

Part Number: **5530322F**

General Description


Series	553
Configuration	3 mm Lens
Description	3 mm Green/Green Bi-Level CBI Integral Resistor
Package Options	Bulk Packaging
Sizes	3mm
Lamp Type	Bi-Level Housing
Viewing	Right Angle
Polarity	Cathode Right
Lens Style	Tinted, Diffused
Viewing Angle	60
LED Centerline	5.0mm



Absolute Maximum Ratings (Ta = 25°)

Reverse Current	100 @ Vr = 5V
Derating	0.086 (mA/degC)
Reverse Voltage	5
Solder Temperature	260 for 5 secs
Operating Temperature	-40 to +85
Storage Temperature	-55 to +100

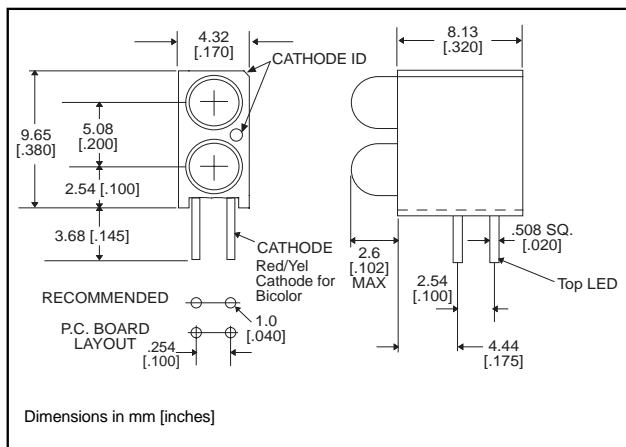
Operating Characteristics

Color	 Green
LED Type	Integral Resistor
Peak Wave Length	565
LED Position	1,2
Luminous Intensity Min	5.6
Luminous Intensity Typical	19
Forward Voltage Typical	10
Forward Voltage Max	20
Test Current mA	20mA

3mm LED CBI® Circuit Board Indicator Bi-level



553-XXXX



Dimensions in mm [inches]

Standard Polarity shown in drawing: Cathode right

Features

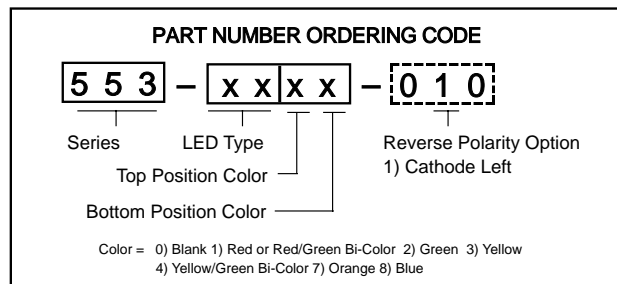
- Multiple CBIs form horizontal LED arrays on 4.45mm (0.175") center-lines. See page 4-41 and 4-42 for pre-assembled arrays
- High Contrast, UL 94 V-0 rated, black housing
- Oxygen index: 32%
- Polymer content: PBT, 0.343 g
- Housing stand-offs facilitate PCB cleaning
- Solderability per MIL-STD-202F, method 208F
- LEDs are safe for direct viewing per IEC 825-1, EN-60825-1

Tolerance note: As noted, otherwise:

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

Custom Combinations

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



-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
- 553-0188 Blue³



LOW CURRENT - LED TYPE 02

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

RESISTOR 5 VOLTS - 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.



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 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 $2\theta_{\%}$	LED Data sheet	Page #
553-0111	Red	650	10	2	10	45°	521-9427	4-64
553-0122	Green	563	16	2.1	10	45°	521-9408	4-64
553-0133	Yellow	585	6.3	2.1	10	45°	521-9428	4-64
553-0177	Orange	600	7	2.2	10	60°	521-9498	4-58
553-0188	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 $2\theta_{\%}$	LED Data sheet	Page #
553-0211	Red	635	1.6	1.7	2	60°	521-9324	4-60
553-0222	Green	565	1.6	1.9	2	60°	521-9326	4-60
553-0233	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 $2\theta_{\%}$	LED Data sheet	Page #
553-0311	Red	635	29	5	10	60°	521-9215	4-59
553-0322	Green	565	19	5	10	60°	521-9323	4-59
553-0333	Yellow	585	12.6	5	10	60°	521-9322	4-59

4

BI-COLOR

Part Number	Color	Peak Wavelength nm	I_V mcd	V_F Volts	Test Current (mA)	Viewing Angle $2\theta_{\%}$	LED Data sheet	Page #
553-0711	Red/Green	635/565	4.7/10	2/2.1	10	50°	521-9459	4-63
553-0744	Yellow/Green	585/565	4.3/6.3	2.1*/2.1*	10	80°	521-9478	4-62

* $I_F = 20\text{mA}$

NON-DIFFUSED

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

* $I_F = 20\text{mA}$

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 4-41 and 4-42 for information. Call factory for information on .185 pitched arrays.