

| DIALIGHT<br>PART NUMBER | LED<br>COLOR   |
|-------------------------|----------------|
| 597-2211-602F, -607F    | AlInGaP ORANGE |
| 597-2222-602F, -607F    | AlInGaP YELLOW |
| 597-2501-602F, -607F    | AlInGaP GREEN  |
| 597-2601-602F, -607F    | InGaN GREEN    |
| 597-2901-602F, -607F    | InGaN BLUE     |

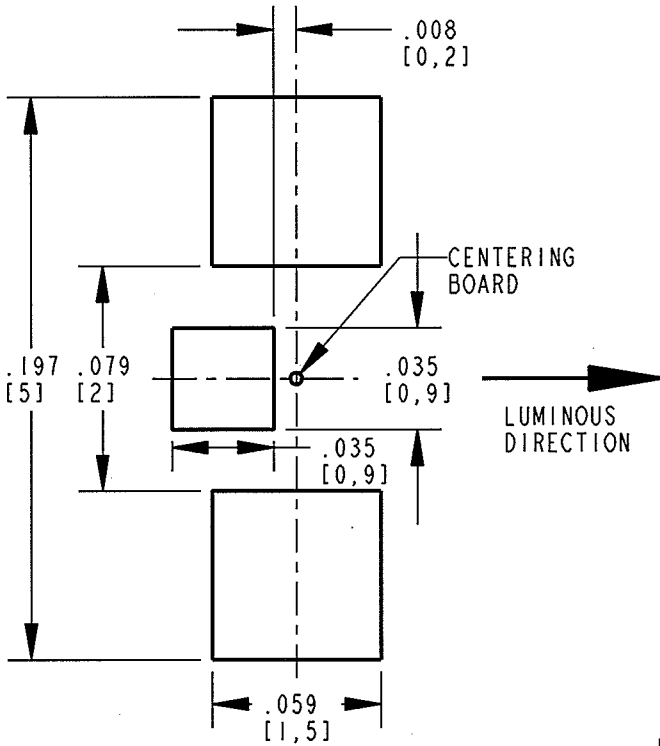
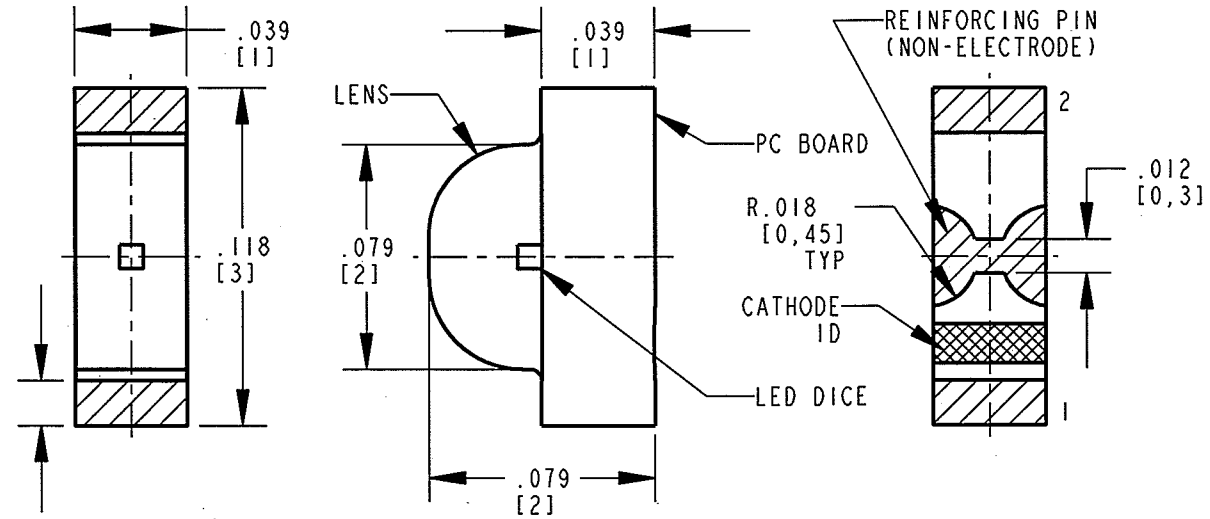
### RoHS COMPLIANT 597-2XXX-60XF

Part Numbers with the "F" suffix ending are RoHS Compliant.  
For example: 597-2222-607F  
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.

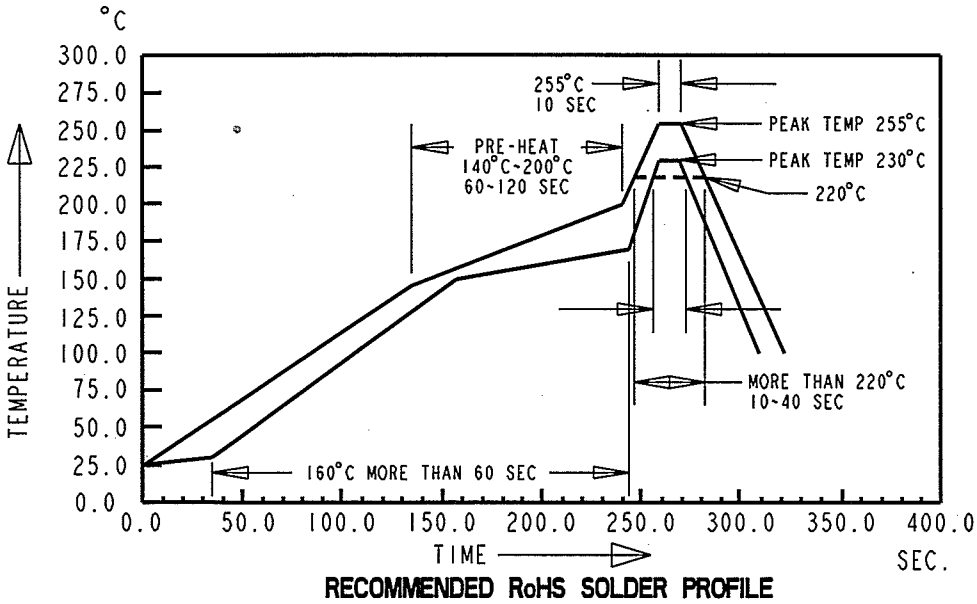


**ATTENTION:**  
OBSERVE PRECAUTIONS FOR  
HANDLING ELECTROSTATIC  
SENSITIVE DEVICES

| REV | ECN NO | REVISIONS   | DRN | CKD  | APP    | DATE |
|-----|--------|-------------|-----|------|--------|------|
| A   |        | NEW RELEASE | KLJ | M.O. | 1/7/24 |      |



**RECOMMENDED SOLDERING  
PAD LAYOUT**



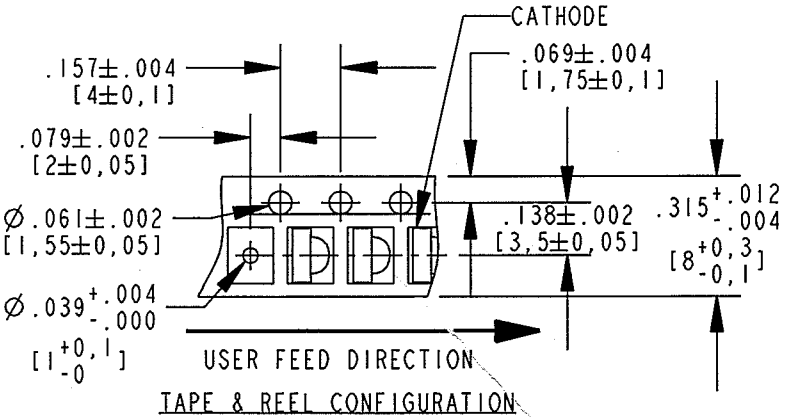
**NOTES:**

1. EPOXY COLOR: WATER CLEAR
2. MOISTURE SENSITIVITY LEVEL 3.
3. LEADS: 0.2  $\mu$ m GOLD (Au) OVER 4.0  $\mu$ m NICKEL (Ni) ON COPPER (Cu) BASE.
4. TAPE & REEL AS PER EIA STANDARD 481-1-A; CATHODE SIDE TOWARDS SPROCKET.
5. TAPE & REEL LEDS MAY REQUIRE RE-TAPING AFTER TWELVE MONTHS.
6. PIN NUMBERS ARE FOR REFERENCE ONLY, DESIGNATION NON-EXISTENT ON PART.
7. ...-602F SUFFIX MEANS PARTS PACKAGED ON A 20 PCS SAMPLE STRIP.
8. ...-607F SUFFIX MEANS PARTS PACKAGED ON A 7"  $\varnothing$ 180mm REEL, 3000 PCS/REEL.
9. DIALIGHT PART NUMBERS:  
597-2211-602F, -607F; 597-2222-602F, -607F; 597-2501-602F, -607F;  
597-2601-602F, -607F; 597-2901-602F, -607F
10. PACKAGING TO INCLUDE LABEL CONTAINING DIALIGHT P/N, DATE CODE/LOT NO.,  
LUMINOUS INTENSITY AND COLOR BINS, QTY/REEL, AND COUNTRY OF ORIGIN.
11. THIS ASSEMBLY CONTAINS ELECTROSTATIC DISCHARGE SENSITIVE DEVICES  
(ESDS). MAINTAIN ALL PRECAUTIONARY MEASURES DURING ASSEMBLY,  
HANDLING, AND STORAGE IN ACCORDANCE WITH IPC-A-610.

**OPERATING CHARACTERISTICS AT 25°C AMBIENT**

| COLOR          | LUMINOUS<br>INTENSITY<br>(mcd) @ I <sub>F</sub> =20mA |     |     | FORWARD<br>VOLTAGE<br>(V) @ I <sub>F</sub> =20mA |     |     | REVERSE<br>CURRENT<br>( $\mu$ A) | DOMINANT<br>WAVELENGTH<br>(nm) |     |     | PEAK<br>WAVELENGTH<br>(nm) | VIEWING<br>ANGLE<br>(DEG) |
|----------------|-------------------------------------------------------|-----|-----|--------------------------------------------------|-----|-----|----------------------------------|--------------------------------|-----|-----|----------------------------|---------------------------|
|                | MIN                                                   | TYP | MAX | MIN                                              | TYP | MAX |                                  | MIN                            | TYP | MAX |                            |                           |
| AlInGaP ORANGE | 71                                                    | 125 | 180 | —                                                | 2.0 | 2.4 | 10                               | 598                            | 605 | 612 | 611                        | 130                       |
| AlInGaP YELLOW | 71                                                    | 125 | 180 | 1.8                                              | —   | 2.4 | 10                               | 587                            | 589 | 592 | 588                        | 130                       |
| AlInGaP GREEN  | 28                                                    | 50  | 71  | —                                                | 2.0 | 2.4 | 10                               | 570                            | 572 | 577 | 574                        | 130                       |
| InGaN GREEN    | 112                                                   | 195 | 280 | 2.8                                              | 3.2 | 3.6 | 10                               | 520                            | 525 | 535 | 525                        | 130                       |
| InGaN BLUE     | 71                                                    | 125 | 180 | 2.8                                              | —   | 3.8 | 10                               | 465                            | 470 | 475 | 468                        | 130                       |

| ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT                     | COLOR             |                   |                  |                |               | UNITS |
|--------------------------------------------------------------|-------------------|-------------------|------------------|----------------|---------------|-------|
|                                                              | AlInGaP<br>ORANGE | AlInGaP<br>YELLOW | AlInGaP<br>GREEN | InGaN<br>GREEN | InGaN<br>BLUE |       |
| POWER DISSIPATION                                            | 75                | 75                | 75               | 76             | 76            | mW    |
| CONTINUOUS FORWARD CURRENT                                   | 30                | 30                | 30               | 20             | 20            | mA    |
| PEAK FORWARD CURRENT<br>(1/10 DUTY CYCLE, 0.1ms PULSE WIDTH) | 80                | 80                | 80               | 100            | 100           | mA    |
| DERATE LINEARLY FROM 25°C                                    | 0.4               | 0.4               | 0.4              | 0.25           | 0.25          | mW/°C |
| REVERSE VOLTAGE                                              | 5                 |                   |                  |                |               | V     |
| STORAGE TEMPERATURE                                          | -55 TO +85        |                   |                  |                |               | °C    |
| OPERATING TEMPERATURE                                        | -55 TO +85        |                   |                  |                |               | °C    |



**USER FEED DIRECTION  
TAPE & REEL CONFIGURATION**

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: 15.000                                                                     | DRAWING NUMBER                                   | REV |
| ALL DIM'S IN: INCHES (MM)                                                         | C-17683                                          | A   |
| TOLERANCES:<br>UNLESS OTHERWISE SPECIFIED                                         | TITLE 1208 SMT RIGHT ANGLE LED<br>RoHS COMPLIANT |     |
| FRACTIONS: $\pm 1/64$<br>DECIMALS (.XX): $\pm .01$<br>DECIMALS (.XXX): $\pm .005$ | MATERIAL                                         |     |
| ANGLES: $\pm 1^\circ$                                                             | Dialight                                         |     |
| FINISH:                                                                           | 1501 ROUTE 34 SOUTH<br>FARMINGDALE, NJ 07727     |     |
| FSCM 83330                                                                        | SHEET 1 OF 1 FAMILY TABLE:                       |     |