|--------------|
| <b>LED P/N</b>                          | OSR53133A-VV    | OSY53133A-VV       | OSB53133A-VV     | OSG53133A-VV      | OSM53131A-VV | OSW53131A-VV |
| <b>Light Color</b>                      | Red             | Yellow             | Blue             | Pure Green        | Warm White   | Cool White   |
| <b>Lens Color</b>                       | Red Transparent | Yellow Transparent | Blue Transparent | Green Transparent | Water Clear  | Water Clear  |
| <b>Wavelength*1/Color Temperature*2</b> | 620-630nm       | 585-595nm          | 465-475m         | 520-530nm         | 2700-3300K   | 8500-18000K  |
| <b>Luminous Intensity(typ.)*3</b>       | 2180mcd         | 2180mcd            | 1560mcd          | 4200mcd           | 4200mcd      | 4200mcd      |
| <b>Forward Voltage(typ.)</b>            | 9V              | 9V                 | 9V               | 9V                | 9V           | 9V           |
| <b>Forward Current(typ.)</b>            | 8mA             | 8mA                | 7.5mA            | 7.5mA             | 7.5mA        | 7.5mA        |
| <b>Viewing Angle(typ.)</b>              | 30°             | 30°                | 30°              | 30°               | 30°          | 30°          |

\*1 Tolerance of measurements of dominant wavelength is ±1nm

\*2 Tolerance of measurements of color temperature is ±10%

\*3 Tolerance of measurements of luminous intensity is ±15%