L-53MWC

## Features

- HIGH EFFICIENCY.
- WHITE EMISSION,HIGH LUMINOUS INTENSITY.

## Description

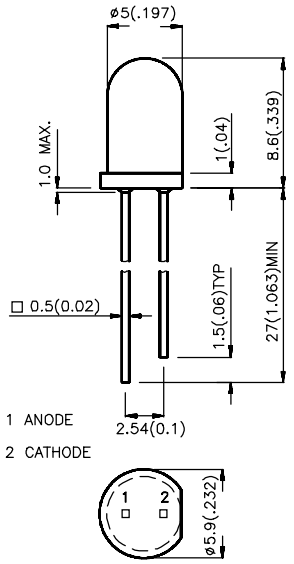
The white source color devices are made with GaN on SiC Light Emitting Diode.

Static electricity and surge damage the LEDS.

It is recommended to use a wrist band or antielectrostatic glove when handling the LEDs.

All devices, equipment and machinery must be electrically grounded.

**Package Dimensions**




Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25(0.01") unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subjected to change without notice.

## Selection Guide

| Part No. | Dice | Case-Color | Iv (mcd) @ 20 mA | | Viewing Angle |
|---|---|---|---|---|---|
| | | | Min. | Typ. | 2θ1/2 |
| L-53MWC | WHITE (GaN) | WATER CLEAR | 80 | 200 | 30° |

Note:
1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

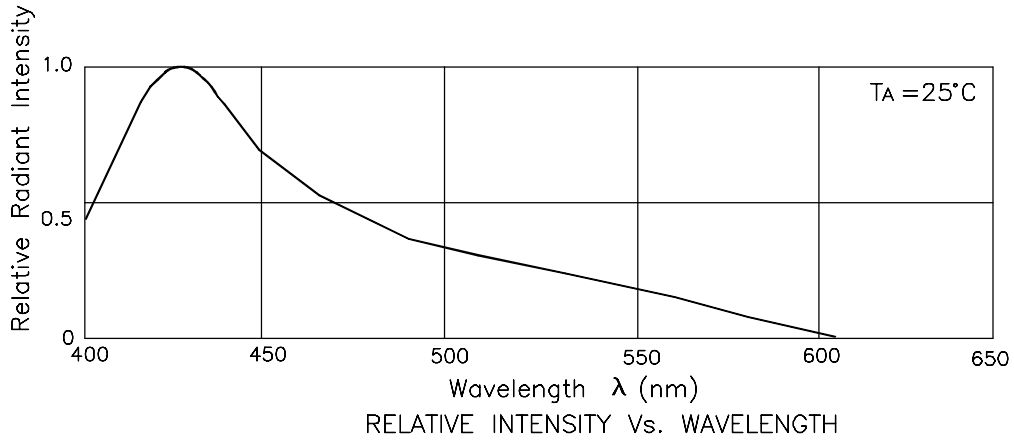
## Electrical / Optical Characteristics at $T_A$=25°C

| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|---|---|---|---|---|---|---|
| $V_F$ | Forward Voltage | White | 3.8 | 4.5 | V | IF=20mA |
| $I_R$ | Reverse Current | White | 10 | | uA | VR = 5V |
| X | Chromaticity Coordinates | White | 0.31 | | | |
| Y | | | 0.32 | | | |

## Absolute Maximum Ratings at $T_A$=25°C

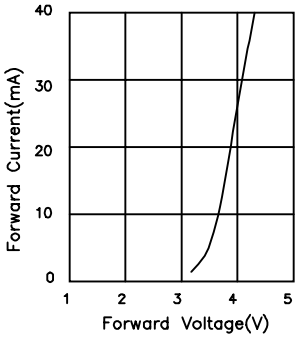
| Parameter | White | Units |
|---|---|---|
| Power dissipation | 120 | mW |
| DC Forward Current | 30 | mA |
| Peak Forward Current [1] | 100 | mA |
| Reverse Voltage | 5 | V |
| Operating Temperature | -30 °C To + 80 °C | |
| Storage Temperature | -40 °C To + 100 °C | |
| Lead Soldering Temperature [2] | 260 °C For 5 Seconds | |

Notes:
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 4mm below package base.

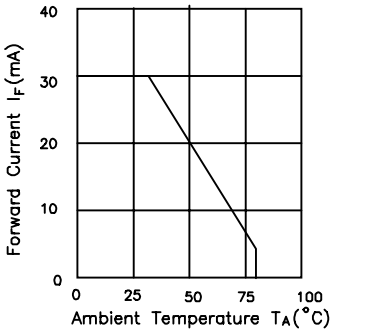


RELATIVE INTENSITY Vs. WAVELENGTH

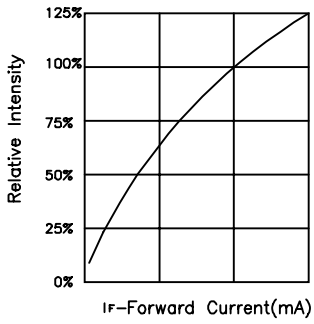
## White L-53MWC



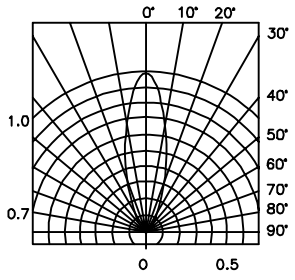

FORWARD CURRENT Vs. FORWARD VOLTAGE




FORWARD CURRENT DERATING CURVE




RELATIVE INTENSITY Vs. FORWARD CURRENT




SPATIAL DISTRIBUTION