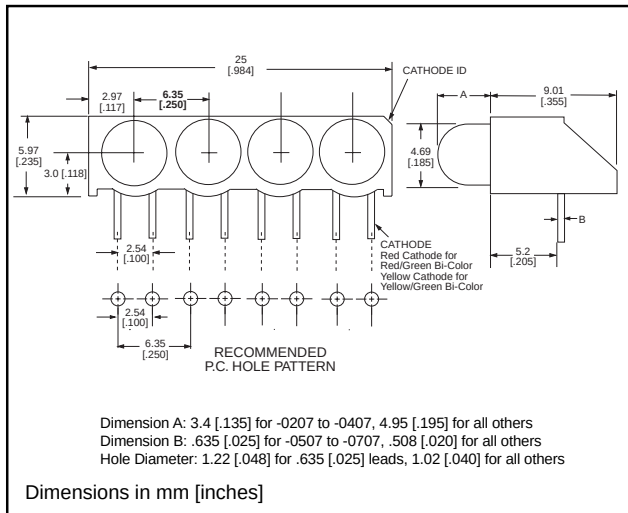


5mm

LED CBI® Circuit Board Indicator Sloped Back Housing, Quad Block

Dialight

550-xx07-004



Standard Polarity shown in drawing: Cathode right

Benefits

- Available with a variety of LEDs
- Housing material meets UL94V-0
- Black housing enhances contrast
- High reliability - life measured in years
- Vibration and shock resistant
- Housing assures proper LED alignment
- Quad Block reduces insertions
- Standoffs on housing facilitate PC board cleaning
- Compatible with:
 - 550-xx07 single-block
 - 550-xx07-002 dual-block

Custom Combinations

- Contact factory for information on custom color combinations

LED Data

- For absolute maximum ratings and other electrical/optical data refer to LED data sheet.

PART NO.

GENERAL PURPOSE

550-0207-004
550-0307-004
550-0407-004

INTEGRAL RESISTOR

550-0507-004
550-0607-004
550-0707-004
550-0807-004

LOW CURRENT

550-1107-004
550-1207-004
550-1307-004

HIGH EFFICIENCY

550-2207-004
550-2307-004
550-2407-004
550-2507-004

BI-COLOR

550-3007-004
550-3107-004

SUPER BRIGHT, DIFFUSED

550-5107-004
550-5207-004
550-5307-004

SUPER BRIGHT, WATER CLEAR (Non-tinted, Non-diffused)

550-5507-004
550-5607-004
550-5707-004

COLOR*

Green
Yellow
Red

Red, 5V
Red, 12V
Green, 5V
Yellow, 5V

Red
Yellow
Green

Green
Yellow
Red
Orange

Red/Green
Yellow/Green

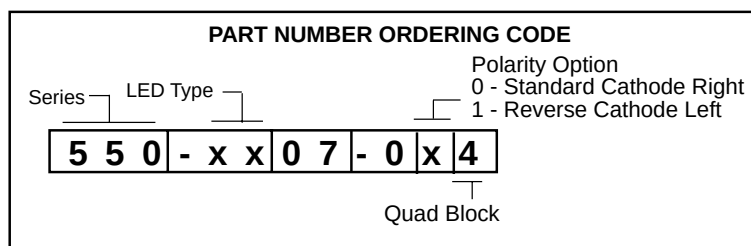
Red
Green
Yellow

Red
Green
Yellow

* LED 1, LED 2, LED 3, LED 4

Reverse Polarity (Cathode Left) option
available. See Part Number Ordering Code.

NEW



Typical Operating Characteristics ($T_A=25^{\circ}\text{C}$)

See LED data sheet for additional information

GENERAL PURPOSE

Part Number	Color	Peak Wavelength nm	I_V mcd	V_F Volts	Test Current (mA)	Viewing Angle $2\theta_{\frac{1}{2}}$	LED Data sheet	Page #
550-0207-004	Green	565	12.3	2.1	20	60°	5ND-9674	6-55
550-0307-004	Yellow	585	12.3	2.1	20	60°	5ND-9673	6-55
550-0407-004	Red	635	12.3	2	20	60°	5ND-9672	6-55

INTEGRAL RESISTOR

Part Number	Color	Peak Wavelength nm	I_V mcd	Test Voltage	Forward Current (mA)	Viewing Angle $2\theta_{\frac{1}{2}}$	LED Data sheet	Page #
550-0507-004	Red	655	2	5	13	60°	5RD-9422	6-56
550-0607-004	Red	655	2	12	13	60°	521-9262	6-43
550-0707-004	Green	565	8	5	12	60°	5RD-9423	6-56
550-0807-004	Yellow	583	8	5	10	60°	521-9284	6-43

LOW CURRENT

Part Number	Color	Peak Wavelength nm	I_V mcd	V_F Volts	Test Current (mA)	Viewing Angle $2\theta_{\frac{1}{2}}$	LED Data sheet	Page #
550-1107-004	Red	635	2	1.8	2	50°	521-9320	6-44
550-1207-004	Yellow	583	1.8	1.9	2	50°	521-9321	6-44
550-1307-004	Green	565	1.8	1.8	2	50°	521-9327	6-44

HIGH EFFICIENCY

Part Number	Color	Peak Wavelength nm	I_V mcd	V_F Volts	Test Current (mA)	Viewing Angle $2\theta_{\frac{1}{2}}$	LED Data sheet	Page #
550-2207-004	Green	563	10	2.1	10	65°	5HD-9270-5	6-53
550-2307-004	Yellow	585	6.3	2.1	10	50°	5HD-9271-5	6-53
550-2407-004	Red	650	7	2.2	10	50°	5HD-9269	6-53
550-2507-004	Orange	600	7	1.9	10	60°	521-9704	6-45

BI-COLOR

Bi-Color data shown as red/green

Part Number	Color	Peak Wavelength nm	I_V mcd	V_F Volts	Test Current (mA)	Viewing Angle $2\theta_{\frac{1}{2}}$	LED Data sheet	Page #
550-3007-004	Red/Green	660/565	90/40	1.8/2.1	20	60°	521-9651	6-48
550-3107-004	Yellow/Green	585/565	8.7/8.7	2.1/2.1	20	50°	521-9724	6-48

SUPER BRIGHT, DIFFUSED

Part Number	Color	Peak Wavelength nm	I_V mcd	V_F Volts	Test Current (mA)	Viewing Angle $2\theta_{\frac{1}{2}}$	LED Data sheet	Page #
550-5107-004	Red	650	34	2.1	20	50°	5SD-9441	6-57
550-5207-004	Green	563	34	2.2	20	50°	5SD-9456	6-57
550-5307-004	Yellow	585	34	2.2	20	50°	5SD-9455	6-57

SUPER BRIGHT, WATER CLEAR (NON-TINTED, NON-DIFFUSED)

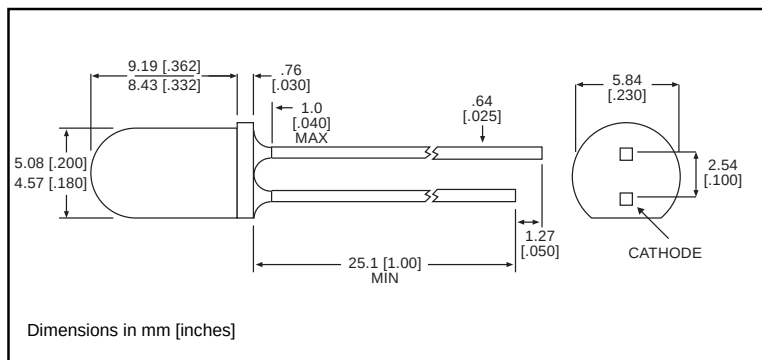
Part Number	Color	Peak Wavelength nm	I_V mcd	V_F Volts	Test Current (mA)	Viewing Angle $2\theta_{\frac{1}{2}}$	LED Data sheet	Page #
550-5507-004	Red	635	125	2.2	20	24°	521-9464	6-49
550-5607-004	Green	565	120	2.3	20	24°	521-9465	6-49
550-5707-004	Yellow	583	140	2.2	20	24°	521-9466	6-49

Dialight

5mm Discrete LED Integral Resistor Diffused

Dialight

521-9183, -9262, -9284, -9285



PART NO.

521-9183

521-9262

521-9284

521-9285

COLOR

Red

Red

Yellow

Green

MOUNTING CLIP: 515-0004
located on page 6-52

ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$)	Red -9183	Red -9262	Yellow -9284	Green -9285
Forward Voltage (V)	7.5	15*	7.5	7.5
Derating ($V/^\circ\text{C}$) From 50°C * From 70°C	.071	.086	.071	.071
Operating Temperature ($^\circ\text{C}$)	-40/+85	-40/+85	-40/+85	-20/+85
Storage Temperature ($^\circ\text{C}$)	-55/+100	-55/+100	-55/+100	-55/+100
Soldering Temperature	260°C, 5 seconds, 1.6 mm from case			

Solder Adherence per MIL-STD-202E, Method 208C

OPERATING CHARACTERISTICS ($T_A=25^\circ\text{C}$)		Red -9183	Red -9262	Yellow -9284	Green -9285
Luminous Intensity (mcd)	Min.	2	1**	2	1.5
	Typical	8	2**	8	4
Peak Wavelength (nm)	Typical	635	655	583	565
λ Peak					
Viewing Angle ($2\theta \frac{1}{2}$)	Typical	60°	60°	60°	60°
Forward Current (I)	Typical	10	13**	10	12
	Max.	15	20**	15	15
Reverse Voltage (V), $I_R=100\mu\text{A}$	Min.	5	5	5	5

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

6

5mm Integral Resistor Diffused

Dialight

5RD-xxxx

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

TYPE	COLOR	VOLTS
*5RD-9378	Green	12
*5RD-9379	Yellow	12
*5RD-9422	Red	5
*5RD-9423	Green	5
*5RD-9480	Red	5

ABSOLUTE MAXIMUM RATINGS (T_A=25°C)

	Green 12V -9378	Yellow 12V -9379	Red 5V -9422	Green 5V -9423	Red 5V -9480
Forward Voltage (V) Derating (V/°C) From 50°C	15 .086	15 .086	7.5 .071	7.5 .071	7.5 .071
Operating Temperature (°C)	-20/+85	-40/+85	-40/+85	-20/+85	-40/+85
Storage Temperature (°C)	-55/+100	-55/+100	-55/+100	-55/+100	-55/+100
Soldering Temperature	260°C, 5 seconds, 1.6 mm from case				

Solder Adherence per MIL-STD-202E, Method 208C

OPERATING CHARACTERISTICS (T_A=25°C)

		Green 12V -9378	Yellow 12V -9379	Red 5V -9422	Green 5V -9423	Red 5V -9480
Luminous Intensity (mcd) V _F =5V, *V _F =12V	Min. Typical	1.5* 4*	1.5* 4*	1 2	2 8	2 8
Peak Wavelength (nm) λ _{Peak}	Typical	565	583	655	565	635
Viewing Angle (2Θ ½)	Typical	60°	60°	60°	60°	60°
Forward Current (mA), V _F =5V *V _F =12V	Typical Max.	13* 20*	13* 20*	13 20	12 15	10 15
Reverse Voltage (V), I _R =100μA	Typical	5	5	5	5	5

Θ ½ is the off axis angle at which the luminous intensity is half the axial luminous intensity

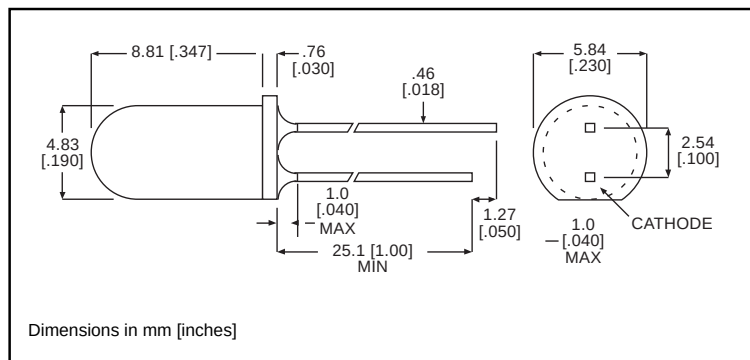
5mm Discrete LED

Low Current, 2mA

Diffused

Dialight

521-9320, -9321, -9327



PART NO.

521-9320

521-9321

521-9327

COLOR

Red

Yellow

Green

MOUNTING CLIP: 515-0004
located on page 6-52

ABSOLUTE MAXIMUM RATINGS (TA=25°C)

	Red -9320	Yellow -9321	Green -9327
Power Dissipation (mW)	27	36	24
Derating (mA/°C) From 92°C	1	1	1
Forward Current (mA)	7	7	7
Peak Current (mA) Pulse width = 10 μs	500	500	500
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		

Solder Adherence per MIL-STD-202E, Method 208C

OPERATING CHARACTERISTICS (TA=25°C)

		Red -9320	Yellow -9321	Green -9327
Luminous Intensity (mcd)	Min.	1.2	1.2	1.2
	Typical	2	1.8	1.8
Peak Wavelength (nm)	Typical	635	583	565
λ Peak				
Viewing Angle (2Θ ½)	Typical	50°	50°	50°
Forward Voltage (V)	Typical	1.8	1.9	1.8
	Max.	2.2	2.7	2.2
Reverse Voltage (V), I _R =50μA	Min.	5	5	5

Θ ½ is the off axis angle at which the luminous intensity is half the axial luminous intensity

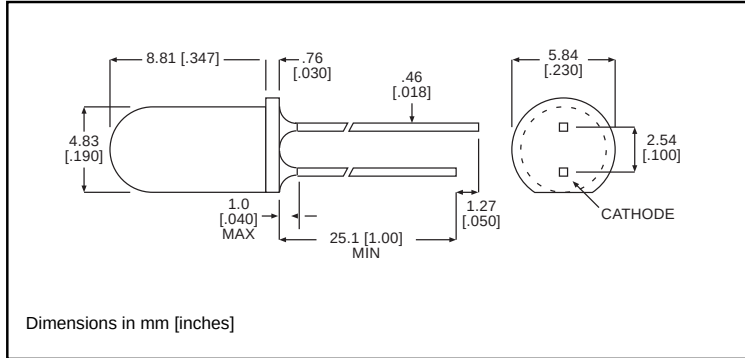
5mm Discrete LED

High Efficiency

Diffused

Dialight

521-9246, -9248, -9250, -9704



PART NO.

COLOR

521-9246

Red

521-9248

Yellow

521-9250

Green

521-9704

Orange

MOUNTING CLIP: 515-0004

located on page 6-52

ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$)	Red -9246	Yellow -9248	Green -9250	Orange -9704
Power Dissipation (mW)	135	85	135	135
Derating (mW/ $^\circ\text{C}$) From 25°C 1. (mA/ $^\circ\text{C}$) From 50°C	1.8	1.6	1.8	.5 ¹
Forward Current (mA)	25	20	25	30
Peak Current (mA) Pulse width = 10 μs	500	500	500	500
Operating Temperature ($^\circ\text{C}$)	-55/+100	-55/+100	-20/+100	-55/+100
Storage Temperature ($^\circ\text{C}$)	-55/+100	-55/+100	-55/+100	-55/+100
Soldering Temperature	260 $^\circ\text{C}$, 5 seconds, 1.6 mm from case			

Solder Adherence per MIL-STD-202E, Method 208C

OPERATING CHARACTERISTICS ($T_A=25^\circ\text{C}$)		Red -9246	Yellow -9248	Green -9250	Orange -9704
Luminous Intensity (mcd)	Min.	4	4	4.2	4
	Typical	7	8	5.2	7
Peak Wavelength (nm) λ_{Peak}	Typical	635	583	565	600
Viewing Angle ($2\theta_{\frac{1}{2}}$)	Typical	60 $^\circ$	60 $^\circ$	60 $^\circ$	60 $^\circ$
Forward Voltage (V) $I_F=10\text{mA}$	Typical	2.2	2.2	2.3	1.9
	Max.	3	3	3	2.4
Reverse Voltage (V), $I_R=100\mu\text{A}$	Min.	5	5	5	5

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

6

5mm
High Efficiency
Diffused

Dialight
5HD-xxxx

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

TYPE

COLOR

*5HD-9246	Red
*5HD-9269	Red
*5HD-9270-2	Green
*5HD-9270-5	Green
*5HD-9271-2	Yellow
*5HD-9271-5	Yellow

ABSOLUTE MAXIMUM RATINGS
(T_A=25°C)

	Red -9246	Red -9269	Green -9270-2	Green -9270-5	Yellow -9271-2	Yellow -9271-5
Power Dissipation (mW)	135	60	140	75	200	60
Derating (mW/°C) From 50°C 1. From 40°C	1.8	.66 ¹		.66 ¹		.66 ¹
Forward Current (mA)	25	20	40	25	60	20
Derating (mA/°C) From 25°C			.6		.8	
Peak Current (mA)	500	60	500	60	1000	60
Pulse width = 1μs						
Operating Temperature (°C)	-55/+100	-25/+85	-55/+100	-25/+85	-55/+100	-25/+85
Storage Temperature (°C)	-55/+100	-30/+100	-55/+100	-30/+100	-55/+100	-30/+100
Soldering Temperature	260°C, 5 seconds, 1.6 mm from case					

Solder Adherence per MIL-STD-202E, Method 208C

OPERATING CHARACTERISTICS
(T_A=25°C)

		Red -9246	Red -9269	Green -9270-2	Green -9270-5	Yellow -9271-2	Yellow -9271-5
Luminous Intensity (mcd)	Min.	4	2.2	4	3.6	4	2.2
I _F =10mA	Typical	7	7	32	10	10	6.3
Peak Wavelength (nm)	Typical	635	650	565	563	590	585
λ Peak							
Viewing Angle (2Θ ½)	Typical	60°	50°	50°	65°	70°	50°
Forward Voltage (V)	Typical	2.2	2.2	2*	2.1	2.4*	2.1
I _F =10mA, *I _F =20mA	Max.	3	2.5	2.6*	3	3*	3
Reverse Voltage (V),	Min.	5	5	5*	3*	5*	3
I _R =100μA *I _R =10μA							

Θ ½ is the off axis angle at which the luminous intensity is half the axial luminous intensity

6