

| REV | ECN NO | REVISIONS   | DRN | CKD | APP | DATE |
|-----|--------|-------------|-----|-----|-----|------|
| A   |        | NEW RELEASE | ALV |     |     |      |

NOTES:  
 1. MILLIMETER DIMENSIONS SHOWN FOR REFERENCE ONLY.  
 2. LEADS TO FIT INTO HOLES SPACED AS PER PATTERN.  
 3. PIN NUMBERS FOR REFERENCE ONLY, DESIGNATION NON-EXISTENT ON PART.  
 4. DIALIGHT PART NUMBER: 553-0781-853F.  
 5. THIS ASSEMBLY CONTAINS ELECTROSTATIC SENSITIVE DEVICES (ESDS). MAINTAIN ALL PRECAUTIONARY MEASURES DURING ASSEMBLY, HANDLING AND STORAGE IN ACCORDANCE WITH IPC-A-610.

**RoHS Compliant 553-0781-853F Thru hole Bi-level CBI**

Part Numbers with the "F" suffix ending are RoHS Compliant. 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.

RED/GREEN BI-COLOR BOTTOM POSITION (LED POS 2.)

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT

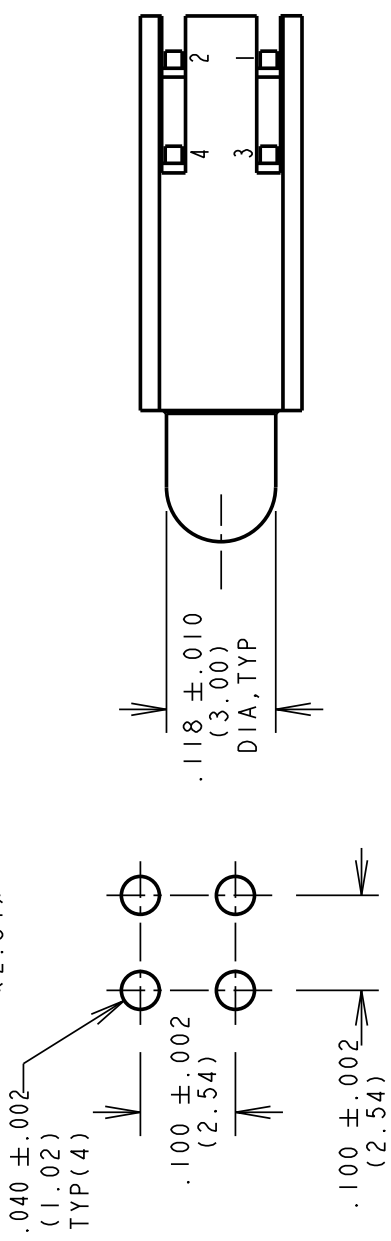
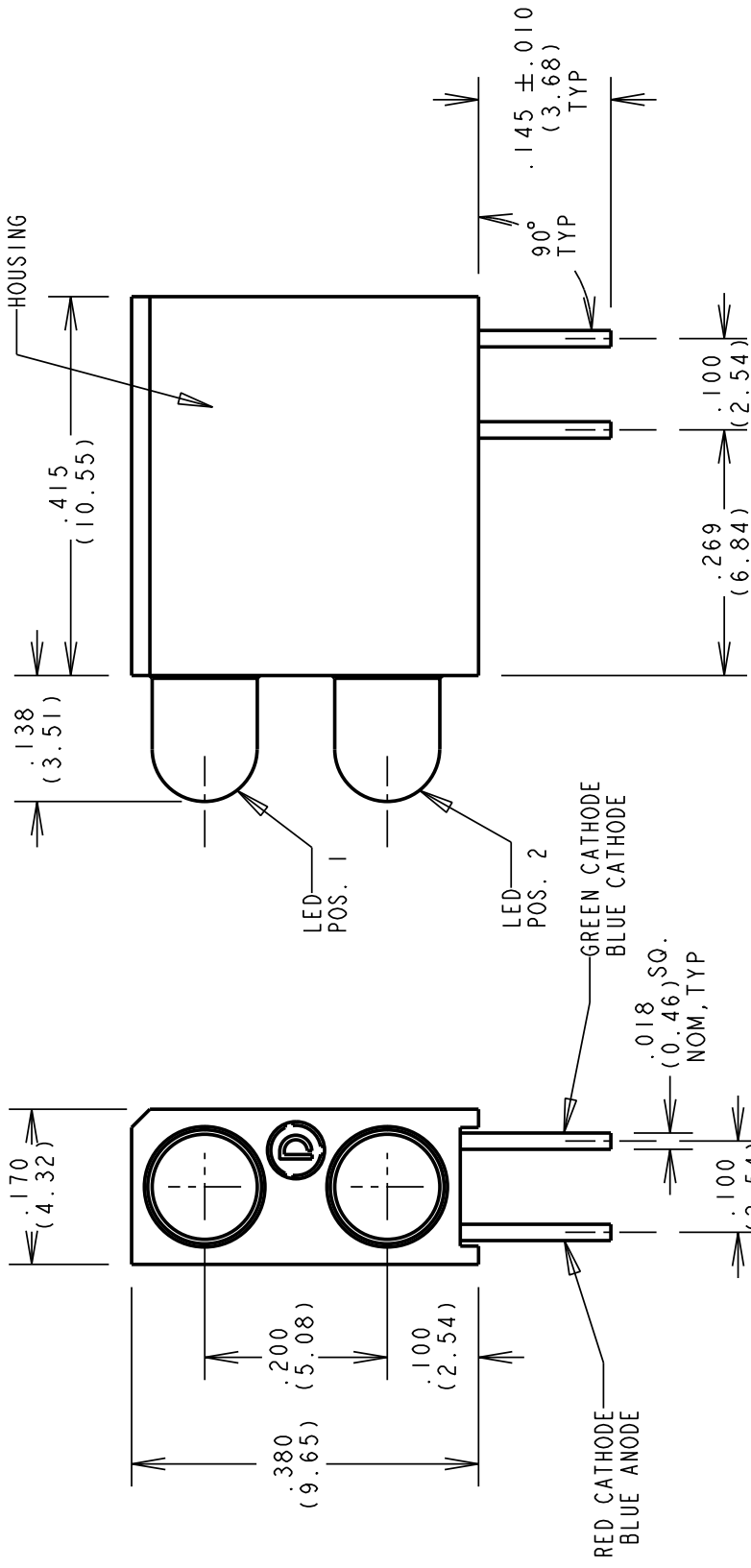
|   |               |
|---|---------------|
| POWER DISSIPATION                                   | 100 mW        |
| DERATE LINEALLY FROM 50 °C                          | .40 mA/°C     |
| CONTINUOUS FORWARD CURRENT                          | 30 mA         |
| PEAK FORWARD CURRENT (10 ms PULSE WIDTH, 1/10 DUTY) | 120 mA        |
| PEAK REVERSE VOLTAGE                                | 5 V           |
| LEAD SOLDERING TEMPERATURE, 6 SEC., 1/16" FROM BASE | 260 °C        |
| OPERATING TEMPERATURE                               | -55 to +100°C |
| STORAGE TEMPERATURE                                 | -55 to +100°C |

OPERATING CHARACTERISTICS AT 25 °C AMBIENT

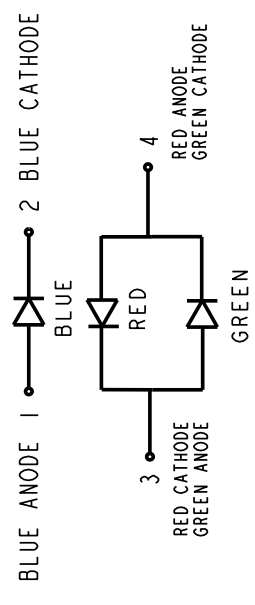
| LED CHARACTERISTICS       | COLOR | MIN | TYP  | MAX | UNITS   | TEST OPERATIONS   |
|---------------------------|-------|-----|------|-----|---------|-------------------|
| LUMINOUS INTENSITY        | GREEN | 3.7 | 10.0 |     | mc/d    | If = 10mA         |
|                           | RED   | 2.5 | 4.7  |     |         |                   |
| FORWARD VOLTAGE           | GREEN |     | 2.1  | 2.8 | V       | If = 20mA         |
|                           | RED   |     | 2.0  |     |         |                   |
| REVERSE CURRENT           | GREEN |     |      | 100 | µA      | Vr = 5 V          |
| PEAK WAVELENGTH           | GREEN |     | 565  |     | nm      | If = 20 mA        |
|                           | RED   |     | 635  |     |         |                   |
| 2 = 1/2 - INTENSITY ANGLE | GREEN |     | 60   |     | DEGREES | If = 20mA         |
|                           | RED   |     |      |     |         |                   |
| CAPACITANCE               | GREEN |     | 35   |     | pf      | Vr=0 V, f = 1 mHz |
|                           | RED   |     | 20   |     |         |                   |



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



RECOMMENDED PC BOARD HOLE PATTERN



BLUE LED TOP POSITION (LED POS 1)

| ABSOLUTE MAXIMUM RATING AT 25°C AMBIENT            |                | OPERATING CHARACTERISTICS AT 25 °C AMBIENT |       |
|--|----------------|--|-------|
| CHARACTERISTICS                                    | UNITS          | CHARACTERISTICS                            | UNITS |
| POWER DISSIPATION                                  | BLUE 90        | MIN  | MAX   |
| FORWARD CURRENT                                    | 20 mA          | 7.1  | 18.0  |
| OPERATING LINEAR FROM 50°C                         | -44 mA/°C      | 3.5  | 4.1   |
| REVERSE VOLTAGE                                    | 5 V            | 462  | 468   |
| LEAD SOLDERING TEMPERATURE, 5 SEC, 1/16" FROM BODY | 260 °C         | 428  |       |
| OPERATING TEMPERATURE                              | -55 to +100 °C | VIEW ANGLE                                 | 2 1/2 |
| STORAGE TEMPERATURE                                | -55 to +100 °C | PEAK EMISSION WAVELENGTH                   |       |
|  |                |  | 70    |

| ABSOLUTE MAXIMUM RATING AT 25°C AMBIENT            |                | OPERATING CHARACTERISTICS AT 25 °C AMBIENT |       |
|--|----------------|--|-------|
| CHARACTERISTICS                                    | UNITS          | MIN  | MAX   |
| POWER DISSIPATION                                  | BLUE 90        | 7.1  | 18.0  |
| FORWARD CURRENT                                    | 20 mA          | 3.5  | 4.1   |
| OPERATING LINEAR FROM 50°C                         | -44 mA/°C      | 462  | 468   |
| REVERSE VOLTAGE                                    | 5 V            | 428  |       |
| LEAD SOLDERING TEMPERATURE, 5 SEC, 1/16" FROM BODY | 260 °C         | VIEW ANGLE                                 | 2 1/2 |
| OPERATING TEMPERATURE                              | -55 to +100 °C | PEAK EMISSION WAVELENGTH                   |       |
| STORAGE TEMPERATURE                                | -55 to +100 °C |  | 70    |

|  |                |                   |
|--|----------------|-------------------|
| ALL DIM'S IN: INCHES (MM)              | DRAWING NUMBER | REV               |
| TOLERANCES: UNLESS OTHERWISE SPECIFIED | C-17439        | A                 |
| FRACTIONS: ±1/64                       | TITLE          | CBI, 3MM BI-LEVEL |
| DECIMALS (.XX): ±.01                   | MATERIAL       | RoHS COMPLIANT    |
| DECIMALS (.XXX): ±.005                 |                |                   |
| DECIMALS (.XXXX): ±.0005               |                |                   |
| ANGLES: ±1°                            |                |                   |
| FINISH:                                |                |                   |