

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







# 3mm LED CBI® Circuit Board Indicator Tri-Block, .200" High LED Centerline



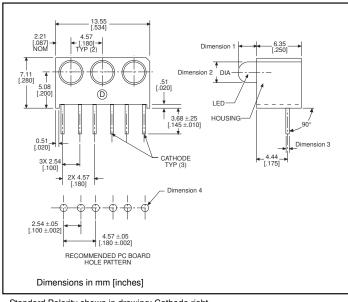
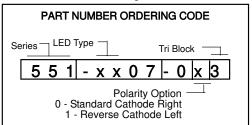


	CHART A	CHART B
Dimension 1	2.67 [.105]	2.41 [.095]
Dimension 2	3.10 ±.20 [.122 ±.008]	2.92 ±.25 [.115 ±.010]
Dimension 3	.51 [.020]	.46 [.018]
Dimension 4	Ø 1.09 ±.05 [.043 ±.002] TYP (6)	Ø 1.02 ±.05 [.040 ±.002] TYP (6)

## REVERSE POLARITY OPTION AVAILABLE

See Part Number Ordering Code below.



PART NO. HIGH EFFICIENCY	COLOR*	CHART
551-0207-003	Green	Α
551-0307-003	Yellow	Α
551-0407-003	Red	Α
LOW CURRENT		
551-1107-003	Red	В
551-1207-003	Yellow	В
551-1307-003	Green	В
* LED 1, LED 2, LED 3		

## **Custom Combinations**

Contact factory for information on custom color combinations

#### **Features**

- Multiple CBIs form horizontal LED arrays on 4.57mm (0.180") center-lines
- · High Contrast, UL 94 V-0 rated, black housing
- Oxygen index: 31.5%
- Polymer content: PBT, 0.569 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: ±0.02mm[±0.008]

Typical Operating Characteristics (T<sub>A</sub>=25°C)

See LED data sheet for additional information

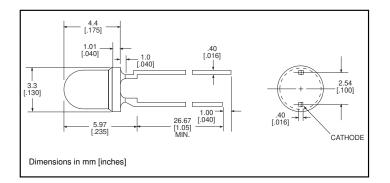
See page 4-72 and 4-71 for Reference Only LED Drive Circuit Examples. See page 4-72 for Pin Out

Part Number	Color	Peak Wavelength nm	ly mcd	V <sub>F</sub> Volts	Test Current (mA)	Viewing Angle 2⊖ <sub>½</sub>	LED Data sheet	Page #
551-0207-003	Green	563	16	2.1	10	45°	521-9408	4-64
551-0307-003	Yellow	585	6.3	2.1	10	45°	521-9428	4-64
551-0407-003	Red	650	10	2	10	45°	521-9427	4-64
551-1107-003	Red	635	1.6	1.7	2	60°	521-9324	4-60
551-1207-003	Yellow	585	1.6	1.8	2	60°	521-9325	4-60
551-1307-003	Green	565	1.6	1.9	2	60°	521-9326	4-60

# 3mm Discrete LED Low Current Diffused



521-9324, -9325, -9326



 PART NO.
 COLOR

 521-9324
 Red

 521-9325
 Yellow

 521-9326
 Green

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

ABSOLUTE MAXIMUM RATINGS (T <sub>A</sub> =25°C)	Red <b>-9324</b>	Yellow <b>-9325</b>	Green <b>-9326</b>	
Power Dissipation (mW)	20	20	20	
Forward Current (mA) Derating (mA/°C) From 90°C	7 .7	7 .7	7 .7	
Peak Current (mA) Pulse width = 10 µs	500	500	500	
Operating Temperature (°C)	-55/+100	-55/+100	-55/+100	
Storage Temperature (°C)	-55/+100	-55/+100	-55/+100	
Soldering Temperature	260°C, 5 seconds, 1.6 mm from case			

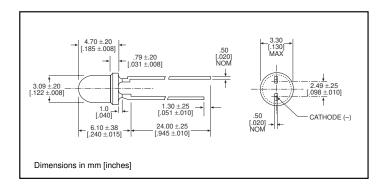
Solder Adherence per MIL-STD-202E, Method 208C

OPERATING CHARACTERISTICS (T <sub>A</sub> =25°C)		Red	Yellow	Green
		<b>-9324</b>	<b>-9325</b>	<b>-9326</b>
Luminous Intensity (mcd) I <sub>F</sub> =2mA	Min.	1	1	1
	Typical	1.6	1.6	1.6
Peak Wavelength (nm) λ Peak	Typical	635	585	565
Viewing Angle (2Θ ½)	Typical	60°	60°	60°
Forward Voltage (V) I <sub>F</sub> =2mA	Typical	1.7	1.8	1.9
	Max.	2.2	2.7	2.2
Reverse Voltage (V), I <sub>R</sub> =50μA	Min.	5	5	5

 $<sup>\</sup>Theta^{\top}$  is the off axis angle at which the luminous intensity is half the axial luminous intensity

# 3mm Discrete LED High Efficiency Diffused





<u>TYPE</u>	<u>COLOR</u>
521-9408	Green
521-9427	Red
521-9428	Yellow

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

ABSOLUTE MAXIMUM RATINGS $(T_A=25^{\circ}C)$	Green <b>-9408</b>	Red <b>-9427</b>	Yellow <b>-9428</b>	
Power Dissipation (mW)	75	60	60	
Forward Current (mA)	25	20	20	
Derating (mA/°C) From 50°C	.5	.5	.5	
Peak Current (mA)	60	60	60	
Operating Temperature (°C)	-25/+85	-25/+85	-25/+85	
Storage Temperature (°C)	-30/+100	-30/+100	-30/+100	
Soldering Temperature	260°C, 5 seconds, 1.6 mm from case			

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

	T 0500)	Green	Red	Yellow
OPERATING CHARACTERISTICS (T <sub>A</sub> =25°C)		-9408	-9427	-9428
Luminous Intensity (mcd)	Min.	5.6	3.6	2.2
I <sub>F</sub> =10mA	Typical	16	10	6.3
Peak Wavelength (nm) λ Peak	Typical	563	650	585
Viewing Angle (2Θ ½)	Typical	45°	45°	45°
Forward Voltage (V)	Typical	2.1	2	2.1
I <sub>F</sub> =10mA	Max.	3	3	3
Reverse Voltage (V), I <sub>R</sub> =10μA	Min.	3	3	3

 $<sup>\</sup>Theta^{\top}$  is the off axis angle at which the luminous intensity is half the axial luminous intensity