

# T-1 3/4 PACKAGE SOLID STATE LAMP

## MVL-524UW

### Description

The MVL-524UW a white source color device, is made with InGaN ( on SiC substrate) LED die.  
The package is T-1 3/4(5mm) water clear plastic lens package.

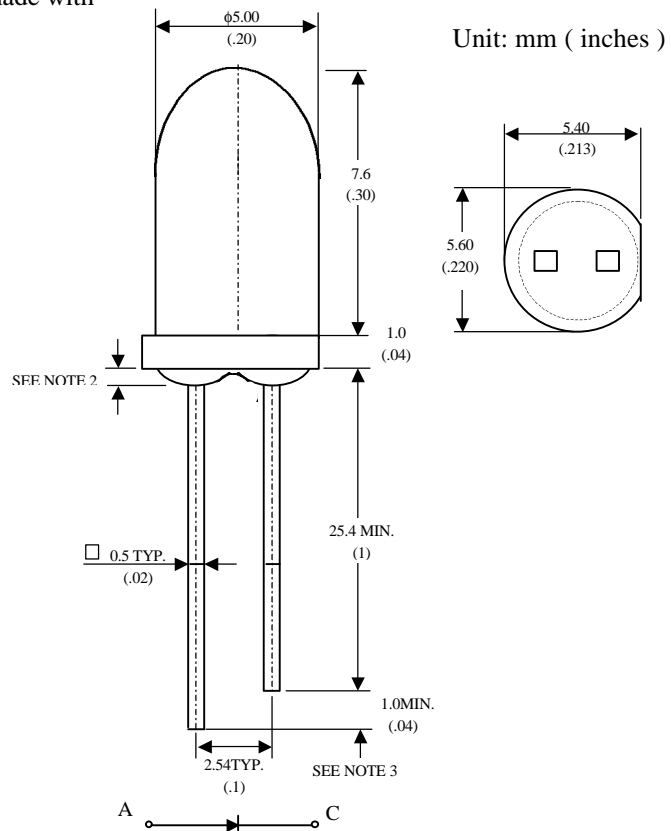
### Applications

- Push-button backlighting
- LCD backlighting
- Symbol backlighting
- Front panel indicator
- Flashlight

### Features

- High Luminous intensity
- High efficiency
- General color rendering index, Ra=85

### Package Dimensions



Notes :

1. Tolerance is  $\pm 0.25$  mm (.010") unless otherwise noted.
2. Protruded resin under flange is 1.5 mm (.059") max.
3. Lead spacing is measured where the leads emerge from the package.

### Absolute Maximum Ratings

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

Parameter	Symbol	Maximum Rating	Unit
Peak Forward Current(1/10 Duty Cycle@1KHz )	$I_{pf}$	100	mA
Continuous Forward Current	$I_{af}$	30	mA
Reverse Voltage	$V_R$	5	V
Operating Temperature Range	$T_{opr}$	-20°C to + 80°C	
Storage Temperature Range	$T_{stg}$	-30°C to + 100°C	
Electrostatic Discharge Threshold(HBM)	$E_{ot}$	1000	V
Solder Temperature 1.6 mm from body for 3 seconds at 260°C			

**UNI**

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## Optical-Electrical Characteristics

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

Parameter	Test Conditions	Symbol	Min .	Typ .	Max .	Unit .
Luminous Intensity	$I_F=20\text{mA}$	$I_V$	1100	2200	-	mcd
Forward Voltage	$I_F=20\text{mA}$	$V_F$	-	3.6	4.0	V
Reverse Current	$V_R=5\text{V}$	$I_R$	-	-	10	$\mu\text{A}$
Viewing Angle	$I_F=20\text{mA}$	$2\theta_{1/2}$	-	20	-	deg.
C.I.E. 1931 Chromaticity Coordinates	$I_F=20\text{mA}$	x	-	0.30	-	-
		y	-	0.30	-	-

## Typical Optical-Electrical Characteristic Curves

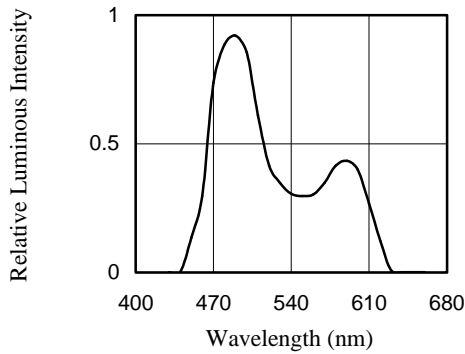


FIG.1 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH

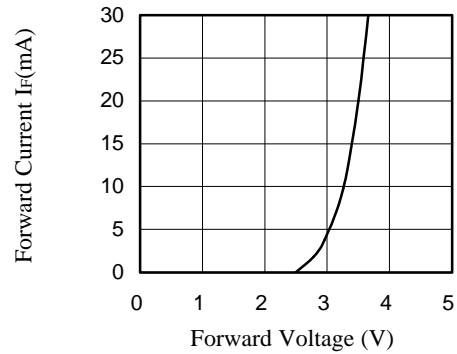


FIG.2 FORWARD CURRENT VS. FORWARD VOLTAGE

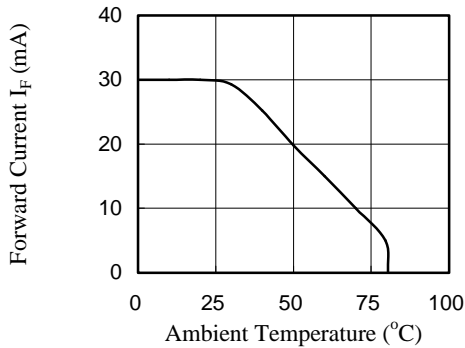


FIG.3 FORWARD CURRENT VS. AMBIENT TEMPERATURE

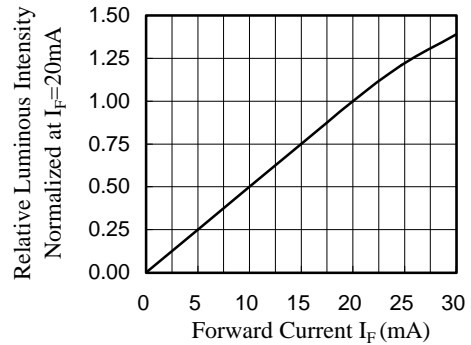


FIG.2 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

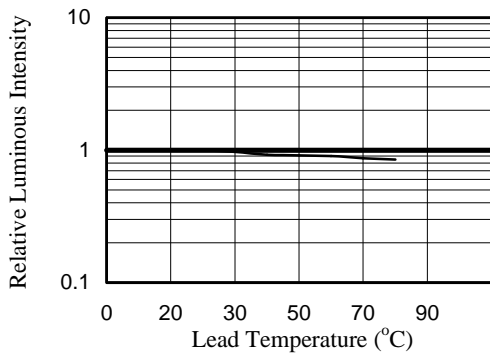


FIG.2 RELATIVE LUMINOUS INTENSITY VS. LEAD TEMPERATURE

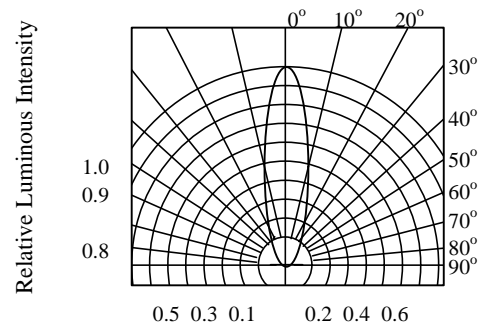


FIG.4 RADIATION DIAGRAM