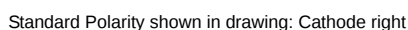


551-xx07-004



- Multiple CBIs form horizontal LED arrays on 4.32mm (0.170") center-lines
- High Contrast, UL 94 V-0 rated, black housing
- Oxygen index: 31.5%
- Polymer content: PBT, 0.875 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:
551-xx07

- LED Protrusion: ± 0.04 mm [± 0.016]
- CBI Housing: ± 0.02 mm [± 0.008]

- Contact factory for information on custom color combinations

Red/Green
Yellow/Green

4



551-xx07-004

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

See LED data sheet for additional information
See page 4-70 and 4-71 for Reference Only LED Drive Circuit Examples. See page 4-72 for Pin Out

HIGH EFFICIENCY

Part Number	Color	Peak Wavelength nm	I_V mcd	V_F Volts	Test Current (mA)	Viewing Angle $2\theta_{1/2}$	LED Data sheet	Page #
551-0207-004	Green	563	16	2.1	10	45°	521-9408	4-64
551-0307-004	Yellow	585	6.3	2.1	10	45°	521-9428	4-64
551-0407-004	Red	650	10	2	10	45°	521-9427	4-64
551-2507-004	Orange	600	7	2.2	10	60°	521-9498	4-58

INTEGRAL RESISTOR, 5 VOLTS

Part Number	Color	Peak Wavelength nm	I_V mcd	Test Voltage	Forward Current (mA)	Viewing Angle $2\theta_{1/2}$	LED Data sheet	Page #
551-0507-004	Red	635	29	5	10	60°	521-9215	4-59
551-0607-004	Green	565	19	5	10	60°	521-9323	4-59
551-0707-004	Yellow	585	12.6	5	10	60°	521-9322	4-59

LOW CURRENT

Part Number	Color	Peak Wavelength nm	I_V mcd	V_F Volts	Test Current (mA)	Viewing Angle $2\theta_{1/2}$	LED Data sheet	Page #
551-1107-004	Red	635	1.6	1.7	2	60°	521-9324	4-60
551-1207-004	Yellow	585	1.6	1.8	2	60°	521-9325	4-60
551-1307-004	Green	565	1.6	1.9	2	60°	521-9326	4-60

BI-COLOR

Part Number	Color	Peak Wavelength nm	I_V mcd	V_F Volts	Test Current (mA)	Viewing Angle $2\theta_{1/2}$	LED Data sheet	Page #
551-3007-004	Red/Green	635/565	4.7/10	2/2.1	10	50°	521-9459	4-63
551-3107-004	Yellow/Green	585/565	4.3/6.3	2.1*/2.1*	10	80°	521-9478	4-62

* $I_F = 20\text{mA}$

Dialight

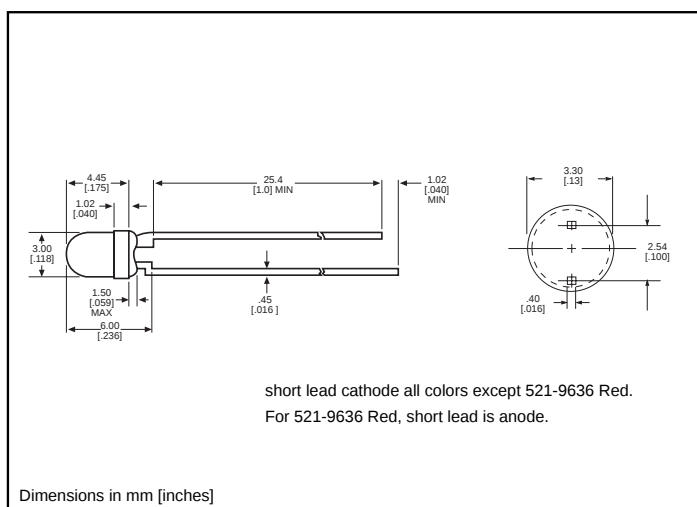
3mm Discrete LED

High Efficiency

Diffused

521-9210, -9211, -9216, -9498, -9636

Dialight



PART NO. COLOR

521-9210 Green

521-9211 Yellow

521-9216 Red

521-9498 Orange

521-9636 Red

NEW

MOUNTING CLIP: 515-0006
located on page 4-65

ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$)	Green -9210	Yellow -9211	Red -9216	Orange -9498	Red -9636
Power Dissipation (mW)	100	60	100	135	100
Forward Current (mA)	30	20	30	25	40
Derating (mA/°C) From 50°C ¹ from 25°C	.4	.25	.4	.5	.5 ¹
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 body				

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

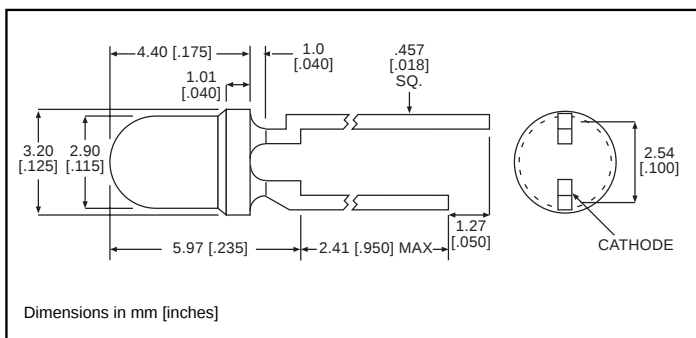
OPERATING CHARACTERISTICS ($T_A=25^\circ\text{C}$)		Green -9210	Yellow -9211	Red -9216	Orange -9498	Red -9636
Luminous Intensity (mcd)	Min.	4.7	7.4	7.4	3.4	8.7 ¹
	Typical	12.6	10	10	7	48 ¹
Peak Wavelength (nm)	Typical	565	585	635	600	660
	λ_{Peak}					
Viewing Angle ($2\theta^{\circ}$)	Typical	60°	60°	60°	60°	60°
Forward Voltage (V)	Typical	2.1 ¹	2.1 ¹	2 ¹	2.2	1.8 ¹
	Max.	2.8 ¹	2.8 ¹	2.8 ¹	3	2.4 ¹
Reverse Voltage (V), $I_R=100\mu\text{A}$	Max.	5	5	5	5	4

¹ θ is the off axis angle at which the luminous intensity is half the axial luminous intensity

3mm Discrete LED Integral Resistor, 5V Diffused

Dialight

521-9215, -9322, -9323



PART NO.

521-9215
521-9322
521-9323

COLOR

Red
Yellow
Green

MOUNTING CLIP: 515-0006
located on page 4-65

ABSOLUTE MAXIMUM RATINGS (T_A=25°C)

	Red -9215	Yellow -9322	Green -9323
Forward Voltage (V)	7.5	7.5	7.5
Derating (V/°C) From 50°C	.086	.086	.071
Operating Temperature (°C)	-40/+85	-40/+85	-20/+85
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 (T_A=25°C)

		Red -9215	Yellow -9322	Green -9323
Luminous Intensity (mcd)	Min.	8.7	3.7	5.6
	Typical	29	12.6	19
Peak Wavelength (nm)	Typical	635	585	565
λ Peak				
Viewing Angle (2Θ _{1/2})	Typical	60°	60°	60°
Forward Current (mA)	Typical	10	10	10
	Max.	20	20	20
Reverse Voltage (V), I _R =100μA	Min.	5	5	5

Θ_{1/2} is the off axis angle at which the luminous intensity is half the axial luminous intensity

4

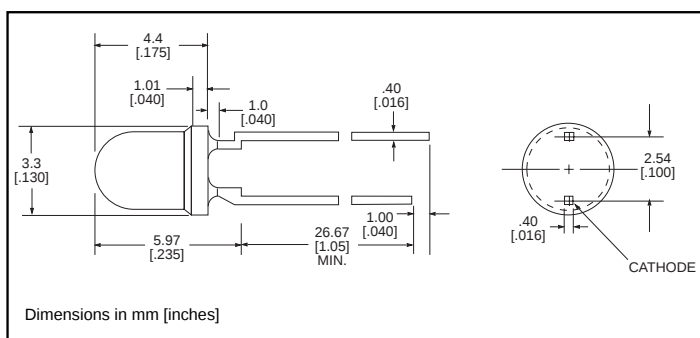
3mm Discrete LED

Low Current

Diffused

Dialight

521-9324, -9325, -9326



PART NO.

521-9324
 521-9325
 521-9326

COLOR

Red
 Yellow
 Green

MOUNTING CLIP: 515-0006
 located on page 4-65

ABSOLUTE MAXIMUM RATINGS (T_A=25°C)

	Red -9324	Yellow -9325	Green -9326
Power Dissipation (mW)	20	20	20
Forward Current (mA)	7	7	7
Derating (mA/°C) From 90°C	.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 (T_A=25°C)

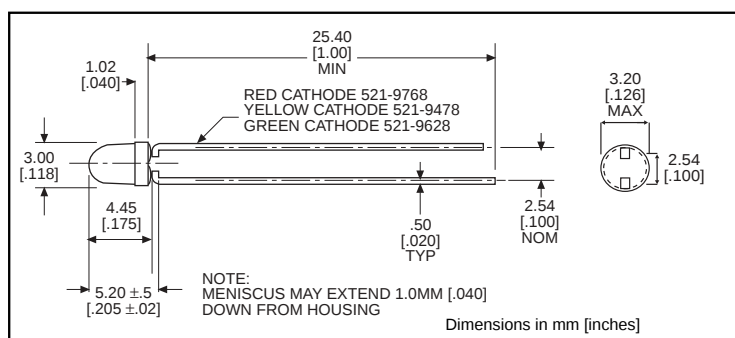
		Red -9324	Yellow -9325	Green -9326
Luminous Intensity (mcd)	Min.	1	1	1
	Typical	1.6	1.6	1.6
Peak Wavelength (nm)	Typical	635	585	565
λ Peak				
Viewing Angle (2θ ¹)	Typical	60°	60°	60°
Forward Voltage (V)	Typical	1.7	1.8	1.9
	Max.	2.2	2.7	2.2
Reverse Voltage (V), I _R =50μA	Min.	5	5	5

Θ¹ is the off axis angle at which the luminous intensity is half the axial luminous intensity

3mm Discrete LED
Bi-Color
Non-Tinted, Diffused

Dialight

521-9478, -9628, -9768



PART NO.

COLOR

521-9478	Yellow/Green
521-9628	Red/Green
521-9768	Red/Yellow

MOUNTING CLIP: 515-0006
 located on page 4-65

ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$)	Yellow/Green -9478	Red/Green -9628	Red/Yellow -9768
Power Dissipation (mW)	60/100	140/100	100/60
Forward Current (mA)	20/30	40/30	30/20
Derating (mA/°C) From 25°C to 50°C	.25/.40 ¹	.5/.4	.4/.25 ¹
Peak Current (mA)	80/120	200/120	120/80
Pulse width = 10μs			
Operating Temperature (°C)	-55/+100	-55/+100	-55/+100
Storage Temperature (°C)	-55/+100	-55/+100	-55/+100
Soldering Temperature	260°C, 5 seconds, 1.66 mm from case		

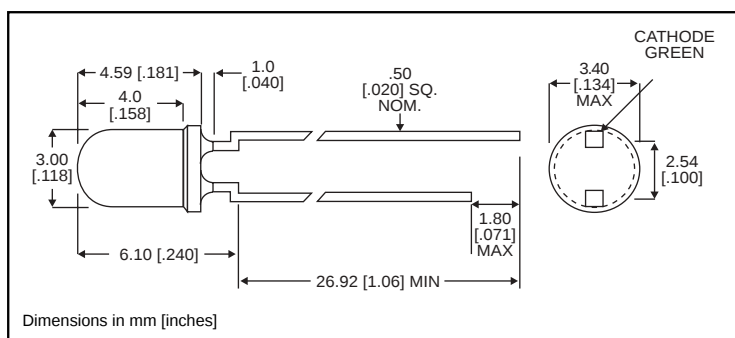
Solder Adherence per MIL-STD-202E, Method 208C

OPERATING CHARACTERISTICS ($T_A=25^\circ\text{C}$)		Yellow/Green -9478	Red/Green -9628	Red/Yellow -9768
Luminous Intensity (mcd)	Min.	2.5/2.5	3.7*/1.1*	1.7*/1.7*
	Typical	4.3/6.3	12.6*/3.7*	5.6*/5.6*
$I_F=10\text{mA}$ * $I_F=20\text{mA}$				
Peak Wavelength (nm)	Typical	585/565	660/565	630/585
λ Peak				
Viewing Angle (2θ °)	Typical	80°	200°	80°
Forward Voltage (V)	Typical	2.1/2.1	1.8/2.1	2/2.1
	Max.	2.8/2.8	2.4/2.8	2.8/2.8
$I_F=20\text{mA}$				
Reverse Voltage (V) $I_R=100\text{ua}$	Min.	5	5	5

¹ θ is the off axis angle at which the luminous intensity is half the axial luminous intensity

3mm Discrete LED Bi-Color Non-Tinted, Diffused

Dialight
521-9459



PART NO.

521-9459

COLOR

Red/Green

MOUNTING CLIP: 515-0006
located on page 4-65

4

ABSOLUTE MAXIMUM RATINGS (T_A=25°C)

Red/Green
-9459

Power Dissipation (mW)	140
Forward Current (mA)	45
Derating (mA/°C) From 25°C	.6
Peak Current (mA) Pulse width = 10μs	1000
Operating Temperature (°C)	-55/+100
Storage Temperature (°C)	-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)

Red/Green
-9459

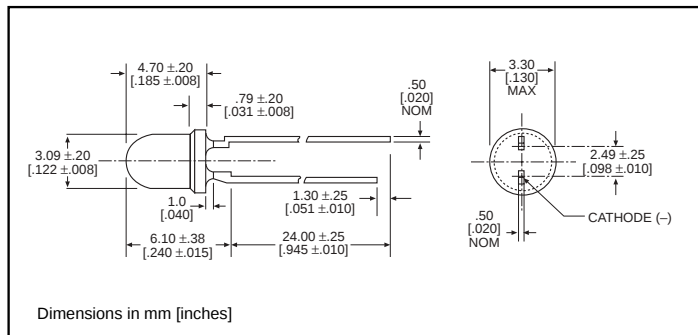
Luminous Intensity (mcd) I _F =10mA	Min. Typical	2.5/3.7 4.7/10
Peak Wavelength (nm) λ Peak	Typical	635/565
Viewing Angle (2Θ½)	Typical	50°
Forward Voltage (V) I _F =10mA	Typical Max.	2/2.1 2.8/2.8

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

3mm Discrete LED High Efficiency Diffused

Dialight

521-94xx



TYPE
 521-9408
 521-9427
 521-9428

COLOR
 Green
 Red
 Yellow

MOUNTING CLIP: 515-0006
 located on page 4-65

ABSOLUTE MAXIMUM RATINGS (T_A=25°C)

	Green -9408	Red -9427	Yellow -9428
Power Dissipation (mW)	75	60	60
Forward Current (mA)	25	20	20
Derating (mA/°C) From 50°C	.5	.5	.5
Peak Current (mA)	60	60	60
Operating Temperature (°C)	-25/+85	-25/+85	-25/+85
Storage Temperature (°C)	-30/+100	-30/+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)

		Green -9408	Red -9427	Yellow -9428
Luminous Intensity (mcd)	Min.	5.6	3.6	2.2
I _F =10mA	Typical	16	10	6.3
Peak Wavelength (nm)	Typical	563	650	585
λ Peak				
Viewing Angle (2Θ ^{1/2})	Typical	45°	45°	45°
Forward Voltage (V)	Typical	2.1	2	2.1
I _F =10mA	Max.	3	3	3
Reverse Voltage (V), I _R =10μA	Min.	3	3	3

Θ¹ is the off axis angle at which the luminous intensity is half the axial luminous intensity