**PARA LIGHT ELECTRONICS CO., LTD.**
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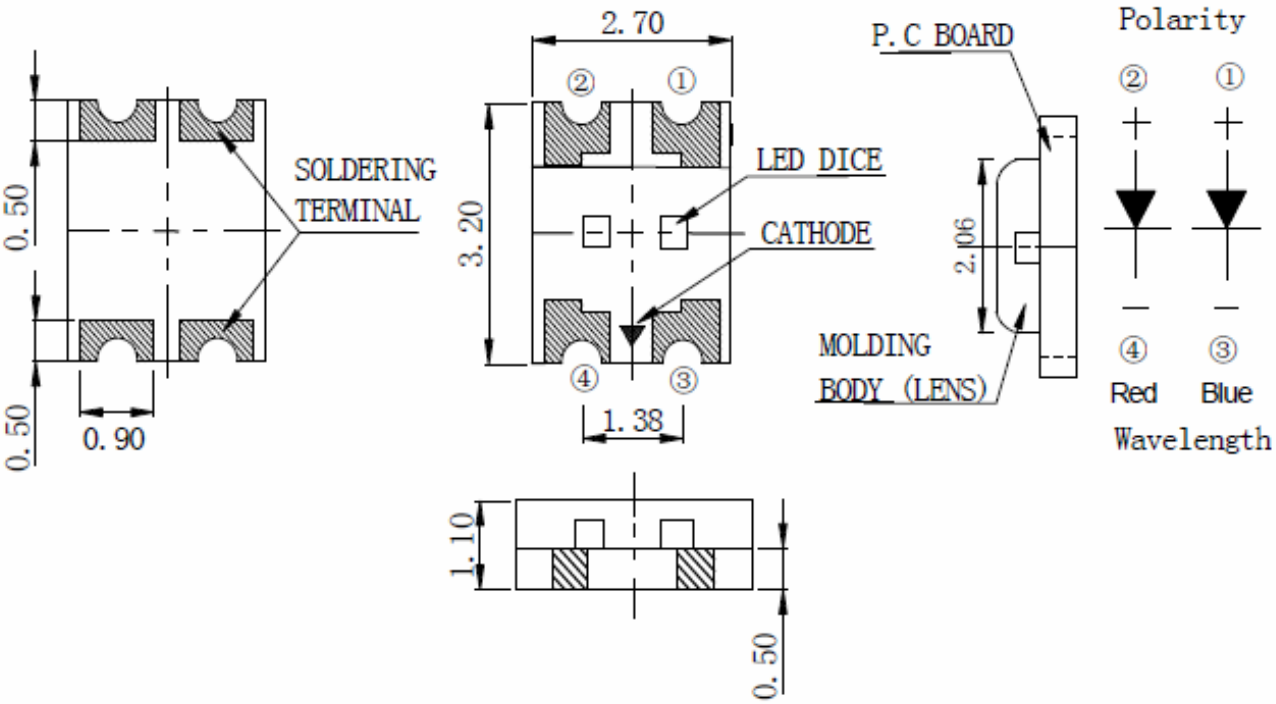
# DATA SHEET

# PART NO. : L-C155TBJRCT

# REV : A / 0

CUSTOMER'S APPROVAL : _____ DCC : _____

PACKAGE DIMENSIONS




Note:

1. All Dimensions are in millimeters(inches)
2. Tolerance is ±0.20mm(0.004 ") Unless otherwise specified.

FEATURES
* LOW POWER CONSUMPTION
* I.C. COMPATIBLE
* LONGLIFE SOLID STATE RELIABILITY

CHIP MATERIALS
* Dice Material : InGaN / AlInGaP
* Light Color : Blue & RED
* Lens Color : WATER CLEAR

ABSOLUTE MAXIMUM RATING : ( Ta = 25°C )

| SYMBOL | PARAMETER | RATING | | UNIT |
|---|---|---|---|---|
| PD | Power Dissipation | B | R | mW |
| | | 76 | 75 | |
| If | Forward Current | 20 | 30 | mA |
| Ifp | Peak Forward Current (1/10 duty cycle 0.1ms) | 100 | 80 | mA |
| VR | Reverse Voltage | 5 | | V |
| Topr | Operating Temperature Range | -55 ~ + 85 | | ℃ |
| Tstg | Storage Temperature Range | -55 ~ + 85 | | ℃ |

ELECTRO-OPTICAL CHARACTERISTICS : ( Ta = 25°C )

| SYMBOL | PARAMETER | TEST CONDITION | | VALUE | | | UNIT |
|---|---|---|---|---|---|---|---|
| | | | | MIN. | TYP. | MAX. | |
| VF | Forward Voltage | IF = 20mA | B | | 3.0 | 3.8 | V |
| | | | R | | 2.0 | 2.4 | |
| IR | Reverse Current | VR = 5V | | | | 100 | μA |
| Δλ | Spectral Line Half-Width | IF = 20mA | B | | 25 | | nm |
| | | | R | | 15 | | |
| λp | Peak Emission Wavelength | IF = 20mA | B | | 468 | | nm |
| | | | R | | 639 | | |
| λD | Dominant Wavelength | IF = 20mA | B | 465 | 470 | 475 | nm |
| | | | R | 617.5 | 631 | 633.5 | |
| 2θ1/2 | Half Intensity Angle | IF = 20mA | | | 130 | | deg |
| Iv | Luminous Intensity | IF = 20mA | B | 28 | 90 | | mcd |
| | | | R | 18 | 72 | | |

## Typical Electro-Optical Characteristics Curves

(25℃ Ambient Temperature Unless Otherwise Noted)

Blue:

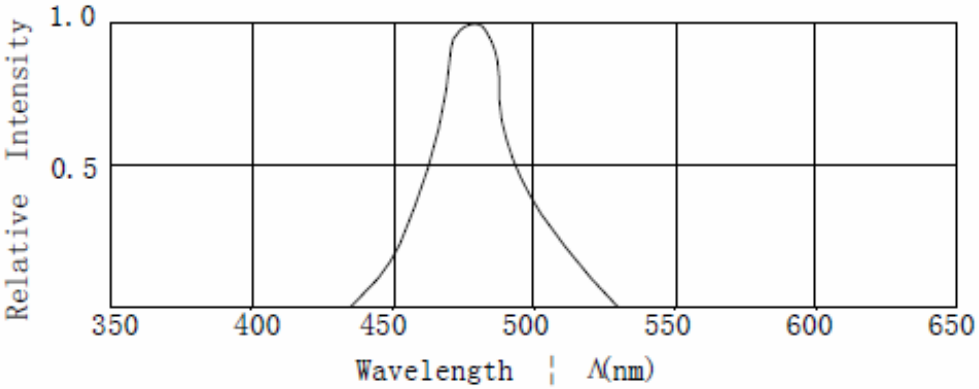



Fig.1 Relative Intensity VS. Wavelength

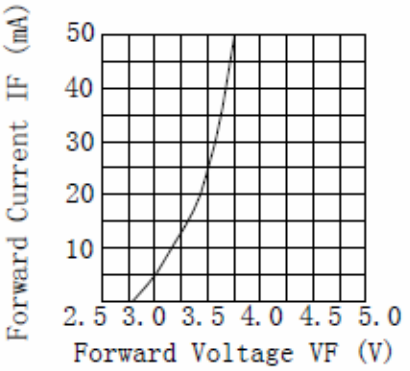



Fig.2 Forward Current vs. Forward Voltage

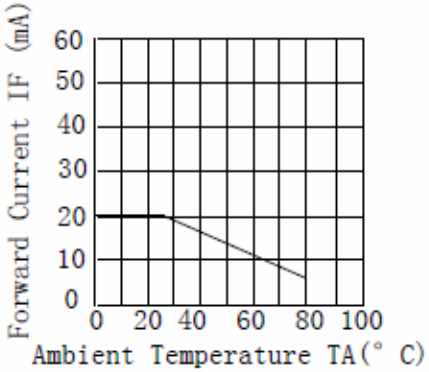



Fig.3 Forward Current Derating Curve

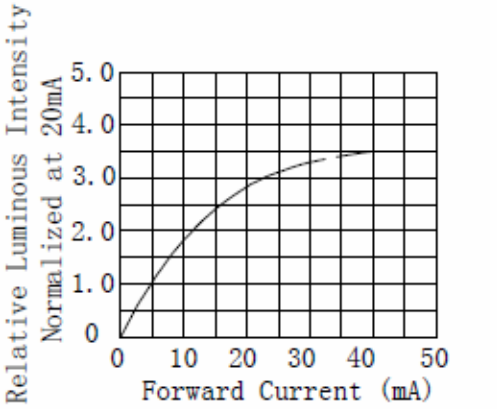



Fig.4 Relative Luminous Intensity vs. Forward Current

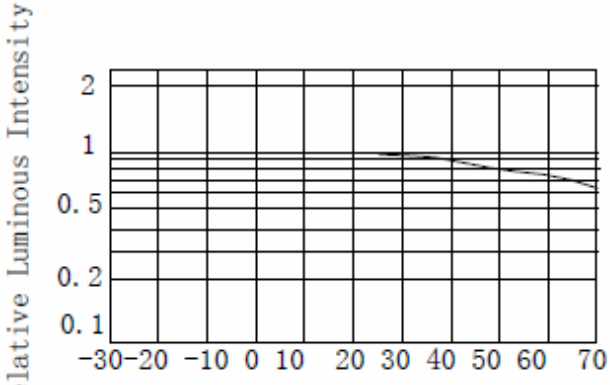



Fig.5 Luminous Intensity vs. Ambient Temperature

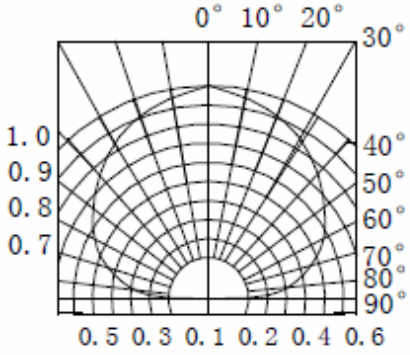



Fig.6 Spatial Distribution

## Typical Electro-Optical Characteristics Curves

(25℃ Ambient Temperature Unless Otherwise Noted)

Red:

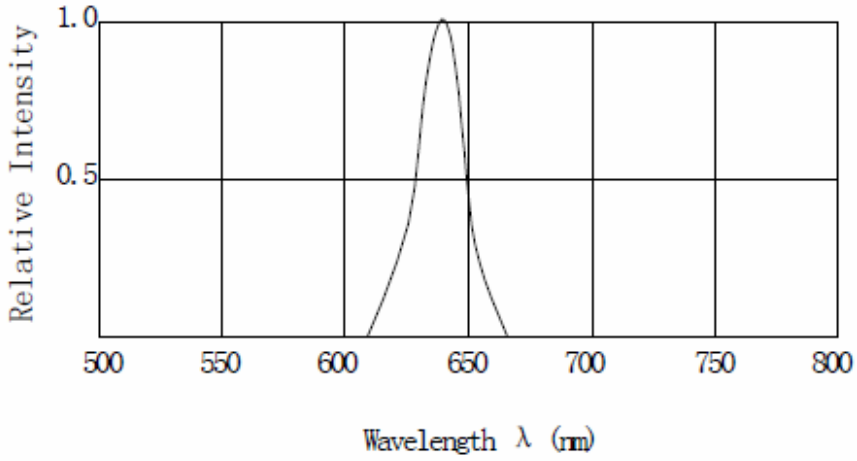



Fig. 1 Relative Intensity vs. Wavelength

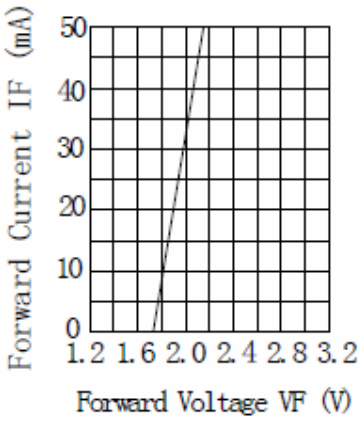



Fig. 2 Forward Current VS. Forward Voltage

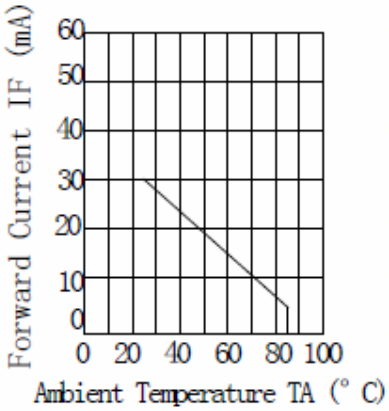



Fig. 3 Forward Current Derating Curve

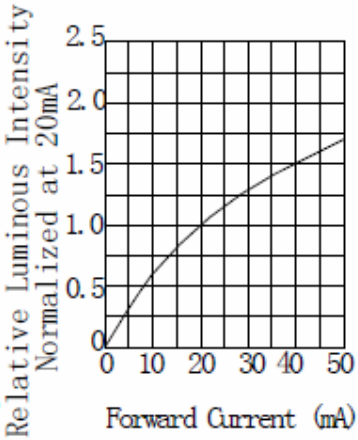



Fig. 4 Relative Luminous Intensity VS. Forward Current

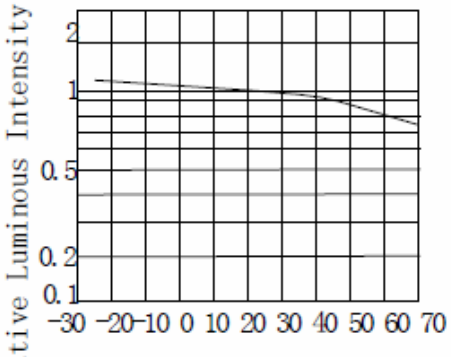



Fig. 5 Luminous Intensity VS. Ambient Temperature

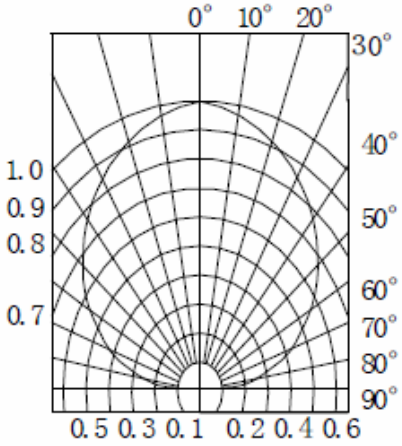



Fig. 6 Spatial Distribution

**Bin Range Of Luminous Intensity**

| Symbol | Bin Code | Min. | Max. | Unit | Condition |
|---|---|---|---|---|---|
| Iv(B) | N | 28 | 45 | mcd | IF=20mA |
| | P | 45 | 72 | | |
| | Q | 72 | 112 | | |
| | R | 112 | 180 | | |
| Iv(R) | M | 18 | 28 | mcd | IF=20mA |
| | N | 28 | 45 | | |
| | P | 45 | 72 | | |
| | Q | 72 | 112 | | |

Notes:

1. Tolerance of Luminous Intensity +/-20%
2. Tolerance of Forward Voltage +/-0.15V
3. Tolerance of the Dominate Wavelength +/- 2nm

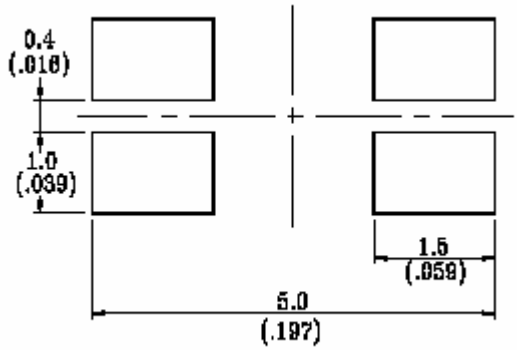
# 3.2*2.7*1.1 mm SMD LED

## L-C155TBJRCT REV:A / 0

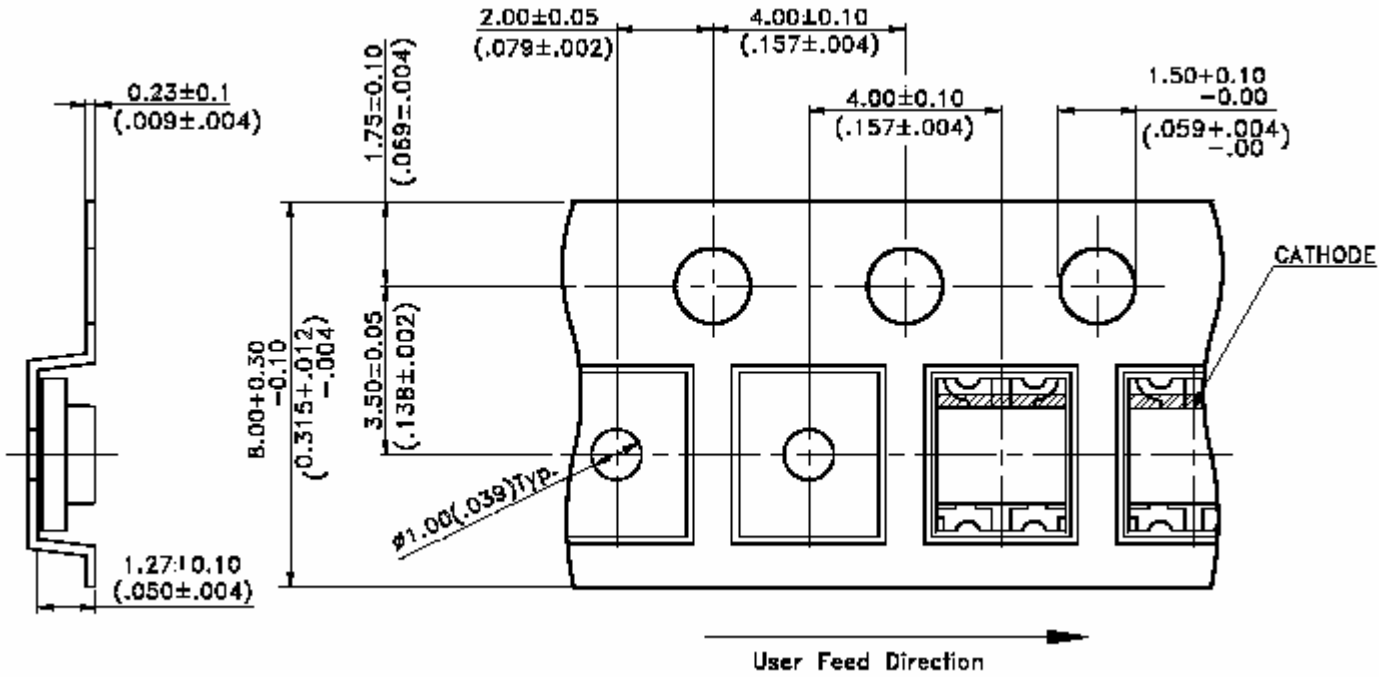
## Cleaning

Do not use unspecified chemical liquid to clean LED they could harm the package.
If clean is necessary, immerse the LED in ethyl alcohol or in isopropyl alcohol at normal temperature for less one minute.

## Suggest Soldering Pad Dimensions




## Package Dimensions Of Tape And Reel




Notes:
1. All dimensions are in millimeters (inches).