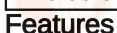


3mm

Dialight

564-0x00-xxx



- Tolerance note: As noted, otherwise:**

- ## Custom Combinations

- PART NUMBER ORDERING CODE

5	6	4	-	0	x	0	0	-	x	x	x
---	---	---	---	---	---	---	---	---	---	---	---

Color = 0) Blank 1) Red or Red/Green Bi-color 2) Green 3) Yellow
4) Yellow/Green Bi-color 7) Orange 8) Blue³

COLOR*

564-0100-111

Red-Red-Red

564-0100-132

Red-Yellow-Green

564-0100-222

Green-Green-Green

564-0100-777

Orange-Orange-Orange

564-0100-999

Blue-Blue-Blue

564-0200-111

Red-Red-Red

564-0200-132

Red-Yellow-Green

564-0200-222

Green-Green-Green

564-0300-111

Red-Red-Red

564-0300-132

Red-Yellow-Green

564-0300-222

Green-Green-Green

BI-COLOR - LED TYPE 07

564-0700-111 Red/Green-Red/Green-Red/Green

564-0700-444 Yellow/Green-Yellow/Green-Yellow/Green

* Top-Middle-Bottom LED



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
SENSITIVE
DEVICES

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

See LED data sheet for additional information
 See Pages 4-73 and 4-74 for 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 #
564-0100-xxx	Red	635	10	2*	10	60°	521-9216	4-58
	Green	565	12.6	2.1*	10	60°	521-9210	4-58
	Yellow	585	10	2.1*	10	60°	521-9211	4-58
	Orange	600	7	2.2	10	60°	521-9498	4-58
	Blue	428	12	3.5	10	70°	521-9831	4-57

* $I_F = 20\text{mA}$

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 #
564-0200-xxx	Red	635	1.6	1.7	2	60°	521-9324	4-60
	Green	565	1.6	1.9	2	60°	521-9326	4-60
	Yellow	585	1.6	1.8	2	60°	521-9325	4-60

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 #
564-0300-xxx	Red	635	29	5	10	60°	521-9215	4-59
	Green	565	19	5	10	60°	521-9323	4-59
	Yellow	585	12.6	5	10	60°	521-9322	4-59

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 #
564-0700-111	Red/Green	635/565	4.7/10	2/2.1	10	50°	521-9459	4-63
564-0700-444	Yellow/Green	585/565	4.3/6.3	2.1*/2.1*	10	80°	521-9478	4-62

* $I_F = 20\text{mA}$



521-9831



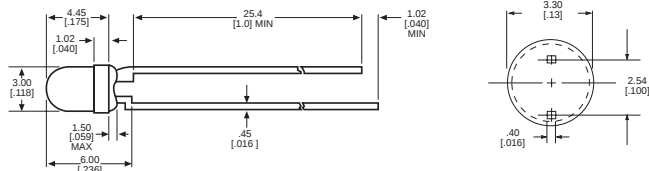
4

3mm Discrete LED

High Efficiency
Diffused

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

Dialight



short lead cathode all colors except 521-9636 Red.
For 521-9636 Red, short lead is anode.

Dimensions in mm [inches]

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°C)	Green	Yellow	Red	Orange	Red
	-9210	-9211	-9216	-9498	-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°C)		Green	Yellow	Red	Orange	Red
		-9210	-9211	-9216	-9498	-9636
Luminous Intensity (mcd)	Min.	4.7	7.4	7.4	3.4	8.7 ¹
I _F =10mA ¹ I _F =20mA	Typical	12.6	10	10	7	48 ¹
Peak Wavelength (nm)	Typical	565	585	635	600	660
λ Peak						
Viewing Angle (2θ °)	Typical	60°	60°	60°	60°	60°
Forward Voltage (V)	Typical	2.1 ¹	2.1 ¹	2 ¹	2.2	1.8 ¹
I _F =10mA ¹ I _F =20mA	Max.	2.8 ¹	2.8 ¹	2.8 ¹	3	2.4 ¹
Reverse Voltage (V), I _R =100μA	Max.	5	5	5	5	4

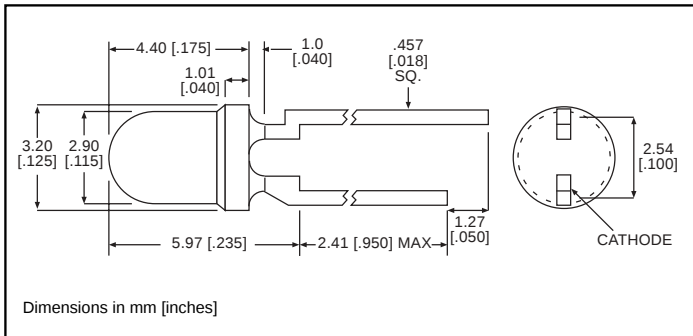
Θ¹ is the off axis angle at which the luminous intensity is half the axial luminous intensity

3mm Discrete LED

Integral Resistor, 5V
Diffused

Dialight

521-9215, -9322, -9323



PART NO.

COLOR

521-9215

Red

521-9322

Yellow

521-9323

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) Derating (V/°C) From 50°C	7.5 .086	7.5 .086	7.5 .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

4

OPERATING CHARACTERISTICS (T_A=25°C)

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

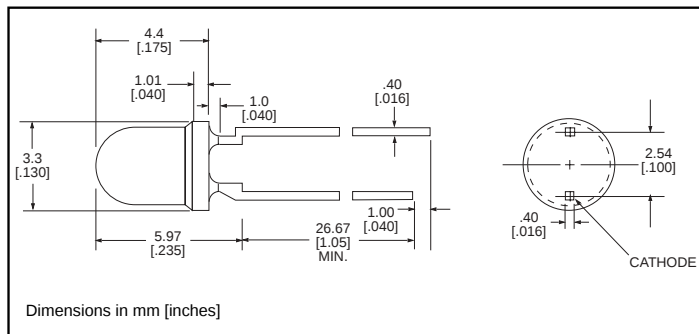
Θ_{1/2} is the off axis angle at which the luminous intensity is half the axial luminous intensity

3mm Discrete LED

Low Current
Diffused

Dialight

521-9324, -9325, -9326



PART NO.

COLOR

521-9324

Red

521-9325

Yellow

521-9326

Green

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

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

	Red -9324	Yellow -9325	Green -9326
Power Dissipation (mW)	20	20	20
Forward Current (mA)	7	7	7
Derating (mA/ $^\circ\text{C}$) From 90°C	.7	.7	.7
Peak Current (mA) Pulse width = 10 μs	500	500	500
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		

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

OPERATING CHARACTERISTICS ($T_A=25^\circ\text{C}$)

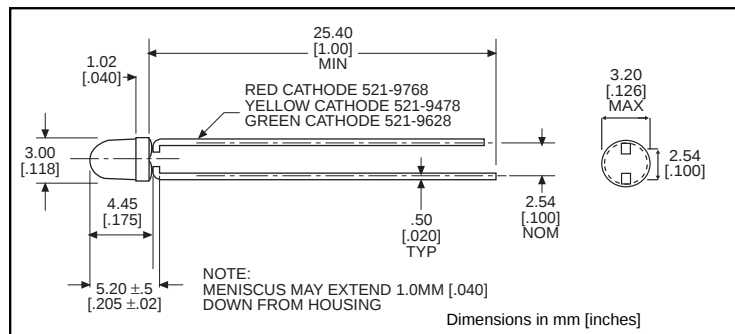
		Red -9324	Yellow -9325	Green -9326
Luminous Intensity (mcd)	Min.	1	1	1
	Typical	1.6	1.6	1.6
Peak Wavelength (nm)	Typical	635	585	565
λ Peak				
Viewing Angle (2θ $^\circ$)	Typical	60 $^\circ$	60 $^\circ$	60 $^\circ$
Forward Voltage (V)	Typical	1.7	1.8	1.9
	Max.	2.2	2.7	2.2
Reverse Voltage (V), $I_R=50\mu\text{A}$	Min.	5	5	5

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

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/ $^{\circ}\text{C}$) From 25°C ¹ From 50°C	.25 ¹ /.40 ¹	.5/.4	.4 ¹ /.25 ¹
Peak Current (mA) Pulse width = 10 μs	80/120	200/120	120/80
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, 1.66 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*
Peak Wavelength (nm) λ Peak	Typical	585/565	660/565	630/585
Viewing Angle (2θ $^{\circ}$)	Typical	80 $^{\circ}$	200 $^{\circ}$	80 $^{\circ}$
Forward Voltage (V) $I_F=20\text{mA}$	Typical Max.	2.1/2.1 2.8/2.8	1.8/2.1 2.4/2.8	2/2.1 2.8/2.8
Reverse Voltage (V) $I_R=100\text{ua}$	Min.	5	5	5

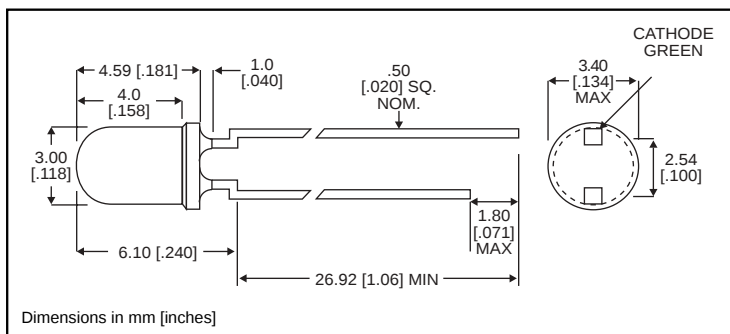
θ ¹ is the off axis angle at which the luminous intensity is half the axial luminous intensity

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 (2Θ _{1/2})	Typical	50°
Forward Voltage (V) I _F =10mA	Typical Max.	2/2.1 2.8/2.8

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