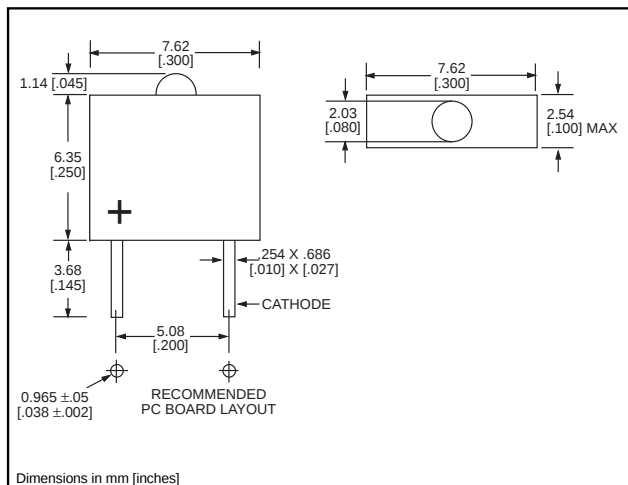


2mm

LED CBI® Circuit Board Indicator Single, Top View

Dialight

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: ±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 #
555-3001	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 _v mcd	I _F mA	Test Voltage	Viewing Angle 2θ _{1/2}	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

2mm
General Purpose
Diffused

Dialight

2ND-XXXX

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

TYPE

2ND-9412*
2ND-9414*
2ND-9416*

COLOR

Red
Green
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°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

Dialight

2RD-9619 thru 2RD-9623

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

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

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

	Red 14V -9619	Red 3.6V -9620	Red 10V -9621	Red 15V -9622	Red 24V -9623
Forward Voltage (V)	14	3.6	10	15	24
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 14V -9619	Red 3.6V -9620	Red 10V -9621	Red 15V -9622	Red 24V -9623
Luminous Intensity (mcd)	Min.	1.3	2.6	1.8	.3	.4
V_F =Forward Voltage	Typical	3.1	6.2	4.2	.9	.9
Peak Wavelength (nm)	Typical	650	650	650	650	650
λ_{Peak}						
Viewing Angle ($2\theta_{1/2}$)	Typical	40 $^{\circ}$	40 $^{\circ}$	40 $^{\circ}$	40 $^{\circ}$	40 $^{\circ}$
Forward Current (mA)	Typical	10	20	14	3	3
V_F =Forward Voltage	Max.	15	25	18	3.8	3.8
Reverse Voltage (V), $I_R=100\mu\text{A}$	Typical	15	4.6	11	16	25