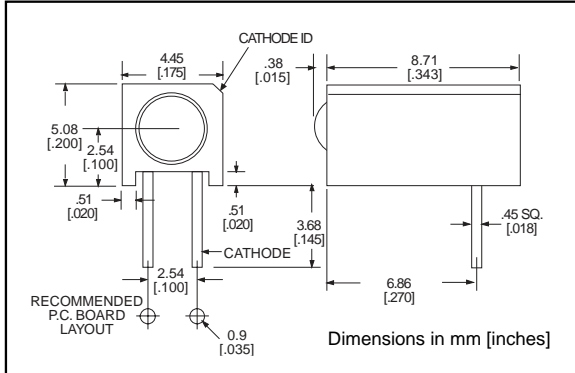


3mm

LED CBI® Circuit Board Indicator For Backlighting



551-xx02



Standard Polarity shown in drawing: Cathode right

PART NO.
HIGH EFFICIENCY, TINTED,
NON DIFFUSED
 551-1502
 551-1602
 551-1702

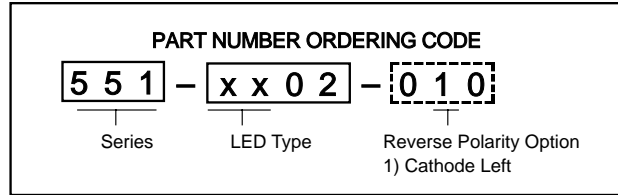
COLOR

 Green
 Yellow
 Red

To order any of the 551-xx02 part numbers with **Reverse Polarity (Cathode Left)**, please add -010 to the part numbers shown above.

Features

- Multiple CBIs form horizontal LED arrays on 4.45mm (0.175") center-lines
- Extended housing and narrow viewing angle LEDs reduce light bleed
- High Contrast, UL 94 V-0 rated, black housing
- Oxygen index: 31.5%
- Polymer content: PBT, 2.242 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:
 - 553-22xx-100 Bi-Level
 - 564-2210-xxx Tri-Level
 - 568-221x-xxx Quad-Level



-010 Ordering Code Suffix required ONLY for Reverse Polarity Option

Tolerance note: As noted, otherwise:

- LED Protrusion: ±0.04 mm [±0.016]
- CBI Housing: ±0.02mm[±0.008]

Typical Operating Characteristics @ TA=25°C

See LED data sheet for additional information

See page 4-70 and 4-71 for Reference Only LED Drive Circuit Examples. See page 4-72 for Pin Out

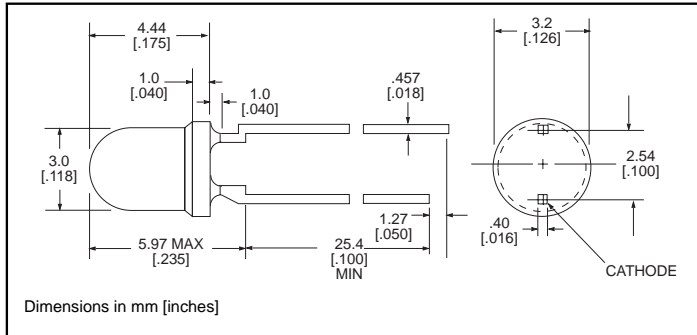
| Part Number | Color | Peak Wavelength nm | Iv mcd | Vf Volts* | Test Current (mA) | Viewing Angle 2θ% | LED Data sheet | Page # |
|-------------|--------|--------------------|--------|-----------|-------------------|-------------------|----------------|--------|
| 551-1502 | Green | 565 | 50 | 2.1 | 10 | 45° | 521-9430 | 4-61 |
| 551-1602 | Yellow | 585 | 20 | 2.1 | 10 | 45° | 521-9431 | 4-61 |
| 551-1702 | Red | 635 | 29 | 2 | 10 | 45° | 521-9432 | 4-61 |

* If = 20mA

3mm Discrete LED
High Efficiency
Tinted, Non-Diffused

Dialight

521-9430, -9431, -9432



PART NO.

COLOR

521-9430
 521-9431
 521-9432

Green
 Yellow
 Red

MOUNTING CLIP: 515-0006
 located on page 4-65

ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$)

| | Green -9430 | Yellow -9431 | Red -9432 |
|------------------------------------------|------------------------------------|------------------------|---------------------|
| Power Dissipation (mW) | 100 | 60 | 100 |
| Forward Current (mA) | 30 | 20 | 30 |
| Derating (mA/°C) From 50°C | .4 | .25 | .4 |
| Peak Current (mA) Pulse width = 100µs | 120 | 80 | 120 |
| Operating Temperature (°C) | -55/+100 | -55/+100 | -55/+100 |
| Storage Temperature (°C) | -55/+100 | -55/+100 | -55/+100 |
| Soldering Temperature | 260°C, 5 seconds, 1.6 mm from case | | |

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

OPERATING CHARACTERISTICS ($T_A=25^\circ\text{C}$)

| | | Green -9430 | Yellow -9431 | Red -9432 |
|-----------------------------------------------|---------|-----------------------|------------------------|---------------------|
| Luminous Intensity (mcd) $I_F=10\text{mA}$ | Min. | 32 | 10 | 8.7 |
| | Typical | 50 | 20 | 29 |
| Peak Wavelength (nm) λ Peak | Typical | 565 | 585 | 635 |
| Viewing Angle ($2\theta_{1/2}$) | Typical | 45° | 45° | 45° |
| Forward Voltage (V) $I_F=20\text{mA}$ | Typical | 2.1 | 2.1 | 2 |
| | Max. | 2.8 | 2.8 | 2.8 |

$\theta_{1/2}$ is the off axis angle at which the luminous intensity is half the axial luminous intensity

4

Mouser Electronics

Authorized Distributor

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Dialight:

[551-1702F](#) [551-1502F](#) [551-1602F](#) [551-1502-010F](#)