

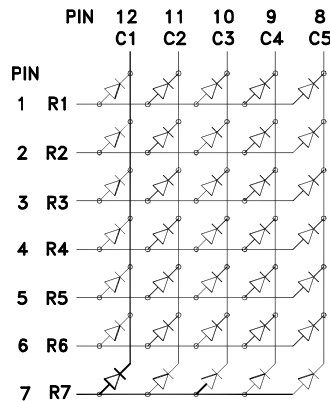
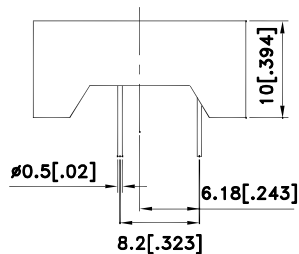
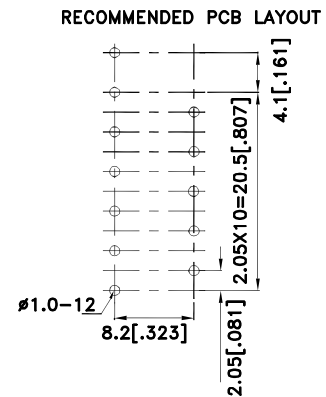
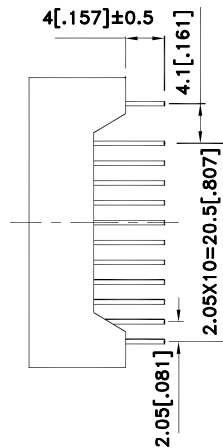
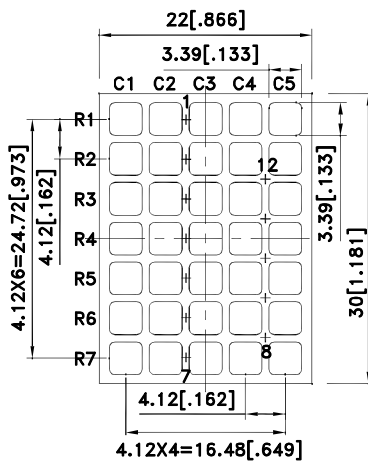
### Features

- 1.107 inch matrix height.
- Low current operation.
- High contrast and light output.
- Easy mounting on P.C. boards or sockets.
- Categorized for luminous intensity.
- Mechanically rugged.
- RoHS compliant.

### Description

The Green source color devices are made with AlGaInP on GaAs substrate Light Emitting Diode.

### Package Dimensions & Internal Circuit Diagram



Notes:

1. All dimensions are in millimeters (inches), Tolerance is ±0.25(0.01") unless otherwise noted.
2. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.



## Selection Guide

| Part No.     | Dice            | Lens Type      | Iv (ucd) [1]<br>@ 10mA |       | Description    |
|--------------|-----------------|----------------|------------------------|-------|----------------|
|              |                 |                | Min.                   | Typ.  |                |
| TC12-41CGKWB | Green (AlGaInP) | White Diffused | 31000                  | 65000 | Column Cathode |

Note:

1. Luminous intensity/ luminous Flux: +/-15%.

## Electrical / Optical Characteristics at TA=25°C

| Symbol                | Parameter                | Device | Typ. | Max. | Units | Test Conditions           |
|-----------------------|--------------------------|--------|------|------|-------|---------------------------|
| $\lambda_{peak}$      | Peak Wavelength          | Green  | 574  |      | nm    | I <sub>F</sub> =20mA      |
| $\lambda_D$ [1]       | Dominant Wavelength      | Green  | 570  |      | nm    | I <sub>F</sub> =20mA      |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Green  | 20   |      | nm    | I <sub>F</sub> =20mA      |
| C                     | Capacitance              | Green  | 15   |      | pF    | V <sub>F</sub> =0V;f=1MHz |
| V <sub>F</sub> [2]    | Forward Voltage          | Green  | 2.1  | 2.5  | V     | I <sub>F</sub> =20mA      |
| I <sub>R</sub>        | Reverse Current          | Green  |      | 10   | uA    | V <sub>R</sub> =5V        |

Notes:

1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

## Absolute Maximum Ratings at TA=25°C

| Parameter                       | Green                 | Units |
|---------------------------------|-----------------------|-------|
| Power dissipation               | 75                    | mW    |
| DC Forward Current              | 30                    | mA    |
| Peak Forward Current [1]        | 150                   | mA    |
| Reverse Voltage                 | 5                     | V     |
| Operating / Storage Temperature | -40°C To +85°C        |       |
| Lead Solder Temperature[2]      | 260°C For 3-5 Seconds |       |

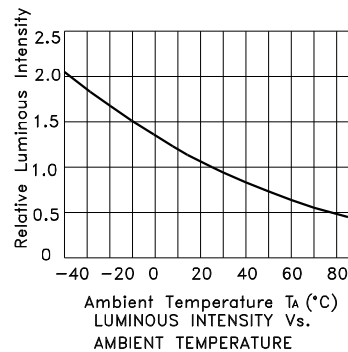
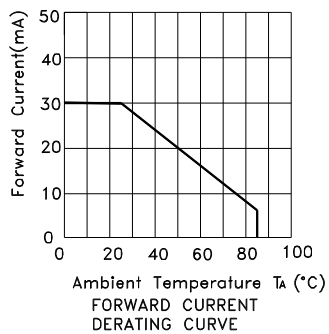
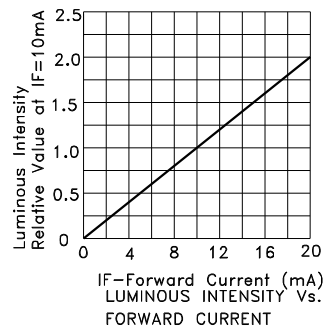
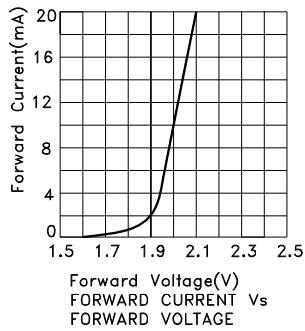
Notes:

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



## Green

### TC12-41CGKWB



## PACKING & LABEL SPECIFICATIONS

## TC12-41CGKWB

