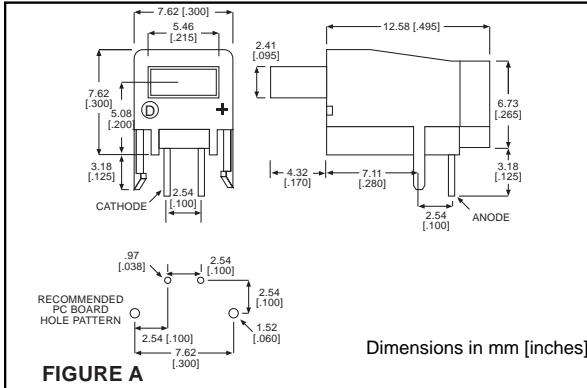


# 2mm x 5mm Rectangular LED CBI® Circuit Board Indicator

# Dialight

## 566-xx07



### PART NO.

566-0207

566-0307

566-0407

**BI-COLOR**

566-3507

### COLOR

Green

Yellow

Red

Red/Green

### FIG.

A

A

A

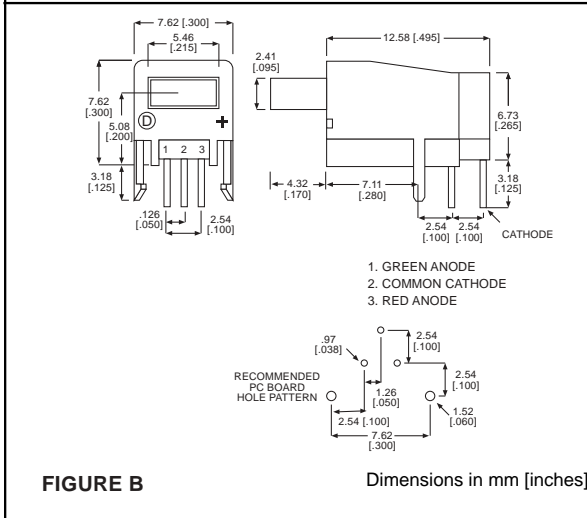
B

### Features

- Multiple CBIs form horizontal LED arrays on 10.16mm (0.400") center-lines.
- Available common cathode (3 leaded) multi-color option simplifies circuit designs
- High Contrast, UL 94 V-0 rated, black housing
- Oxygen index: 32%
- Polymer content: PBT, 0.532 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 [ $\pm 0.008$ ]



### 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

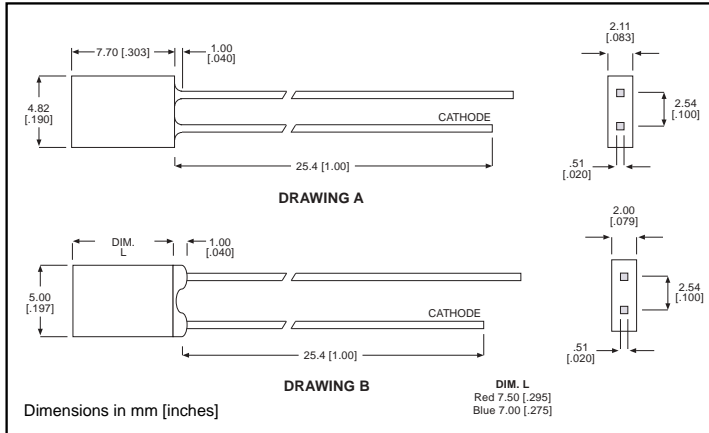
Part Number	Color	Peak Wavelength nm	I <sub>v</sub> mcd	V <sub>F</sub> Volts	Test Current (mA)	Viewing Angle 2θ°	LED Data sheet	Page #
566-0207	Green	565	4	2.2	20	110°	521-9332	5-16
566-0307	Yellow	583	3.5	2.1	20	110°	521-9452	5-16
566-0407	Red	635	7.4	2	20	140°	521-9499	5-16
566-3507	Red/Green	635/565	3.5*/4*	1.9/2.1	10	100°	521-9406	5-17

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

2mm x 5mm Discrete LED  
 Rectangular  
 Tinted, Diffused

**Dialight**

521-9332, -9452, -9499, -9718



PART NO.	COLOR	DRAWING
521-9332	Green	A
521-9452	Yellow	A
521-9499	Red	B
<del>521-9718</del>	<del>Blue</del>	<del>B</del>

<b>ABSOLUTE MAXIMUM RATINGS</b> ( $T_A=25^\circ\text{C}$ )	Green <b>-9332</b>	Yellow <b>-9452</b>	Red <b>-9499</b>	Blue <b>-9718</b>
Power Dissipation (mW)	135	85	100	189
Forward Current (mA)	30	20	30	30
Derating (mA/ $^\circ\text{C}$ ) From 50 $^\circ\text{C}$ 1. mW/ $^\circ\text{C}$ From 25 $^\circ\text{C}$	.5	.34	.4	.45 <sup>1</sup>
Peak Current (mA)	500*	500*	120	180
<i>Pulse width = 1 ms *Pulse width = 10 <math>\mu\text{s}</math></i>				
Operating Temperature ( $^\circ\text{C}$ )	-20/+100	-55/+100	-55/+100	-25/+75
Storage Temperature ( $^\circ\text{C}$ )	-55/+100	-55/+100	-55/+100	-25/+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>-9332</b>	Yellow <b>-9452</b>	Red <b>-9499</b>	Blue <b>-9718</b>
Luminous Intensity (mcd)	Min.	2.6	2.2	3	9
	Typical	4	3.5	7.4	18
Peak Wavelength (nm)	Typical	565	583	635	430
$\lambda$ Peak					
Viewing Angle ( $2\theta$ $^\circ$ )	Typical	110 $^\circ$	110 $^\circ$	140 $^\circ$	120 $^\circ$
Forward Voltage (V)	Typical	2.2	2.1	2	5.3
	Max.	3	2.6	2.8	6
Reverse Voltage (V), $I_R=100\mu\text{A}$	Min.	5	5	5	5

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

**2mm x 5mm Discrete LED**  
**Bi-Color LED, Common Cathode**  
**Non-Tinted, Diffused**



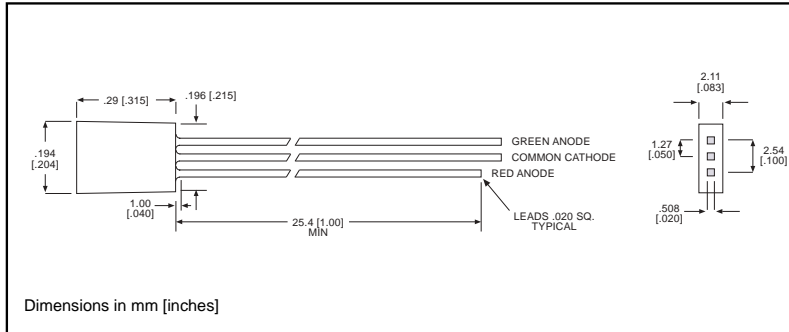
**521-9406**

**PART NO.**

521-9406

**COLOR**

Red/Green



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

Red/Green  
**-9406**

Power Dissipation (mW)	135/135
Derating (mW/°C) From 25°C	1.8/1.8
Forward Current (mA)	25/25
Peak Current (mA) Pulse width = 10 $\mu\text{s}$	90/90
Operating Temperature (°C)	-20/+85
Storage Temperature (°C)	-55/+100
Soldering Temperature	260°C, 5 seconds, 1.6 mm from case

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

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

Red/Green  
**-9406**

Luminous Intensity (mcd)	Min.	2.1/2.6
$I_F=20\text{mA}$	Typical	3.5/4
Peak Wavelength (nm)	Typical	635/565
$\lambda$ Peak		
Viewing Angle ( $2\theta$ )	Typical	100°
Forward Voltage (V)	Typical	1.9/2.1
$I_F=10\text{mA}$	Max.	2.4/2.7

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

**5**