



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

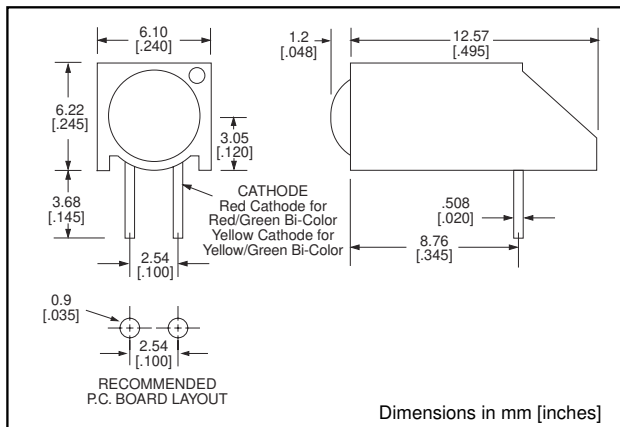
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



5mm LED CBI® Circuit Board Indicator For Backlighting



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

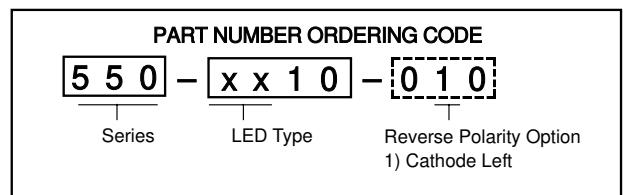
Red/Green

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



-010 Ordering Code Suffix required

ONLY for Reverse Polarity Option

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

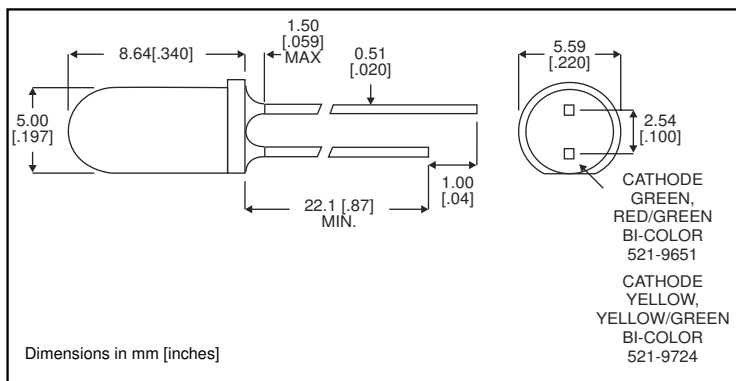
See page 6-55 and 6-56 for Reference Only LED Drive Circuit Examples. See page 6-57 for Pin Out

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.	LED COLOR
521-9651	Red/Green
521-9724	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) <i>Pulse width = 100 μs</i>	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
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.**

<u>TYPE</u>	<u>COLOR</u>
*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 $^\circ$	1.5	1.5	1.5
Forward Current (mA)	25	25	25
Peak Current (mA) <i>Pulse Width = 1 μs</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

OPERATING CHARACTERISTICS ($T_A=25^\circ\text{C}$)		Red -9419	Green -9420	Yellow -9421
Luminous Intensity (mcd)	Min.	56	56	56
	Typical	110	110	110
Peak Wavelength (nm) λ Peak	Typical	650	565	565
Viewing Angle ($2\Theta^{1/2}$)		30 $^\circ$	30 $^\circ$	30 $^\circ$
Forward Voltage (V) $I_F=20\text{mA}$	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

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