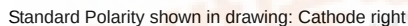


[查询"55"](#)

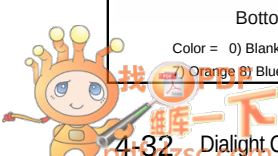
Dialight
553-xxxx-3000



- Multiple CBIs form horizontal LED arrays on 5.08mm (0.200") center-lines.
- High Contrast, UL 94 V-0 rated, black housing
- Oxygen index: 32%
- Polymer content: PBT, 0.405 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:
553-xxxx-306 Bi-Level Array

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

- Contact factory for information on custom bi-level arrays and color combinations.



COLOR*

Red
Green
Yellow
Orange
Blue³

Green

Yellow

Orange

Blue³

Red

Green

Yellow

Red

Green

Yellow

Red/Green
Yellow/Green

Yellow/Green

Red

Green

Yellow

* Top-Bottom LED

See Part Number Ordering Code below.



OBSERVE PRECAUTIONS
 FOR HANDLING
 ELECTROSTATIC
 SENSITIVE
 DEVICES

[查询"553-0233-300"供应商](#)**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 #
553-0111-300	Red	650	10	2	10	45°	521-9427	4-64
553-0122-300	Green	563	16	2.1	10	45°	521-9408	4-64
553-0133-300	Yellow	585	6.3	2.1	10	45°	521-9428	4-64
553-0177-300	Orange	600	7	2.2	10	60°	521-9498	4-58
553-0188-300	Blue	428	12	3.5	10	70°	521-9831	4-57

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 #
553-0211-300	Red	635	1.6	1.7	2	60°	521-9324	4-60
553-0222-300	Green	565	1.6	1.9	2	60°	521-9326	4-60
553-0233-300	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 #
553-0311-300	Red	635	29	5	10	60°	521-9215	4-59
553-0322-300	Green	565	19	5	10	60°	521-9323	4-59
553-0333-300	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 #
553-0711-300	Red/Green	635/565	4.7/10	2/2.1	10	50°	521-9459	4-63
553-0744-300	Yellow/Green	585/565	4.3/6.3	2.1*/2.1*	10	80°	521-9478	4-62

* I_F = 20mA**NON-DIFFUSED**

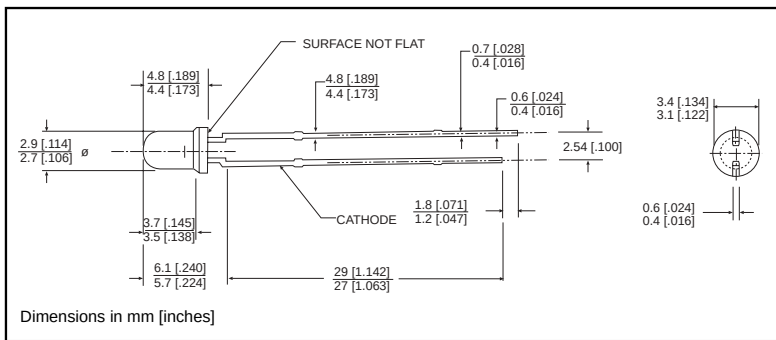
Part Number	Color	Peak Wavelength nm	I _v mcd	V _F Volts*	Test Current (mA)	Viewing Angle 2 $\theta_{1/2}$	LED Data sheet	Page #
553-2211-300	Red	635	29	2	10	45°	521-9432	4-61
553-2222-300	Green	565	50	2.1	10	45°	521-9430	4-61
553-2233-300	Yellow	585	20	2.1	10	45°	521-9431	4-61

* I_F = 20mA

3mm Discrete LED
Tinted, Diffused



Dialight
521-9831



PART NO. 521-9831
COLOR Blue³

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



4

ABSOLUTE MAXIMUM RATINGS (T _A =25°C)		Blue -9831
Power Dissipation (mW)		100
Forward Current (mA)		20
Derating (mA/°C) From 55°C		.44
Operating Temperature (°C)		-40/+100
Storage Temperature (°C)		-40/+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)		Blue -9831
Luminous Intensity (mcd)	Min.	6.3
I _F =10mA	Typical	12
Peak Wavelength (nm)	Typical	428
λ Peak		
Viewing Angle (2Θ½)	Typical	70°
Forward Voltage (V)	Typical	3.5
I _F =10mA	Max.	4.2
Reverse Voltage (V) I _R =10μA	Min.	3

Θ½ is the off axis angle at which the luminous intensity is half the axial luminous intensity

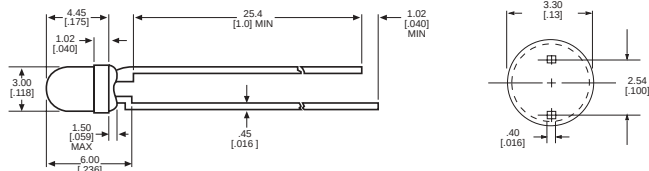
3mm Discrete LED

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

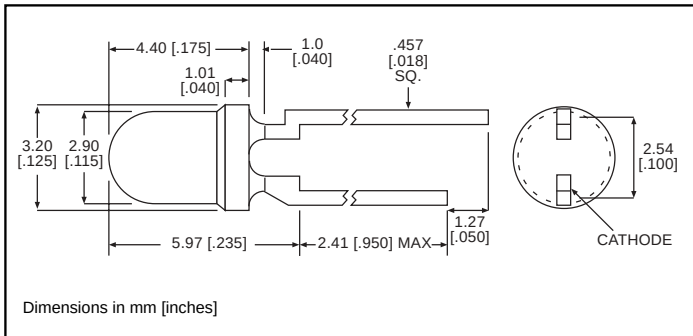
Θ¹ is the off axis angle at which the luminous intensity is half the axial luminous intensity

3mm Discrete LED

Integral Resistor, 5V
Diffused

Dialight

521-9215, -9322, -9323



PART NO.

COLOR

521-9215
521-9322
521-9323

Red
Yellow
Green

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

4

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

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

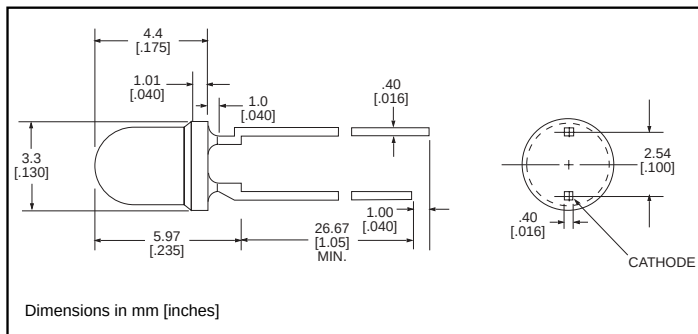
Θ_{1/2} is the off axis angle at which the luminous intensity is half the axial luminous intensity

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

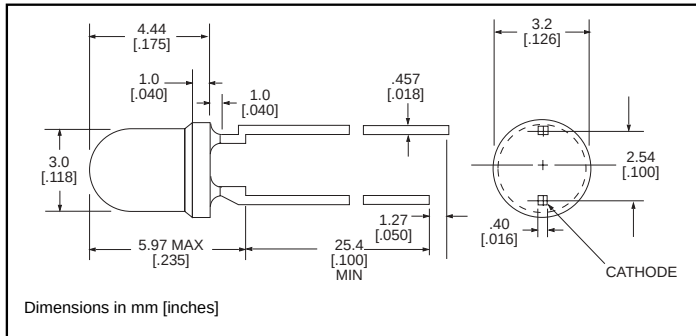
θ is the off axis angle at which the luminous intensity is half the axial luminous intensity

3mm Discrete LED

High Efficiency
Tinted, Non-Diffused

Dialight

521-9430, -9431, -9432



PART NO.

521-9430
521-9431
521-9432

COLOR

Green
Yellow
Red

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

ABSOLUTE MAXIMUM RATINGS (T_A=25°C)

	Green -9430	Yellow -9431	Red -9432
Power Dissipation (mW)	100	60	100
Forward Current (mA)	30	20	30
Derating (mA/°C) From 50°C	.4	.25	.4
Peak Current (mA) Pulse width = 100μs	120	80	120
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)

		Green -9430	Yellow -9431	Red -9432
Luminous Intensity (mcd)	Min.	32	10	8.7
I _F =10mA	Typical	50	20	29
Peak Wavelength (nm)	Typical	565	585	635
λ Peak				
Viewing Angle (2Θ _{1/2})	Typical	45°	45°	45°
Forward Voltage (V)	Typical	2.1	2.1	2
I _F =20mA	Max.	2.8	2.8	2.8

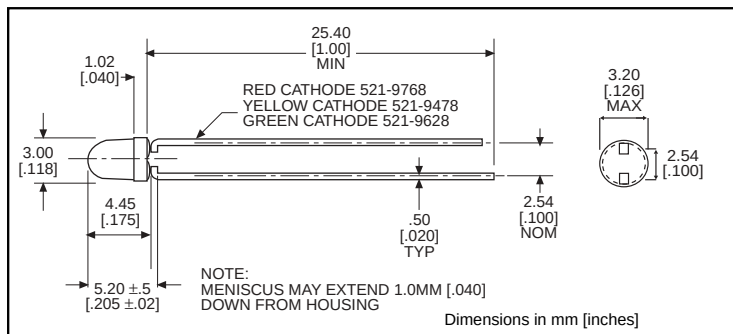
Θ_{1/2} is the off axis angle at which the luminous intensity is half the axial luminous intensity

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 ¹ From 50°C	.25 ¹ /.40 ¹	.5/.4	.4 ¹ /.25 ¹
Peak Current (mA) Pulse width = 10µs	80/120	200/120	120/80
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*
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
Reverse Voltage (V) $I_R=100\mu\text{A}$	Min.	5	5	5

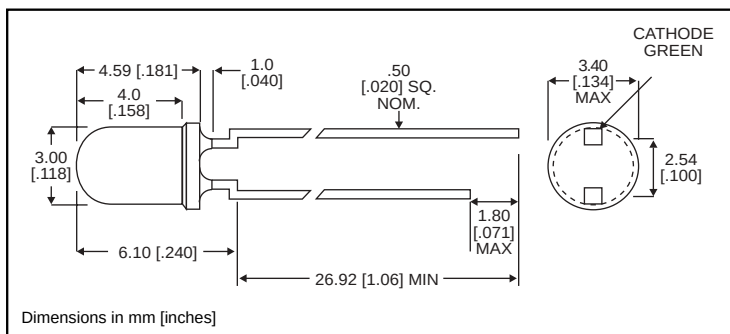
θ ° is the off axis angle at which the luminous intensity is half the axial luminous intensity

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 (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

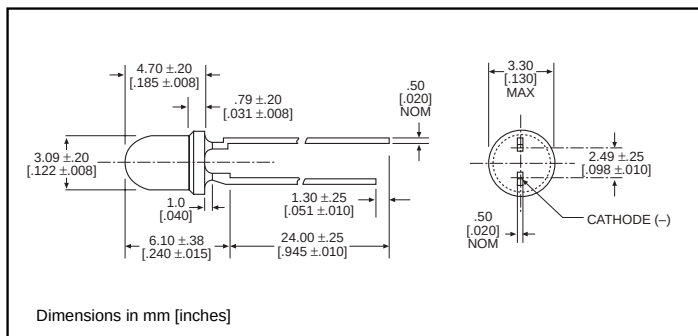
3mm Discrete LED

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

	Green -9408	Red -9427	Yellow -9428
Power Dissipation (mW)	75	60	60
Forward Current (mA)	25	20	20
Derating (mA/ $^\circ\text{C}$) From 50°C	.5	.5	.5
Peak Current (mA)	60	60	60
Operating Temperature ($^\circ\text{C}$)	-25/+85	-25/+85	-25/+85
Storage Temperature ($^\circ\text{C}$)	-30/+100	-30/+100	-30/+100
Soldering Temperature	260 $^\circ\text{C}$, 5 seconds, 1.6 mm from case		

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

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

		Green -9408	Red -9427	Yellow -9428
Luminous Intensity (mcd)	Min.	5.6	3.6	2.2
	Typical	16	10	6.3
Peak Wavelength (nm)	Typical	563	650	585
λ Peak				
Viewing Angle (2θ $^\circ$)	Typical	45 $^\circ$	45 $^\circ$	45 $^\circ$
Forward Voltage (V)	Typical	2.1	2	2.1
	Max.	3	3	3
Reverse Voltage (V), $I_R=10\mu\text{A}$	Min.	3	3	3

θ $^\circ$ is the off axis angle at which the luminous intensity is half the axial luminous intensity