## LITE-ON ELECTRONICS,INC.

## Property of Lite-On Only

## Features

* Dual color chip LED.
* Ultra bright AlInGaP Chip LED.
* Package in 8 mm tape on 7" diameter reels.
* Compatible with automatic placement equipment.
* Compatible with infrared and vapor phase reflow solder process.
* EIA STD package.
* I.C. compatible.


## Package Dimensions



## Devices

| Part No. | Lens | Source Color |
| :---: | :---: | :---: |
| LTST-C195KGJRKT | Water Clear | AlInGaP Green |
|  | Water Clear | AlInGaP Red |

Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.1 \mathrm{~mm}(.004$ ") unless otherwise noted.

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Electrical / Optical Characteristics At $\mathbf{T a}=\mathbf{2 5}{ }^{\circ} \mathbf{C}$

| Parameter | Symbol |  | LTST-C195KGJRKT |  | Unit | Test Condition |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Green | Red |  |  |
| Luminous <br> Intensity | IV | MIN. | 20.0 | 15.0 | mcd | $\begin{gathered} \mathrm{IF}=20 \mathrm{~mA} \\ \text { Note } 1 \end{gathered}$ |
|  |  | TYP. | 35.0 | 25.0 |  |  |
|  |  | MAX. |  |  |  |  |
| Viewing Angle | 201/2 | TYP. | 130 | 130 | deg | Note 2 (Fig.6) |
| Peak Emission <br> Wavelength | $\lambda \mathrm{P}$ | TYP. | 574 | 639 | nm | $\quad$ Measurement $@$ Peak (Fig.1) |
| Dominant <br> Wavelength | $\lambda \mathrm{d}$ | TYP. | 571 | 631 | nm | Note 3 |
| Spectral Line <br> Half-Width | $\Delta \lambda$ | TYP. | 15 | 20 | nm |  |
| Forward |  | TYP. | 2.0 | 2.0 |  |  |
| Voltage |  | MAX. | 2.4 | 2.4 |  |  |
| Reverse <br> Current | IR | MAX. | 100 | 100 | $\mu \mathrm{A}$ | $\mathrm{VR}=5 \mathrm{~V}$ |
| Capacitance | C | TYP. | 40 | 40 | PF | $\mathrm{VF}=0, \mathrm{f}=1 \mathrm{MHZ}$ |

Notes: 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. $\theta 1 / 2$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
3. The dominant wavelength, $\lambda \mathrm{d}$ is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

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## Typical Electrical / Optical Characteristics Curves

( $25^{\circ} \mathrm{C}$ Ambient Temperature Unless Otherwise Noted)


Fig. 1 RELATIVE INTENSITY VS. WAVELENGTH


Fig. 2 FORWARD CURRENT VS. FORWARD VOLTAGE



Fig. 3 FORWARD CURRENT DERATING CURVE


Fig. 6 SPATIAL DISTRIBUTION

Fig. 4 RELATIVE LUMINOUS
INTENSITY VS. FORWARD CURRENT

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## 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:

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Notes:

1. Empty component pockets sealed with top cover tape.
2. 7 inch reel-4000 pieces per reel.
3. The maximum number of consecutive missing lamps is two.
4. In accordance with ANSI/EIA 481-1-A-1994 specifications.
