

| DIALIGHT<br>PART NUMBER | LED COLOR                  |                            | DIM<br>"A" | DIM<br>"B" |
|-------------------------|----------------------------|----------------------------|------------|------------|
|                         | POSITION 1                 | POSITION 2                 |            |            |
| 553-0102-300F           | BLANK                      | GREEN DIFFUSED             | .097       | .122±.010  |
| 553-0103-300F           | BLANK                      | YELLOW DIFFUSED            | .097       | .122±.010  |
| 553-0108-300F           | BLANK                      | BLUE NON-TINTED DIFFUSED   | .093       | .110±.010  |
| 553-0111-300F           | RED DIFFUSED               | RED DIFFUSED               | .097       | .122±.010  |
| 553-0112-300F           | RED DIFFUSED               | GREEN DIFFUSED             | .097       | .122±.010  |
| 553-0113-300F           | RED DIFFUSED               | YELLOW DIFFUSED            | .097       | .122±.010  |
| 553-0117-300F           | RED DIFFUSED               | ORANGE DIFFUSED            | .097       | .122±.010  |
| 553-0121-300F           | GREEN DIFFUSED             | RED DIFFUSED               | .097       | .122±.010  |
| 553-0122-300F           | GREEN DIFFUSED             | GREEN DIFFUSED             | .097       | .122±.010  |
| 553-0123-300F           | GREEN DIFFUSED             | YELLOW DIFFUSED            | .097       | .122±.010  |
| 553-0127-300F           | GREEN DIFFUSED             | ORANGE DIFFUSED            | .087       | .115±.010  |
| 553-0131-300F           | YELLOW DIFFUSED            | RED DIFFUSED               | .097       | .122±.010  |
| 553-0132-300F           | YELLOW DIFFUSED            | GREEN DIFFUSED             | .097       | .122±.010  |
| 553-0133-300F           | YELLOW DIFFUSED            | YELLOW DIFFUSED            | .097       | .122±.010  |
| 553-0172-300F           | ORANGE DIFFUSED            | GREEN DIFFUSED             | .097       | .122±.010  |
| 553-0177-300F           | ORANGE DIFFUSED            | ORANGE DIFFUSED            | .087       | .115±.010  |
| 553-0188-300F           | BLUE NON-TINTED DIFFUSED   | BLUE NON-TINTED DIFFUSED   | .093       | .110±.005  |
| 553-0201-300F           | BLANK                      | 2 mA RED DIFFUSED          | .087       | .115±.010  |
| 553-0203-300F           | BLANK                      | 2 mA YELLOW DIFFUSED       | .087       | .115±.010  |
| 553-0211-300F           | 2 mA RED DIFFUSED          | 2 mA RED DIFFUSED          | .087       | .115±.010  |
| 553-0212-300F           | 2 mA RED DIFFUSED          | 2 mA GREEN DIFFUSED        | .087       | .115±.010  |
| 553-0213-300F           | 2 mA RED DIFFUSED          | 2 mA YELLOW DIFFUSED       | .087       | .115±.010  |
| 553-0221-300F           | 2 mA GREEN DIFFUSED        | 2 mA RED DIFFUSED          | .087       | .115±.010  |
| 553-0222-300F           | 2 mA GREEN DIFFUSED        | 2 mA GREEN DIFFUSED        | .087       | .115±.010  |
| 553-0223-300F           | 2 mA GREEN DIFFUSED        | 2 mA YELLOW DIFFUSED       | .087       | .115±.010  |
| 553-0232-300F           | 2 mA YELLOW DIFFUSED       | 2 mA GREEN DIFFUSED        | .087       | .115±.010  |
| 553-0233-300F           | 2 mA YELLOW DIFFUSED       | 2 mA YELLOW DIFFUSED       | .087       | .115±.010  |
| 553-0303-300F           | BLANK                      | 5 V YELLOW DIFFUSED        | .087       | .115±.010  |
| 553-0311-300F           | 5 V RED DIFFUSED           | 5 V RED DIFFUSED           | .087       | .115±.010  |
| 553-0312-300F           | 5 V RED DIFFUSED           | 5 V GREEN DIFFUSED         | .087       | .115±.010  |
| 553-0313-300F           | 5 V RED DIFFUSED           | 5 V YELLOW DIFFUSED        | .087       | .115±.010  |
| 553-0322-300F           | 5 V GREEN DIFFUSED         | 5 V GREEN DIFFUSED         | .087       | .115±.010  |
| 553-0323-300F           | 5 V GREEN DIFFUSED         | 5 V YELLOW DIFFUSED        | .087       | .115±.010  |
| 553-0332-300F           | 5 V YELLOW DIFFUSED        | 5 V GREEN DIFFUSED         | .087       | .115±.010  |
| 553-0333-300F           | 5 V YELLOW DIFFUSED        | 5 V YELLOW DIFFUSED        | .087       | .115±.010  |
| 553-0701-300F           | BLANK                      | BI-COLOR RED/GREEN         | .093       | .118±.005  |
| 553-0711-300F           | BI-COLOR RED/GREEN         | BI-COLOR RED/GREEN         | .093       | .118±.005  |
| 553-0714-300F           | BI-COLOR RED/GREEN         | BI-COLOR YELLOW/GREEN      | .093       | .118±.005  |
| 553-0741-300F           | BI-COLOR YELLOW/GREEN      | BI-COLOR RED/GREEN         | .093       | .118±.005  |
| 553-0744-300F           | BI-COLOR YELLOW/GREEN      | BI-COLOR YELLOW/GREEN      | .093       | .118±.005  |
| 553-2211-300F           | RED TINTED NON-DIFFUSED    | RED TINTED NON-DIFFUSED    | .087       | .115±.010  |
| 553-2222-300F           | GREEN TINTED NON-DIFFUSED  | GREEN TINTED NON-DIFFUSED  | .087       | .115±.010  |
| 553-2223-300F           | GREEN TINTED NON-DIFFUSED  | YELLOW TINTED NON-DIFFUSED | .087       | .115±.010  |
| 553-2232-300F           | YELLOW TINTED NON-DIFFUSED | GREEN TINTED NON-DIFFUSED  | .087       | .115±.010  |
| 553-2233-300F           | YELLOW TINTED NON-DIFFUSED | YELLOW TINTED NON-DIFFUSED | .087       | .115±.010  |

| 10 mA NON-DIFFUSED LED [ OPERATING CHARACTERISTICS AT 25°C ] |        |     |     |     |       |                         |
|--------------------------------------------------------------|--------|-----|-----|-----|-------|-------------------------|
| CHARACTERISTICS                                              | COLOR  | MIN | TYP | MAX | UNITS | TEST CONDITIONS         |
| LUMINOUS INTENSITY                                           | RED    | 8.7 | 29  |     | mcd   | I <sub>F</sub> = 10 mA  |
|                                                              | YELLOW | 10  | 50  |     |       |                         |
|                                                              | GREEN  | 32  | 50  |     |       |                         |
| FORWARD VOLTAGE                                              | RED    |     | 2.0 | 2.8 | V     | I <sub>F</sub> = 10 mA  |
|                                                              | YELLOW |     | 2.1 | 2.8 |       |                         |
|                                                              | GREEN  |     | 2.1 | 2.8 |       |                         |
| REVERSE VOLTAGE                                              | RED    | 5   |     |     | V     | I <sub>R</sub> = 100 µA |
|                                                              | YELLOW | 5   |     |     |       |                         |
|                                                              | GREEN  | 5   |     |     |       |                         |
| PEAK WAVELENGTH                                              | RED    |     | 635 |     | nm    | MEASURED AT PEAK        |
|                                                              | YELLOW |     | 585 |     |       |                         |
|                                                              | GREEN  |     | 565 |     |       |                         |

| 10 mA DIFFUSED LED [ OPERATING CHARACTERISTICS AT 25°C ] |        |     |     |     |       |                        |
|----------------------------------------------------------|--------|-----|-----|-----|-------|------------------------|
| CHARACTERISTICS                                          | COLOR  | MIN | TYP | MAX | UNITS | TEST CONDITIONS        |
| LUMINOUS INTENSITY                                       | RED    | 3.6 | 10  |     | mcd   | I <sub>F</sub> = 10 mA |
|                                                          | YELLOW | 2.2 | 6.3 |     |       |                        |
|                                                          | GREEN  | 5.6 | 16  |     |       |                        |
|                                                          | BLUE   | 6.3 |     | 20  |       |                        |
|                                                          | ORANGE | 3.4 | 7.0 |     |       |                        |
| FORWARD VOLTAGE                                          | RED    |     | 2.0 | 3.0 | V     | I <sub>F</sub> = 10 mA |
|                                                          | YELLOW |     | 2.1 | 3.0 |       |                        |
|                                                          | GREEN  |     | 2.1 | 3.0 |       |                        |
|                                                          | BLUE   |     | 3.5 | 4.2 |       |                        |
|                                                          | ORANGE | 1.5 | 2.2 | 3.0 |       |                        |
| REVERSE VOLTAGE                                          | RED    | 3   |     |     | V     | I <sub>R</sub> = 10 µA |
|                                                          | YELLOW | 3   |     |     |       |                        |
|                                                          | GREEN  | 3   |     |     |       |                        |
|                                                          | BLUE   | 3   |     |     |       |                        |
|                                                          | ORANGE | 5   |     |     |       |                        |
| PEAK WAVELENGTH                                          | RED    |     | 650 |     | nm    | MEASURED AT PEAK       |
|                                                          | YELLOW |     | 585 |     |       |                        |
|                                                          | GREEN  |     | 563 |     |       |                        |
|                                                          | BLUE   |     | 428 |     |       |                        |
|                                                          | ORANGE |     | 600 |     |       |                        |

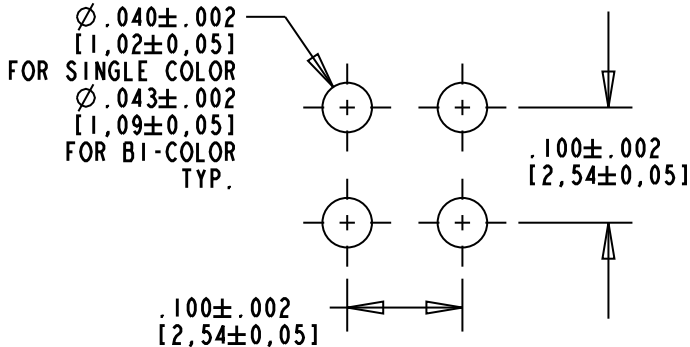
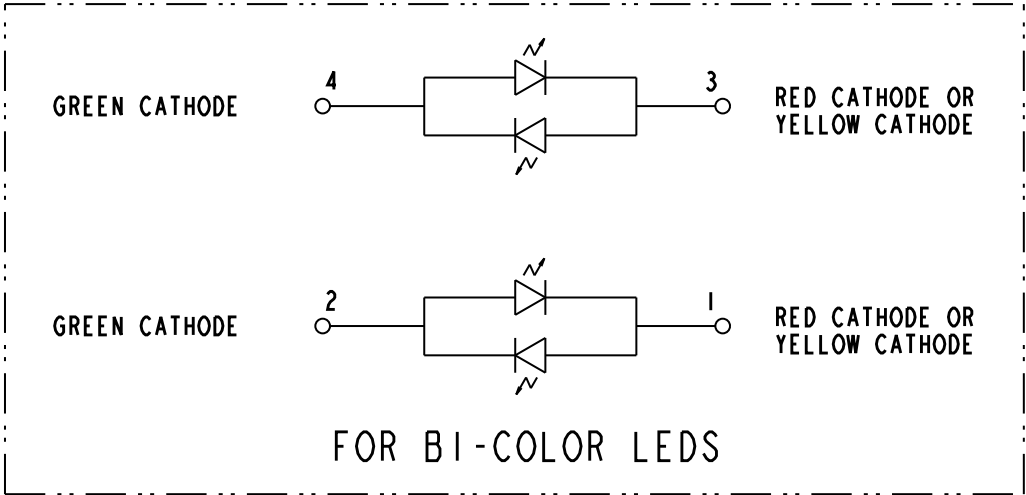
| BI-COLOR LED [ OPERATING CHARACTERISTICS AT 25°C ] |        |     |     |      |       |                        |  |
|----------------------------------------------------|--------|-----|-----|------|-------|------------------------|--|
| CHARACTERISTICS                                    | COLOR  | MIN | TYP | MAX  | UNITS | TEST CONDITIONS        |  |
| LUMINOUS INTENSITY                                 | YELLOW | 2.5 | 4.3 |      | mcd   | I <sub>F</sub> = 10 mA |  |
|                                                    | GREEN  |     | 6.3 |      |       |                        |  |
|                                                    | RED    | 2.5 | 4.7 |      |       |                        |  |
| FORWARD VOLTAGE                                    | GREEN  |     | 3.7 | 10.0 | mA    | I <sub>F</sub> = 10 mA |  |
|                                                    | YELLOW |     | 2.1 | 2.8  |       |                        |  |
|                                                    | RED    |     | 2.0 | 2.1  |       |                        |  |
| PEAK WAVELENGTH                                    | YELLOW |     | 585 |      | nm    | MEASURED AT PEAK       |  |
|                                                    | GREEN  |     | 565 |      |       |                        |  |
|                                                    | RED    |     | 635 |      |       |                        |  |

| 2 mA NON-DIFFUSED LED [ OPERATING CHARACTERISTICS AT 25°C ] |        |     |     |     |       |                        |  |
|-------------------------------------------------------------|--------|-----|-----|-----|-------|------------------------|--|
| CHARACTERISTICS                                             | COLOR  | MIN | TYP | MAX | UNITS | TEST CONDITIONS        |  |
| LUMINOUS INTENSITY                                          | RED    | 1.0 | 1.6 |     | mcd   | I <sub>F</sub> = 2 mA  |  |
|                                                             | YELLOW | 1.0 | 1.6 |     |       |                        |  |
|                                                             | GREEN  | 1.0 | 1.6 |     |       |                        |  |
| FORWARD VOLTAGE                                             | RED    |     | 1.7 | 2.2 | V     | I <sub>F</sub> = 2 mA  |  |
|                                                             | YELLOW |     | 1.8 | 2.7 |       |                        |  |
|                                                             | GREEN  |     | 1.9 | 2.2 |       |                        |  |
| REVERSE VOLTAGE                                             | RED    | 5   |     |     | V     | I <sub>R</sub> = 50 µA |  |
|                                                             | YELLOW | 5   |     |     |       |                        |  |
|                                                             | GREEN  | 5   |     |     |       |                        |  |
| PEAK WAVELENGTH                                             | RED    |     | 635 |     | nm    | MEASURED AT PEAK       |  |
|                                                             | YELLOW |     | 585 |     |       |                        |  |
|                                                             | GREEN  |     | 565 |     |       |                        |  |

| 5 V INTEGRAL RESISTOR LED [ OPERATING CHARACTERISTICS AT 25°C ] |        |     |      |     |       |                         |  |
|-----------------------------------------------------------------|--------|-----|------|-----|-------|-------------------------|--|
| CHARACTERISTICS                                                 | COLOR  | MIN | TYP  | MAX | UNITS | TEST CONDITIONS         |  |
| LUMINOUS INTENSITY                                              | RED    | 8.7 | 29   |     | mcd   | V <sub>F</sub> = 5 V    |  |
|                                                                 | YELLOW | 3.7 | 12.6 |     |       |                         |  |
|                                                                 | GREEN  | 5.6 | 19   |     |       |                         |  |
| FORWARD CURRENT                                                 | RED    |     | 10   | 20  | mA    | V <sub>F</sub> = 5 V    |  |
|                                                                 | YELLOW |     | 10   | 20  |       |                         |  |
|                                                                 | GREEN  |     | 10   | 20  |       |                         |  |
| REVERSE VOLTAGE                                                 | RED    | 5   |      |     | V     | I <sub>R</sub> = 100 µA |  |
|                                                                 | YELLOW | 5   |      |     |       |                         |  |
|                                                                 | GREEN  | 5   |      |     |       |                         |  |
| PEAK WAVELENGTH                                                 | RED    |     | 635  |     | nm    | MEASURED AT PEAK        |  |
|                                                                 | YELLOW |     | 585  |     |       |                         |  |
|                                                                 | GREEN  |     | 565  |     |       |                         |  |

NOTES:

- LED LEAD DIMENSIONS SHOWN ARE MEASURED AT HOUSING EXIT.
- LEADS TO FIT INTO HOLES SPACED AS PER PATTERN.
- PIN NUMBERS FOR REFERENCE ONLY, DESIGNATION NON-EXISTENT ON PART.
- DIALIGHT PART NUMBERS: 553-XXXX-300F.
- THIS ASSEMBLY CONTAINS ELECTROSTATIC DISCHARGE SENSITIVE DEVICES (ESDS). MAINTAIN ALL PRECAUTIONARY MEASURES DURING ASSEMBLY, HANDLING, AND STORAGE IN ACCORDANCE WITH IPC-A-610.

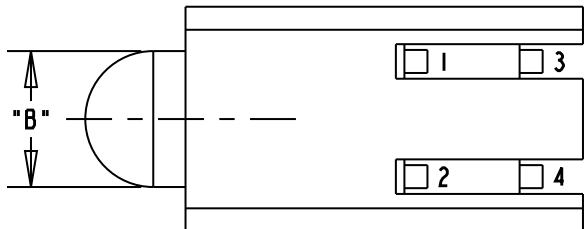
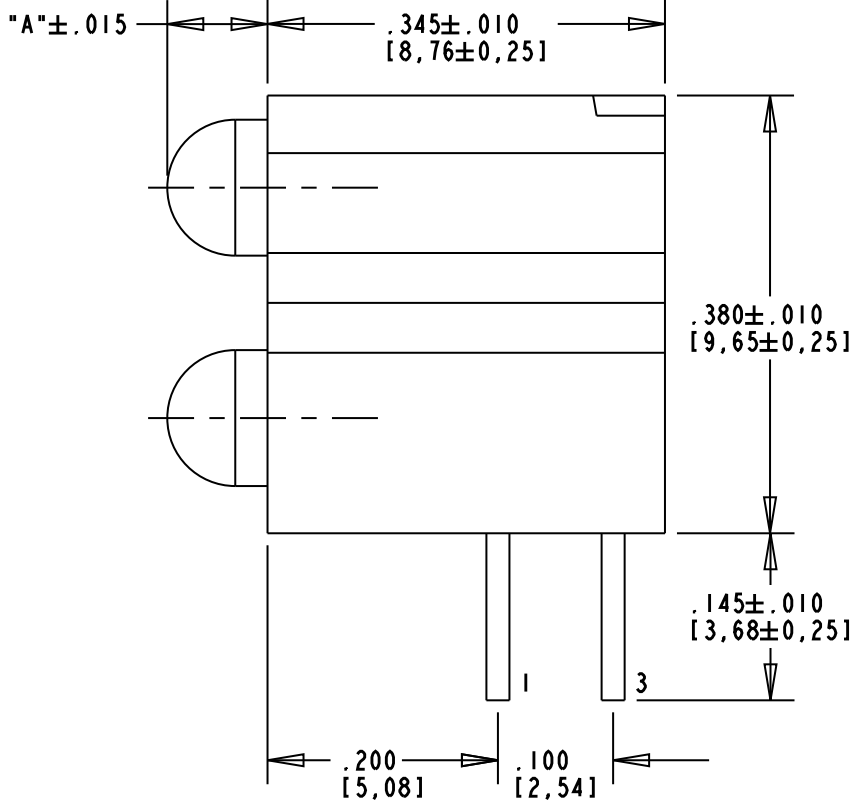
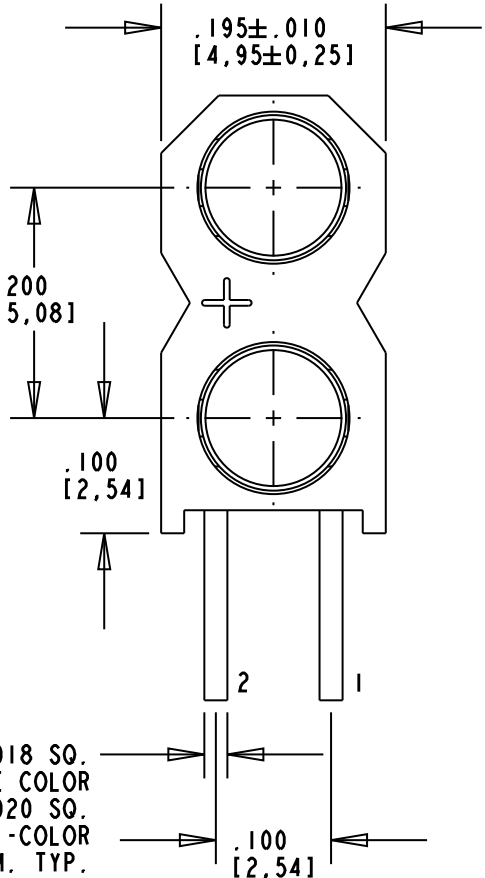


RECOMMENDED HOLE PATTERN GAUGE



ATTENTION:  
OBSERVE PRECAUTIONS FOR  
HANDLING ELECTROSTATIC  
SENSITIVE DEVICES

| REV | ECN NO | REVISIONS                                                                    | DRN | CKD | APP | DATE    |
|-----|--------|------------------------------------------------------------------------------|-----|-----|-----|---------|
| A   | —      | NEW RELEASE                                                                  | TWC | —   | —   | —       |
| B   | —      | ADDED P/N 553-2232-300F & DUAL DIMENSIONS; UPDATED NOTES; DELETED BACK VIEW. | AJF | KLJ | NO  | 9-29-10 |



RoHS Compliant 553-XXXX-300F Thru hole Bi-level CBI

Part Numbers with the "F" suffix ending are RoHS Compliant.  
Example: 553-0112-300F  
The bag packaging is marked with "RoHS Compliant" label or equivalent markings.  
Parts can be wave soldered, dip soldered or hand soldered using typical lead-free soldering process with max 260°C temp. for 5 sec.

|                                                                                                                                                                                                                                        |  |                                              |  |                                              |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------|--|----------------------------------------------|--|
| THIS DRAWING AND THE CONTENTS HEREIN ARE CONFIDENTIAL AND<br>THE SOLE PROPERTY OF DIALIGHT. REPRODUCTION OF THIS DRAWING<br>OR CONSTRUCTION OF ANY PARTS WITHIN THIS DRAWING ARE<br>FORBIDDEN WITHOUT THE WRITTEN CONSENT OF DIALIGHT. |  |                                              |  |                                              |  |
| SCALE: 6.000                                                                                                                                                                                                                           |  | DRAWING NUMBER                               |  | REV                                          |  |
| ALL DIM'S IN: INCHES (MM)                                                                                                                                                                                                              |  | C-17297                                      |  | B                                            |  |
| TOLERANCES:<br>UNLESS OTHERWISE SPECIFIED                                                                                                                                                                                              |  | TITLE 3mm BI-LEVEL LED CBI<br>RoHS COMPLIANT |  |                                              |  |
| FRACTIONS: ±1/64                                                                                                                                                                                                                       |  |                                              |  |                                              |  |
| DECIMALS (.XX): ±.02                                                                                                                                                                                                                   |  |                                              |  |                                              |  |
| DECIMALS (.XXX): ±.015                                                                                                                                                                                                                 |  |                                              |  |                                              |  |
| ANGLES: ±1°                                                                                                                                                                                                                            |  | MATERIAL                                     |  |                                              |  |
| FINISH:                                                                                                                                                                                                                                |  | Dialight                                     |  | 1501 ROUTE 34 SOUTH<br>FARMINGDALE, NJ 07727 |  |
| FSCM 83330                                                                                                                                                                                                                             |  | SHEET 1 OF 1                                 |  | FAMILY TABLE:                                |  |