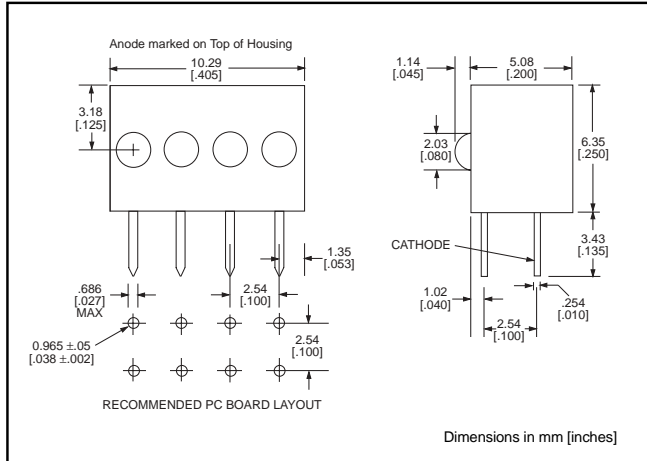


# 2mm LED CBI® Circuit Board Indicator Quad



## 555-4xxx



### PART NO.

### COLOR

#### GENERAL PURPOSE

555-4001	Red
555-4301	Green
555-4401	Yellow

#### INTEGRAL RESISTOR, 5 VOLTS

555-4003	Red
555-4007	Red
555-4009	Red
555-4303	Green
555-4403	Yellow

### 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, 0.280 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: 555-2xxx Single Block

### Custom Combinations

- Contact factory for information on custom color combinations

### 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 #
555-4001	Red	650	1.2	1.6	20	40°	2ND-9412	3-14
555-4301	Green	565	1	2.4	20	40°	2ND-9414	3-14
555-4401	Yellow	583	2	2.2	20	40°	2ND-9416	3-14

#### INTEGRAL RESISTOR, 5 VOLTS

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 #
555-4003	Red	650	1.9	6	5	40°	2RD-9614	3-15
555-4007	Red	650	.9	3	5	40°	2RD-9613	3-15
555-4009	Red	650	.6	1	5	40°	2RD-9618	3-15
555-4303	Green	565	2.5	4.7	5	40°	2RD-9615	3-15
555-4403	Yellow	583	2.1	4.7	5	40°	2RD-9616	3-15

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/°C) From 25°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 (°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		

<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°	40°	40°
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

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<b>ABSOLUTE MAXIMUM RATINGS</b> ( $T_A=25^\circ\text{C}$ )	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				

<b>OPERATING CHARACTERISTICS</b> ( $T_A=25^\circ\text{C}$ )		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
$\lambda$ 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