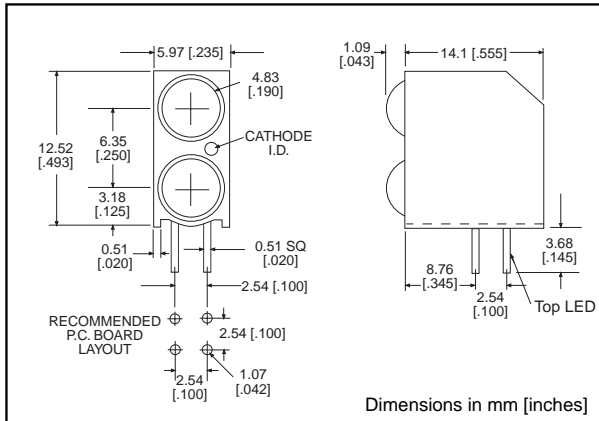


# 5mm 5V LED CBI® Circuit Board Indicator Bi-Level For Backlighting



## 552-22xx-100



Standard Polarity shown in drawing: Cathode right

### PART NO.

**HIGH EFFICIENCY, TINTED,  
NON DIFFUSED**

- 552-2211-100
- 552-2222-100
- 552-2223-100
- 552-2232-100
- 552-2233-100

### COLOR\*

- Red-Red
- Green-Green
- Green-Yellow
- Yellow-Green
- Yellow-Yellow

\* Top-Bottom LED

**Reverse Polarity (Cathode Left) option available.  
See Part Number Ordering Code.**

### Features

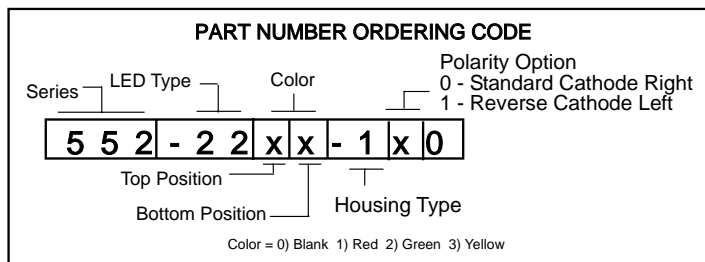
- Multiple CBIs form horizontal LED arrays on 6.35mm (0.250") center-lines.
- High Contrast, UL 94 V-0 rated, black housing
- Oxygen index: 32%
- Polymer content: PBT, 0.845 g
- Housing stand-offs facilitate PCB cleaning
- Solderability per MIL-STD-202F, method 208F
- LEDs are safe for direct viewing 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 [ $\pm 0.008$ ]

### Custom Combinations

- Contact factory for information on custom color combinations and ganged arrays



6

### 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 6-58 for Pin Out*

Color	Peak Wavelength nm	$I_v$ mcd	$V_f$ Volts	Test Current (mA)	Viewing Angle $2\theta_{\%}$	LED Data sheet	Page #
Red	650	110	2.1	20	30°	5HN-9419	6-50
Green	565	110	2.2	20	30°	5HN-9420	6-50
Yellow	585	110	2.2	20	30°	5HN-9421	6-50

5mm  
High Efficiency  
Tinted, Non-Diffused



**\* NOT A VALID PART NUMBER. THIS SHEET IS FOR REFERENCE ONLY.**

TYPE	COLOR
*5HN-9419	Red
*5HN-9420	Green
*5HN-9421	Yellow

<b>ABSOLUTE MAXIMUM RATINGS</b> ( $T_A=25^\circ\text{C}$ )	Red <b>-9419</b>	Green <b>-9420</b>	Yellow <b>-9421</b>
Power Dissipation (mW)	75	75	75
Derating (mW/ $^\circ\text{C}$ ) From 50 $^\circ$	1.5	1.5	1.5
Forward Current (mA)	25	25	25
Peak Current (mA) <i>Pulse Width = 1 <math>\mu\text{s}</math></i>	60	60	60
Operating Temperature ( $^\circ\text{C}$ )	-55/+100	-55/+100	-55/+100
Storage Temperature ( $^\circ\text{C}$ )	-55/+100	-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 <b>-9419</b>	Green <b>-9420</b>	Yellow <b>-9421</b>
Luminous Intensity (mcd)	Min.	56	56	56
	Typical	110	110	110
Peak Wavelength (nm) $\lambda$ Peak	Typical	650	565	565
Viewing Angle ( $2\theta$ $^\circ$ )		30 $^\circ$	30 $^\circ$	30 $^\circ$
Forward Voltage (V)	Typical	2.1	2.2	2.2
	Max	2.55	2.55	2.55
Reverse Voltage (V), $I_R=100\mu\text{A}$	Min.	5	5	5

$\theta$  is the off axis angle at which the luminous intensity is half the axial luminous intensity