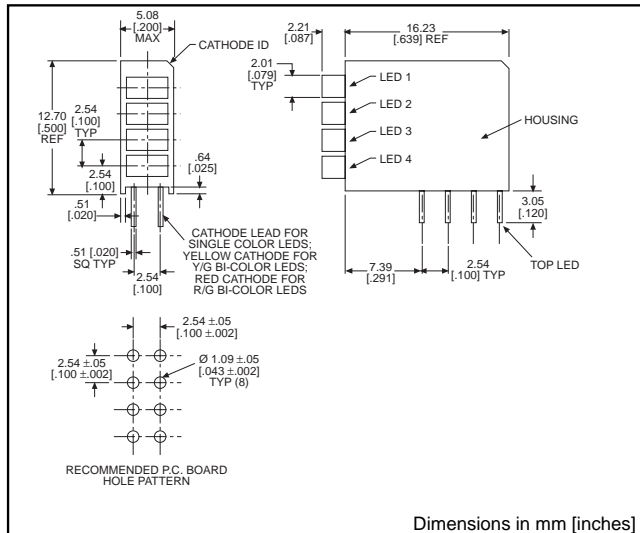


# 2mm x 4mm Rectangular LED CBI® Circuit Board Indicator Quad-Level



## PART NO.

## COLOR\*

### LED TYPE 01

- 568-0121-111
- 568-0122-222
- 568-0122-323
- 568-0123-232
- 568-0123-333

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

### BI-COLOR - LED TYPE 07

- 568-0721-111
- 568-0724-444

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

\* LED 1, LED 2, LED 3, LED 4

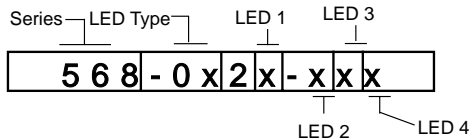
## Features

- Multiple CBIs form horizontal LED arrays on 5.08mm (0.200") center-lines.
- High Contrast, UL 94 V-0 rated, black housing
- Oxygen index: 29%
- Polymer content: PBT, 1.004 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: ±0.04 mm [±0.016]
- CBI Housing: ±0.02mm[±0.008]

## EXAMPLE OF PART NUMBER ORDERING CODE



LED Color = 0) Blank 1) Red or Red/Green Bi-Color 2) Green 3) Yellow  
4) Yellow/Green Bi-Color

## Custom Combinations

- Contact factory for information on custom color combinations.

## Typical Operating Characteristics (T<sub>A</sub>=25°C)

See LED data sheet for additional information  
See Page 5-20 and 5-21 for Reference Only LED Drive Circuit Example  
See Page 5-22 for Pin Out

Part Number	Color	Peak Wavelength nm	I <sub>v</sub> * mcd	V <sub>F</sub> ** Volts	Viewing Angle 2θ <sub>½</sub>	LED Data sheet	Page #
568-012x-xxx	Red	635	3.7	2.1	104°	521-9658	5-14
	Green	565	3.7	2.1	104°	521-9606	5-14
	Yellow	585	3.7	2.1	104°	521-9607	5-14

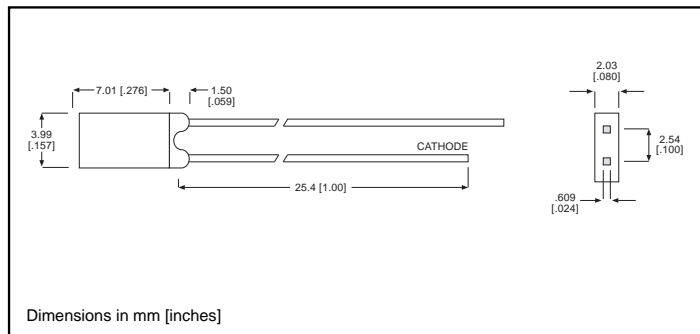
\* I<sub>F</sub> = 10mA \*\* I<sub>F</sub> = 20mA

Part Number	Color	Peak Wavelength nm	I <sub>v</sub> mcd	V <sub>F</sub> Volts	Test Current (mA)	Viewing Angle 2θ <sub>½</sub>	LED Data sheet	Page #
568-0721-111	Red/Green	630/565	5.6/5.6	2/2.1	20	140°	521-9743	5-15
568-0724-444	Yellow/Green	585/565	2.5/3.7	2.1/2.1	20	140°	521-9640	5-15

**2mm x 4mm Discrete LED**  
**Rectangular**  
**Tinted**

**Dialight**

**521-9606, -9607, -9658**



**PART NO.**

**COLOR**

521-9606  
 521-9607  
 521-9658

Green  
 Yellow  
 Red

<b>ABSOLUTE MAXIMUM RATINGS</b> ( $T_A=25^\circ\text{C}$ )	Green <b>-9606</b>	Yellow <b>-9607</b>	Red <b>-9658</b>
Power Dissipation (mW)	100	60	100
Forward Current (mA)	30	20	30
Derating (mA/ $^\circ\text{C}$ ) From 50 $^\circ\text{C}$	.4	.25	.4
Peak Current (mA) Pulse width = 100 $\mu\text{s}$	120	80	120
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		

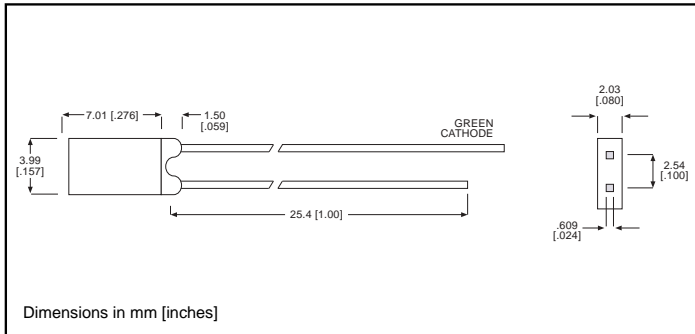
Solder Adherence per MIL-STD-202E, Method 208C

<b>OPERATING CHARACTERISTICS</b> ( $T_A=25^\circ\text{C}$ )		Green <b>-9606</b>	Yellow <b>-9607</b>	Red <b>-9658</b>
Luminous Intensity (mcd)	Min.	2.2	2.2	1.1
	Typical	3.7	3.7	3.7
Peak Wavelength (nm) $\lambda$ Peak	Typical	565	585	635
Viewing Angle ( $2\theta$ $^\circ$ )	Typical	104 $^\circ$	104 $^\circ$	104 $^\circ$
Forward Voltage (V)	Typical	2.1	2.1	2.1
	Max.	2.8	2.8	2.8
Reverse Voltage (V), $I_R=100\mu\text{A}$	Min.	5	5	5

$\theta^1$  is the off axis angle at which the luminous intensity is half the axial luminous intensity

**2mm x 4mm Discrete LED**  
**Rectangular - Bi-Color**  
**Non-Tinted, Diffused**

**Dialight**  
**521-9640, -9743**



<u>PART NO.</u>	<u>COLOR</u>
521-9640	Yellow/Green
521-9743	Red/Green

<b>ABSOLUTE MAXIMUM RATINGS</b> ( $T_A=25^\circ\text{C}$ )	Yellow/Green	Red/Green
	<b>-9640</b>	<b>-9743</b>
Power Dissipation (mW)	60/100	100/100
Forward Current (mA)	20/30	30/30
Derating (mA/ $^\circ\text{C}$ ) From 50 $^\circ\text{C}$	.25/.4	.4/.4
Peak Current (mA)	80/120	120/120
Pulse width = 100 $\mu\text{s}$		
Operating Temperature ( $^\circ\text{C}$ )	-55/+100	-55/+100
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> ( $T_A=25^\circ\text{C}$ )		Yellow/Green	Red/Green
		<b>-9640</b>	<b>-9743</b>
Luminous Intensity (mcd)	Min.	.7/1.1	1.7/1.7
	Typical	2.5/3.7	5.6/5.6
Peak Wavelength (nm)	Typical	585/565	630/565
$\lambda$ Peak			
Viewing Angle ( $2\Theta^{1/2}$ )	Typical	140 $^\circ$	140 $^\circ$
Forward Voltage (V)	Typical	2.1/2.1	2/2.1
	Max.	2.8/2.8	2.8/2.8

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

**5**