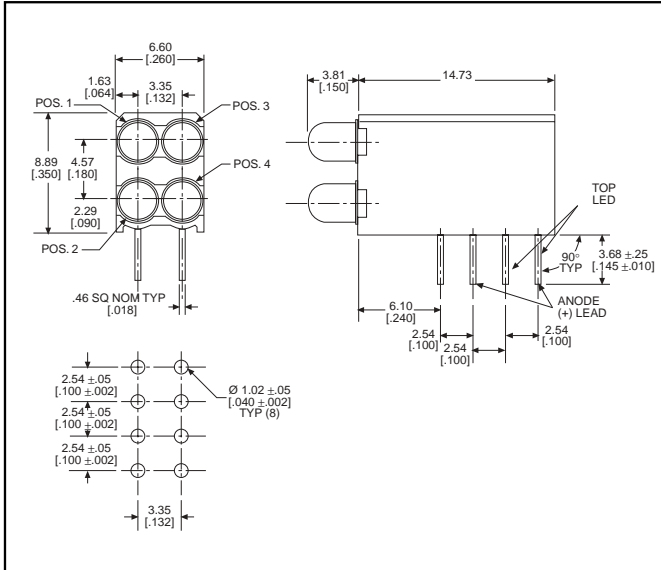


# 3mm LED CBI® Circuit Board Indicator High Density Dual Bi-Level

# Dialight

## 569-010x-xxx



PART NO.	COLOR*
569-0101-111	Red
569-0102-222	Green
569-0103-333	Yellow
569-0107-777	Orange
569-0108-888	Blue <sup>3</sup>



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

### Features

- Multiple CBIs form horizontal LED arrays on 3.35mm (0.132") center-lines
- High Contrast, UL 94 V-0 rated, black housing
- Oxygen index: 32%
- Polymer content: PBT, 0.860 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:
  - 569-011x-x00 Narrow Bi-Level

### Custom Combinations

- Contact factory for information on custom color combinations

### Tolerance note: As noted, otherwise:

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

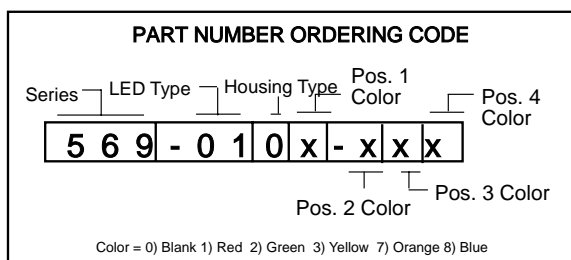
4

### Typical Operating Characteristics (T<sub>A</sub>=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	I <sub>v</sub> mcd	V <sub>F</sub> Volts	Test Current (mA)	Viewing Angle 2θ%	LED Data sheet	Page #
569-0101-111	Red	635	10	2*	10	60°	521-9216	4-58
569-0102-222	Green	565	12.6	2.1*	10	60°	521-9210	4-58
569-0103-333	Yellow	585	10	2.1*	10	60°	521-9211	4-58
569-0107-777	Orange	600	7	2.2	10	60°	521-9498	4-58
569-0108-888	Blue	428	12	3.5	10	70°	521-9831	4-57

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



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
SENSITIVE  
DEVICES



# 3mm Discrete LED Tinted, Diffused



## 521-9831



**PART NO.** 521-9831  
**COLOR** Blue<sup>3</sup>

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



**ATTENTION**  
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SENSITIVE  
DEVICES

4

### ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=25°C)

Blue  
-9831

Power Dissipation (mW)	100
Forward Current (mA)	20
Derating (mA/°C) From 55°C	.44
Operating Temperature (°C)	-40/+100
Storage Temperature (°C)	-40/+100
Soldering Temperature	260°C, 5 seconds, 1.6 mm from case

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

### OPERATING CHARACTERISTICS (T<sub>A</sub>=25°C)

Blue  
-9831

Luminous Intensity (mcd)	Min.	6.3
I <sub>F</sub> =10mA	Typical	12
Peak Wavelength (nm)	Typical	428
λ Peak		
Viewing Angle (2Θ <sub>1/2</sub> )	Typical	70°
Forward Voltage (V)	Typical	3.5
I <sub>F</sub> =10mA	Max.	4.2
Reverse Voltage (V) I <sub>R</sub> =10μA	Min.	3

Θ<sub>1/2</sub> is the off axis angle at which the luminous intensity is half the axial luminous intensity

# 3mm Discrete LED

## High Efficiency

### Diffused

521-9210, -9211, -9216, -9498, -9636

# Dialight



#### PART NO. COLOR

- 521-9210 Green
- 521-9211 Yellow
- 521-9216 Red
- 521-9498 Orange
- 521-9636 Red



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

<b>ABSOLUTE MAXIMUM RATINGS</b> ( $T_A=25^\circ\text{C}$ )	Green <b>-9210</b>	Yellow <b>-9211</b>	Red <b>-9216</b>	Orange <b>-9498</b>	Red <b>-9636</b>
Power Dissipation (mW)	100	60	100	135	100
Forward Current (mA)	30	20	30	25	40
Derating (mA/°C) From 50°C <sup>1</sup> from 25°C	.4	.25	.4	.5	.5 <sup>1</sup>
Operating Temperature (°C)	-55/+100	-55/+100	-55/+100	-55/+100	-55/+100
Storage Temperature (°C)	-55/+100	-55/+100	-55/+100	-55/+100	-55/+100
Soldering Temperature	260°C, 5 seconds, 1.6 mm from body				

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

<b>OPERATING CHARACTERISTICS</b> ( $T_A=25^\circ\text{C}$ )		Green <b>-9210</b>	Yellow <b>-9211</b>	Red <b>-9216</b>	Orange <b>-9498</b>	Red <b>-9636</b>
Luminous Intensity (mcd)	Min.	4.7	7.4	7.4	3.4	8.7 <sup>1</sup>
	Typical	12.6	10	10	7	48 <sup>1</sup>
Peak Wavelength (nm)	Typical	565	585	635	600	660
Viewing Angle ( $2\theta$ °)	Typical	60°	60°	60°	60°	60°
Forward Voltage (V)	Typical	2.1 <sup>1</sup>	2.1 <sup>1</sup>	2 <sup>1</sup>	2.2	1.8 <sup>1</sup>
	Max.	2.8 <sup>1</sup>	2.8 <sup>1</sup>	2.8 <sup>1</sup>	3	2.4 <sup>1</sup>
Reverse Voltage (V), $I_R=100\mu\text{A}$	Max.	5	5	5	5	4

<sup>1</sup>  $\theta$  is the off axis angle at which the luminous intensity is half the axial luminous intensity