

# TOL-5043AAC

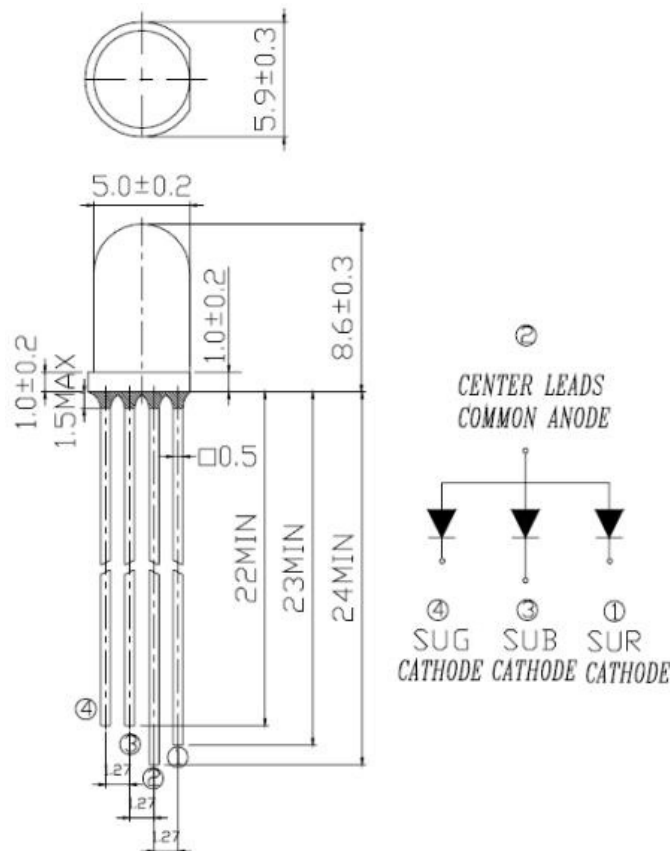
## Lamp LED

| Part Number | Chip                |                | Lens Color  |
|-------------|---------------------|----------------|-------------|
|             | Material            | Source Color   |             |
| TOL-5043AAC | AlGaInP/InGaN/InGaN | Red/Green/Blue | Water Clear |

### Features

- I.C. compatible.
- Low power consumption, long life, stable and reliable.
- Compatible with wave soldering process.
- Red/Green/Blue common Anode.
- RoHS compliant.

### Dimensions



#### Notes:

1. All dimensions are in millimeter.
2. Tolerance is  $\pm 0.25$ mm unless otherwise noted.

## Absolute Maximum Rating @ Ta=25°C

| Parameter  | Maximum Rating   |     |     | Unit |
|--|------------------|-----|-----|------|
|  | R                | G   | B   |      |
| Peak Forward Current<br>(1/10 Duty Cycle, 0.1ms Pulse Width) | 100              | 100 | 160 | mA   |
| Power Dissipation  | 100              | 100 | 120 | mW   |
| Continuous Forward Current                                   | 50               | 30  | 30  | mA   |
| Reverse Voltage  | 5                | 5   | 5   | V    |
| Operating Temperature Range                                  | -30°C to +85°C   |     |     |      |
| Storage Temperature Range                                    | -40°C to +100°C  |     |     |      |
| Wave Soldering Profile For Lead-free Soldering               | 260°C, 5 Seconds |     |     |      |

## Electrical / Optical Characteristic @ Ta=25°C

| Parameter           | Symbol            | Red  |      |      | Green |      |      | Blue |      |      | Unit | Test Condition       |
|---------------------|-------------------|------|------|------|-------|------|------|------|------|------|------|----------------------|
|                     |                   | Min. | Typ. | Max. | Min.  | Typ. | Max. | Min. | Typ. | Max. |      |                      |
| Luminous Intensity  | I <sub>v</sub>    | 3000 | 4000 | -    | 4000  | 5000 | -    | 3000 | 4000 | -    | mcd  | I <sub>F</sub> =20mA |
| Viewing Angle       | 2θ <sub>1/2</sub> | -    | 40   | -    | -     | 40   | -    | -    | 40   | -    | deg  | I <sub>F</sub> =20mA |
| Dominant Wavelength | λ <sub>d</sub>    | 620  | -    | 630  | 520   | -    | 530  | 464  | -    | 474  | nm   | I <sub>F</sub> =20mA |
| Forward Voltage     | V <sub>F</sub>    | -    | 2.1  | -    | -     | 3.2  | -    | -    | 3.2  | -    | V    | I <sub>F</sub> =20mA |
| Reverse Current     | I <sub>R</sub>    | -    | -    | 10   |       |      | 10   |      |      | 10   | μA   | V <sub>R</sub> =5V   |

\* Please refer to CIE 1931 chromaticity diagram.

Remark : Only reference for above data when testing.

The tolerance of intensity : ± 15%.

The tolerance of wave length : ±1nm.

The tolerance of forwards voltage : ± 0.05V.