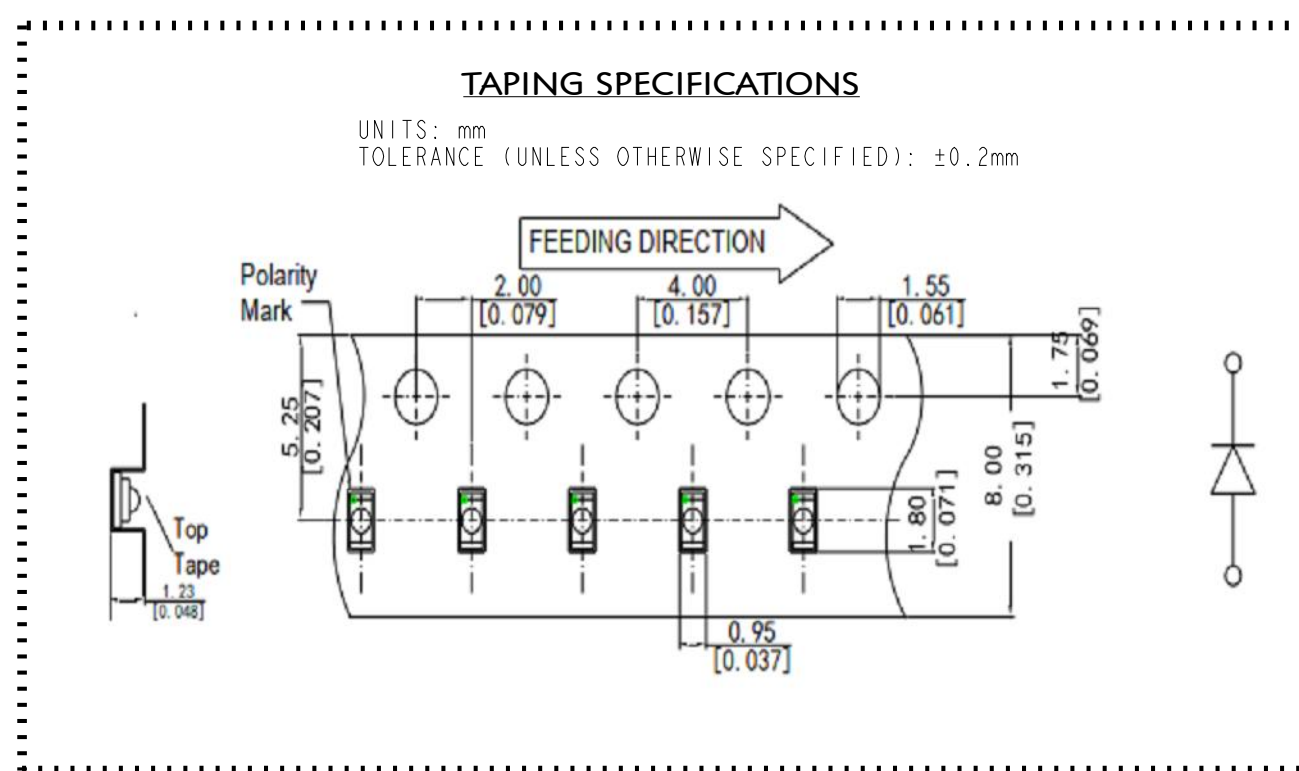
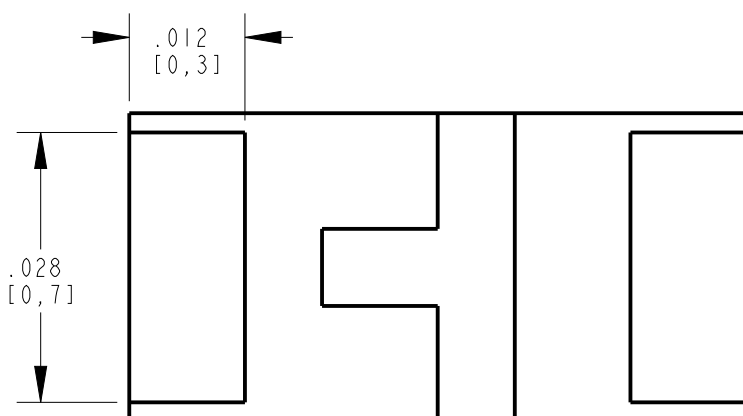
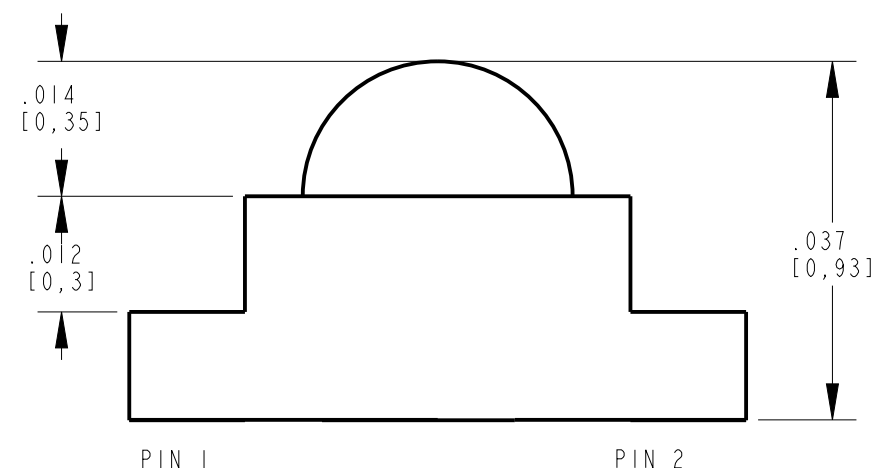
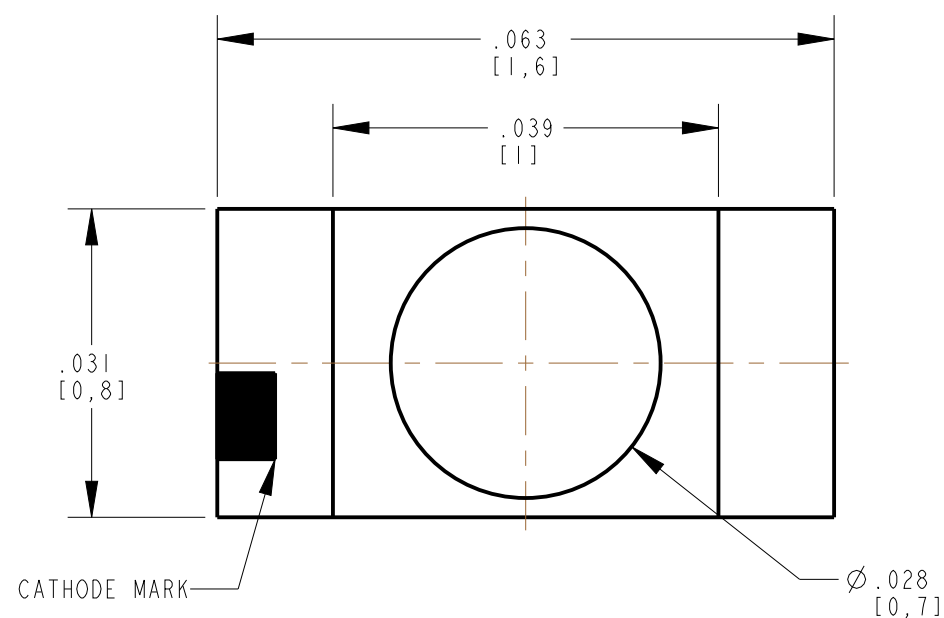
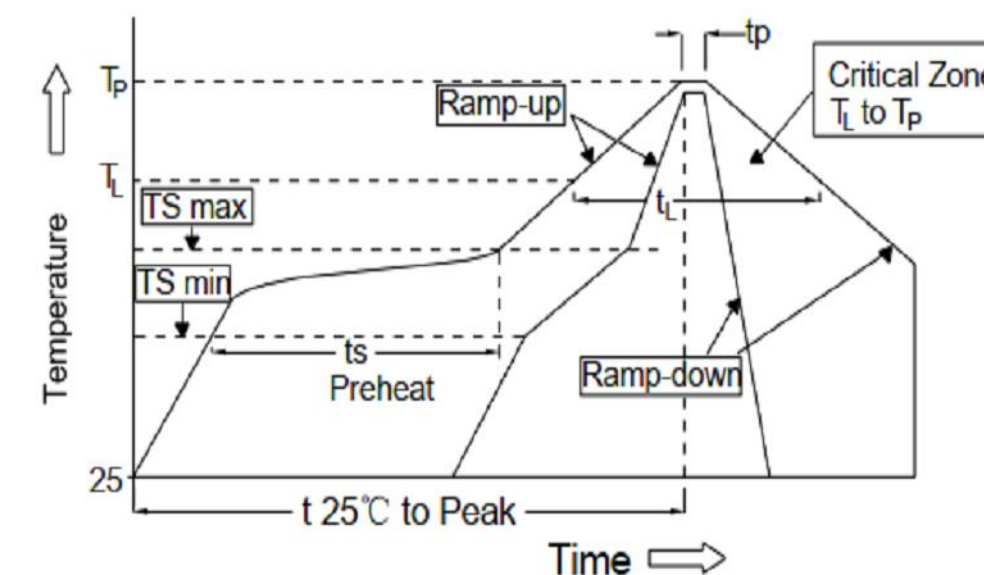


| DIALIGHT PART NO.  | LED COLOR (nm)     |
|--------------------|--------------------|
| 598-8E20-102F,107F | RED ORANGE (625)   |
| 598-8E30-102F,107F | ORANGE (605)       |
| 598-8E40-102F,107F | YELLOW (590)       |
| 598-8E60-102F,107F | YELLOW GREEN (570) |
| 598-8E80-102F,107F | GREEN (525)        |
| 598-8E90-102F,107F | BLUE (470)         |

| REV | REVISIONS   | DRN | APP | DATE     |
|-----|---|-----|-----|----------|
| A   | NEW RELEASE   | LD  | NO  | 9-24-19  |
| B   | ADDED DIM .039  | LD  | NO  | 11-13-19 |
| C   | P/N 598-8E10-102F,107F<br>CHANGED TO 598-8E20-102F,107F,<br>REMOVED I <sub>F</sub> VALUES UNDER FWD VOLTAGE | LD  | NO  | 02-05-20 |



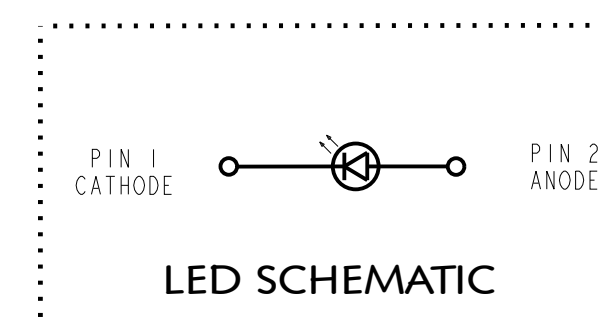
### RECOMMENDED RoHS SOLDER PROFILE



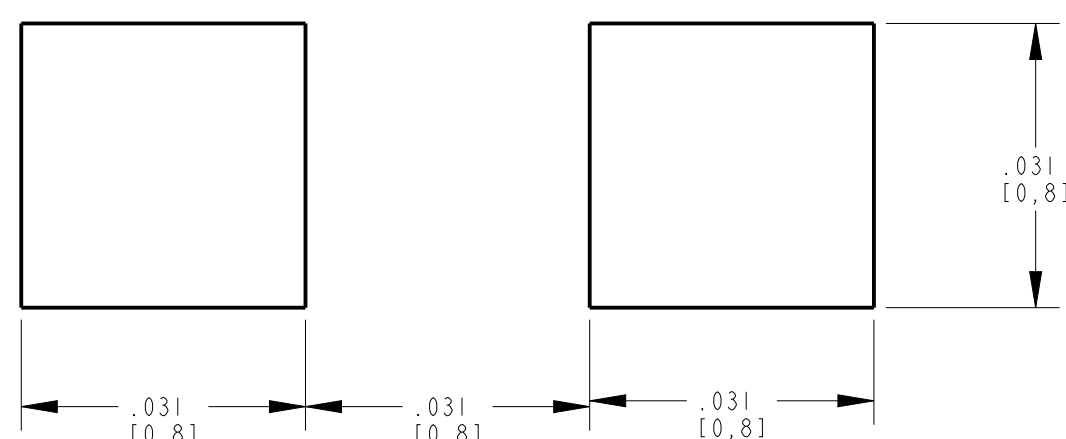
| ELECTRICAL OPTICAL CHARACTERISTICS AT 25°C |                     |                          |      |      |                          |      |      |                      |                               |      |                     |     |                     |
|--|---------------------|--------------------------|------|------|--------------------------|------|------|----------------------|-------------------------------|------|---------------------|-----|---------------------|
| LED COLOR                                  | TEST CONDITION      | LUMINOUS INTENSITY (mcd) |      |      | DOMINANT WAVELENGTH (nm) |      |      | REVERSE CURRENT (uA) | SPECTRAL LINE HALF-WIDTH (nm) |      | FORWARD VOLTAGE (V) |     | VIEWING ANGLE (DEG) |
|  |                     | MIN.                     | TYP. | MAX. | MIN.                     | TYP. | MAX. | MAX                  | TYP                           | TYP. | MAX.                | TYP |                     |
| RED ORANGE                                 | I <sub>F</sub> (mA) | 350                      | 500  | 650  | 615                      | 625  | 630  | 10                   | 15                            | 1.6  | 2.4                 | 60  |                     |
| ORANGE                                     |                     | 430                      | 615  | 800  | 600                      | 605  | 610  |                      |                               | 1.6  | 2.4                 |     |                     |
| YELLOW                                     |                     | 350                      | 590  | 650  | 585                      | 590  | 595  |                      |                               | 1.6  | 2.4                 |     |                     |
| YELLOW GREEN                               |                     | 150                      | 340  | 530  | 565                      | 570  | 575  |                      |                               | 1.8  | 2.4                 |     |                     |
| GREEN                                      |                     | 350                      | 775  | 1200 | 515                      | 525  | 535  |                      |                               | 2.4  | 3.6                 |     |                     |
| BLUE                                       |                     | 350                      | 440  | 530  | 460                      | 470  | 475  |                      |                               | 2.6  | 3.8                 |     |                     |

| 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 form Tsmin to Tsmax           | 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      |
| DTr/Dt            | Temperature rising rate            | under 6° C/sec  |
| DTd/Dt            | Temperature decreasing rate        | under -3° C/sec |

| ABSOLUTE MAXIMUM RATINGS AT 25°C |                       |                      |                           |                             |                           |                         |                          |
|----------------------------------|-----------------------|----------------------|---------------------------|-----------------------------|---------------------------|-------------------------|--------------------------|
| LED COLOR                        | POWER DISSIPATON (mW) | FORWARD CURRENT (mA) | PEAK FORWARD CURRENT (mA) | ELECTROSTATIC DISCHARGE (V) | OPERATING TEMPRATURE (°C) | STORAGE TEMPRATURE (°C) | SOLDERING CONDITION (°C) |
| RED ORANGE                       | 72                    | 30                   | 60                        | 2000                        | -40 to +85                | -40 to +85              | 260                      |
| ORANGE                           |                       |                      |                           |                             |                           |                         |                          |
| YELLOW                           |                       |                      |                           |                             |                           |                         |                          |
| YELLOW GREEN                     |                       |                      |                           |                             |                           |                         |                          |
| GREEN                            | 108                   |                      |                           | 1000                        |                           |                         |                          |
| BLUE                             | 114                   |                      |                           |                             |                           |                         |                          |



### RECOMMENDED PAD LAYOUT



### NOTES:

1. QUANTITY IS 4,000 PCS PER REEL
2. PIN NUMBERS ARE FOR REFERENCE ONLY, DESIGNATION NON-EXISTENT ON PART.
3. THIS ASSEMBLY CONTAINS ELECTROSTATIC DISCHARGE SENSITIVE DEVICES (ESDS). MAINTAIN ALL PRECAUTIONARY MEASURES DURING ASSEMBLY, HANDLING AND STORAGE IN ACCORDANCE WITH IPC-A-610.
4. THIS PRODUCT IS RoHS COMPLIANT. EACH BAG IS TO BE MARKED WITH RoHS COMPLIANT LABEL OR EQUIVALENT MARKINGS. LED MUST BE Pb FREE.



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

|   |  |     |
|---|--|-----|
| 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: 35.00  | DRAWING NUMBER   | REV |
| ALL DIM'S IN: INCHES (MM)   | C18448   | C   |
| TOLERANCES: UNLESS OTHERWISE SPECIFIED  | TITLE  |     |
| FRACTIONS: ±1/64  | 0603 W/ LENS   |     |
| DECIMALS (.XX): ±.01  | MATERIAL   |     |
| DECIMALS (.XXX): ±.005  |  |     |
| DECIMALS (.XXXX): ±.0005  |  |     |
| ANGLES: ±1°   |  |     |
| FINISH  |  |     |
| FSCM 83330  | 1501 ROUTE 34 SOUTH<br>FARMINGDALE, NJ 07727<br>(732) 919-3119<br>www.dialight.com |     |
| SHEET 1 OF 1  | FAMILY TABLE:  |     |