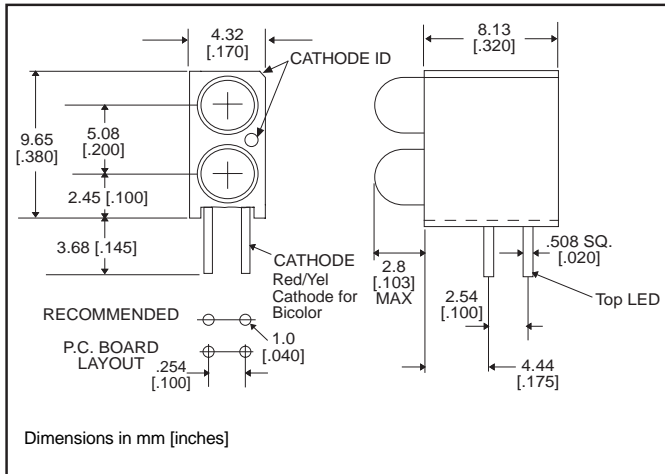


3mm LED CBI® Circuit Board Indicator Bi-level

Dialight

553-xxxx



Standard Polarity shown in drawing: Cathode right

Benefits

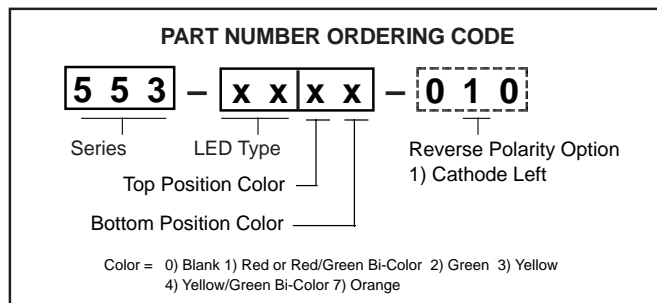
- Available in a variety of LEDs
- Standoffs on housing facilitate PC board cleaning
- Bi-level design conserves board space
- Black housing enhances contrast
- High reliability - life measured in years
- Housing meets UL 94V-0
- Vibration and shock resistant
- Housing assures proper LED alignment
- Single PC Board insertion 2 LEDs

Custom Combinations

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

LED Data

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



-010 Ordering Code Suffix required ONLY for Reverse Polarity Option

PART NO.

COLOR*

HIGH EFFICIENCY - LED TYPE 01

553-0111	Red
553-0122	Green
553-0133	Yellow
553-0177	Orange

LOW CURRENT - LED TYPE 02

553-0211	Red
553-0222	Green
553-0233	Yellow

RESISTOR 5V - LED TYPE 03

553-0311	Red
553-0322	Green
553-0333	Yellow

BI-COLOR - LED TYPE 07

553-0711	Red/Green
553-0744	Yellow/Green

NON-DIFFUSED - LED TYPE 22

553-2211	Red
553-2222	Green
553-2233	Yellow

* Top-Bottom LED

To order any of the 553-xxxx part numbers with Reverse Polarity (Cathode Left), please add -010 to the part numbers shown above.



Typical Operating Characteristics (T_A=25°C)

See LED data sheet for additional information

HIGH EFFICIENCY

Part Number	Color	Peak Wavelength nm	I _v mcd	V _F Volts	Test Current (mA)	Viewing Angle 2Θ _{1/2}	LED Data sheet	Page #
553-0111	Red	650	10	2	10	45°	521-9427	4-63
553-0122	Green	563	16	2.1	10	45°	521-9408	4-63
553-0133	Yellow	585	6.3	2.1	10	45°	521-9428	4-63
553-0177	Orange	600	6.5	2.2	10	60°	521-9498	4-53

LOW CURRENT

Part Number	Color	Peak Wavelength nm	I _v mcd	V _F Volts	Test Current (mA)	Viewing Angle 2Θ _{1/2}	LED Data sheet	Page #
553-0211	Red	635	1.8	1.8	2	50°	521-9324	4-55
553-0222	Green	565	1.6	1.8	2	50°	521-9326	4-55
553-0233	Yellow	583	1.6	1.9	2	50°	521-9325	4-55

INTEGRAL RESISTOR, 5V

Part Number	Color	Peak Wavelength nm	I _v mcd	Test Voltage	Forward Current (mA)	Viewing Angle 2Θ _{1/2}	LED Data sheet	Page #
553-0311	Red	635	4	5	10	60°	521-9215	4-54
553-0322	Green	565	8	5	12	60°	521-9323	4-54
553-0333	Yellow	583	8	5	10	60°	521-9322	4-54

4

BI-COLOR

Bicolor data shown as red/green or yellow/green

Part Number	Color	Peak Wavelength nm	I _v mcd	V _F Volts	Test Current (mA)	Viewing Angle 2Θ _{1/2}	LED Data sheet	Page #
553-0711	Red/Green	635/565	5	2	10	50°	521-9459	4-58
553-0744	Yellow/Green	585/565	4.3/6.3	2.1*/2.1*	10	80°	521-9478	4-57

* I_F = 20mA

NON-DIFFUSED

Part Number	Color	Peak Wavelength nm	I _v mcd	V _F Volts	Test Current (mA)	Viewing Angle 2Θ _{1/2}	LED Data sheet	Page #
553-2211	Red	635	12	2.2	10	45°	521-9432	4-56
553-2222	Green	565	12	2.3	10	45°	521-9430	4-56
553-2233	Yellow	583	12	2.2	10	45°	521-9431	4-56

CBI ARRAYS .200 PITCH

Dialight offers its Multiarray to reduce insertions and to assure indicator alignment. Multiarrays mount indicators on .200 centers. These assemblies are available in arrays of 2 to 6. See pages 4-43 and 4-44 for information. Call factory for information on .185 pitched arrays.

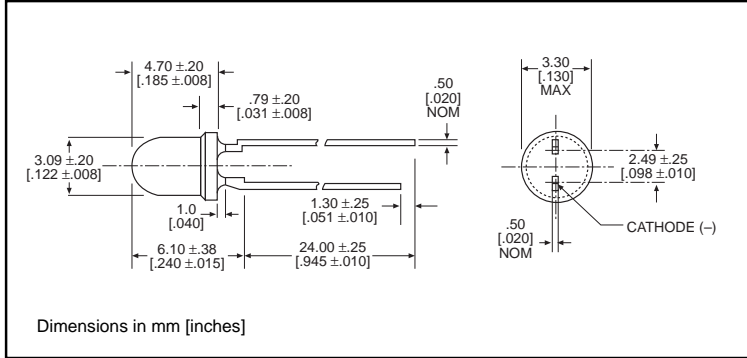
Dialight



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/°C) <i>From 50°C</i>	.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 ($T_A=25^\circ\text{C}$)

		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
Viewing Angle ($2\theta_{1/2}$)	Typical	45°	45°	45°
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

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

4

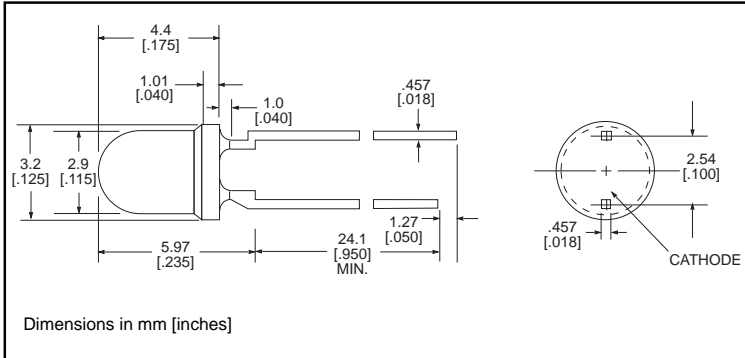
3mm Discrete LED

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

	Red -9324	Yellow -9325	Green -9326
Power Dissipation (mW)	24	36	24
Forward Current (mA)	7	7	7
Derating (mA/°C) <i>From 92°C</i>	1	1	1
Peak Current (mA) <i>Pulse width = 10 μs</i>	500	500	500
Operating Temperature (°C)	-55/+100	-55/+100	-20/+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 ($T_A=25^\circ\text{C}$)

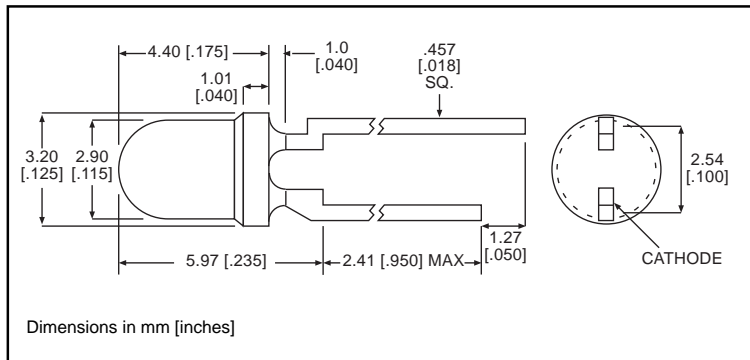
		Red -9324	Yellow -9325	Green -9326
Luminous Intensity (mcd) $I_F=2\text{mA}$	Min.	1	1	1
	Typical	1.8	1.6	1.6
Peak Wavelength (nm) λ_{Peak}	Typical	635	583	565
Viewing Angle ($2\theta_{1/2}$)	Typical	50°	50°	50°
Forward Voltage (V) $I_F=2\text{mA}$	Typical	1.8	1.9	1.8
	Max.	2.2	2.7	2.2
Reverse Voltage (V), $I_R=50\mu\text{A}$	Min.	5	5	5

$\theta_{1/2}$ 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



<u>PART NO.</u>	<u>COLOR</u>
521-9215	Red
521-9322	Yellow
521-9323	Green

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

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

	Red -9215	Yellow -9322	Green -9323
Forward Voltage (V)	7.5	7.5	7.5
Derating (V/ $^\circ\text{C}$) From 50°C	.071	.071	.071
Operating Temperature ($^\circ\text{C}$)	-40/+85	-40/+85	-20/+85
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 -9215	Yellow -9322	Green -9323
Luminous Intensity (mcd)	Min.	1.5	2	2
	Typical	4	8	8
Peak Wavelength (nm)	Typical	635	583	565
λ Peak				
Viewing Angle (2θ $\frac{1}{2}$)	Typical	60 $^\circ$	60 $^\circ$	60 $^\circ$
Forward Current (mA)	Typical	10	10	12
	Max.	15	15	15
Reverse Voltage (V), $I_R=100\mu\text{A}$	Min.	5	5	5

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