



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!



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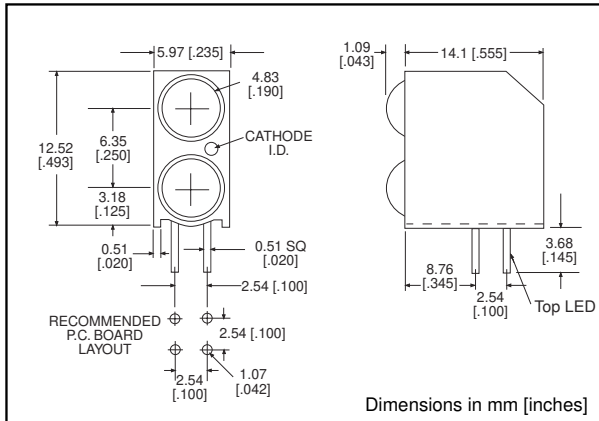
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



5mm 5V LED CBI® Circuit Board Indicator Bi-Level For Backlighting



552-22xx-100



Standard Polarity shown in drawing: Cathode right

PART NO.
HIGH EFFICIENCY, TINTED,
NON DIFFUSED
552-2211-100
552-2222-100
552-2223-100
552-2232-100
552-2233-100

COLOR*

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

* Top-Bottom LED

Reverse Polarity (Cathode Left) option available.
See Part Number Ordering Code.

Features

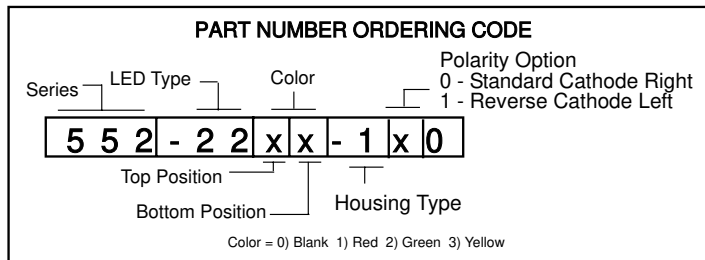
- Multiple CBIs form horizontal LED arrays on 6.35mm (0.250") center-lines.
- High Contrast, UL 94 V-0 rated, black housing
- Oxygen index: 32%
- Polymer content: PBT, 0.845 g
- Housing stand-offs facilitate PCB cleaning
- Solderability per MIL-STD-202F, method 208F
- LEDs are safe for direct viewing per IEC 825-1, EN-60825-1

Tolerance note: As noted, otherwise:

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

Custom Combinations

- Contact factory for information on custom color combinations and ganged arrays



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Typical Operating Characteristics (T_A=25°C)

See LED data sheet for additional information
See page 6-55 and 6-56 for Reference Only LED Drive Circuit Examples. See page 6-58 for Pin Out

Color	Peak Wavelength nm	I _v mcd	V _F Volts	Test Current (mA)	Viewing Angle 2θ°	LED Data sheet	Page #
Red	650	110	2.1	20	30°	5HN-9419	6-50
Green	565	110	2.2	20	30°	5HN-9420	6-50
Yellow	585	110	2.2	20	30°	5HN-9421	6-50

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/ $^\circ\text{C}$) <i>From 50$^\circ$</i>	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