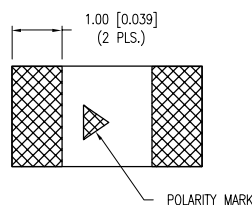
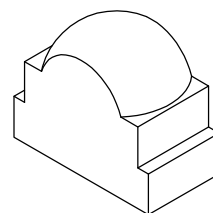
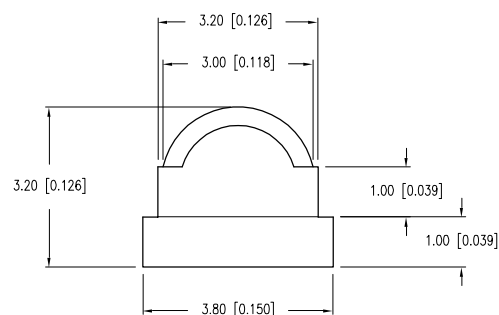
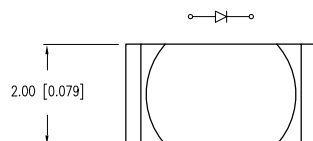


| PART NUMBER | SML-LXL238SRC-TR                    | REV. | B    |
|-------------|-------------------------------------|------|------|
| DATE        | E.C.N. NUMBER AND REVISION COMMENTS |      | REV. |
| 03.14.03    | E.C.N. #10967.                      |      | A    |
| 05.25.10    | E.C.N. #11508.                      |      | B    |



POLARITY MARK

ELECTRO-OPTICAL CHARACTERISTICS  $T_A = 25^\circ\text{C}$   $I_f = 20\text{mA}$ 

| PARAMETER          | MIN         | TYP | MAX | UNITS    | TEST COND              |
|--------------------|-------------|-----|-----|----------|------------------------|
| PEAK WAVELENGTH    |             | 660 |     | nm       |                        |
| FORWARD VOLTAGE    |             | 1.7 | 2.2 | $V_f$    |                        |
| REVERSE VOLTAGE    | 5.0         |     |     | $V_r$    | $I_r = 100\mu\text{A}$ |
| AXIAL INTENSITY    |             | 300 |     | mcd      | $I_f = 20\text{mA}$    |
| VIEWING ANGLE X    |             | 60  |     | 2x theta |                        |
| VIEWING ANGLE Y    |             | 35  |     | 2x theta |                        |
| EMITTED COLOR:     | RED         |     |     |          |                        |
| EPOXY LENS FINISH: | WATER CLEAR |     |     |          |                        |

LIMITS OF SAFE OPERATION AT  $25^\circ\text{C}$ 

| PARAMETER                      | MAX        | UNITS                |
|--------------------------------|------------|----------------------|
| PEAK FORWARD CURRENT*          | 185        | mA                   |
| STEADY CURRENT                 | 30         | mA                   |
| POWER DISSIPATION              | 170        | mW                   |
| DERATE FROM $25^\circ\text{C}$ | -1.2       | mW/ $^\circ\text{C}$ |
| OPERATING TEMP.                | -40 TO +85 | $^\circ\text{C}$     |
| STORAGE TEMP.                  | -40 TO +85 | $^\circ\text{C}$     |

\*  $t < 10\mu\text{s}$ 

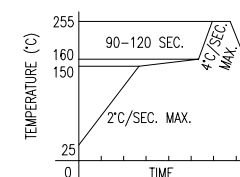
**CAUTION: MOISTURE SENSITIVE DEVICE**  
PER JEDEC LEVEL 3 STANDARDS

## NOTES:

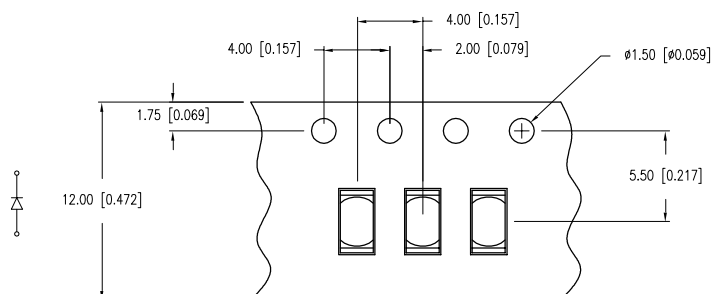
- THE CATHODE IS ORIENTED TOWARDS THE TAPE SPROCKET HOLE.

## LEAD FREE REFLOW PROFILE

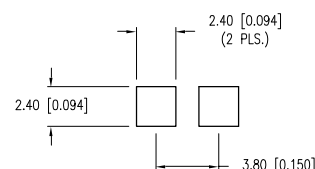
10 SEC. MAX.

TOTAL TIME ABOVE  $220^\circ\text{C}$  IS 60 SECONDS MAX.

## TAPE SPEC



## RECOMMENDED SOLDER PAD LAYOUT



\*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE:  $X = \pm 1$  ( $\pm 0.039$ ),  $X.X = \pm 0.5$  ( $\pm 0.020$ ),  $X.XX = \pm 0.25$  ( $\pm 0.010$ ),  $X.XXX = \pm 0.127$  ( $\pm 0.005$ ). LEAD SIZE =  $\pm 0.05$  ( $\pm 0.002$ ), LEAD LENGTH =  $\pm 0.75$  ( $\pm 0.030$ ). MIN =  $\frac{+ \text{DECIMAL PRECISION}}{-0.00}$  MAX =  $\frac{+0.00}{- \text{DECIMAL PRECISION}}$



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3.8mm x 2.0mm SMT LED, 660nm AlInGaP RED LED, WATER CLEAR DOME LENS.

\*\*THE SPECIFICATIONS MAY CHANGE AT ANY TIME WITHOUT NOTICE DUE TO NEW MATERIALS OR PRODUCT IMPROVEMENT.\*\*

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|                 |              |
|-----------------|--------------|
| DATE: 02.05.03  | DRAWN BY: CT |
| PAGE: 1 OF 1    | CHKD BY: SS  |
| SCALE: N/A      | APRVD BY: JD |
| UNIT: mm [INCH] | (P)          |