

### LC503AYL2-30P-A

#### Features

5mm Package  
 High Optical Power  
 High Luminous Intensity  
 Slightly Diffused Lens  
 All Plastic Mold Type  
 LEAD FREE



**ATTENTION**  
 OBSERVE PRECAUTIONS  
 ELECTROSTATIC  
 SENSITIVE DEVICES

#### Applications

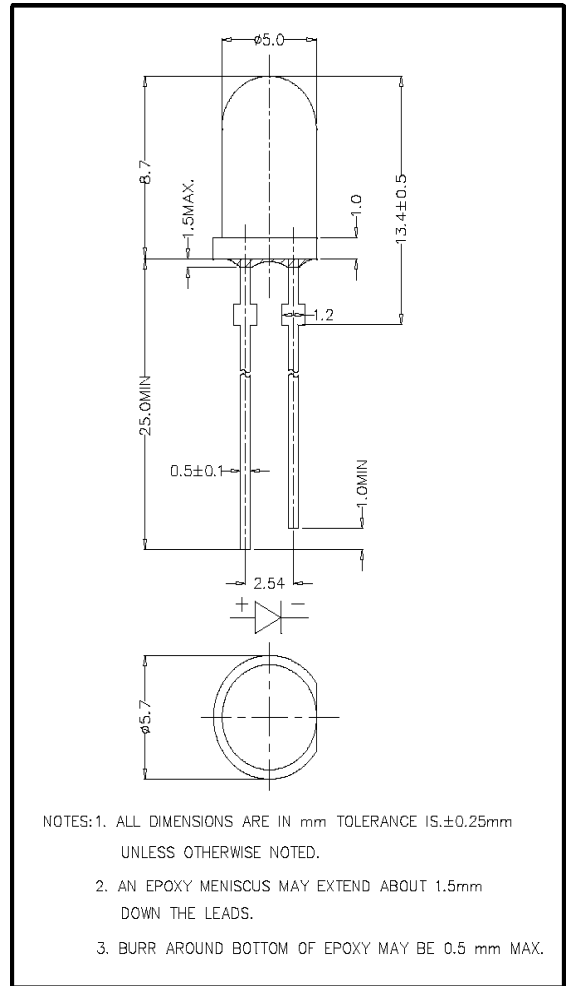
Outdoor Message Centers  
 VMS  
 Automotive Interior Lighting  
 Traffic Signals  
 Pedestrian Signals  
 Decorative Lighting

#### Maximum Ratings (Ta=25°C)

| Characteristic        | Symbol           | Max.           | Unit |
|-----------------------|------------------|----------------|------|
| Forward Current       | I <sub>F</sub>   | 50             | mA   |
| Reverse Voltage       | V <sub>R</sub>   | 5              | V    |
| Power Dissipation     | P <sub>D</sub>   | 130.00         | mW   |
| Operating Temperature | T <sub>opr</sub> | -40 ~ +95      | °C   |
| Storage Temperature   | T <sub>stg</sub> | -40 ~ +100     | °C   |
| Soldering Temperature | T <sub>sol</sub> | 260            | °C   |
| Soldering Time        | -                | for 3 sec. max | -    |

#### Opto-Electrical Characteristics (Ta=25°C)

| Characteristic           | Symbol            | Test Condition       | Min     | Typ     | Max  | Unit |
|--------------------------|-------------------|----------------------|---------|---------|------|------|
| Forward Voltage          | V <sub>F</sub>    | I <sub>F</sub> =20mA | -       | 2.10    | 2.60 | V    |
| Reverse Current          | I <sub>R</sub>    | V <sub>R</sub> =5V   | -       | -       | 100  | μA   |
| Luminous Intensity       | I <sub>v</sub>    | I <sub>F</sub> =20mA | 3000.00 | 4500.00 | -    | mcd  |
| Viewing Angle            | 2θ <sup>1/2</sup> | -                    | -       | 30°     | -    | deg. |
| Peak Wavelength          | λ <sub>p</sub>    | I <sub>F</sub> =20mA | -       | 594     | -    | nm   |
| Dominant Wavelength      | λ <sub>d</sub>    | I <sub>F</sub> =20mA | -       | 591     | -    | nm   |
| Spectral Line Half Width | Δλ                | I <sub>F</sub> =20mA | -       | 20      | -    | nm   |



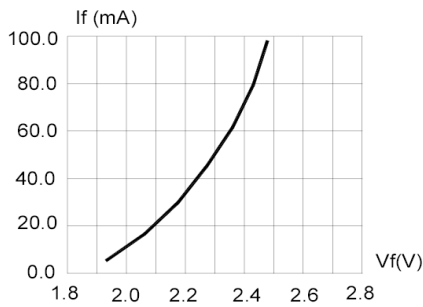


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

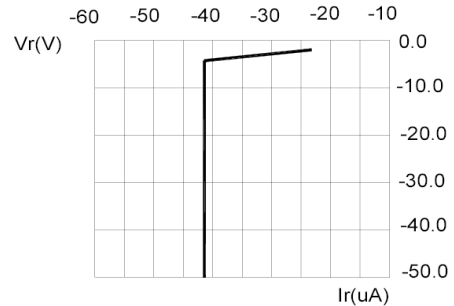


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

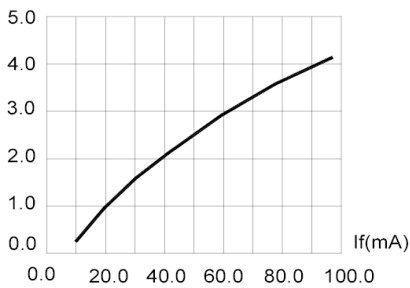


FIG.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

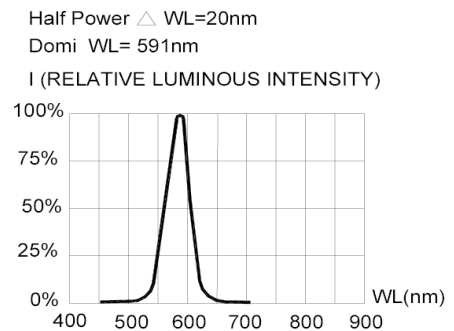


FIG.4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.

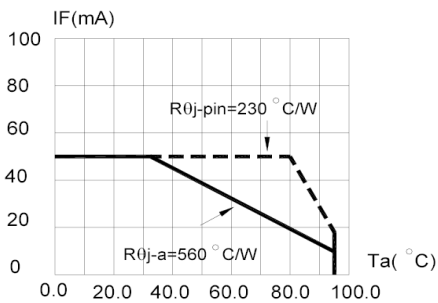


FIG.5 MAXIMUM FORWARD DC CURRENT VS AMBIENT TEMPERATURE ( $T_{jmax}=105^{\circ}C$ )

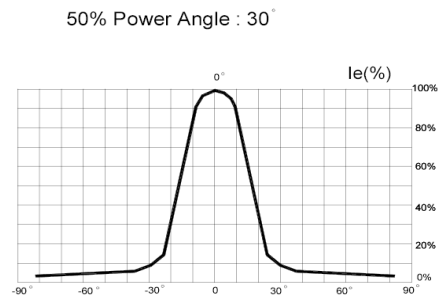


FIG.6 FAR FIELD PATTERN

1. Cathode PAD Area (0.18 X 0.18inch<sup>2</sup>)
2. Height above nominal seating plane in inches(0.3inch)