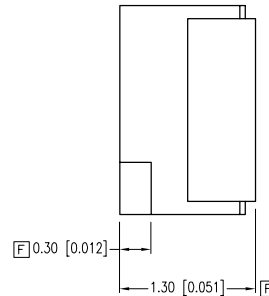
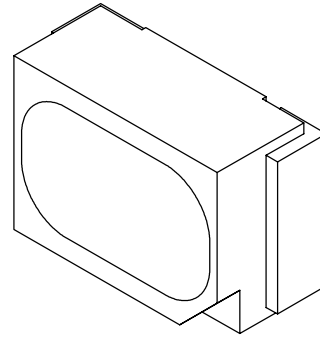
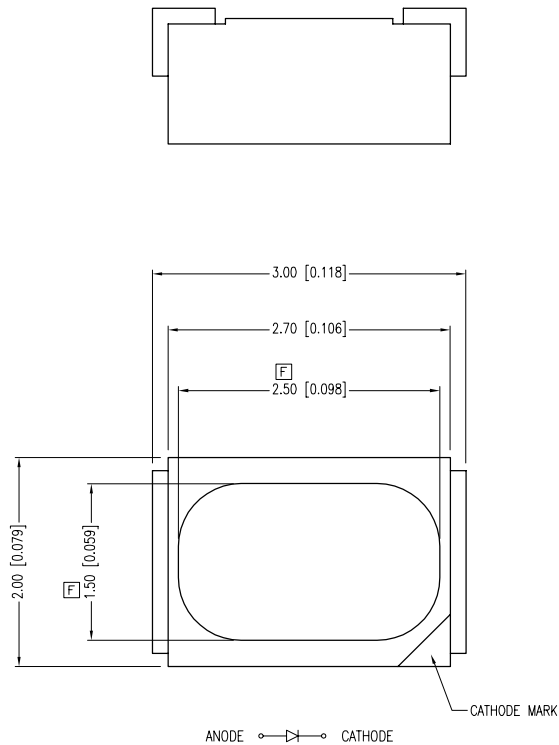


| PART NUMBER | SML-LX23IC-TR                         | REV. | G    |
|-------------|---------------------------------------|------|------|
| DATE        | E.C.N. NUMBER AND REVISION COMMENTS   |      | REV. |
| 02.05.99    | E.C.N. #10BRDR. ADDED REFLOW PROFILE. |      | A    |
| 08.09.99    | E.C.N. #10543.                        |      | B    |
| 01.05.01    | E.C.N. #10695.                        |      | C    |
| 03.14.03    | E.C.N. #10967.                        |      | D    |
| 02.07.05    | E.C.N. #11148.                        |      | E    |
| 12.14.09    | E.C.N. #10603.                        |      | F    |
| 03.28.11    | E.C.N. #10BRDR & REDRAWN.             |      | G    |



| ELECTRO-OPTICAL CHARACTERISTICS $T_A=25^\circ\text{C}$ $I_f=20\text{mA}$ |                  |     |     |          |                      |
|--------------------------------------------------------------------------|------------------|-----|-----|----------|----------------------|
| PARAMETER                                                                | MIN              | TYP | MAX | UNITS    | TEST COND            |
| PEAK WAVELENGTH                                                          |                  | 635 |     | nm       |                      |
| FORWARD VOLTAGE                                                          |                  | 2.0 | 2.5 | $V_f$    |                      |
| REVERSE VOLTAGE                                                          | 5.0              |     |     | $V_r$    | $I_r=100\mu\text{A}$ |
| AXIAL INTENSITY                                                          |                  | 20  |     | mcd      | $I_f=20\text{mA}$    |
| VIEWING ANGLE                                                            |                  | 90  |     | 2x theta |                      |
| EMITTED COLOR:                                                           | RED              |     |     |          |                      |
| EPOXY LENS FINISH:                                                       | WATER CLEAR LENS |     |     |          |                      |

| LIMITS OF SAFE OPERATION AT $25^\circ\text{C}$ PER CHIP |            |                      |
|---------------------------------------------------------|------------|----------------------|
| PARAMETER                                               | MAX        | UNITS                |
| PEAK FORWARD CURRENT*                                   | 160        | mA                   |
| STEADY CURRENT                                          | 30         | mA                   |
| POWER DISSIPATION                                       | 100        | mW                   |
| DERATE FROM $25^\circ\text{C}$                          | -1.2       | mW/ $^\circ\text{C}$ |
| OPERATING TEMP.                                         | -25 TO +80 | $^\circ\text{C}$     |
| STORAGE TEMP.                                           | -30 TO +85 | $^\circ\text{C}$     |
| SOLDERING TEMP.                                         | +240       | $^\circ\text{C}$     |

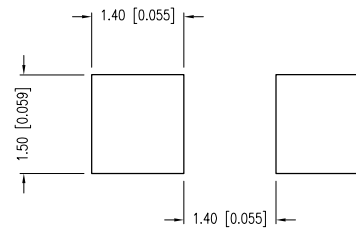
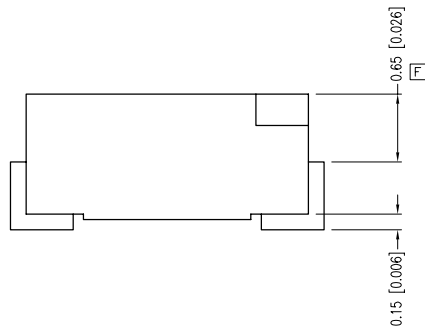
\*  $t < 10\mu\text{s}$ 

## NOTES:

1. THE CATHODE IS ORIENTED TOWARDS THE TAPE SPROCKET HOLE.

|         |                                                                   |
|---------|-------------------------------------------------------------------|
| (B) (A) | CAUTION: MOISTURE SENSITIVE DEVICE<br>PER JEDEC LEVEL 4 STANDARDS |
|---------|-------------------------------------------------------------------|

## RECOMMENDED SOLDER PAD LAYOUT



\*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN= <sup>+DECIMAL PRECISION</sup> -0.00 <sup>-DECIMAL PRECISION</sup>

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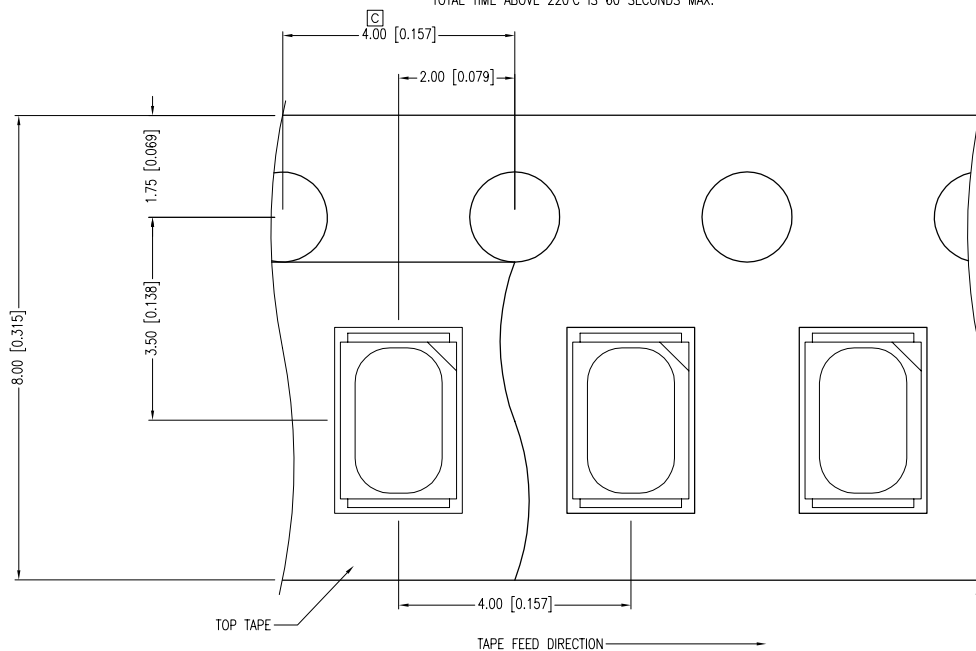
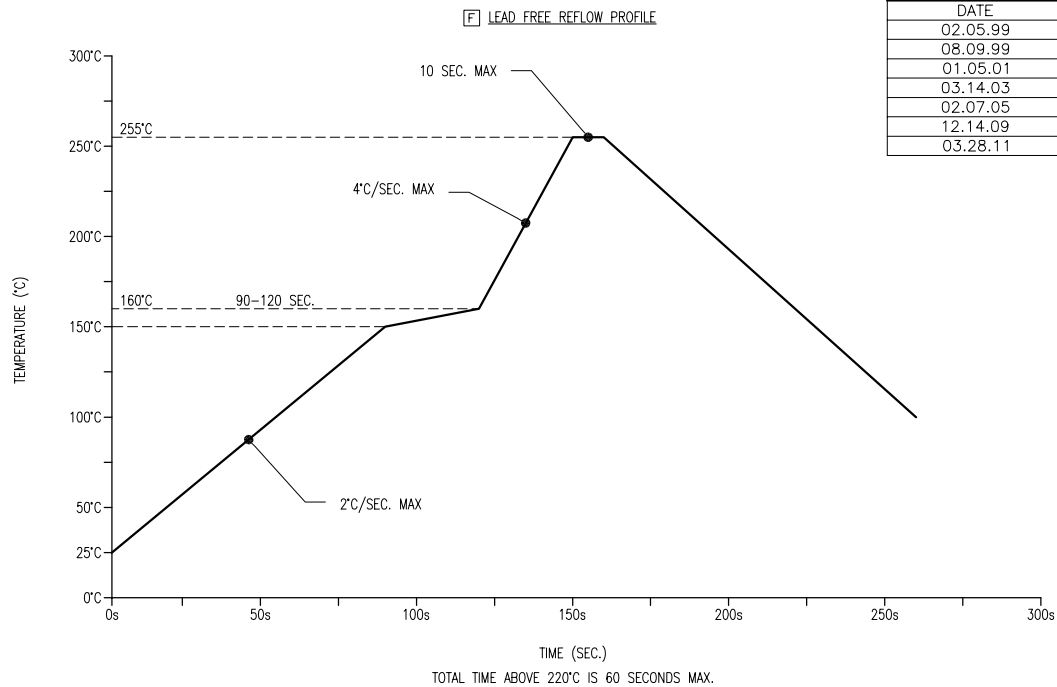
2mm x 3mm SURFACE MOUNT WITH REFLECTOR, 635nm RED LED, WATER CLEAR LENS.

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

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|--------|-----------|-----------|------|
| DATE:  | 03.28.11  | DRAWN BY: | AB   |
| PAGE:  | 1 OF 2    | CHKD BY:  | JD   |
| SCALE: | NTS       | APRVD BY: | JD   |
| UNIT:  | mm [INCH] |           | (Pb) |

| PART NUMBER | SML-LX23IC-TR                         | REV. | G    |
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| 03.14.03    | E.C.N. #10967.                        |      | D    |
| 02.07.05    | E.C.N. #11148.                        |      | E    |
| 12.14.09    | E.C.N. #10603.                        |      | F    |
| 03.28.11    | E.C.N. #10BRDR & REDRAWN.             |      | G    |



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