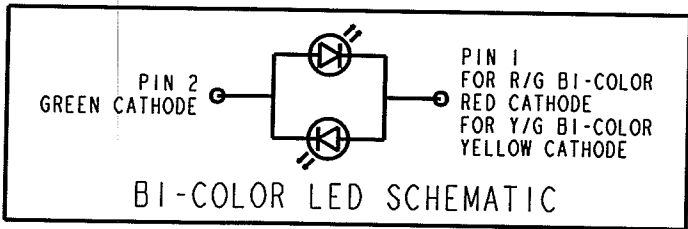
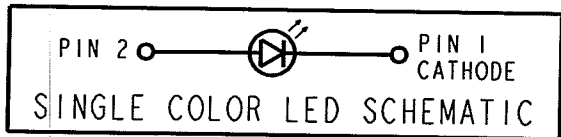


| PART NUMBER   | LED COLOR             |                       |
|---------------|-----------------------|-----------------------|
|               | POS. 1                | POS. 2                |
| 553-0211-100F | RED                   | RED                   |
| 553-0221-100F | GREEN                 | RED                   |
| 553-0222-100F | GREEN                 | GREEN                 |
| 553-0223-100F | GREEN                 | YELLOW                |
| 553-0233-100F | YELLOW                | YELLOW                |
| 553-0322-100F | GREEN, 5V             | GREEN, 5V             |
| 553-0710-100F | RED/GREEN BI-COLOR    | BLANK                 |
| 553-0744-100F | YELLOW/GREEN BI-COLOR | YELLOW/GREEN BI-COLOR |



**RoHS COMPLIANT 553-0XXX-100F**  
Part Numbers with the "F" suffix ending are RoHS Compliant.  
For example: 553-0222-100F  
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.

| REV | ECN NO | REVISIONS   | DRN | CKD  | APP    | DATE |
|-----|--------|-------------|-----|------|--------|------|
| A   |        | NEW RELEASE | KLJ | 7.8. | 7/9/08 |      |

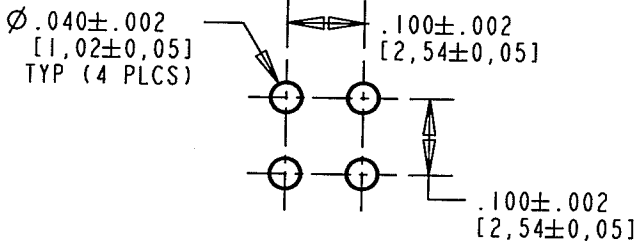
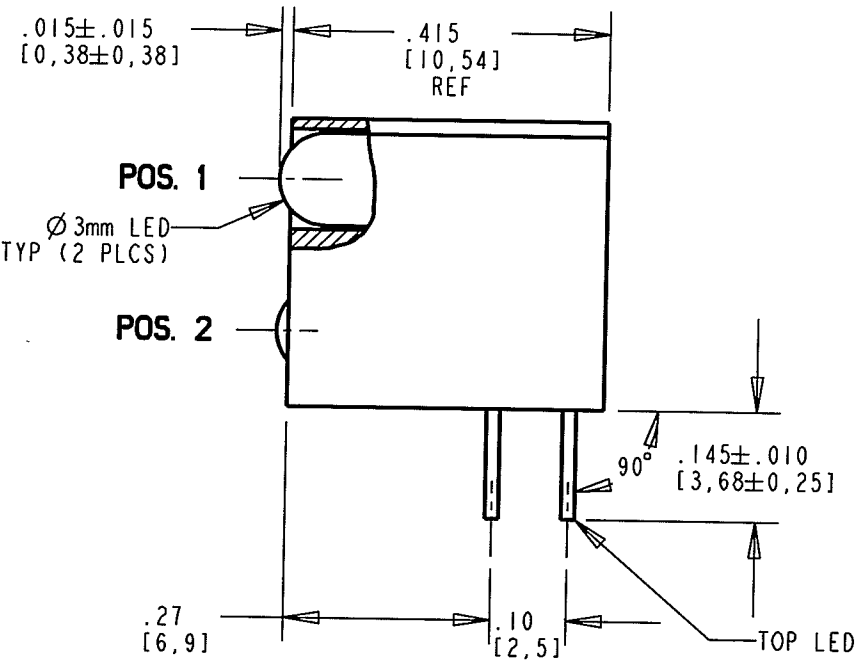
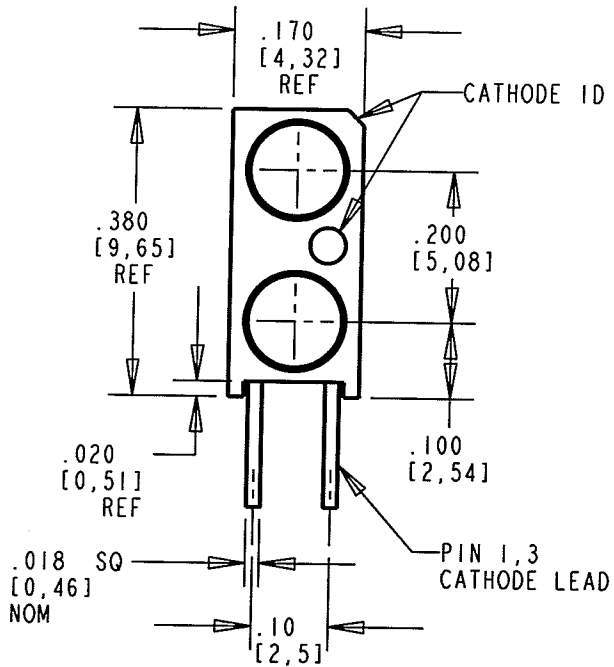
- NOTES:
- LED LEAD DIMENSIONS SHOWN ARE MEASURED AT HOUSING EXIT.
  - LEADS TO FIT INTO HOLES SPACED AS PER PATTERN.
  - PIN NUMBERS FOR REFERENCE ONLY, DESIGNATION NON-EXISTENT ON PART.
  - DIALIGHT PART NUMBERS: 553-0XXX-100F.
  - THIS ASSEMBLY CONTAINS ELECTROSTATIC DISCHARGE SENSITIVE DEVICES (ESDS). MAINTAIN ALL PRECAUTIONARY MEASURES DURING ASSEMBLY, HANDLING, AND STORAGE IN ACCORDANCE WITH IPC-A-610.

| ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT FOR BI-COLOR LEDS |  | R/G BI-COLOR |       | Y/G BI-COLOR |       | UNITS |
|------------------------------------------------------------|--|--------------|-------|--------------|-------|-------|
|                                                            |  | RED          | GREEN | YELLOW       | GREEN |       |
| POWER DISSIPATION                                          |  | 100          | 60    | 100          |       | mW    |
| CONTINUOUS FORWARD CURRENT                                 |  | 30           | 20    | 30           |       | mA    |
| PEAK FORWARD CURRENT (1/10 DUTY CYCLE, 10 ms PULSE WIDTH)  |  | 120          | 80    | 120          |       | mA    |
| DERATING LINEAR FROM 50°C                                  |  | 0.4          | 0.25  | 0.4          |       | mA/°C |
| REVERSE VOLTAGE                                            |  | 5            |       |              |       | V     |
| SOLDERING TEMPERATURE (.063" FROM BODY FOR 5 SECONDS)      |  | 260          |       |              |       | °C    |
| OPERATING TEMPERATURE                                      |  | -55 TO +100  |       |              |       | °C    |
| STORAGE TEMPERATURE                                        |  | -55 TO +100  |       |              |       | °C    |

| BI-COLOR LED OPERATING CHARACTERISTICS AT Ta = 25°C |        |                      |                          |                   |                                     |      |                                |
|-----------------------------------------------------|--------|----------------------|--------------------------|-------------------|-------------------------------------|------|--------------------------------|
| LED                                                 | COLOR  | PEAK WAVELENGTH (nm) | DOMINANT WAVELENGTH (nm) | VIEWING ANGLE (°) | LUMINOUS INTENSITY (mcd) @ If=10 mA |      | FORWARD VOLTAGE (V) @ If=20 mA |
|                                                     |        | TYP                  | TYP                      | TYP               | MIN                                 | TYP  | TYP MAX                        |
| RED/GREEN BI-COLOR                                  | RED    | 635                  | —                        | 60                | 2.5                                 | 4.7  | 2.0 2.8                        |
|                                                     | GREEN  | 565                  | —                        |                   | 3.7                                 | 10.0 | 2.1 2.8                        |
| YELLOW/GREEN BI-COLOR                               | YELLOW | 585                  | 586                      | 80                | 2.5                                 | 4.3  | 2.1 2.8                        |
|                                                     | GREEN  | 565                  | 569                      |                   | 2.5                                 | 6.3  | 2.1 2.8                        |

| ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT<br>FOR SINGLE COLOR LEDS | LED COLOR         |            |             |                | UNITS |
|-------------------------------------------------------------------|-------------------|------------|-------------|----------------|-------|
|                                                                   | RED DIFF          | GREEN DIFF | YELLOW DIFF | GREEN DIFF, 5V |       |
| POWER DISSIPATION                                                 | 20                | 20         | 20          | —              | mW    |
| CONTINUOUS FORWARD CURRENT                                        | 7                 | 7          | 7           | —              | mA    |
| DC FORWARD VOLTAGE                                                | —                 | —          | —           | 7.5            | V     |
| PEAK FORWARD CURRENT (0.01 ms PULSE WIDTH)                        | 120               | 60         | 80          | —              | mA    |
| DERATING LINEAR FROM 90°C (50°C FOR 5V GREEN)                     | 0.7               | 0.7        | 0.7         | 0.086 (V/°C)   | mA/°C |
| REVERSE VOLTAGE                                                   | 5                 |            |             |                | V     |
| SOLDERING TEMPERATURE (.063 in FROM BODY)                         | 260 FOR 5 SECONDS |            |             |                | °C    |
| OPERATING TEMPERATURE                                             | -55 TO +100       |            |             | -40 TO +85     | °C    |
| STORAGE TEMPERATURE                                               | -55 TO +100       |            |             |                | °C    |

| SINGLE COLOR LED OPERATING CHARACTERISTICS AT TA = 25°C |                               |                          |                   |                                                                |     |                                 |     |                                |     |                                |
|---------------------------------------------------------|-------------------------------|--------------------------|-------------------|----------------------------------------------------------------|-----|---------------------------------|-----|--------------------------------|-----|--------------------------------|
| COLOR                                                   | PEAK EMISSION WAVELENGTH (nm) | DOMINANT WAVELENGTH (nm) | VIEWING ANGLE (°) | LUMINOUS INTENSITY (mcd) @ IF = 2mA;<br>@ VF = 5V FOR 5V GREEN |     | FORWARD VOLTAGE (V) @ IF = 2 mA |     | FORWARD CURRENT (mA) @ VF = 5V |     | REVERSE CURRENT (μA) @ VR = 5V |
|                                                         |                               |                          |                   | MIN                                                            | TYP | TYP                             | MAX | TYP                            | MAX | MAX                            |
| RED DIFFUSED                                            | 635                           | 623                      | 60                | 0.7                                                            | 2.5 | 1.7                             | 2.2 | —                              | —   | 10                             |
| GREEN DIFFUSED                                          | 565                           | 569                      | 60                | 0.4                                                            | 1.1 | 1.9                             | 2.2 | —                              | —   | 10                             |
| YELLOW DIFFUSED                                         | 591                           | 588                      | 60                | 0.4                                                            | 1.1 | 1.8                             | 2.7 | —                              | —   | 10                             |
| GREEN DIFF, 5V INTEGRAL RESISTOR                        | 565                           | —                        | 60                | 5.6                                                            | 19  | —                               | —   | 10                             | 20  | 100                            |



RECOMMENDED HOLE PATTERN GAUGE



**ATTENTION:**  
OBSERVE PRECAUTIONS FOR  
HANDLING ELECTROSTATIC  
SENSITIVE DEVICES

|                                                                                                                                                                                                                               |                                                          |               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|---------------|
| THIS DRAWING AND THE CONTENTS HEREIN ARE CONFIDENTIAL AND THE SOLE PROPERTY OF DIALIGHT. REPRODUCTION OF THIS DRAWING OR CONSTRUCTION OF ANY PARTS WITHIN THIS DRAWING ARE FORBIDDEN WITHOUT THE WRITTEN CONSENT OF DIALIGHT. |                                                          |               |
| SCALE: DRAWING SCALE<br>ALL DIM'S IN: INCHES (MM)                                                                                                                                                                             | DRAWING NUMBER<br>C-17638                                | REV<br>A      |
| TOLERANCES:<br>UNLESS OTHERWISE SPECIFIED<br>FRACTIONS: ±1/64<br>DECIMALS (.XX): ±.01<br>DECIMALS (.XXX): ±.005<br>DECIMALS (.XXXX): ±.0005<br>ANGLES: ±1°                                                                    | TITLE BI-LEVEL CBI BACKLIGHTING<br>RoHS COMPLIANT        |               |
| FINISH:                                                                                                                                                                                                                       | MATERIAL                                                 |               |
| FSCM 83330                                                                                                                                                                                                                    | Dialight<br>1501 ROUTE 34 SOUTH<br>FARMINGDALE, NJ 07727 |               |
|                                                                                                                                                                                                                               | SHEET 1 OF 1                                             | FAMILY TABLE: |