

Part Number: **5530111F**

General Description


Series	553
Configuration	3 mm Lens
Description	3 mm Red/Red Bi-Level CBI
Package Options	Bulk Packaging
Sizes	3mm
Lamp Type	Bi-Level Housing
Viewing	Right Angle
Polarity	Cathode Right
Lens Style	Tinted, Diffused
Viewing Angle	45
LED Centerline	5.0mm



Absolute Maximum Ratings (Ta = 25°)

Derating	0.5 (mA/degC)
Reverse Voltage	3
Solder Temperature	260 for 5 secs
Operating Temperature	-25 to +85
Storage Temperature	-30 to +100

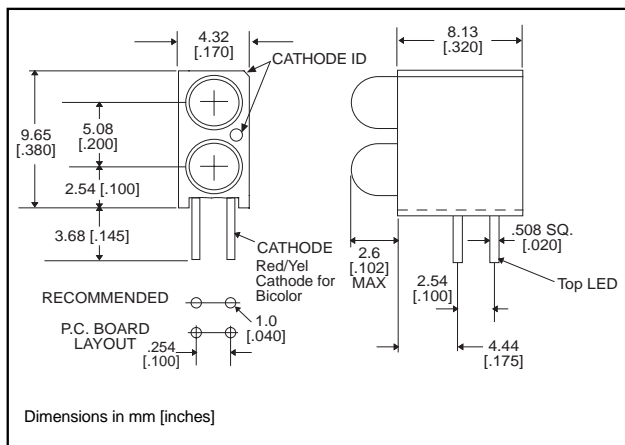
Operating Characteristics

Color	 Red
LED Type	Standard Efficiency
Peak Wave Length	650
LED Position	1,2
Luminous Intensity Min	3.6
Luminous Intensity Typical	10
Forward Voltage Typical	2
Forward Voltage Max	3
Test Current mA	20mA
Power Dissipation Max	60mW

3mm LED CBI® Circuit Board Indicator Bi-level

Dialight

553-XXXX



Standard Polarity shown in drawing: Cathode right

Features

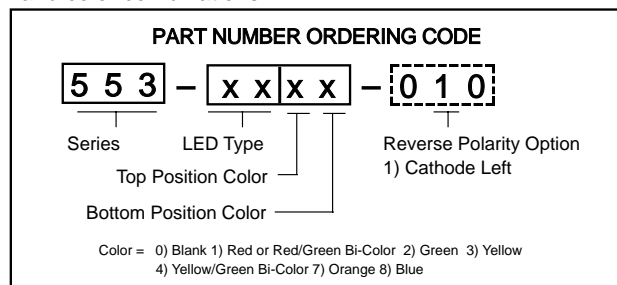
- Multiple CBIs form horizontal LED arrays on 4.45mm (0.175") center-lines. See page 4-41 and 4-42 for pre-assembled arrays
- High Contrast, UL 94 V-0 rated, black housing
- Oxygen index: 32%
- Polymer content: PBT, 0.343 g
- Housing stand-offs facilitate PCB cleaning
- Solderability per MIL-STD-202F, 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 | Blue ³ |



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

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.

