

SIDE LOOK PACKAGE SOLID STATE LAMP

MVL-824HW

Description

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

Applications

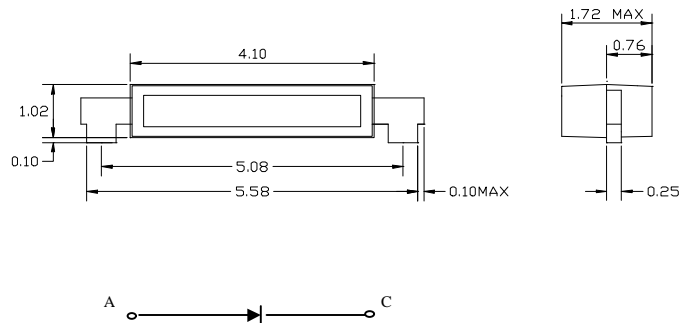
- LCD backlighting
- Symbol backlighting
- Front panel indicator

Features

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

Package Dimensions

Units : mm



Notes :

1. All dimensions are in millimeters.
2. Tolerance is ± 0.1 mm unless otherwise noted.
3. Lead plating is minimum 80 micrometers 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	μA
Reverse Current ($V_R=5\text{V}$)	I_R	100	μA
Operating Temperature Range	T_{opr}	-20°C to $+85^\circ\text{C}$	
Storage Temperature Range	T_{stg}	-40°C to $+100^\circ\text{C}$	
Electrostatic Discharge Threshold (HBM)	E_{ot}	200	V

Optical-Electrical Characteristics

@ T_A=25°C

Parameter	Test Conditions	Symbol	Min .	Typ .	Max .	Unit .
Luminous Intensity	I _F =20mA	I _V	-	180	-	mcd
Forward Voltage	I _F =20mA	V _F	-	3.5	4.0	V
Reverse Current	V _R =5V	I _R	-	-	100	μA
Chromaticity	I _F =20mA	x/y		0.33/0.33		
Viewing Angle	I _F =20mA	2θ _{1/2}	-	110	-	deg.

Typical Optical-Electrical Characteristic Curves

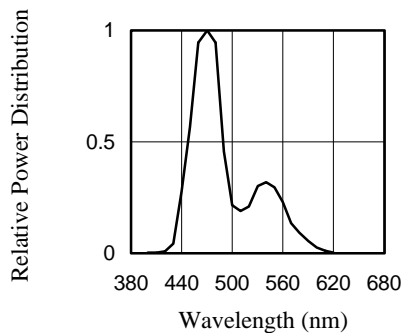


FIG.1 RELATIVE LUMINOUS INTENSITY

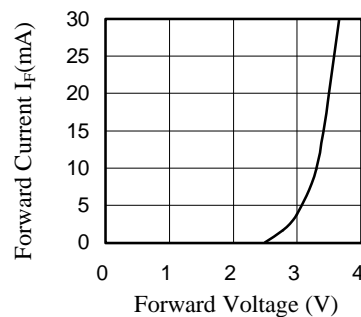


FIG.2 FORWARD CURRENT VS. FORWARD VOLTAGE

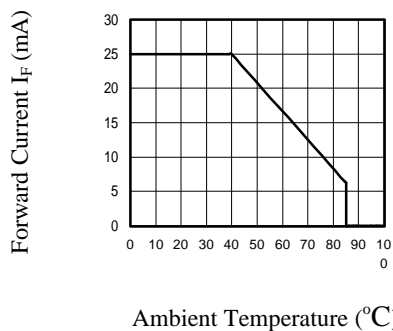


FIG.3 FORWARD CURRENT VS. AMBIENT TEMPERATURE

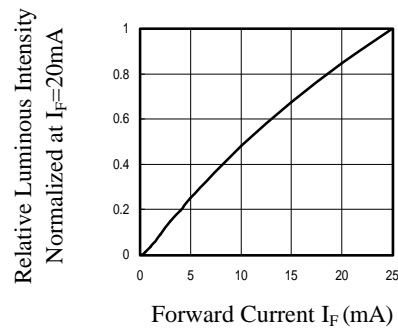


FIG.4 RELATIVE LUMINOUS INTENSITY

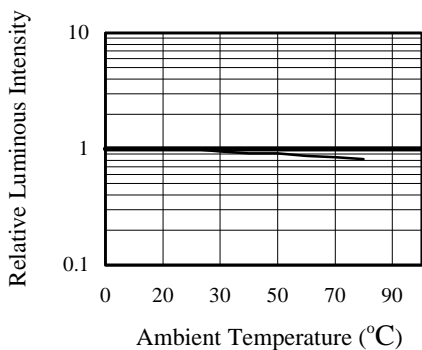


FIG.5 RELATIVE LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE

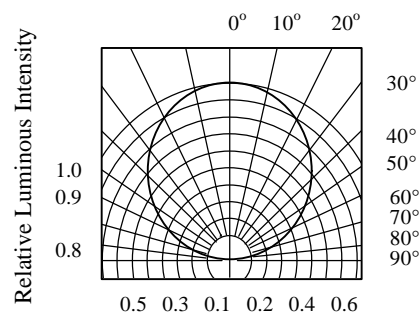


FIG.6 RADIATION DIAGRAM