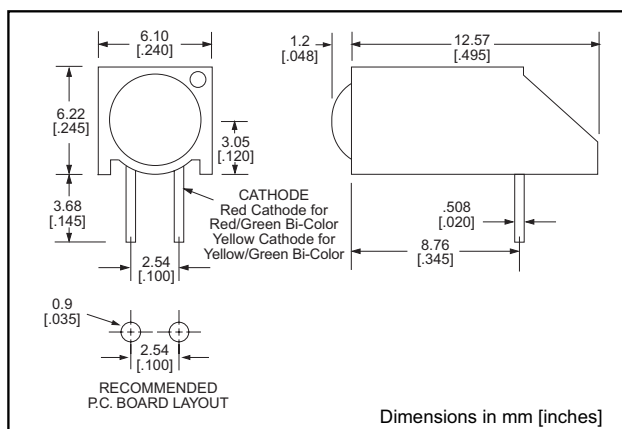


5mm LED CBI® Circuit Board Indicator For Backlighting

Dialight

550-xx10



Standard Polarity shown in drawing: Cathode right

PART NO.

HIGH EFFICIENCY, TINTED,
NON DIFFUSED

550-1510

550-1610

550-1710

COLOR

Green

Yellow

Red

BI-COLOR

550-3010

550-3110

Red/Green

Yellow/Green

To order any of the 550-xx10 part numbers with
Reverse Polarity (Cathode Left), please add -010
to the part numbers shown above.

Features

- Extended housing and narrow viewing angle LEDs reduce light bleed
- Multiple CBIs form horizontal LED arrays on 6.35mm (0.250") center-lines.
- Optional stabilizing pin available - Contact Dialight for details
- High Contrast, UL 94 V-0 rated, black housing
- Oxygen index: 32%
- Polymer content: PBT, 0.275 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

PART NUMBER ORDERING CODE

5 5 0 - x x 1 0 - 0 1 0

Series

LED Type

Reverse Polarity Option
1) Cathode Left

-010 Ordering Code Suffix required

ONLY for Reverse Polarity Option

6

Tolerance note: As noted, otherwise:

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

Typical Operating Characteristics ($T_A=25^\circ\text{C}$)

See LED data sheet for additional information

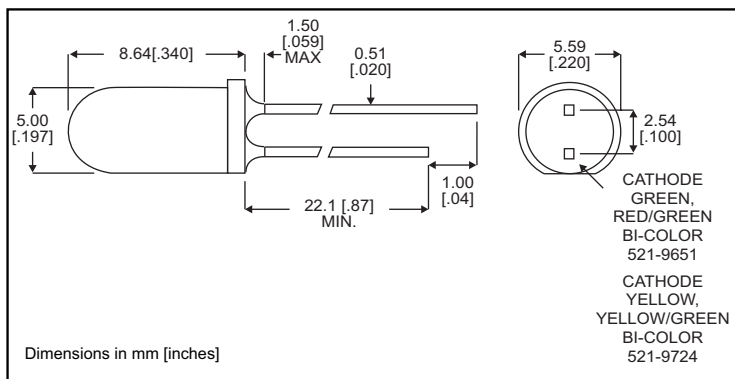
See page 6-55 and 6-56 for Reference Only LED Drive Circuit Examples. See page 6-57 for Pin Out

Part Number	Color	Peak Wavelength nm	I_v mcd	V_F Volts	Test Current (mA)	Viewing Angle 2 $\theta_{\%}$	LED Data sheet	Page #
550-1510	Green	565	110	2.2	20	30°	5HN-9420	6-50
550-1610	Yellow	585	110	2.2	20	30°	5HN-9421	6-50
550-1710	Red	650	110	2.1	20	30°	5HN-9419	6-50
550-3010	Red/Green	660/565	90/40	1.8/2.1	20	60°	521-9651	6-46
550-3110	Yellow/Green	585/565	8.7/8.7	2.1/2.1	20	50°	521-9724	6-46

5mm Discrete LED Bi-Color Non-Tinted, Diffused

Dialight

521-9651, -9724



PART NO.

521-9651

521-9724

LED COLOR

Red/Green

Yellow/Green

MOUNTING CLIP: 515-0005
located on page 6-48

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

	Red/Green -9651	Yellow/Green -9724
Power Dissipation (mW)	100/100	60/100
Forward Current (mA)	40/30	20/30
Derating (mA/°C) From 50°C	.5/.4	.25/.40
Peak Current (mA) Pulse width = 100 μs	200/120	80/120
Operating Temperature (°C)	-55/+100	-55/+100
Storage Temperature (°C)	-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 ($T_A=25^\circ\text{C}$)

		Red/Green -9651	Yellow/Green -9724
Luminous Intensity (mcd)	Min.	29/12.6	2.5/2.5
	Typical	90/40	8.7/8.7
Peak Wavelength (nm)	Typical	660/565	585/565
λ_{Peak}			
Viewing Angle ($2\theta_{1/2}$)	Typical	60°	50°
Forward Voltage (V)	Typical	1.8/2.1	2.1/2.1
	Max.	2.4/2.8	2.8/2.8

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

5mm
High Efficiency
Tinted, Non-Diffused

Dialight
5HN-xxxx

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

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

ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$)	Red -9419	Green -9420	Yellow -9421
Power Dissipation (mW)	75	75	75
Derating (mW/ $^{\circ}\text{C}$) From 50°	1.5	1.5	1.5
Forward Current (mA)	25	25	25
Peak Current (mA) Pulse Width = 1 μs	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

OPERATING CHARACTERISTICS ($T_A=25^{\circ}\text{C}$)		Red -9419	Green -9420	Yellow -9421
Luminous Intensity (mcd)	Min.	56	56	56
$I_F=20\text{mA}$	Typical	110	110	110
Peak Wavelength (nm) λ_{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
$I_F=20\text{mA}$	Max	2.55	2.55	2.55
Reverse Voltage (V), $I_R=100\mu\text{A}$	Min.	5	5	5

θ° is the off axis angle at which the luminous intensity is half the axial luminous intensity