



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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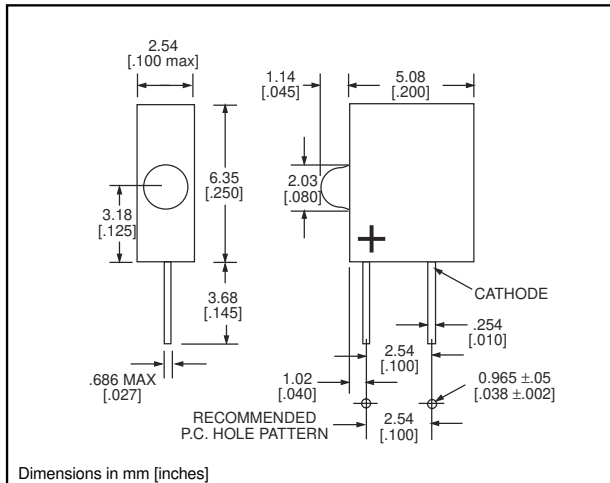
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2mm
LED CBI® Circuit Board Indicator
Single



555-2xxx



PART NO.

COLOR

GENERAL PURPOSE

555-2001	Red
555-2301	Green
555-2401	Yellow

INTEGRAL RESISTOR, VARIOUS VOLTAGES

555-2003	Red, 5V
555-2007	Red, 5V
555-2008	Red, 24V
555-2009	Red, 5V
555-2303	Green, 5V
555-2403	Yellow, 5V

Features

- Multiple CBIs form horizontal LED arrays on 2.54mm (0.100") center-lines
- High Contrast, UL 94 V-0 rated, black housing
- Oxygen index: 31.5%
- Polymer content: PBT, 0.079 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: 555-4xxx Quad Block

Tolerance note: As noted, otherwise:

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

Typical Operating Characteristics (T_A = 25°C)

See LED data sheet for additional information

GENERAL PURPOSE

See Page 3-17 and 3-18 for Reference Only LED Drive Circuit Examples

See Page 3-19 for Pin Out

Part Number	Color	Peak Wavelength nm	I _v mcd	V _F Volts	Test Current (mA)	Viewing Angle 2θ _{1/2}	LED Data sheet	Page #
555-2001	Red	650	1.2	1.6	20	40°	2ND-9412	3-14
555-2301	Green	565	1	2.4	20	40°	2ND-9414	3-14
555-2401	Yellow	583	2	2.2	20	40°	2ND-9416	3-14

INTEGRAL RESISTOR, VARIOUS VOLTAGES

Part Number	Color	Peak Wavelength nm	I _v mcd	I _F mA	Test Voltage	Viewing Angle 2θ _{1/2}	LED Data sheet	Page #
555-2003	Red	650	1.9	6	5	40°	2RD-9614	3-15
555-2007	Red	650	.9	3	5	40°	2RD-9613	3-15
555-2008	Red	650	.9	3	24	40°	2RD-9623	3-16
555-2009	Red	650	.6	1	5	40°	2RD-9618	3-15
555-2303	Green	565	2.5	4.7	5	40°	2RD-9615	3-15
555-2403	Yellow	583	2.1	4.7	5	40°	2RD-9616	3-15

3



2mm
General Purpose
Diffused

Dialight

2ND-xxxx

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

<u>TYPE</u>	<u>COLOR</u>
2ND-9412*	Red
2ND-9414*	Green
2ND-9416*	Yellow

ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$)	Red -9412	Green -9414	Yellow -9416
Power Dissipation (mW)	80	80	80
Derating (mW/ $^\circ\text{C}$) From 25 $^\circ\text{C}$	1.1	1.1	1.1
Forward Current (mA)	40	25	25
Peak Current (mA) <i>Pulse width = 1 μs</i>	250	250	250
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		

OPERATING CHARACTERISTICS ($T_A=25^\circ\text{C}$)		Red -9412	Green -9414	Yellow -9416
Luminous Intensity (mcd) $I_F=20\text{mA}$	Min.	1	.5	.6
	Typical	1.2	1	2
Peak Wavelength (nm) λ_{Peak}	Typical	650	565	583
Viewing Angle ($2\theta_{1/2}$)	Typical	40 $^\circ$	40 $^\circ$	40 $^\circ$
Forward Voltage (V) $I_F=20\text{mA}$	Typical	1.6	2.4	2.2
	Max.	2	3	3
Reverse Voltage (V), $I_R=10\mu\text{A}$	Min.	3	3	3

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

2mm
Integral Resistor, 5 Volts
Diffused

Dialight

2RD-9613 thru 2RD-9618

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

TYPE	COLOR
2RD-9613*	Red
2RD-9614*	Red
2RD-9615*	Green
2RD-9616*	Yellow
2RD-9618*	Red

3

ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$)	Red -9613	Red -9614	Green -9615	Yellow -9616	Red -9618
Forward Voltage (V)	6	6	6	6	6
Operating Temperature ($^\circ\text{C}$)	-55/+100	-55/+100	-55/+100	-55/+100	-55/+100
Storage Temperature ($^\circ\text{C}$)	-55/+100	-55/+100	-55/+100	-55/+100	-55/+100
Soldering Temperature	260 $^\circ\text{C}$, 5 seconds, 1.6 mm from case				

OPERATING CHARACTERISTICS ($T_A=25^\circ\text{C}$)	-	Red 9613	Red -9614	Green -9615	Yellow -9616	Red -9618
Luminous Intensity (mcd)	Min.	.4	.8	.8	1.3	.3
	Typical	.9	1.9	2.5	2.1	.6
Peak Wavelength (nm)	Typical	650	650	565	583	650
λ Peak						
Viewing Angle ($2\theta_{1/2}$)	Typical	40 $^\circ$	40 $^\circ$	40 $^\circ$	40 $^\circ$	40 $^\circ$
Forward Current (mA)	Typical	3	6	4.7	4.7	1
	Max.	4	8	6.7	6.7	2.6
Reverse Voltage (V), $I_R=100\mu\text{A}$	Min.	6	6	6	6	6

2mm

Integral Resistor, Various Voltages

Diffused



2RD-9619 thru 2RD-9623

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

TYPE	COLOR
2RD-9619*	Red, 14V
2RD-9620*	Red, 3.6V
2RD-9621*	Red, 10V
2RD-9622*	Red, 15V
2RD-9623*	Red, 24V

ABSOLUTE MAXIMUM RATINGS (T _A =25°C)	Red 14V	Red 3.6V	Red 10V	Red 15V	Red 24V
	-9619	-9620	-9621	-9622	-9623
Forward Voltage (V)	14	3.6	10	15	24
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 case				

OPERATING CHARACTERISTICS (T _A =25°C)		Red 14V	Red 3.6V	Red 10V	Red 15V	Red 24V
		-9619	-9620	-9621	-9622	-9623
Luminous Intensity (mcd)	Min.	1.3	2.6	1.8	.3	.4
	Typical	3.1	6.2	4.2	.9	.9
Peak Wavelength (nm)	Typical	650	650	650	650	650
λ Peak						
Viewing Angle (2θ _{1/2})	Typical	40°	40°	40°	40°	40°
Forward Current (mA)	Typical	10	20	14	3	3
	Max.	15	25	18	3.8	3.8
Reverse Voltage (V), I _R =100μA	Typical	15	4.6	11	16	25