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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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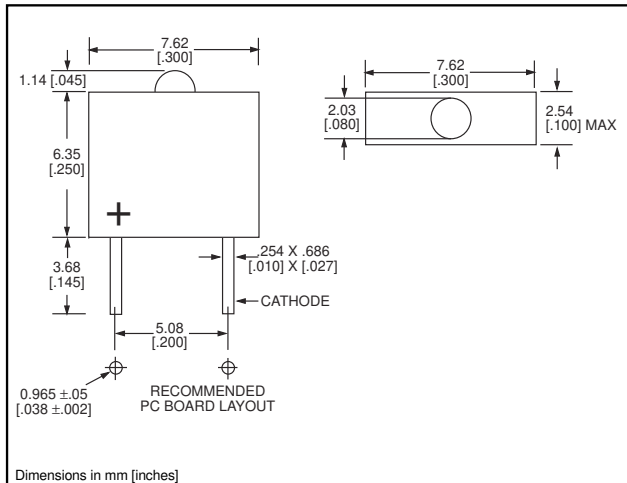


2mm

# LED CBI® Circuit Board Indicator Single, Top View



555-3xxx



### PART NO.

### COLOR

#### GENERAL PURPOSE

555-3001	Red
555-3301	Green
555-3401	Yellow

#### INTEGRAL RESISTOR, VARIOUS VOLTAGES

555-3003	Red, 5V
555-3006	Red, 14V
555-3007	Red, 5V
555-3008	Red, 24V
555-3009	Red, 5V
555-3303	Green, 5V
555-3403	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, 0.090 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: 555-5xxx Quad Block

### Tolerance note: As noted, otherwise:

- LED Protrusion:  $\pm 0.04$  mm [ $\pm 0.016$ ]
- CBI Housing:  $\pm 0.02$ mm [ $\pm 0.008$ ]

**Typical Operating Characteristics (T<sub>A</sub> = 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 <sub>v</sub> mcd	V <sub>F</sub> Volts	Test Current (mA)	Viewing Angle 2θ <sub>1/2</sub>	LED Data sheet	Page #
555-3001	Red	650	1.2	1.6	20	40°	2ND-9412	3-14
555-3301	Green	565	1	2.4	20	40°	2ND-9414	3-14
555-3401	Yellow	583	2	2.2	20	40°	2ND-9416	3-14

**INTEGRAL RESISTOR, VARIOUS VOLTAGES**

Part Number	Color	Peak Wavelength nm	I <sub>v</sub> mcd	I <sub>F</sub> mA	Test Voltage	Viewing Angle 2θ <sub>1/2</sub>	LED Data sheet	Page #
555-3003	Red	650	1.9	6	5	40°	2RD-9614	3-15
555-3006	Red	650	3.1	10	14	40°	2RD-9619	3-16
555-3007	Red	650	.9	3	5	40°	2RD-9613	3-15
555-3008	Red	650	.9	3	24	40°	2RD-9623	3-16
555-3009	Red	650	.6	1	5	40°	2RD-9618	3-15
555-3303	Green	565	2.5	4.7	5	40°	2RD-9615	3-15
555-3403	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

<b>ABSOLUTE MAXIMUM RATINGS</b> ( $T_A=25^\circ\text{C}$ )	Red <b>-9412</b>	Green <b>-9414</b>	Yellow <b>-9416</b>
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 <math>\mu\text{s}</math></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		

<b>OPERATING CHARACTERISTICS</b> ( $T_A=25^\circ\text{C}$ )		Red <b>-9412</b>	Green <b>-9414</b>	Yellow <b>-9416</b>
Luminous Intensity (mcd) $I_F=20\text{mA}$	Min.	1	.5	.6
	Typical	1.2	1	2
Peak Wavelength (nm) $\lambda_{\text{Peak}}$	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

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<b>ABSOLUTE MAXIMUM RATINGS</b> ( $T_A=25^\circ\text{C}$ )	Red <b>-9613</b>	Red <b>-9614</b>	Green <b>-9615</b>	Yellow <b>-9616</b>	Red <b>-9618</b>
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				

<b>OPERATING CHARACTERISTICS</b> ( $T_A=25^\circ\text{C}$ )	-	Red <b>9613</b>	Red <b>-9614</b>	Green <b>-9615</b>	Yellow <b>-9616</b>	Red <b>-9618</b>
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
$\lambda$ 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 <sub>A</sub> =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 <sub>A</sub> =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
Viewing Angle (2θ <sub>1/2</sub> )	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 <sub>R</sub> =100µA	Typical	15	4.6	11	16	25