

Part Number: **5502205F**

### General Description


|                 |                         |
|-----------------|-------------------------|
| Series          | 550                     |
| Configuration   | 5 mm Lens               |
| Description     | 5 mm Green Diffused CBI |
| Package Options | Bulk Packaging          |
| Sizes           | 5mm                     |
| Lamp Type       | Single Color            |
| Viewing         | Right Angle             |
| Polarity        | Cathode Right           |
| Lens Style      | Diffused                |
| LED Centerline  | 3.00                    |



### Absolute Maximum Ratings (Ta = 25°)

|                       |                      |
|-----------------------|----------------------|
| Forward Current mA    | 25mA                 |
| Reverse Current       | 10 @ Vr = 3V         |
| Derating              | from 40° @ .66 mW/°C |
| Solder Temperature    | 260° for 5 sec       |
| Operating Temperature | -25 to +85           |
| Storage Temperature   | -30 to +100          |

### Operating Characteristics

|                            |   |
|----------------------------|---|
| Color                      |  Green |
| LED Type                   | High Efficiency   |
| Luminous Intensity Min     | 3.6   |
| Luminous Intensity Typical | 10  |
| Test Current mA            | 10mA  |
| Emitted Color              | Green   |
| Power Dissipation Max      | 75mW  |

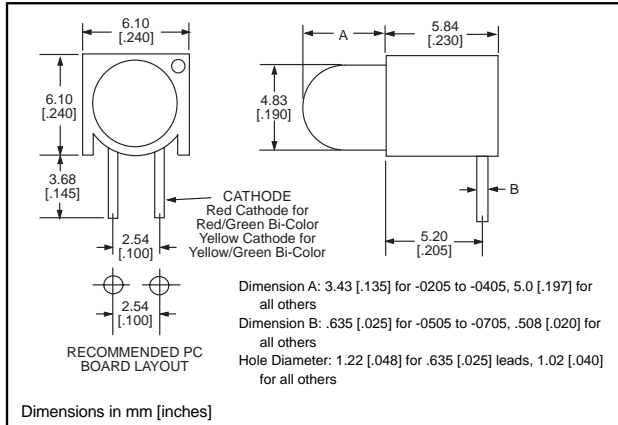


This is a  
RoHS Compliant Product  
[To learn more click here](#)

# 5mm LED CBI® Circuit Board Indicator Square Back Housing



## 550-xx05



Standard Polarity shown in drawing: Cathode right

### Features

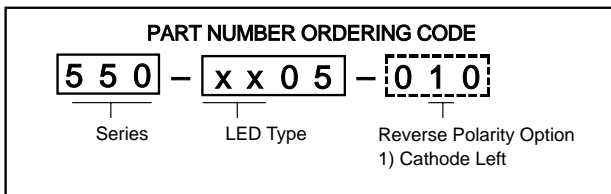
- Multiple CBIs form horizontal LED arrays on 6.35mm (0.250") center-lines.
- High Contrast, UL 94 V-0 rated, black housing
- Oxygen index: 32%
- Polymer content: PBT, 0.160 g
- Housing stand-offs facilitate PCB cleaning
- Solderability per MIL-STD-202F, method 208F
- LEDs are safe for direct viewing per IEC 825-1, EN-60825-1
- Compatible with:  
550-xx05-003 Tri-Block  
550-xx05-004 Quad Block

### Custom

- For custom LEDs contact factory.

### Tolerance note: As noted, otherwise:

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



-010 Ordering Code Suffix required ONLY for Reverse Polarity Option

### PART NO.

#### GENERAL PURPOSE

550-0205  
550-0305  
550-0405

### COLOR

Green  
Yellow  
Red

#### INTEGRAL RESISTOR

550-0505  
550-0705  
550-0805

Red, 5V  
Green, 5V  
Yellow, 5V

#### LOW CURRENT

550-1105  
550-1205  
550-1305

Red  
Yellow  
Green

#### HIGH EFFICIENCY

550-2205  
550-2305  
550-2405  
550-2505

Green  
Yellow  
Red  
Orange

#### BI-COLOR

550-3005  
550-3105

Red/Green  
Yellow/Green



#### SUPER BRIGHT, DIFFUSED

550-5105  
550-5205  
550-5305

Red  
Green  
Yellow

#### SUPER BRIGHT, WATER CLEAR (Non-tinted, Non-diffused)

550-5505  
550-5605  
550-5705

Red  
Green  
Yellow

To order any of the 550-xx05 part numbers with Reverse Polarity (Cathode Left), please add -010 to the part numbers shown above.



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

See LED data sheet for additional information

GENERAL PURPOSE 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 $2\theta_{\%}$ | LED Data sheet | Page # |
|-------------|--------|--------------------|-----------|-------------|-------------------|------------------------------|----------------|--------|
| 550-0205    | Green  | 565                | 12.3      | 2.1         | 20                | 60°                          | 5ND-9674       | 6-51   |
| 550-0305    | Yellow | 585                | 12.3      | 2.1         | 20                | 60°                          | 5ND-9673       | 6-51   |
| 550-0405    | Red    | 635                | 12.3      | 2           | 20                | 60°                          | 5ND-9672       | 6-51   |

## INTEGRAL RESISTOR

| Part Number | Color  | Peak Wavelength nm | $I_V$ mcd | Test Voltage | Forward Current (mA) | Viewing Angle $2\theta_{\%}$ | LED Data sheet | Page # |
|-------------|--------|--------------------|-----------|--------------|----------------------|------------------------------|----------------|--------|
| 550-0505    | Red    | 655                | 2         | 5            | 13                   | 60°                          | 5RD-9422       | 6-52   |
| 550-0705    | Green  | 565                | 8         | 5            | 12                   | 60°                          | 5RD-9423       | 6-52   |
| 550-0805    | Yellow | 583                | 8         | 5            | 10                   | 60°                          | 521-9284       | 6-41   |

## LOW CURRENT

| Part Number | Color  | Peak Wavelength nm | $I_V$ mcd | $V_F$ Volts | Test Current (mA) | Viewing Angle $2\theta_{\%}$ | LED Data sheet | Page # |
|-------------|--------|--------------------|-----------|-------------|-------------------|------------------------------|----------------|--------|
| 550-1105    | Red    | 635                | 2         | 1.8         | 2                 | 50°                          | 521-9320       | 6-42   |
| 550-1205    | Yellow | 583                | 1.8       | 1.9         | 2                 | 50°                          | 521-9321       | 6-42   |
| 550-1305    | Green  | 565                | 1.8       | 1.8         | 2                 | 50°                          | 521-9327       | 6-42   |

## HIGH EFFICIENCY

| Part Number | Color  | Peak Wavelength nm | $I_V$ mcd | $V_F$ Volts | Test Current (mA) | Viewing Angle $2\theta_{\%}$ | LED Data sheet | Page # |
|-------------|--------|--------------------|-----------|-------------|-------------------|------------------------------|----------------|--------|
| 550-2205    | Green  | 563                | 10        | 2.1         | 10                | 65°                          | 5HD-9270-5     | 6-49   |
| 550-2305    | Yellow | 585                | 6.3       | 2.1         | 10                | 50°                          | 5HD-9271-5     | 6-49   |
| 550-2405    | Red    | 650                | 7         | 2.2         | 10                | 50°                          | 5HD-9269       | 6-49   |
| 550-2505    | Orange | 600                | 7         | 1.9         | 10                | 60°                          | 521-9704       | 6-43   |

## BI-COLOR

| Part Number | Color        | Peak Wavelength nm | $I_V$ mcd | $V_F$ Volts | Test Current (mA) | Viewing Angle $2\theta_{\%}$ | LED Data sheet | Page # |
|-------------|--------------|--------------------|-----------|-------------|-------------------|------------------------------|----------------|--------|
| 550-3005    | Red/Green    | 660/565            | 90/40     | 1.8/2.1     | 20                | 60°                          | 521-9651       | 6-46   |
| 550-3105    | Yellow/Green | 585/565            | 8.7/8.7   | 2.1/2.1     | 20                | 50°                          | 521-9724       | 6-46   |

## SUPER BRIGHT, DIFFUSED

| Part Number | Color  | Peak Wavelength nm | $I_V$ mcd | $V_F$ Volts | Test Current (mA) | Viewing Angle $2\theta_{\%}$ | LED Data sheet | Page # |
|-------------|--------|--------------------|-----------|-------------|-------------------|------------------------------|----------------|--------|
| 550-5105    | Red    | 650                | 34        | 2.1         | 20                | 50°                          | 5SD-9441       | 6-53   |
| 550-5205    | Green  | 563                | 34        | 2.2         | 20                | 50°                          | 5SD-9456       | 6-53   |
| 550-5305    | Yellow | 585                | 34        | 2.2         | 20                | 50°                          | 5SD-9455       | 6-53   |

## SUPER BRIGHT, WATER CLEAR (NON-TINTED, NON-DIFFUSED)

| Part Number | Color  | Peak Wavelength nm | $I_V$ mcd | $V_F$ Volts | Test Current (mA) | Viewing Angle $2\theta_{\%}$ | LED Data sheet | Page # |
|-------------|--------|--------------------|-----------|-------------|-------------------|------------------------------|----------------|--------|
| 550-5505    | Red    | 635                | 125       | 2.2         | 20                | 24°                          | 521-9464       | 6-47   |
| 550-5605    | Green  | 565                | 120       | 2.3         | 20                | 24°                          | 521-9465       | 6-47   |
| 550-5705    | Yellow | 583                | 140       | 2.2         | 20                | 24°                          | 521-9466       | 6-47   |