| PART NUMBER | SML-LXR851GSRW-TR                   | REV. | А    |
|-------------|-------------------------------------|------|------|
| DATE        | E.C.N. NUMBER AND REVISION COMMENTS |      | REV. |
| 05.16.11    | E.C.N. #11710/10BRDR. & REDRAWN.    |      | Α    |

|              | CA  CA  CA  CA  CA  CA  CA  CA  CA  CA |  |
|--------------|--|--|
| 1            | GREEN  RED  G R COMMON  ANODE          |  |
| 2.00 [0.079] | PIN OUT  PIN OUT                       |  |

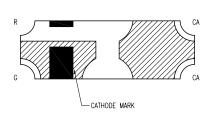
| ELECTRO-OPTICAL CHARACTERISTICS TA =25°C If=20mA |                      |         |     |          |           |
|--|----------------------|---------|-----|----------|-----------|
| PARAMETER  | MIN                  | TYP.    | MAX | UNITS    | TEST COND |
| PEAK WAVELENGTH (G/R)                            |                      | 565/660 |     | nm       |           |
| FORWARD VOLTAGE (G/R)                            |                      | 2.2/1.7 | 2.4 | Vf       |           |
| REVERSE VOLTAGE                                  | 5.0                  |         |     | Vr       | lr=100μA  |
| AXIAL INTENSITY (G/R)                            |                      | 4/20    |     | mcd      | If=20mA   |
| VIEWING ANGLE                                    |                      | 130     |     | 2x theta |           |
| EMITTED COLOR:                                   | GREEN/               | RED     |     |          |           |
| EPOXY LENS FINISH:                               | MILKY WHITE DIFFUSED |         |     |          |           |

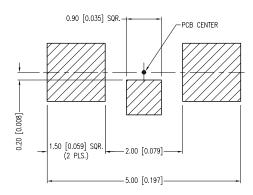
| LIMITS OF SAFE OPERATION AT 25°C | PER CHIP   |       |
|----------------------------------|------------|-------|
| PARAMETER                        | MAX        | UNITS |
| PEAK FORWARD CURRENT*            | 160        | mA .  |
| STEADY CURRENT (G/R)             | 25/30      | mA.   |
| POWER DISSIPATION                | 100        | mW    |
| DERATE FROM 25°C                 | -1.2       | mW/*C |
| OPERATING TEMP.                  | -20 TO +85 | ·c    |
| STORAGE TEMP.                    | -30 TO +90 | .C    |
| * 1×10C                          |            |       |

CAUTION: MOISTURE SENSITIVE DEVICE PER JEDEC LEVEL 2 STANDARDS

CAUTION: MOISTURE SENSITIVE DEVICE 1. SHELF LIFE IN SEALED BAG: 12 MONTHS AT <40°C AND <90% RELATIVE HUMIDITY (RH). 2. AFTER THIS BAG IS OPENED, DEVICES HAVE TO BE MOUNTED WITHIN 48 HOURS OR STORED AT <30% RH.

## RECOMENDED 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=  $^{+0.00}_{-0.00}$  PRECISION MAX.=  $^{+0.00}_{-0.00}$  PRECISION  $^{-0.00}_{-0.00}$  MAX.=  $^{+0.00}_{-0.00}$  PRECISION  $^{-0.00}_{-0.00}$  PRECISION  $^{-0.00}_{-0$ 



290 E. HELEN ROAD PALATINE, IL 60067-6976 PHONE: +1.847.359.2790 FAX: +1.847.359.6538

1.0x3.0mm PCB RIGHT ANGLE SURFACE MOUNT LED, 565/660nm GREEN/RED, MILKY WHITE DIFFUSED, TAPE & REEL

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

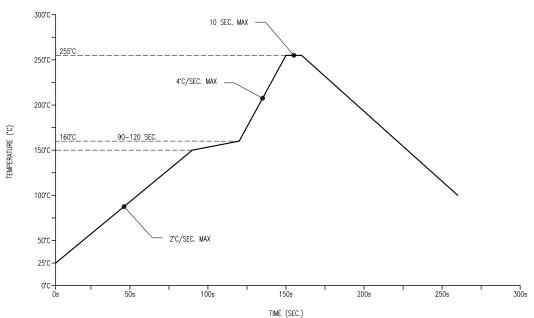
CONFIDENTIAL INFORMATION
THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPERTY OF LUMEX INC. EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY LUMEX INC., THE HOLDER OF THIS DOCUMENT SHALL KEEP ALL INFORMATION CONTAINED HEREIN CONFIDENTIAL AND SHALL PROTECT SAME IN WHOLE OR IN PART FROM DISCLOSURE AND DISSEMINATION TO ALL THIRD PARTIES.

| ١  | UNCONTROLLED DOCUMENT |    |       |     |           |    |
|----|-----------------------|----|-------|-----|-----------|----|
| ı, | DATE:                 | 05 | 5.16. | 11  | DRAWN BY: | AB |
|    | PAGE:                 | 1  | OF    | 2   | CHKD BY:  | KF |
|    | SCALE:                |    | NTS   |     | APRVD BY: | SS |
|    | UNIT: mm [INCH]       |    |       | CH] | Po        |    |

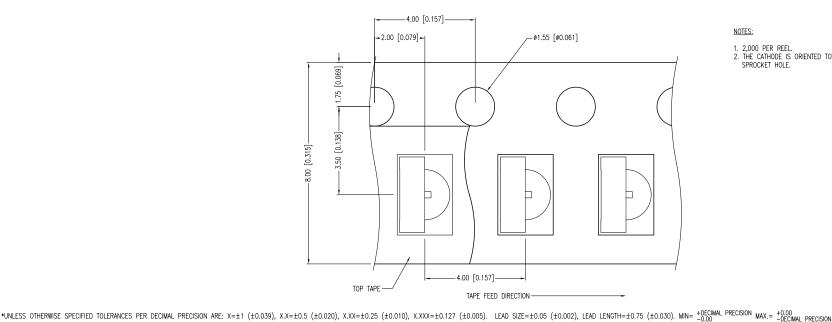
UNCONTROLLED DOCUMENT

| PART NUMBER | SML-LXR851GSRW-TR                   | REV. | Α    |
|-------------|-------------------------------------|------|------|
| DATE        | E.C.N. NUMBER AND REVISION COMMENTS |      | REV. |
| 05.16.11    | E.C.N. #11710/10BRDR. & REDRAWN.    |      | Α    |

## LEAD FREE REFLOW PROFILE



TOTAL TIME ABOVE 220°C IS 60 SECONDS MAX.



## NOTES:

- 2,000 PER REEL.
   THE CATHODE IS ORIENTED TOWARDS THE TAPE SPROCKET HOLE.

Creating LED and LCD Solutions Together™

290 E. HELEN ROAD PALATINE, IL 60067-6976 PHONE: +1.847.359.2790

FAX: +1.847.359.6538 WEB: WWW.LUMEX.COM

.0x3.0mm PCB RIGHT ANGLE SURFACE MOUNT LED, 565/660nm GREEN/RED, MILKY WHITE DIFFUSED, TAPE & REEL

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

CONFIDENTIAL INFORMATION
THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPERTY OF LUMEX INC. EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY LUMEX INC., THE HOLDER OF THIS DOCUMENT SHALL KEEP ALL INFORMATION CONTAINED HEREIN CONFIDENTIAL AND SHALL PROTECT SAME IN WHOLE OR IN PART FROM DISCLOSURE AND DISSEMINATION TO ALL THIRD PARTIES.

UNCONTROLLED DOCUMENT DATE: 05.16.11 DRAWN BY: AΒ PAGE: 2 OF 2 CHKD BY: KF SCALE: NTS APRVD BY: SS UNIT: mm [INCH] (Pb)