

# SIDE LOOK PACKAGE SOLID STATE LAMP

# MSL-824MW

## Description

The MSL-824MW, a white source color device, is made with advanced InGaN on SiC chip. The package is mixing epoxy and phosphor within white plastic.

## Applications

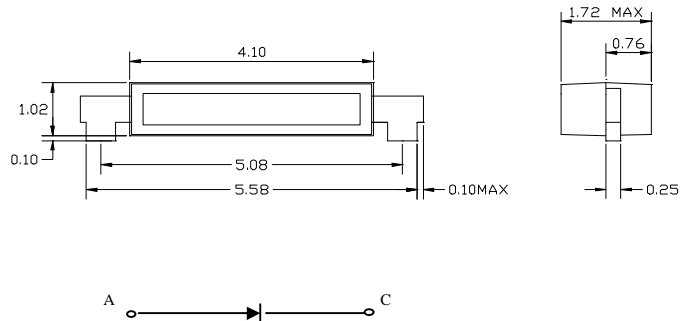
- LCD backlighting
- Symbol backlighting
- Front panel indicator

## Features

- High performance
- Excellent chip to chip consistency
- Uniform radiation pattern

## Package Dimensions

Units : mm



Notes :

1. All dimensions are in millimeters.
2. Tolerance is  $\pm 0.1$  mm unless otherwise noted.
3. Lead plating is minimum 80 microns of silver.

## Absolute Maximum Ratings

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

Parameter	Symbol	Maximum Rating	Unit
Power Dissipation	P	100	mW
Continuous Forward Current	$I_F$	25	$\mu\text{A}$
Reverse Current ( $V_R=5\text{V}$ )	$I_R$	100	$\mu\text{A}$
Operating Temperature Range	$T_{opr}$	$-20^\circ\text{C}$ to $+85^\circ\text{C}$	
Storage Temperature Range	$T_{stg}$	$-40^\circ\text{C}$ to $+100^\circ\text{C}$	
Electrostatic Discharge Threshold (HBM)	$E_{ot}$	1000	V

## Optical-Electrical Characteristics

@ T<sub>A</sub>=25°C

Parameter	Test Conditions	Symbol	Min .	Typ .	Max .	Unit .
Luminous Intensity	I <sub>F</sub> =20mA	I <sub>V</sub>	-	150	-	mcd
Forward Voltage	I <sub>F</sub> =20mA	V <sub>F</sub>	-	3.5	4.1	V
Reverse Current	V <sub>R</sub> =5V	I <sub>R</sub>	-	-	100	μA
Chromaticity	I <sub>F</sub> =20mA	x/y		0.33/0.33		
Viewing Angle	I <sub>F</sub> =20mA	2θ <sub>1/2</sub>	-	110	-	deg.

## Typical Optical-Electrical Characteristic Curves

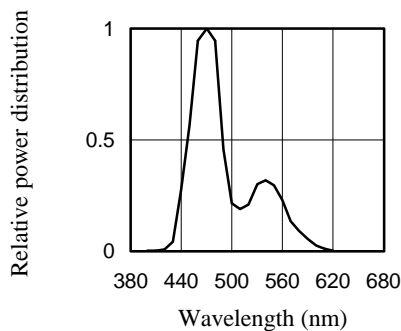


FIG.1 RELATIVE LUMINOUS INTENSITY

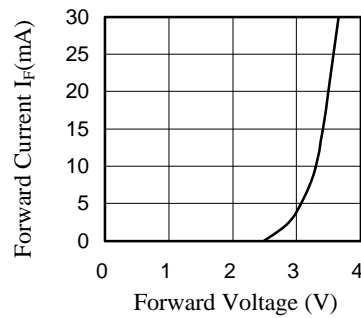


FIG.2 FORWARD CURRENT VS. FORWARD VOLTAGE

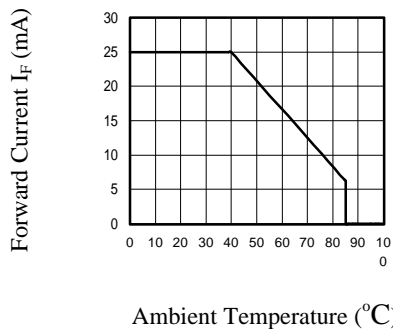


FIG.3 FORWARD CURRENT VS. AMBIENT TEMPERATURE

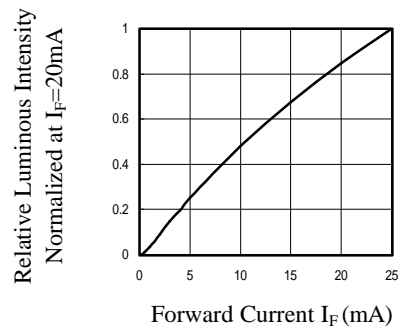


FIG.4 RELATIVE LUMINOUS INTENSITY

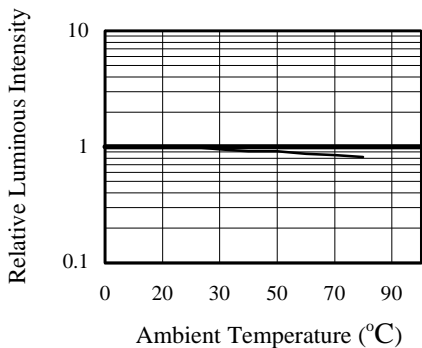


FIG.5 RELATIVE LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE

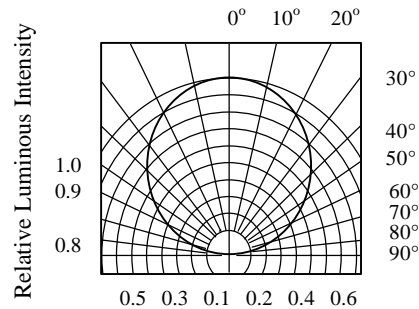


FIG.6 RADIATION DIAGRAM

This datasheet has been downloaded from:

[www.DatasheetCatalog.com](http://www.DatasheetCatalog.com)

Datasheets for electronic components.