

# SIDE LOOK PACKAGE SOLID STATE LAMP

## MSL-824TG

### Description

The MSL-824TG is designed based on in an industry standard package for ease of handling and use.

The package is water clear epoxy within white plastic.

### Package Dimensions

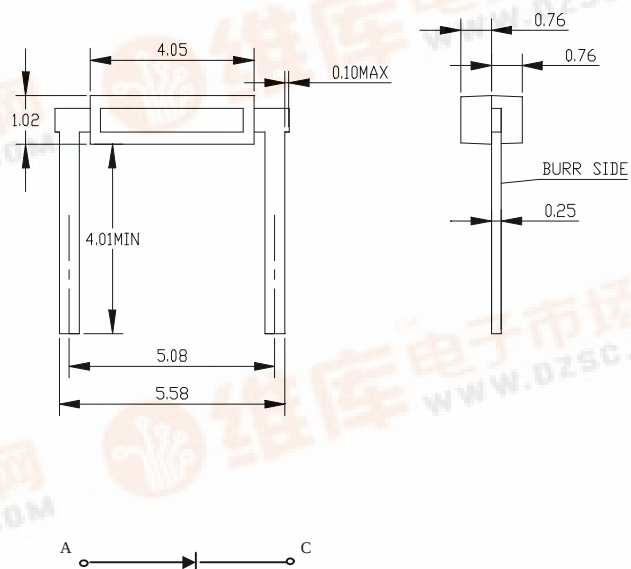
Units : mm

### Applications

- LCD backlighting
- Symbol backlighting
- Front panel indicator

### Features

- High performance
- Excellent chip to chip consistency
- High reliability



#### Notes :

1. All dimensions are in millimeters.
2. Tolerance is  $\pm 0.1$  mm unless otherwise noted.

### Absolute Maximum Ratings

@  $T_A = 25^\circ\text{C}$

| Parameter                                                       | Symbol           | Maximum Rating | Unit |
|-----------------------------------------------------------------|------------------|----------------|------|
| Power Dissipation                                               | P <sub>ad</sub>  | 100            | mW   |
| Continuous Forward Current                                      | I <sub>af</sub>  | 25             | mA   |
| Reverse Current(V <sub>R</sub> =5V)                             | I <sub>R</sub>   | 10             | μA   |
| Operating Temperature Range                                     | T <sub>opr</sub> | -40°C to +85°C |      |
| Storage Temperature Range                                       | T <sub>stg</sub> | -40°C to +85°C |      |
| Lead Soldering Temperature 260°C for 5 second (2.0mm From Body) |                  |                |      |

## Optical-Electrical Characteristics

'@  $T_A=25^\circ\text{C}$

| PART NO   | Color      |             | Dominant Wave Length<br>$\lambda_D(\text{nm})$ | Spectral Halfwidth<br>$\Delta\lambda(\text{nm})$ | Forward Voltage<br>@ $I_F=20\text{mA}$<br>(V) |     | Luminous Intensity<br>@ $I_F=20\text{mA}$<br>(mcd) |     | Viewing Angle<br>$2\theta_{1/2}$<br>(deg) |
|-----------|------------|-------------|------------------------------------------------|--------------------------------------------------|-----------------------------------------------|-----|----------------------------------------------------|-----|-------------------------------------------|
|           | Emitted    | Lens        |                                                |                                                  | TYP                                           | MAX | MIN                                                | TYP |                                           |
| MSL-824TG | True Green | Water Clear | 525                                            | 36                                               | 3.6                                           | 4.1 | 200                                                | 325 | 110                                       |

## Typical Optical-Electrical Characteristic Curves

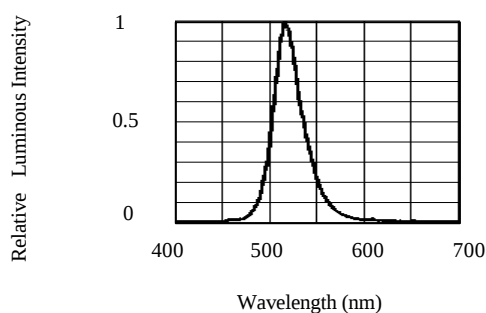


FIG.1 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH

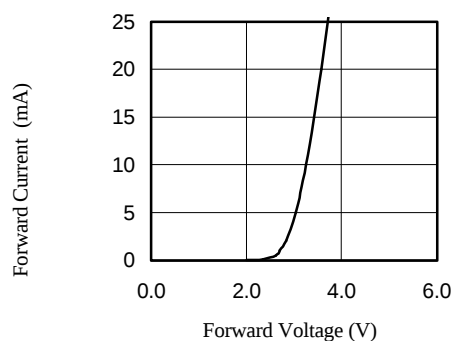


FIG.2 FORWARD CURRENT VS. FORWARD VOLTAGE

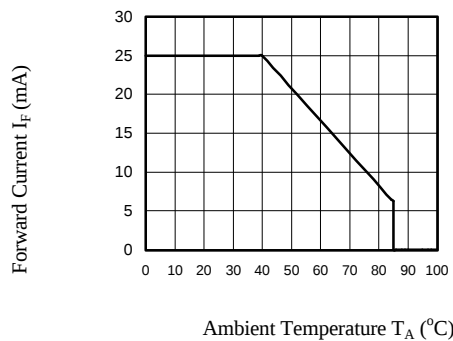


FIG.3 FORWARD CURRENT VS. AMBIENT TEMPERATURE

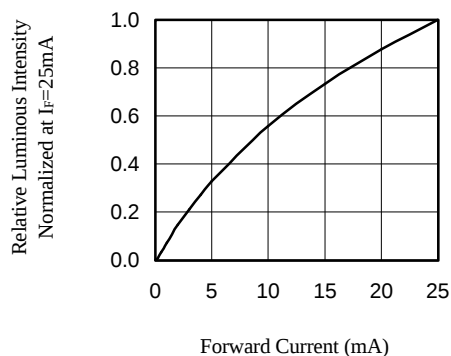


FIG.4 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

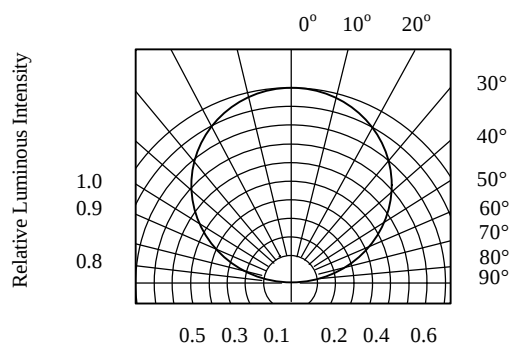


FIG.5 RADIATION PATTERN DIAGRAM