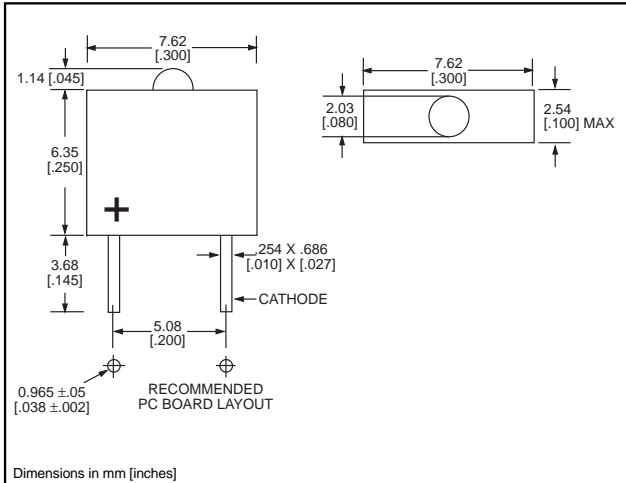


2mm

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



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

<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