

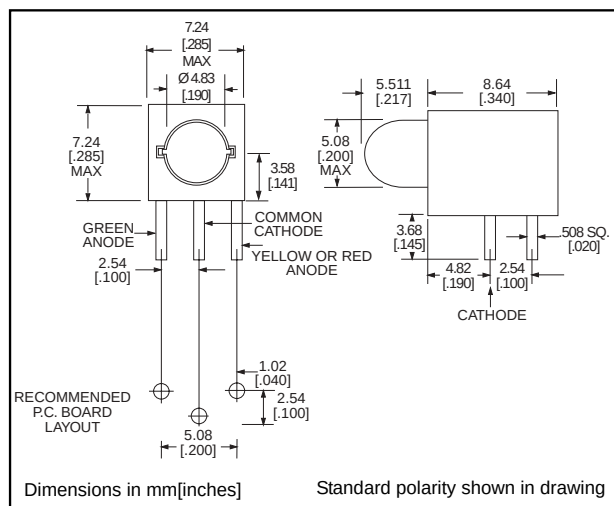
5mm

# LED CBI® Circuit Board Indicator

## 3 Leaded, Bi-Color, Common Cathode

**Dialight**

550-3x05



### PART NO.

550-3505  
550-3605

### COLOR

Red/Green  
Yellow/Green

To order any of the 550-3x05 part numbers with Reverse Polarity (Green Anode Right; Yellow or Red Anode Left), please add -010 to the part numbers shown above.



### Features

- Common Cathode simplifies design, and the red/green LED provides yellow-orange as a third color
- Multiple CBIs form horizontal LED arrays on 7.24mm (0.285") center-lines.
- High Contrast, UL 94 V-0 rated, black housing
- Oxygen index: 32%
- Polymer content: PBT, 0.462 g
- Housing stand-offs facilitate PCB cleaning
- Solderability per MIL-STD-202F, method 208F
- LEDs are safe for direct viewing per IEC 825-1, EN-60825-1

### Tolerance note: As noted, otherwise:

- LED Protrusion:  $\pm 0.04$  mm [ $\pm 0.016$ ]
- CBI Housing:  $\pm 0.02$ mm [ $\pm 0.008$ ]

### PART NUMBER ORDERING CODE

5 5 0 - 3 x 0 5 - 0 1 0

Reverse Polarity Option  
1) Green Anode Right;  
Yellow or Red Anode Left

-010 Ordering Code Suffix required ONLY for Reverse Polarity Option

### Typical Operating Characteristics ( $T_A=25^{\circ}\text{C}$ )

See LED data sheet for additional information

See page 6-55 and 6-56 for Reference Only LED Drive Circuit Examples. See page 6-57 for Pin Out

| Part Number | Color        | Peak Wavelength nm | $I_v$ mcd | $V_F$ Volts | Test Current (mA) | Viewing Angle $2\theta_{\frac{1}{2}}$ | LED Data sheet | Page # |
|-------------|--------------|--------------------|-----------|-------------|-------------------|---------------------------------------|----------------|--------|
| 550-3505    | Red/Green    | 635/565            | 5/8       | 2.1/2.3     | 10                | 65°                                   | 521-9450       | 6-45   |
| 550-3605    | Yellow/Green | 583/565            | 5/8       | 2.1/2.1     | 10                | 65°                                   | 521-9460       | 6-45   |

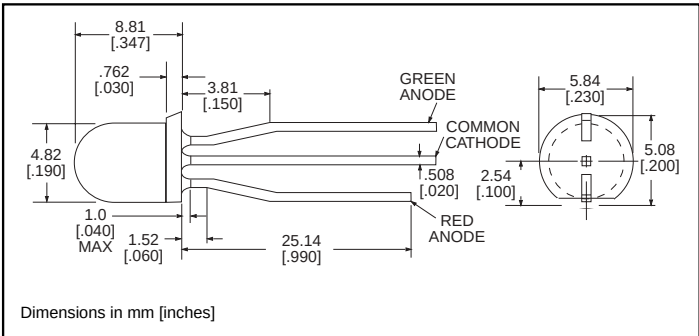
# 5mm Discrete LED

## Bi-Color

### 3 Leded, Non-Tinted, Diffused

# Dialight

## 521-9450, -9460



| PART NO. | LED COLOR               |
|----------|-------------------------|
| 521-9450 | Red/Green               |
| 521-9460 | Yellow/Green <b>NEW</b> |

**MOUNTING CLIP: 515-0004**  
located on page 6-48

| <b>ABSOLUTE MAXIMUM RATINGS</b> ( $T_A=25^{\circ}\text{C}$ )                                | Red/Green                                            | Yellow/Green |
|---------------------------------------------------------------------------------------------|------------------------------------------------------|--------------|
|                                                                                             | <b>-9450</b>                                         | <b>-9460</b> |
| Power Dissipation (mW)                                                                      | 135/135                                              | 135/135      |
| Forward Current (mA)                                                                        | 25/25                                                | 25/25        |
| Derating (mA/ $^{\circ}\text{C}$ ) From 50 $^{\circ}\text{C}$ 1. From 40 $^{\circ}\text{C}$ | .5/.5                                                | .5/.5        |
| Peak Current (mA)                                                                           | 90/90                                                | 90/90        |
| Pulse width = 10 $\mu\text{s}$                                                              |                                                      |              |
| Operating Temperature ( $^{\circ}\text{C}$ )                                                | -20/+85                                              | -20/+85      |
| Storage Temperature ( $^{\circ}\text{C}$ )                                                  | -55/+100                                             | -55/+100     |
| Soldering Temperature                                                                       | 260 $^{\circ}\text{C}$ , 5 seconds, 1.6 mm from case |              |

Solder Adherence per MIL-STD-202E, Method 208C

| <b>OPERATING CHARACTERISTICS</b> ( $T_A=25^{\circ}\text{C}$ ) |         | Red/Green     | Yellow/Green  |
|---------------------------------------------------------------|---------|---------------|---------------|
|                                                               |         | <b>-9450</b>  | <b>-9460</b>  |
| Luminous Intensity (mcd)                                      | Min.    | 2.1/4.2       | 2.1/4.2       |
| $I_F=10\text{mA}$                                             | Typical | 5/8           | 5/8           |
| Peak Wavelength (nm)                                          | Typical | 635/565       | 583/565       |
| $\lambda_{\text{Peak}}$                                       |         |               |               |
| Viewing Angle ( $2\Theta^{\circ}$ )                           | Typical | 65 $^{\circ}$ | 65 $^{\circ}$ |
| Forward Voltage (V)                                           | Typical | 2.1/2.3       | 2.1/2.1       |
| $I_F=10\text{mA}$                                             | Max.    | 2.5/2.7       | 2.5/2.5       |

$\Theta^{\circ}$  is the off axis angle at which the luminous intensity is half the axial luminous intensity

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