

| OPERATING CHARACTERISTICS AT 25°C AMBIENT |                         |         |         |                                    |                      |                          |      |         |                          |         |                        |
|-------------------------------------------|-------------------------|---------|---------|------------------------------------|----------------------|--------------------------|------|---------|--------------------------|---------|------------------------|
| PART NUMBER                               | FORWARD VOLTAGE/CURRENT |         |         | REVERSE VOLTAGE (V)                | PEAK WAVELENGTH (nm) | DOMINANT WAVELENGTH (nm) |      |         | LUMINOUS INTENSITY (mcd) |         | TEST CONDITIONS        |
|                                           | MIN.                    | TYP.    | MAX.    |                                    | TYP.                 | MIN.                     | TYP. | MAX.    | MIN.                     | TYP.    |                        |
| 551-0203F                                 | 1.5 V                   | 2.1 V   | 2.6 V   | V <sub>R</sub> = 5 V MIN. @ 10 μA  | 565                  | 564                      | 568  | 573     | 5.6                      | 12      | I <sub>F</sub> = 10 mA |
| 551-0303F                                 |                         | 2.1 V   | 2.6 V   | V <sub>R</sub> = 5 V MIN. @ 10 μA  | 585                  | 584                      | 590  | 595     | 3.7                      | 8.7     | I <sub>F</sub> = 10 mA |
| 551-0403F                                 |                         | 2.0 V   | 2.6 V   | V <sub>R</sub> = 5 V MIN. @ 10 μA  | 635                  | 615                      | 625  | 632     | 2.5                      | 8.7     | I <sub>F</sub> = 10 mA |
| 551-0503F                                 |                         | 10 mA   | 20 mA   | V <sub>R</sub> = 5 V MIN. @ 100 μA | 635                  | —                        | —    | —       | 8.7                      | 29      | V <sub>F</sub> = 5 V   |
| 551-0603F                                 |                         | 10 mA   | 20 mA   | V <sub>R</sub> = 5 V MIN. @ 100 μA | 565                  | —                        | —    | —       | 5.6                      | 19      | V <sub>F</sub> = 5 V   |
| 551-0703F                                 |                         | 10 mA   | 20 mA   | V <sub>R</sub> = 5 V MIN. @ 100 μA | 585                  | —                        | —    | —       | 3.7                      | 12.6    | V <sub>F</sub> = 5 V   |
| 551-0803F                                 |                         | 3.5 V   | 4.1 V   | V <sub>R</sub> = 5 V MIN. @ 10 μA  | 428                  | 462                      | 465  | 468     | 7.1                      | 12.5    | I <sub>F</sub> = 10 mA |
| 551-1103F                                 |                         | 1.7 V   | 2.2 V   | V <sub>R</sub> = 5 V MIN. @ 50 μA  | 635                  | —                        | —    | —       | 1.0                      | 1.6     | I <sub>F</sub> = 2 mA  |
| 551-1203F                                 |                         | 1.8 V   | 2.7 V   | V <sub>R</sub> = 5 V MIN. @ 50 μA  | 585                  | —                        | 587  | —       | 1.0                      | 1.6     | I <sub>F</sub> = 2 mA  |
| 551-1303F                                 |                         | 1.9 V   | 2.2 V   | V <sub>R</sub> = 5 V MIN. @ 50 μA  | 565                  | —                        | —    | —       | 1.0                      | 1.6     | I <sub>F</sub> = 2 mA  |
| 551-2503F                                 | 1.5 V                   | 2.2 V   | 3.0 V   | V <sub>R</sub> = 5 V MIN. @ 100 μA | 600                  | —                        | —    | —       | 3.4                      | 7.0     | I <sub>F</sub> = 10 mA |
| 551-3003F                                 |                         |         |         | N/A                                | 635/565              | —                        | —    | —       | 2.5/3.7                  | 4.7/10  | I <sub>F</sub> = 10 mA |
|                                           |                         | 2.0/2.1 | 2.8/2.8 |                                    |                      | —                        | —    | —       |                          |         | I <sub>F</sub> = 20 mA |
| 551-3103F                                 |                         |         |         | N/A                                | 585/565              | —                        | —    | —       | 2.5/2.5                  | 4.3/6.3 | I <sub>F</sub> = 10 mA |
|                                           |                         | 2.1/2.1 | 2.8/2.8 |                                    |                      | 585/583                  | —    | 589/587 |                          |         | I <sub>F</sub> = 20 mA |

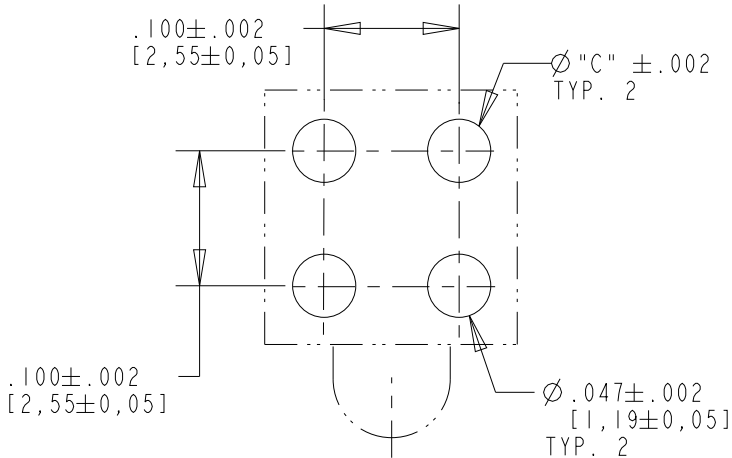
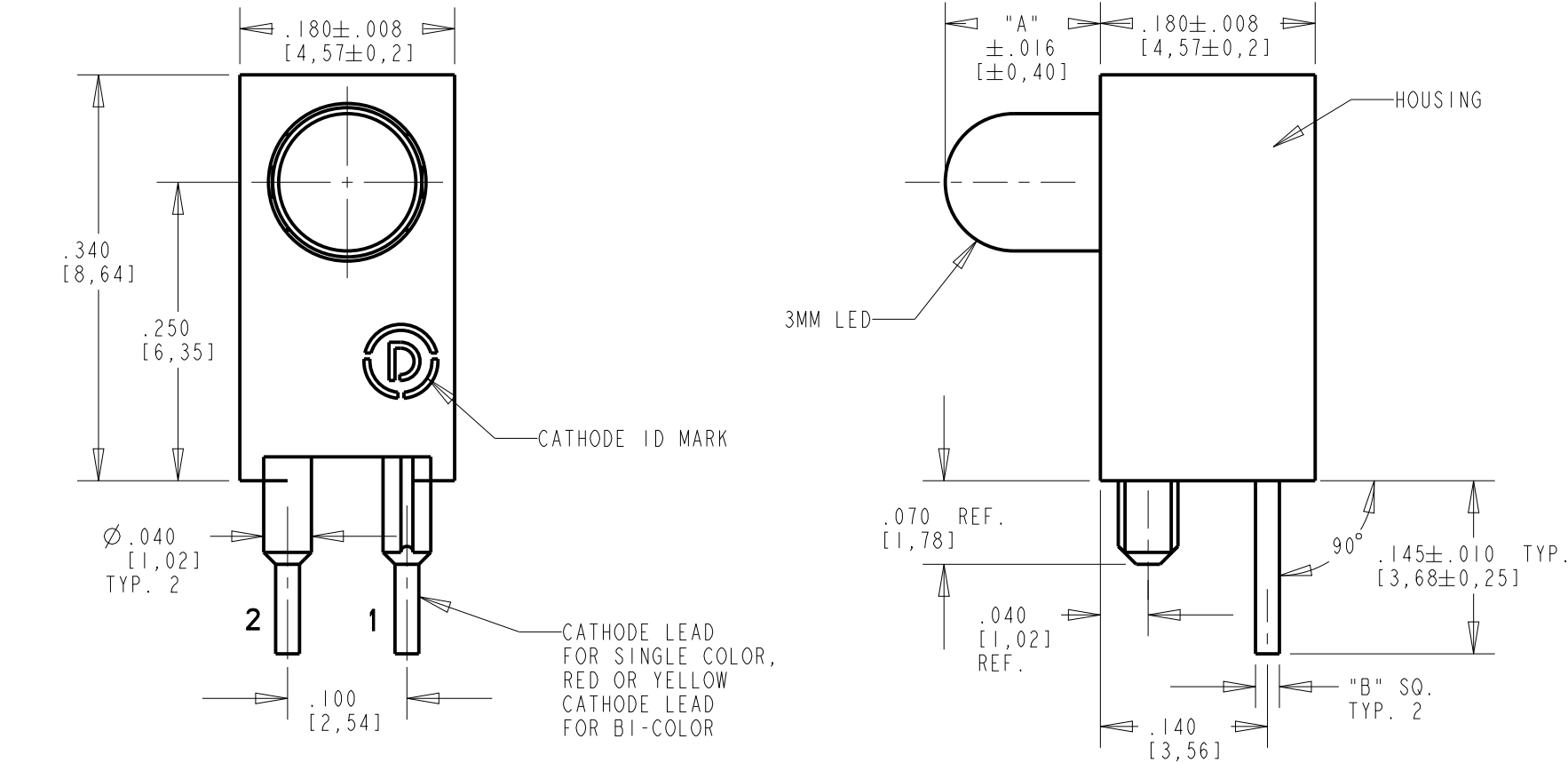
| REV. | ECN NO. | REVISIONS                                                       | DRN. | CKD. | APP. | DATE    |
|------|---------|-----------------------------------------------------------------|------|------|------|---------|
| A    | —       | NEW RELEASE                                                     | TWC  | TC   | NO   | 8-30-05 |
| B    | —       | ADDED P/N 551-0803F                                             | CE   | —    | —    | —       |
| C    | —       | UPDATED DIMENSION A AND LED SPECS FOR P/N 551-0203F/0303F/0404F | BP   | —    | NO   | 8-22-16 |

| PART NUMBER | LED COLOR             | "A" DIMENSION | "B" DIMENSION | "C" DIMENSION |
|-------------|-----------------------|---------------|---------------|---------------|
| 551-0203F   | GREEN DIFFUSED        | .130 [3,30]   | .016x.018     | .040 [1,02]   |
| 551-0303F   | YELLOW DIFFUSED       | .130 [3,30]   | .016x.018     | .040 [1,02]   |
| 551-0403F   | RED DIFFUSED          | .130 [3,30]   | .016x.018     | .040 [1,02]   |
| 551-0503F   | RED W/RESISTOR 5V     | .130 [3,30]   | .018 [0,46]   | .040 [1,02]   |
| 551-0603F   | GREEN W/RESISTOR 5V   | .130 [3,30]   | .018 [0,46]   | .040 [1,02]   |
| 551-0703F   | YELLOW W/RESISTOR 5V  | .130 [3,30]   | .018 [0,46]   | .040 [1,02]   |
| 551-0803F   | BLUE DIFFUSED         | .136 [3,45]   | .020 [0,51]   | .043 [1,09]   |
| 551-1103F   | 2 mA RED DIFFUSED     | .130 [3,30]   | .018 [0,46]   | .040 [1,02]   |
| 551-1203F   | 2 mA YELLOW DIFFUSED  | .130 [3,30]   | .018 [0,46]   | .040 [1,02]   |
| 551-1303F   | 2 mA GREEN DIFFUSED   | .130 [3,30]   | .018 [0,46]   | .040 [1,02]   |
| 551-2503F   | ORANGE DIFFUSED       | .130 [3,30]   | .018 [0,46]   | .040 [1,02]   |
| 551-3003F   | RED/GREEN BI-COLOR    | .136 [3,45]   | .020 [0,51]   | .043 [1,09]   |
| 551-3103F   | YELLOW/GREEN BI-COLOR | .130 [3,30]   | .020 [0,51]   | .043 [1,09]   |

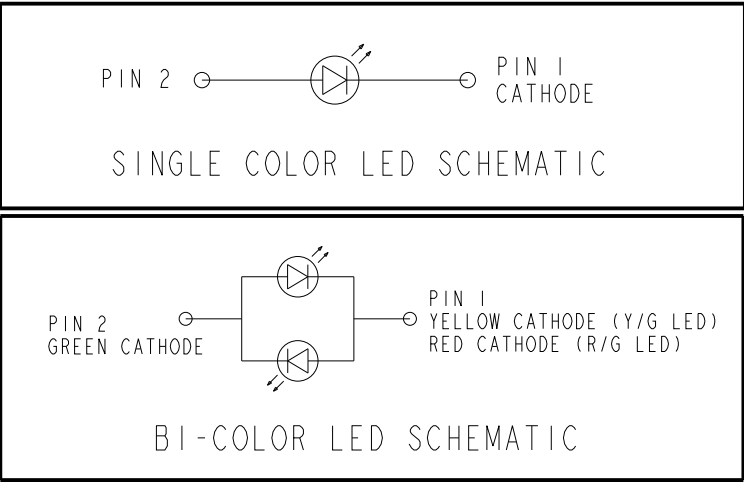
- NOTES:
- LEADS TO FIT INTO HOLES SPACED AS PER HOLE PATTERN.
  - LED LEAD DIMENSIONS SHOWN ARE MEASURED AT HOUSING EXIT.
  - DIALIGHT PART NUMBER: 551-XX03F
  - THIS ASSEMBLY CONTAINS ELECTROSTATIC DISCHARGE SENSITIVE DEVICES (ESDS). MAINTAIN ALL PRECAUTIONARY MEASURES DURING ASSEMBLY, HANDLING AND STORAGE IN ACCORDANCE WITH IPC-A-610.

RoHS Compliant 551-XX03F Thru hole CBI

Part Numbers with the "F" suffix ending are RoHS Compliant.  
Example: 551-3103F  
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.



RECOMMENDED P.C. BOARD HOLE PATTERN



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: 7.000                                                                                                                                                                                                                  | DRAWING NUMBER<br><br>C-17295                                                         | REV<br><br>C                                 |
| ALL DIM'S IN: INCHES (MM)                                                                                                                                                                                                     |                                                                                       |                                              |
| TOLERANCES:<br>UNLESS OTHERWISE SPECIFIED                                                                                                                                                                                     | TITLE 3mm LED CBI, .250" HIGH LED<br>RoHS COMPLIANT                                   |                                              |
| FRACTIONS: ±1/64<br>DECIMALS (.XX): ±.020<br>DECIMALS (.XXX): ±.005<br>DECIMALS (.XXXX): ±.0005<br>ANGLES: ±3°                                                                                                                |                                                                                       |                                              |
| FINISH:<br><br>-                                                                                                                                                                                                              | MATERIAL                                                                              |                                              |
| FSCM 83330                                                                                                                                                                                                                    |  | 1501 ROUTE 34 SOUTH<br>FARMINGDALE, NJ 07727 |
|                                                                                                                                                                                                                               |                                                                                       |                                              |
|                                                                                                                                                                                                                               | SHEET 1 OF 1                                                                          | FAMILY TABLE:                                |