

| PART NUMBER   | LED COLOR | REVISIONS |        |     |          |
|---------------|-----------|-----------|--------|-----|----------|
|               |           | REV       | ECN No | DRN | DATE     |
| 597-3008-202F | RED       | A         | —      | KLJ | 11-12-07 |
| 597-3008-207F | RED       | A         | —      | KLJ | 11-12-07 |
| 597-3208-202F | ORANGE    | A         | —      | KLJ | 11-12-07 |
| 597-3208-207F | ORANGE    | A         | —      | KLJ | 11-12-07 |
| 597-3308-202F | GREEN     | A         | —      | KLJ | 11-12-07 |
| 597-3308-207F | GREEN     | A         | —      | KLJ | 11-12-07 |
| 597-3408-202F | YELLOW    | A         | —      | KLJ | 11-12-07 |
| 597-3408-207F | YELLOW    | A         | —      | KLJ | 11-12-07 |

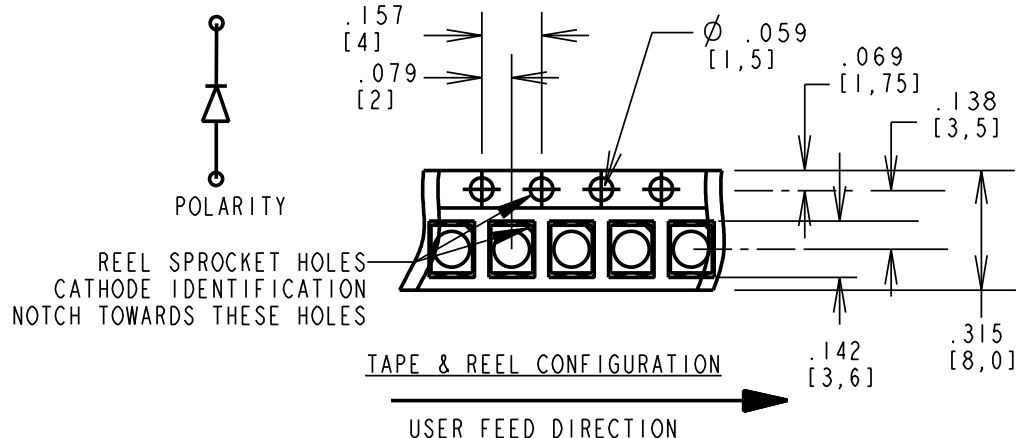
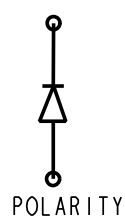
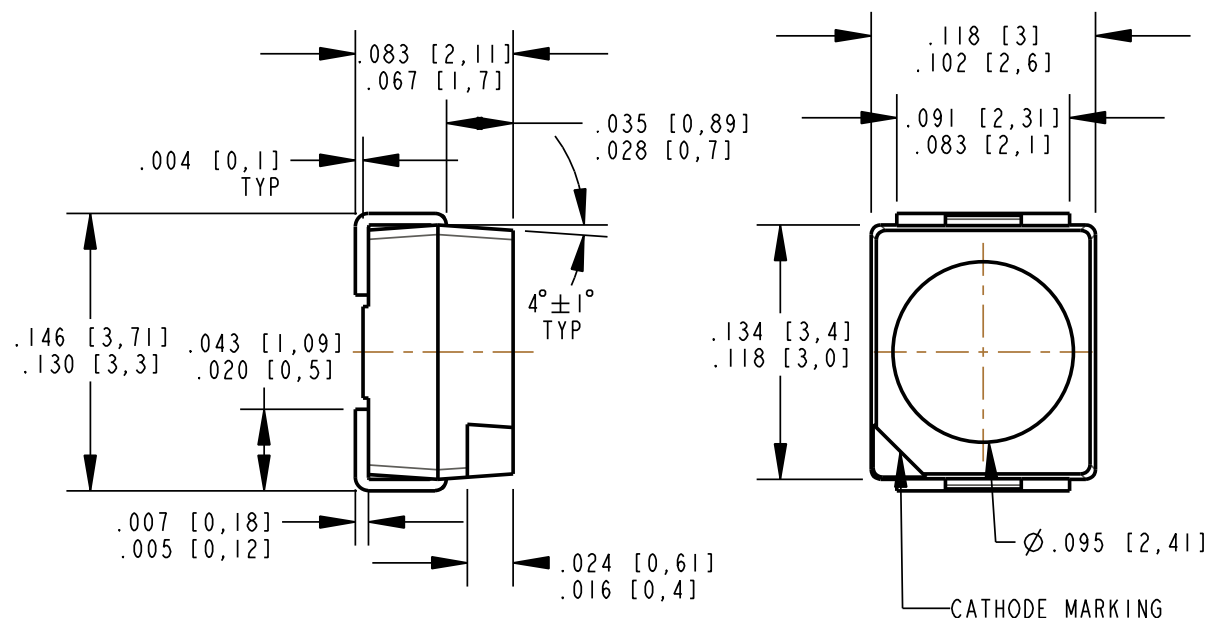
| REV | ECN NO | REVISIONS   | DRN | CKD | APP | DATE |
|-----|--------|-------------|-----|-----|-----|------|
| A   | —      | NEW RELEASE | KLJ |     |     |      |



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

| ABSOLUTE MAXIMUM RATING AT 25°C AMBIENT |             | UNITS |
|---|-------------|-------|
| OPERATING TEMPERATURE                   | -40 TO +100 | °C    |
| STORAGE TEMPERATURE                     | -40 TO +100 | °C    |
| JUNCTION TEMPERATURE                    | +125        | °C    |
| FORWARD CURRENT                         | 20          | mA    |
| SURGE CURRENT                           | 100         | mA    |
| REVERSE VOLTAGE                         | 12          | V     |
| POWER CONSUMPTION                       | 50          | mW    |

| OPERATING CHARACTERISTICS AT 25°C AMBIENT |        |      |      |      |        |                      |
|---|--------|------|------|------|--------|----------------------|
| CHARACTERISTICS                           | COLOR  | MIN  | TYP  | MAX  | UNITS  | TEST CONDITIONS      |
| LUMINOUS INTENSITY                        | RED    | 7.1  | 12.6 | 18.0 | mcd    | $I_f = 2 \text{ mA}$ |
|   | GREEN  | 3.55 | 6.28 | 9.0  |        |                      |
|   | YELLOW | 9.0  | 15.7 | 22.4 |        |                      |
|   | ORANGE | 11.2 | 19.6 | 28.0 |        |                      |
|   | RED    | —    | 65   | —    |        |                      |
|   | GREEN  | —    | 31   | —    |        |                      |
|   | YELLOW | —    | 80   | —    |        |                      |
| FORWARD VOLTAGE                           | RED    | 1.7  | 1.8  | 2.2  | V      | $I_f = 2 \text{ mA}$ |
|   | GREEN  | 1.7  | 1.8  | 2.2  |        |                      |
|   | YELLOW | 1.7  | 1.8  | 2.2  |        |                      |
|   | ORANGE | 1.7  | 1.8  | 2.2  |        |                      |
| REVERSE CURRENT                           | RED    | —    | 0.01 | 10   | µA     | $V_R = 12 \text{ V}$ |
|   | GREEN  | —    | 0.01 | 10   |        |                      |
|   | YELLOW | —    | 0.01 | 10   |        |                      |
|   | ORANGE | —    | 0.01 | 10   |        |                      |
| VIEWING ANGLE                             |        | 120  |      |      | Degree |                      |
| DOMINANT WAVELENGTH                       | RED    | 624  | 630  | 636  | nm     | $I_f = 2 \text{ mA}$ |
|   | GREEN  | 566  | 570  | 575  |        |                      |
|   | YELLOW | 580  | 587  | 595  |        |                      |
|   | ORANGE | 600  | 606  | 609  |        |                      |
| PEAK WAVELENGTH                           | RED    | —    | 643  | —    | nm     | $I_f = 2 \text{ mA}$ |
|   | GREEN  | —    | 572  | —    |        |                      |
|   | YELLOW | —    | 591  | —    |        |                      |
|   | ORANGE | —    | 610  | —    |        |                      |

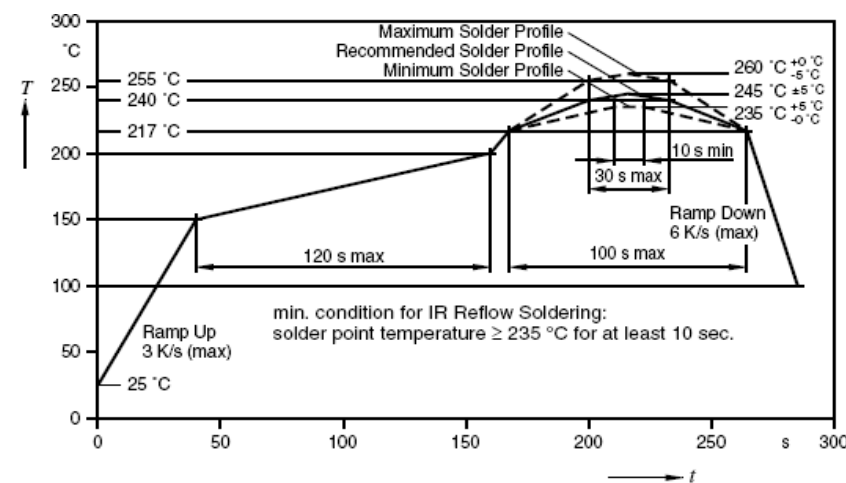
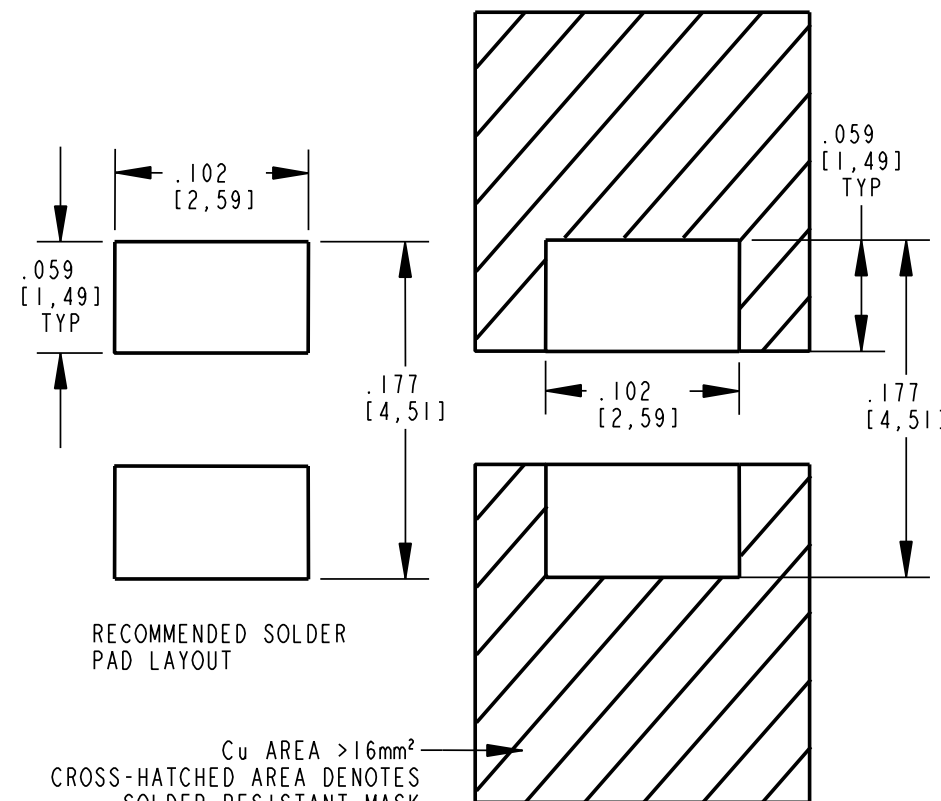


**RoHS Compliant 597-3X08-2XXF Surface Mount LED**

Part Numbers with the "F" suffix ending are RoHS Compliant.  
 Example: 597-3308-207F  
 Reel and bag packaging are marked with "RoHS Compliant" label or equivalent markings. These parts can be used with RoHS reflow profile. Parts can be wave soldered, dip soldered or hand soldered using typical lead-free soldering process with max 260°C temp. for 5 sec.

**NOTES:**

- COLORLESS CLEAR WINDOW.
- LED CHIP: InGaAlP
- LED LEAD FINISH: PURE MATT TIN (Sn)  $8.0 \pm 2.0 \mu\text{m}$  WITH NICKEL (Ni) UNDER LAYER OF COPPER (Cu).
- 2000 PARTS/REEL, 180mm DIA. REEL WITH 12mm WIDTH CARRIER, REEL, AND PACKAGING HAS A LABEL WITH DIALIGHT LOGO, DIALIGHT P/N, QTY PER REEL, DATE CODE, LOT NUMBER, INTENSITY BIN CODE, COLOR BIN, AND COUNTRY OF ORIGIN.
- DIALIGHT PART NUMBERS:  
 597-3008-207F, FULL REEL 7" DIA.; 597-3008-002F, SAMPLE STRIP 20 PCS/STRIP;  
 597-3208-207F, FULL REEL 7" DIA.; 597-3208-002F, SAMPLE STRIP 20 PCS/STRIP;  
 597-3308-207F, FULL REEL 7" DIA.; 597-3308-002F, SAMPLE STRIP 20 PCS/STRIP;  
 597-3408-207F, FULL REEL 7" DIA.; 597-3408-002F, SAMPLE STRIP 20 PCS/STRIP.
- ESD WITHSTAND VOLTAGE: UP TO 2kV ACCORDING TO JESD22-A114-B
- "ATTENTION" OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC SENSITIVE DEVICES. PACKAGE THIS PRODUCTION IN ANTI-STATIC BAG WITH ESD PRECAUTION LABEL P/N 9100-117-0505-00 ON EACH BAG. FOR EYE SAFETY, DO NOT STARE DIRECTLY INTO THE LIGHT BEAM OF THIS LED DEVICE AT CLOSE RANGE.
- MOISTURE SENSITIVITY LEVEL 2.
- TAPE AND REEL LEDS MAY REQUIRE RE-TAPING AFTER TWELVE MONTHS.



RECOMMENDED REFLOW SOLDERING PROFILE

|   |  |               |
|---|--|---------------|
| 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: 10.000<br>ALL DIM'S IN: INCHES (MM)  | DRAWING NUMBER<br>C-17562                                | REV<br>A      |
| TOLERANCES:<br>UNLESS OTHERWISE SPECIFIED   | TITLE PLCC-2 LOW CURRENT 2mA SMT LED<br>RoHS COMPLIANT   |               |
| AS PER MFR DATA SHEET   | MATERIAL   |               |
| FINISH:   | Dialight<br>1501 ROUTE 34 SOUTH<br>FARMINGDALE, NJ 07727 |               |
| FSCM 83330  | SHEET 1 OF 1   | FAMILY TABLE: |