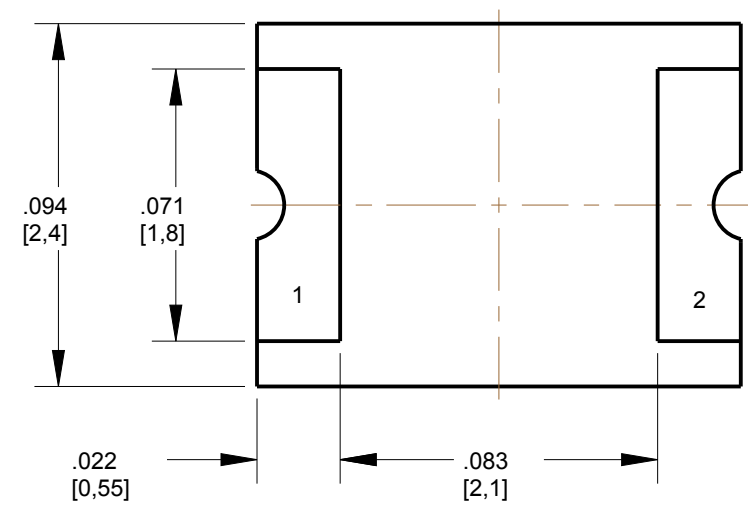
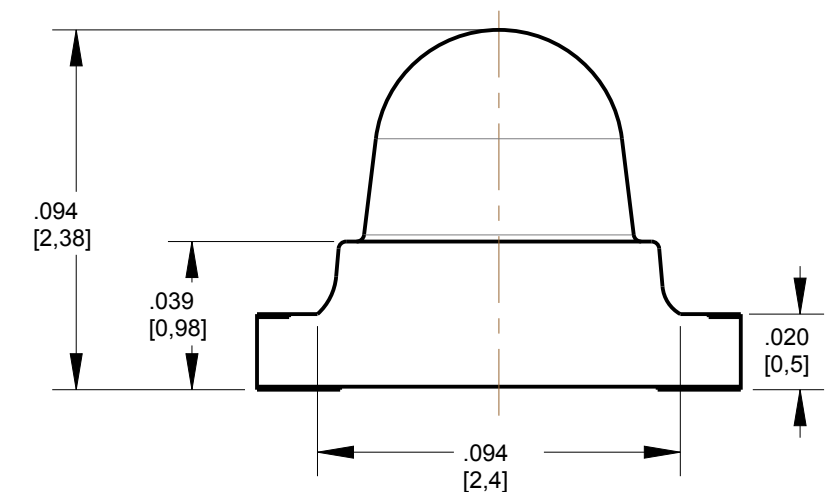
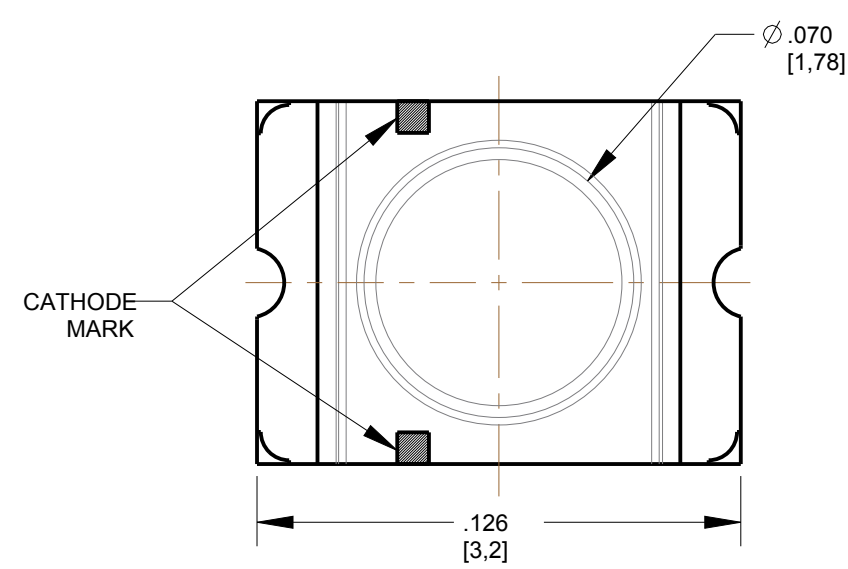
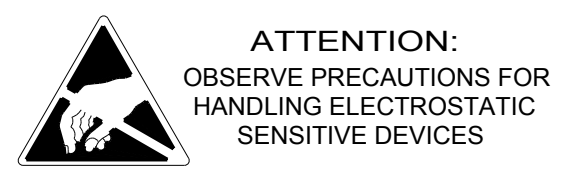
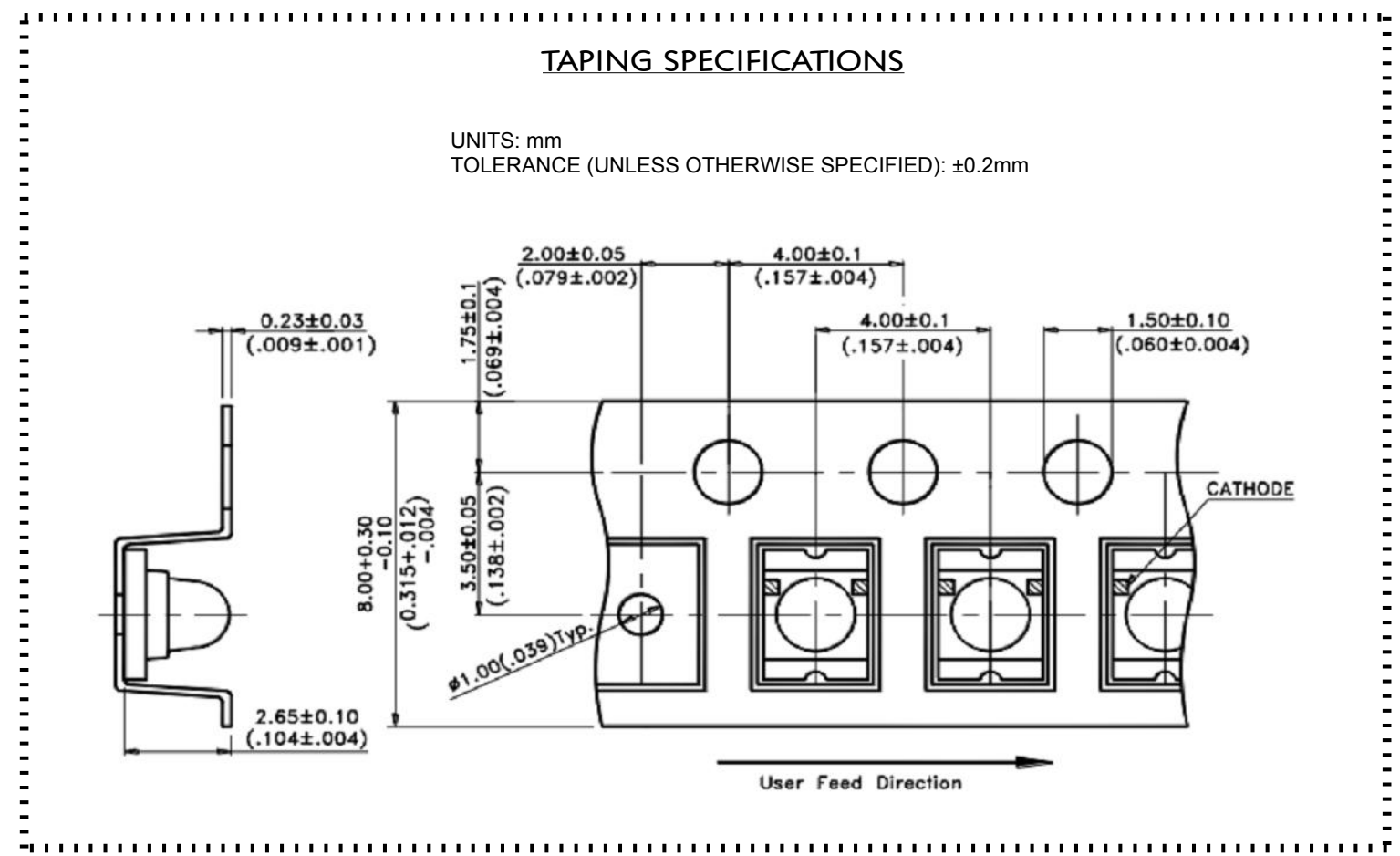
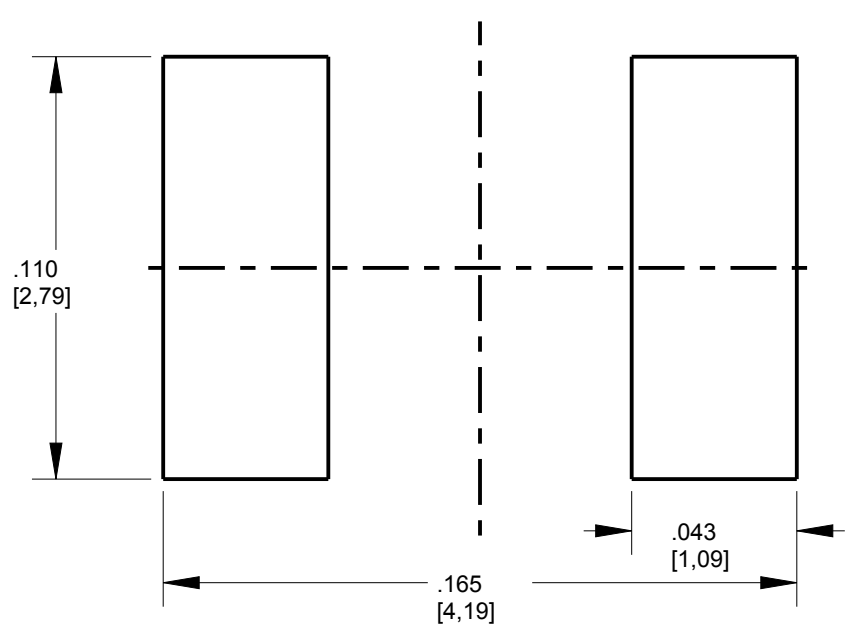


| DIALIGHT PART NO.  | LED COLOR (nm)     |
|--------------------|--------------------|
| 597-3001-602F,607F | RED (630)          |
| 597-3041-602F,607F | RED ORANGE (615)   |
| 597-3201-602F,607F | ORANGE (605)       |
| 597-3501-602F,607F | YELLOW GREEN (570) |
| 597-3401-602F,607F | YELLOW (590)       |
| 597-3321-602F,607F | GREEN (525)        |
| 597-3601-602F,607F | BLUE (470)         |

| REV | REVISIONS   | DRN | APP | DATE    |
|-----|-------------|-----|-----|---------|
| A   | NEW RELEASE | LD  | NO  | 9-24-19 |



RECOMMENDED SOLDER PAD LAYOUT



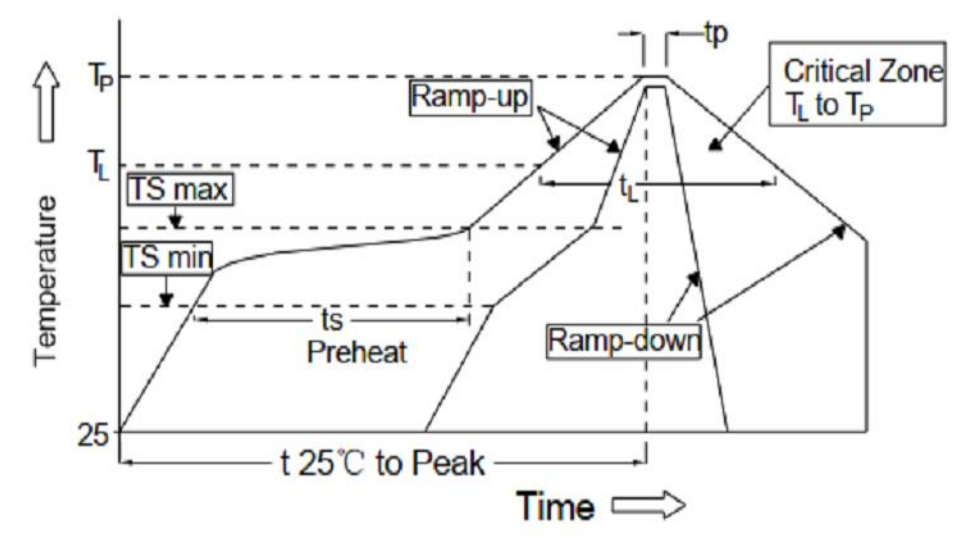
TAPING SPECIFICATIONS

UNITS: mm  
TOLERANCE (UNLESS OTHERWISE SPECIFIED): ±0.2mm

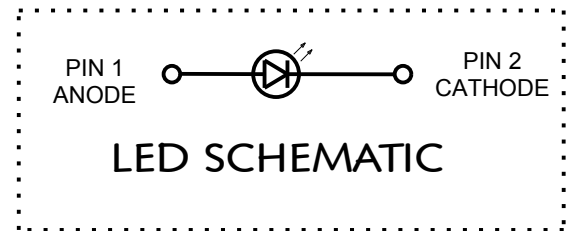
| ELECTRICAL OPTICAL CHARACTERISTICS AT 25 °C |                |                          |      |      |                          |                          |      |      |                 |                          |                                      |      |      |                                    |
|---|----------------|--------------------------|------|------|--------------------------|--------------------------|------|------|-----------------|--------------------------|--------------------------------------|------|------|------------------------------------|
| LED COLOR                                   | TEST CONDITION | LUMINOUS INTENSITY (mcd) |      |      | PEAK EMISSION WAVELENGTH | DOMINANT WAVELENGTH (nm) |      |      | REVERSE CURRENT | SPECTRAL LINE HALF-WIDTH | FORWARD VOLTAGE I <sub>F</sub> =20mA |      |      | VIEWING ANGLE I <sub>F</sub> =20mA |
|   |                | IF (mA)                  | MIN. | TYP. | MAX.                     | TYP.                     | MIN. | TYP. | MAX.            | MAX.                     | TYP.                                 | TYP. | MAX. | TYP.                               |
| RED   | 20             | 10µA @ VR=5V             | 710  | 850  | 2800                     | 639                      |      | 630  |                 | 20                       | 2.0                                  | 2.4  | 25   |                                    |
| RED ORANGE                                  |                |                          | 710  | 2605 | 4500                     | 621                      |      | 615  |                 | 18                       | 2.0                                  | 2.4  | 25   |                                    |
| ORANGE                                      |                |                          | 450  | 1200 | 4500                     | 611                      | 600  | 605  | 610             | 17                       | 2.0                                  | 2.4  | 25   |                                    |
| YELLOW GREEN                                |                |                          | 180  | 600  | 1800                     | 574                      |      | 570  |                 | 15                       | 2.0                                  | 2.4  | 25   |                                    |
| YELLOW                                      |                |                          | 450  | 710  | 1800                     | 588                      | 587  | 590  | 595             | 15                       | 2.0                                  | 2.4  | 25   |                                    |
| GREEN                                       |                |                          | 710  | 2000 | 4500                     | 530                      |      | 525  |                 | 35                       | 2.8                                  | 3.6  | 25   |                                    |
| BLUE  |                |                          | 560  | 1400 | 2240                     | 468                      | 465  | 470  | 475             | 25                       | 3.4                                  | 3.8  | 25   |                                    |

| ABSOLUTE MAXIMUM RATINGS AT 25 °C |                        |                           |                      |                                  |                     |                            |                          |                          |
|-----------------------------------|------------------------|---------------------------|----------------------|----------------------------------|---------------------|----------------------------|--------------------------|--------------------------|
| LED COLOR                         | POWER DISSIPATION (mW) | PEAK FORWARD CURRENT (mA) | FORWARD CURRENT (mA) | DERATING LINEAR FROM 25° C mA/°C | REVERSE VOLTAGE (V) | OPERATING TEMPERATURE (°C) | STORAGE TEMPERATURE (°C) | SOLDERING CONDITION (°C) |
| RED                               | 75                     | 80                        | 30                   | 0.4                              | 5                   | -55 TO +85                 | -55 TO +85               | 260                      |
| RED ORANGE                        | 75                     | 80                        | 30                   | 0.4                              |                     | -30 TO +85                 | -40 TO +85               |                          |
| ORANGE                            | 75                     | 80                        | 30                   | 0.4                              |                     | -55 TO +85                 | -55 TO +85               |                          |
| YELLOW GREEN                      | 75                     | 80                        | 30                   | 0.4                              |                     | -55 TO +85                 | -55 TO +85               |                          |
| YELLOW                            | 75                     | 80                        | 30                   | 0.4                              |                     | -55 TO +85                 | -55 TO +85               |                          |
| GREEN                             | 76                     | 100                       | 20                   | 0.25                             |                     | -20 TO +80                 | -30 TO +100              |                          |
| BLUE                              | 76                     | 100                       | 20                   | 0.25                             |                     | -20 TO +80                 | -30 TO +100              |                          |

RECOMMENDED RoHS SOLDER PROFILE



| MARK                | DEFINITION                           | CONDITION      |
|---------------------|--------------------------------------|----------------|
| TS <sub>max</sub>   | Maximum of pre-heating temperature   | 200 °C         |
| TS <sub>min</sub>   | Minimum of pre-heating temperature   | 150 °C         |
| T <sub>s</sub>      | Time from Tsmin to T <sub>smax</sub> | 60-120 sec     |
| T <sub>L</sub>      | Reference temperature                | 217 °C         |
| t <sub>L</sub>      | Retention time for TL                | within 60s     |
| T <sub>P</sub>      | Peak Temperature                     | 260 °C         |
| t <sub>P</sub>      | Time for peak temperature            | within 10s     |
| DT <sub>r</sub> /Dt | Temperature rising rate              | under 3 °C/sec |
| DT <sub>d</sub> /Dt | Temperature decreasing rate          | under 3 °C/sec |



NOTES:

- QUANTITY IS 1,500 PCS PER REEL.
- PIN NUMBERS ARE FOR REFERENCE ONLY, DESIGNATION NON-EXISTENT ON PART.
- THIS ASSEMBLY CONTAINS ELECTROSTATIC DISCHARGE SENSITIVE DEVICES (ESDS). MAINTAIN ALL PRECAUTIONARY MEASURES DURING ASSEMBLY, HANDLING AND STORAGE IN ACCORDANCE WITH IPC-A-610.
- THIS PRODUCT IS RoHS COMPLIANT. EACH BAG IS TO BE MARKED WITH RoHS COMPLIANT LABEL OR EQUIVALENT MARKINGS. LED MUST BE Pb FREE.

THIS DRAWING AND THE CONTENTS HEREIN ARE CONFIDENTIAL AND THE SOLE PROPERTY OF DIALIGHT CORP. REPRODUCTION OF THIS DRAWING OR CONSTRUCTION OF ANY PARTS WITHIN THIS DRAWING ARE FORBIDDEN WITHOUT THE WRITTEN CONSENT OF DIALIGHT CORP.

DIALIGHT CORP. INTERNAL REFERENCE ONLY = 3D MODEL: 4500521848X15-A-1

|  |                    |     |
|--|--------------------|-----|
| SCALE: 20.00                           | DRAWING NUMBER     | REV |
| ALL DIMS IN: INCHES (MM)               | C18446             | A   |
| TOLERANCES: UNLESS OTHERWISE SPECIFIED | TITLE              |     |
| FRACTIONS: ±1/64                       | SM LED 1209 (3224) |     |
| DECIMALS (.XX): ±0.1                   | MATERIAL           |     |
| DECIMALS (.XXX): ±0.05                 |                    |     |
| DECIMALS (.XXXX): ±0.005               |                    |     |
| ANGLES: ±1°                            |                    |     |
| FINISH                                 |                    |     |
| FSCM 83330                             |                    |     |

**Dialight** 1501 ROUTE 34 SOUTH FARMINGDALE, NJ 07727 (732) 919-3119 www.dialight.com

SHEET 1 OF 1 FAMILY TABLE: